

Open access and collection development in academic libraries: digitization to discovery

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Open access and collection development in academic libraries; digitization to discovery

Laura Bowering Mullen

Rutgers University Library of Science and Medicine

lbmullen@rci.rutgers.edu

Abstract

All librarians in the academy have a responsibility to promote the value of open access scholarship. Alongside the strident open access rhetoric heard in the academic library world is the need for continued emphasis on practical strategies for adding relevant scholarly “free to reader, free to library” materials to collections. Librarians involved in collection development roles must now reach as far as possible into the larger world of web scholarly content to add, organize, promote and make quality material discoverable and accessible. Librarians need to expose the research materials housed in repositories and on the open web, even as these materials are often hidden from scholars due to lack of indexing, inadequate crawling by major search engines, existence of poor quality metadata, or a lack of librarian effort at marketing of material that might maximize usage and accessibility. Collection development librarians and subject specialists are best poised to know which public domain materials might best be digitized and made more accessible to institutional scholars and to local communities. Collection development librarians can identify new digitization initiatives, seek grant funding, and leverage collaborations and partnerships to maximize the availability and dissemination of open web scholarly research materials. These are new roles for collection development librarians, many of whom have seen other changes to their positions in an increasingly digital age. Collection development librarians add value by integrating valuable open web content alongside traditional library materials.

Organizing available quality scholarly materials through weblists, research guides, LibGuides, course management systems, and integrated library systems can and must include free web materials. Collection development with open access materials requires a different skill set; one not dependent on traditional patterns of acquisition or the usual benchmarking for quality that may be dependent on traditional metrics or publisher reputation. Vetting of relevant, quality open access resources requires knowledge of all sources of such materials, whether the products

of disciplinary or institutional repositories, open access journals and articles of all types, open educational resources, large monograph digitization initiatives, and indexes to the open access literature such as DOAJ(Directory of Open Access Journals). These materials represent a treasure trove of content, and extend the library's traditional holdings out into the open web. Continued relevance for collection development as an "art" hinges on librarians' willingness to embrace and add scholarly content regardless of business model. There are no barriers to adding open access content to the academic library, and the collection development policies will not have to be redefined to integrate the many sources of this "free to reader, free to library" content. Partnering with public services librarians to integrate this content into user services initiatives will result in further showcasing of these nontraditional materials. Collaboration and partnerships in promoting library production of open scholarship as well as librarians' participation in shared open access discussions and initiatives can be seen as an appealing future scenario for collection development in academic libraries. Smaller or less well funded libraries can take advantage of material being made available by research libraries with robust repositories and journal and even book publishing programs. Along with purchasing or licensing content, many libraries are becoming "knowledge creators" and are eager to share the material with other libraries and scholars.

Introduction

Collection development in academic libraries has undergone a major transformation in the digital age. Along with the increasing inclusion of toll based electronic resources in collections comes the need to evaluate and integrate all manner of open access electronic scholarly content. While librarians have heard a lot about open access from their own libraries and library organizations, there is some background needed to understand the various "flavors" and "colors" of open access, and how this movement is affecting the work of librarians building collections and working daily with users. [Mullen, 2010]

Librarians who vet materials and organize the collections of academic libraries create the underpinning for all public services and library outreach efforts. The prevailing attitude of many is that all information will eventually be free on the web; that the internet may even replace the library. The library must retain its relevance as collections move to digital formats. Librarians must continue to build meaningful and useful library collections in an ever more complex situation, keeping in mind that many library users are overwhelmed by the deluge of information choices available to them. The library must still be the "place" where scholarly materials may be discovered, accessed, read and used. Librarians make sense out of mountains of internet offerings, and know all too well that print collections still make up a tremendous amount of library collections. With so much talk of open access, librarians still seek to build collections made up of a variety of formats, and from a plethora of information providers, including commercial, society, and university presses. There are many new creators of scholarly material in the new information landscape, and librarians are able to evaluate this avalanche of information to pull out value for collections.

While some say collection development is of lesser importance than in the past, there are actually new roles for librarians in building collections that are “hybrid” in their makeup. Today’s scholarly collections comprise both purchased/licensed material and a variety of quality open access content. Librarians will continue to build the collection of the future, exposing all relevant scholarly content, building discovery tools around that content, and working on organizing all materials in meaningful ways for library patrons and the reference librarians that serve as a bridge between the user and the material.

