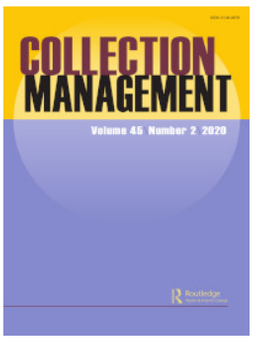

Collection Management

ISSN: 0146-2679 (Print) 1545-2549 (Online) Journal homepage: https://www.tandfonline.com/loi/wcol20

A Foundation for Change: Using Challenges and Opportunities as Building Blocks for Collection Management

Jennifer A. Maddox Abbott

To cite this article: Jennifer A. Maddox Abbott (2020) A Foundation for Change: Using Challenges and Opportunities as Building Blocks for Collection Management, Collection Management, 45:2, 110-123, DOI: 10.1080/01462679.2019.1626315

To link to this article: https://doi.org/10.1080/01462679.2019.1626315

COLLECTION MANAGEMENT
2020, VOL. 45, NO. 2, 110–123
https://doi.org/10.1080/01462679.2019.1626315

Routledge
Taylor & Francis Group

GUEST EDITORIAL

A Foundation for Change: Using Challenges and Opportunities as Building Blocks for Collection Management

Jennifer A. Maddox Abbott

Collection Management Librarian, University Library, University of Illinois at Urbana-Champaign, Urbana, Illinois

ABSTRACT

Large-scale collection management represents not just opportunities in terms of space, budgets, and personnel but also an important responsibility for the library's ability to provide quality service and access to knowledge in the future. Libraries must address many challenges when managing collections, but by taking advantage of opportunities when presented, libraries can improve access for today and tomorrow. Using the University of Illinois at Urbana-Champaign as an example, this article will explore how opportunities like high-density storage, shared print initiatives, digitization efforts, and mass deduplication can address challenges facing libraries and improve current and future access to collections.

KEYWORDS

Collection management; deduplication; digitization; high-density storage; shared print

Introduction

Large-scale collection management decisions have a lasting impact on access to both local and shared library collections. Collection management decisions are a significant factor in the potential interactions that may occur between library patrons and library content, so large-scale collection management represents not just opportunities in terms of space, budgets, and personnel but also an important responsibility for the library's ability to provide quality service and access to knowledge in the future. "Overall, the value of collections, and so the work of collection managers, becomes rooted in the potential that exists for someone to interact with content and then go on to advance society, further scientific or medical research, create a pleasurable experience or a work of art, or simply learn something new," (Chadwell 2012, 60). How best can libraries provide access to information? How best can we connect researchers, scholars, and students with the resources and the information that they need? As information professionals, it is incumbent on us to take this responsibility seriously and

CONTACT Jennifer A. Maddox Abbott maddox5@illinois.edu Collection Management Librarian, University Library, University of Illinois at Urbana-Champaign, 809 S. Oak Street, Champaign, IL 61820.

remain committed to maintaining access to our current and future collections.

There are many challenges that libraries must address when managing collections, but by taking advantage of opportunities when they are presented, even small ad hoc opportunities, libraries can improve access for today and tomorrow. Using the University of Illinois at Urbana-Champaign as an example, this article will explore how opportunities like high-density storage, shared print initiatives, digitization efforts, and mass deduplication can address challenges facing libraries and improve current and future access to collections.

Every library and information science student at some point runs across S. R. Ranganathan's Five Laws of Library Science (Ranganathan 1963):

- Books are for use.
- Every book its reader.
- Every reader his or her book.
- Save the time of the reader.
- The library is a growing organism.

Although obviously dated at this point in time, these five laws remain foundational for the profession. As librarians make decisions, sometimes hard ones, regarding the shape of library collections, principles like these provide a touchstone against testing new policies. Of particular interest in relation to large-scale collection management is the fifth law of library science: the library is a growing organism. Today's research and academic libraries are experiencing a time of rapid change. Changing user needs, technological advances, and varying physical space availability and budgets all play a role in the way libraries can and should provide access to information. This rapid rate of change is sometimes a challenge, sometimes an opportunity, or, in the author's experience, often both at the same time. So some of the key goals for collection management are to identify the challenges, take advantage of the opportunities, and develop strategies to continue to evaluate challenges and opportunities as the library and the needs of patrons continue to grow and evolve.

Challenges

When thinking about managing extensive collections that may be dispersed in a variety of locations and housed in a range of conditions across a library, there are certainly challenges that librarians must face. In particular, large-scale collection management plans must consider space, cost, and

time constraints; account for preservation and metadata factors; and address issues related to perception.

Space

The problem of a lack of space is nothing new. For the last 40 years, the publication of new printed material has outpaced the construction of new library spaces in which to house it all (Barclay 2010). There is simply too much content for colleges and universities to continue to collect printed materials at the same levels and attempt to store them in the old ways. Institutions cannot build enough buildings to keep up with physical storage, at least not in the traditional sense.