Scholarly Journal Content

There is an ever expanding wealth of open access journal content. Some of that corpus of scholarly journal content results from the “gold road” to open access where a rapidly expanding list of whole journal issues (as well as individual articles) are made freely available once authors or funders have paid for open access. Commercial publishers like Sage, Wiley and Springer publish many open access titles, and librarians will need to pull this content into the library suite of offerings. The open access offerings of commercial publishers are continuing to grow. An example of rapid growth can be seen in the suite of offerings from Hindawi (www.hindawi.com) as well as others who have seen that open access can provide another channel for the publication of research. Author funded open access now seems a profitable business model for commercial publishers that is likely to grow. Commercial publishers are trying a variety of approaches and business models in order to expand open access content. As authors, funders, and even some libraries pay, researchers and readers may access this open access content directly from the web, or by going to the library website that creates access points for this material. Librarians may find this rapidly changing landscape challenging, but will add value to the library by pulling this open access content into collections and services.

Index and directory-type sources such as Directory of Open Access Journals (DOAJ) (www.doaj.org) or Open J-Gate (www.openj-gate.com), both containing comprehensive information as well as search capability for open access journals, can be mined for sources to add to the library collection. Using a disciplinary approach, the journal collection of any library can be enriched by adding quality free peer reviewed journal content from any credible producer. Open access journals do not differ in terms of status of peer review, only in business model, and library users do not need to differentiate when searching based on open or toll access status of library accessed periodicals. DOAJ includes many available open access journals in languages other than English, although it may be difficult to refine results by language when searching. Many libraries are also publishing open access journals out of institutional repositories, and these titles may be found through DOAJ and added to collections.

Including DOAJ, Open J-Gate, and other discovery sources of open access materials such as Google Scholar (<http://scholar.google.com>), or even PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>) in lists of indexes and abstracting sources on library websites allows library users to easily find scholarly open access content. Google Scholar, free to

all, is a major discovery source for open access content of all types, and provides linking directly to versions of articles. Librarians will also need to thoroughly understand the issue of “versioning,” and how the variety of other versions of articles other than the publisher branded PDF must be used in research. Librarians may have a role in deciding which versions will be brought into library collections for users, and whether the availability of preprints, postprints or anything other than the “version of record” will be able to be used, cited, and presented in student research papers or other scholarly work. Various organizations, such as the National Information Standards Association (NISO), Association of Learned and Professional Society Publishers(ALPSP), and Joint Information Systems Committee (JISC), and are developing standards to add clarity to the issue of versioning. [Carpenter, 2011] Google Scholar, a major portal to open access articles, chapters, conference reports, proceedings and other scholarly material, does expose a variety of versions even for a single digital object and librarians will need to understand how these versions fit into the process of writing and citing for publication.

Another role of librarians involved with collections will be an educational role around new forms of scholarly communication such as the “journal article of the future.” The system still revolves around peer review and there have been many recent discussions revolving around the need for the academy to continue to watch the changes occurring and engage with the issues on campus. [Harley & Acord, 2011] Librarians will also be able to share expertise as researchers grapple with issues surrounding peer review and decision making around which materials have adequate scholarliness and credibility to be included in library collections.

Any discussion of open access and collection development in academic libraries would include a reminder for developing nations that there are many opportunities to access traditional subscription content from commercial publishers free (or for a reduced fee). Popular programs include those of “Research4Life” comprising HINARI (Health InterNetwork Access to Research Initiative), OARE (Online Access to Research in the Environment), and AGORA (Access to Global Online Research in Agriculture), but there are many others as well. For a useful list of many of these programs for developing nations, see <http://www.library.yale.edu/~license/develop.shtml>).

Institutional and subject repositories

Many repositories still seem to be silos in the information landscape, and contents may be best found by searches of Google and Google Scholar, or OAISTER. (<http://www.oclc.org/oaister/>) OAISTER, now part of OCLC, is a search engine to repository content. It is however, somewhat of a challenge to see how to integrate the millions of items searchable by OAISTER into library collections except as a search engine on the list of indexes and databases. Institutional repositories contain mixed content, and even though many are crawled by Google, collections librarians can certainly add value by integrating any of the objects in the repository more deeply into library collections and public services.

Freely available open access monographs

Notwithstanding legal and copyright challenges, there are many notable book digitization projects that may provide a wealth of scholarship, much of it free text. This corpus of free book material is of enormous value to digital humanities scholarship, as well as to any search of scholarly literature. Librarians building collections need to continue to expose the valuable book material available on the web and integrate it into the local library collection. Some of the prominent sources of book material come from initiatives such as Google Books, Open Library, Project Gutenberg, Internet Archive, Open Content Alliance, Million Book Project, HathiTrust, and other more specific open monograph efforts such as those from PubMed, National Academies Press, United Nations University (UNU), University of California Press E-Books Collection and many others. These book projects, some with MARC records for adding to catalogs and ILSs, also provide search of full text content. Many provide keyword searching, although that is still of limited value for some types of research. A search of the web for free online book collection shows that many librarians and others are constantly seeking sources of free book material and organizing lists and portals of such material for researchers. Even for reference work, a search of material in digitized book collections often results in a specific piece of information previously hidden from researchers' eyes. The challenge for collections librarians will be to develop comprehensive policies for the vetting, integrating and sustaining the addition of open access book content into library collections and services. Issues of weeding content and perpetual access will require continuing attention.