The University of Illinois Library faced a critical space shortage in the early 2000s, with several areas of the Main Stacks being filled 110 to 150 percent capacity (Collection Management Working Group 2017). Opening the Library's Oak Street high-density storage facility in 2004 certainly helped to relieve that overcrowding, but the library is again faced with too many printed books for the shelf space available, with Oak Street being at nearly 85% capacity. With both traditional shelving and high-density storage reaching capacity, the University Library will need to re-envision once again the future of physical collection storage. As awe-inspiring as local, massive physical collections are, no one institution can provide all the resources necessary to their users, and storing the print record en masse is no longer a sustainable model. The University of Illinois is not alone in rapidly reaching, or already at, capacity, in both open stacks and high-density storage, and we are at what has been referred to as a "critical crossroads in collection management" (Demas and Miller 2012).

To add more pressure to space challenges, the problem is not just about librarians buying and storing too many books for the shelving available. In addition to the increase in collections size, libraries are also seeing a change in how patrons use library spaces. Users today expect the library to provide more services and places to study or collaborate than in the past and not simply be buildings that hold books. Libraries must think critically about how best to allocate spaces, and those decisions often result in the reduction of the shelving footprint in libraries.

Cost

An always-looming challenge for managing large collections is cost. Many libraries struggle with a general lack of financial support in all areas, but even without actual budget cuts financial concerns are an ongoing challenge. The cost of additional or new services reduce the budget for

purchasing print materials, and as physical collections grow over time the annual cost to maintain and store them grows as well. Patrons in all disciplines are increasingly coming to rely on access to electronic resources, including ebooks, online journal subscriptions, and access to databases or software packages, but the body of material published in print each year still exceeds any library's ability to purchase. As libraries divert dollars to these newer formats and ways of accessing library collections, it creates a challenge in balancing the cost benefit of both types of access, and often space again becomes an issue. Libraries must grapple with how to continue to collect the physical books that are necessary in order to continue to have the robust, current, and usable collections that large, research institutions *should* have, while also effectively curating existing collections for current and future need. As libraries take advantage of opportunities to improve their funding situations, there are still financial challenges with each step forward in managing collections. There are many beneficial projects to undertake, sometimes so many that prioritization becomes its own challenge, but they all take money. It is often difficult to identify funding even if the end result is a major cost savings: whether it is starting a new project internally in order to transfer materials from one location to another, deduplicating or weeding collections to relieve overcrowding, starting a new project with external partners to share cataloging expertise and resources (to collectively store collections), or to digitize material to provide more robust access. Staffing, space, and computers to do the work, as well as shipping or recycling costs must be considered. While it can sometimes be a challenge to find the initial dollars to take on new initiatives or projects, the challenge is worth it in terms of long-term costs and, more importantly, in improved access to the library's diverse and rich collections.

When thinking about costs, the cost associated with new or incoming services—such as subscription packages or allocated purchasing dollars—are more obvious and easier to identify than some of the more hidden costs of maintaining or managing current collections. When looking at the cost of having a book on a shelf in a library for one year, it is not just the cost of that book but the storage costs that must be figured in, as well. These include the cost of staffing, circulation, maintenance, cleaning, and electricity for both heating and cooling. As Courant and Nielsen write, "These costs would be much lower if the library did not store millions of books" (Courant et al. 2010, 85), and so they cannot be ignored. The cost to keep a book will vary slightly depending on a library's specific factors, but it is estimated that it costs $4.26 per year to store a book in open stacks and $0.86 for each book in high-density storage per year (Courant et al. 2010).

So, for example, if the University of Illinois is storing one million never-used print volumes, with half in the open Main Stacks and half in high-

density storage at the Oak Street Library, the cost might exceed $2.5 million dollars per year. Of course, most of those costs are the sunk costs or capital investments that do not disappear when an item is discarded, but nevertheless, the issue of storage would continue or increase in perpetuity if left unaddressed. New spaces, or replacements in current facilities, only serve to increase those storage costs over time.

When thinking about that cost-per-book figure beyond one campus, when the focus is shifted to a consortium of peer institutions, such as the Big Ten Academic Alliance (BTAA), to which the University of Illinois belongs, one must consider the Big Ten schools who each have eight, ten, or twelve million volumes on their shelves. The challenge then is not about just one library's one million never- or little-used volumes, but those same volumes held by five or ten or all of the libraries in the BTAA. This compounds the problem when looking at the financial cost of inaction related to print retention.