Many libraries, societies, and nations are digitizing content. Libraries that can digitize all manner of local collections will be able to contribute to knowledge creation and dissemination. The results of digitization projects need to be marketed to all libraries that want to add these collections. Publishing reports of projects in the library literature as well as marketing in other channels will allow others to benefit. Librarians must continue to add value to digitization projects by making sure there is excellent and adequate metadata to promote discovery, as well as continuing to focus on preservation, a traditional role for academic libraries. Avoiding placing materials in silos hidden from researcher traffic will be increasingly important.

Dissertations, a wealth of material for collections

Many universities now have ETD (Electronic Theses and Dissertations) programs, and this category provides a large free source of dissertation material from many excellent universities. There is an effort to pull together all of the disparate ETD initiatives in the "NLTLD: Networked Digital Library of Theses and Dissertations." (<http://www.ndltd.org/>). Another great value added service for librarians will be to find ways to integrate and provide discovery to this material. Most universities with ETD programs will have this material available from repositories. ETDs are also searchable via Google and Google Scholar, and librarians can aid searchers in finding dissertations using these tools. PsycINFO and MLA International Bibliography, both subscription products, use ProQuest's dissertation service for subject indexing of dissertations,

and so there may be some challenge to pulling together subject collections of free dissertations for researchers. Once again, it is stressed that librarians can create vast subject collections of open access materials for use by researchers. Especially for libraries without rich subscription collections, librarians can create valuable collections by linking to resources made available by authors, commercial publishers, digitization efforts of many kinds, and university repositories. Those librarians tasked with providing collections focused on area studies may want to integrate dissertation material as another category of valuable scholarly work as they include rich bibliographies of source material.

Wikipedia and Reference

Wikipedia has, in some cases, become the place for “pre-research,” the first stop for people worldwide to begin a search for information. Groups of scholars, including some in the music as well as the medical communities have decided to participate in adding knowledge to Wikipedia (rather than trying to steer researchers in other directions). With more than 250 languages, Wikipedia depends on communities of scholars to create an open access encyclopedic treatment, complete with references, to many topics of interest and importance. Librarians may wish to integrate open access tools such as Wikipedia further into the library as well as contribute to content in local languages. Many students use Wikipedia as an index to articles on topics, and adding references to Wikipedia, especially open access references, adds value for all who search for information. Librarians have been called upon to contribute actively to Wikipedia by adding to various language sections as well as to enhance the entries for library and information science. Collection development librarians will need to continue to assess the need for more traditional reference books if usage is declining.

Integration of open access materials into academic library collections

Librarians responsible for general collections or specific subject areas can now use products such as “LibGuides” (or similar open source products) to create valuable and specific roadmaps to the research literature of a discipline. These guides can integrate in convenient list form all resources, both open access and subscription that are available to a researcher seeking sources of scholarly information. Librarians looking for information on area studies might find the community of LibGuides users and creators a very useful place to begin to discover important resources, including important gray literature and other materials not in traditional publication outlets. Visiting the LibGuides Community page (libguides.com) allows a search of thousands of already created guides on almost any topic of interest. Rather than “reinventing the wheel,” librarians can add links to the guides carefully crafted by other librarians relating to specific topics and areas of research.

Web lists on library websites, specific pages or wikis authored by groups within library organizations, bibliographies published both formally and informally, and lists shared through worldwide library listservs and networks can expose open access content for addition to library

collections. All libraries should be on alert for quality scholarly content available on the web in open access format. Once these lists are created, they should be shared by librarians as a means of promoting openness and sharing the research materials that benefit informed society. Continuing to promote libraries as the source of a culture of openness, innovation and sharing of local scholarship with others will allow the library to retain relevance and high status in the university and greater society.

Those libraries using any method of federated search, or one of the newer discovery layer products need to make sure that sources of open access journal and book material are included in this type of service alongside more traditional subscription library materials. An example of a discovery product “partnering” with an open access collection is the recent inclusion of HathiTrust and the Summon discovery service from ProQuest. [SerialsSolutions, 2011] Those libraries building next generation integrated library systems (ILSs) will find open access materials a necessity for inclusion.

Open Educational Resources (OER)

An outgrowth of the open access movement can be seen in the rapid adoption of open educational resources. Librarians can also scour the web for freely available online courses, videos and other resources to enhance the educational content added to Libguides, research guides weblinks, and courseware. Libraries tasked with pulling together resources for distance learning will find a wealth of educational material for addition to courseware. Partnering with teaching faculty to build lists of relevant and appropriate scholarly materials for teaching and learning is another valuable role for librarians. Understanding of copyright and fair use is also important for librarians working with electronic materials.

Data linked to articles

An emerging area that will impact collection development is that of freely available data sets. Often discussed in terms of “escience,” “cyberinfrastructure,” or “open science,” librarians can expect to find freely available data on the web—both linked to publications and as standalone products of subject and institutional repositories. Those librarians responsible for building collections in specific subjects or area studies will add value to academic libraries by exposing and organizing the data that results from the research process for the use of scholars. Libraries grappling with making data available will want to share methods, policies, and results with the library community. Mandates from some funding bodies and other organizations are helping to fast track the issues surrounding open access to data. The movement toward open data is another vehicle for librarian engagement with the building blocks of the research process.

Digital access; a continuing concern for open access collection building

Open access holds great promise for research communication and collaboration on a global scale. However, dreams of openness for scholarship hinge on adequate broadband access, issues of net

neutrality, and reliance on commercial entities such as Google. Where the library might remain for posterity, Google, a corporation, may not. Digital preservation of the scholarly record will always be a concern for librarians. Concern for internet access for all citizens has also been within the purview of librarians, and that becomes more important than ever with a move to digitizing existing print and moving to a born digital future for the scholarly literature. Without ubiquitous access to the internet, open access to scholarship cannot be realized. For universal open access, there also remain issues of language and translation. There are many websites and blogs where librarians can follow and contribute to discussions of equity in information access and open access in various areas of the world. See, for instance, the page dedicated to “News: Open Access, Latin America & the Caribbean” from the Association for Progressive Communications (APC) at:

<http://www.apc.org/en/news/openaccess/lac>

With a move to electronic collections in many libraries, there are other issues of sharing of collections that need constant vigilance by librarians. Interlibrary loan and other issues of sharing material with users are being affected by a move to ebooks in many libraries due to restrictive digital rights management issues. Open access materials, as long as there is adequate internet access, may be able to provide somewhat of a buffer for any lessening of traditional resource sharing.

Librarians contributing and sharing knowledge

Librarians can continue to contribute to knowledge in the LIS (library and Information science) disciplines by contributing not only to formal LIS literature but to the subject repositories, E-LIS and dLIST, and to institutional repositories where they exist. Collection development librarians in their other possible roles as authors or editors can continue to strive to make the library literature more open. Librarians, in their roles with LIS organizations can use those venues for disseminating information about freely available scholarship to the greater librarian community. Listservs and other social networking channels can spread knowledge of open access resources as well.

Librarians are able to assist scholars by creating guides and bibliographies especially for interdisciplinary subject areas, and for any area where there is not a traditional corpus of indexed scholarship with dedicated publication outlets. [Westbrook, 2010] This role for librarians is even more important due to the expansive amount of scholarly research material emanating from many countries, as well as the burgeoning amount of important digital resources of all types. For the busy researcher, the library that is able to pull together all scholarly resources into easily accessed portals will be a very valuable asset. Librarians can be the indexing and metadata experts for adding value to subject collections. With a keen eye on changing standards affecting versions and even cataloging, librarians are adding value to collections, both print and digital.

Librarians and libraries, by their very nature and mission, will also continue to cultivate the value of sharing of resources, collaboration, and innovation.

Scope of the collection

Where are the boundaries of the library collection? Can the library collection be assessed as in the past if it extends out into the open web? Each individual library will be tasked with defining the individual library collection as print is replaced by electronic, users start with the library website, and more and more scholarly materials may be found free on the internet. Rather than only caretakers of physical materials, or evaluators of subscription materials, libraries have choices to make in terms of bringing web content into the library collection. This type of active collection building which includes free web sources adds ever increasing value to the library collection as well as provides exciting discovery of quality materials for library users.

Open access, in its many forms, can be a vehicle for that sharing, allowing collection building far from the traditional boundaries of the library-out onto the open web where much is waiting to be discovered and exposed for the sake of research. Collection development for libraries will now depend on the dedicated and savvy librarians who take advantage of the valuable and available corpus of open access scholarship. At this juncture, it is a challenge for every librarian to add open access scholarship to the regular offerings of academic libraries, to include open access strategies in all collection development policies, and to share with public services librarian colleagues all of the materials gathered for researcher benefit.

With budgets suffering, an open access collection strategy allows for extension of library offerings that is without precedent and without cost. The library can continue to be known as the “place” where scholarly content is made available, vetted, organized, made more useful, and preserved. Best practices and policy development will guide the integration of open access web content into the excellent collections and services of all academic libraries. Excellent collections and the services that scaffold from them, including the integration of open access resources, will allow academic libraries to continue a vital and integral role in the life of every university.

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