Time

Another challenge libraries face is finding the time to tackle collection management projects on top of ongoing daily work. As technical services librarians often remind their public service counterparts, acquiring materials without the ability to provide access to them in a meaningful way serves no long-term purpose. While workflows are in place to keep up with new, incoming materials, libraries have the additional challenge of dealing with legacy collections and backlogs. When a backlog of uncataloged items that had been squirreled away in a closet decades ago is discovered, how does a library best go about getting those items cataloged in a timely manner in order to provide access? If new spaces or funding are providing an impetus to make progress on collection management projects, additional timing factors such as reliance on working with departments and units outside library control, construction deadlines, or lack of available manpower to meet demand all come into play. Working out collection management project planning timelines can be challenging with many moving parts to coordinate, especially since there are often factors outside the library's control, and often collections must be moved in a short and/or very specific amount of time, and then be shifted into their new home or returned to their space on a specific timeline, as well.

Preservation

When managing physical collections, it is a well-known challenge that many items are old and have likely been stored in less-than-ideal

preservation conditions for a long time. The library may need to develop a workflow for dealing with a variety of physical problems, or may need to deal with a specific, unforeseen mold outbreak or silverfish infestation. These challenges sometimes trigger a new collection management project that was not expected, or they are sometimes one of many moving parts of a planned project. Condition, of both library spaces and collections, is an important factor. Criteria of acceptable standards of condition vary from project to project and from institution to institution, but it is an aspect of large-scale collection management that must be considered.

Metadata

Whether maintaining existing collections or starting a new initiative, availability and accuracy of appropriate metadata is key. If records are updated manually on a case-by-case basis with items in hand, or are loaded into a system in a batch process, the need to manage the metadata that is tied to the physical and electronic resources is critical.

Because libraries have a long history of collecting more than can be processed, many institutions have cataloging backlogs that have developed over decades. When identifying and prioritizing projects to transfer materials into high-density or shared storage locations, rather than storing volumes on open shelving, providing robust online access for discovery becomes even more essential. While accurate metadata is always vital, if the browsability of physical collections are reduced or removed, librarians must ensure that records are correct and complete in the library's catalog or items held in storage are effectively lost. To add to the complexity, any consortial or shared collection management project introduces metadata from different institutions, which can differ in significant ways. Given that there is more than one way to accurately catalog a book, it can be a challenge to parse the data and compare holdings with other libraries because of these metadata differences.

Perception

In any field, there is often disparity between what the professionals know to be true and what the general public believes to be true. In any large-scale, or in any large-*change* project, this challenge cannot be ignored. For example, the library literature supports the notion that shelf browsing does not occur with the frequency or success that was once believed (Kieft and Payne 2012), and yet this is often cited anecdotally as a feature that patrons deem essential in their libraries. The same is true whenever libraries begin to look at weeding projects. Weeding is "puzzling, at best, to many in the

academic community and, at worst, is deeply troubling, even a violation of the historical public trust vested in libraries" (Kieft and Payne 2012, 146). Patrons may see weeding as a threat to the access to information, when in fact a well-maintained collection is far more valuable and more likely to provide easy access to required resources.

Not just weeding, but any change in space configuration, collection locations, or changes to circulation policies are often viewed as detrimental by patrons, which is of course counter to the intent of the library professionals involved. Managing expectations of what a library can collect and maintain successfully must therefore be viewed as a necessary challenge and key factor in any project's success.

Opportunities

The rapidly changing world of libraries has led to a number of opportunities in large-scale collection management. The University of Illinois at Urbana-Champaign has taken advantage of several of these, including high-density storage, shared print initiatives, large-scale digitization, and deduplication efforts. The University Library is not alone in moving forward in these areas, and these examples provide insight into how other institutions can effectively make similar investments for growth.

High-density storage

Starting in the late 1980s, academic libraries, big and small, public and private, have had to grapple with space issues (Payne 2007). Many libraries took on typical building projects beginning in the 1990s in order to accommodate their growing collections, but few successfully added a significant amount of space. Any budgeted growth room on their shelves was quickly filled, so campuses began investigating the possibility of high-density storage. High-density storage allowed libraries to shift millions of rarely used volumes into their on- or off-site facilities, freeing up shelf space for new, incoming titles and heavily used core collections. Since the late 1990s, leading library architects and planners have assumed that any library that holds more than one million volumes would maintain a storage facility as an integral part of its collection management strategy (Jones 1999). University of Illinois' Oak Street high-density storage facility opened in 2004, and currently holds more than four million items.

The cost difference between storing a book in open stacks versus high-density storage was a driving factor in libraries' decisions to move towards this storage model. Courant et al. (2010) conclude that it costs $4.26 per book per year to store an item in the open stacks and $0.86 per year to

store an item in high-density storage. That is a difference of $3.40 per book, per year. So, for example, if all four million volumes at the University of Illinois' Oak Street facility were housed in open stacks locations on campus, the library would be looking at an additional $13.6 million dollars in expenditures annually.

High-density storage offers fifteen to twenty times the capacity of traditional library shelving, which makes it an ideal choice for libraries where it is important to retain rarely used items. Looking back again at Ranganathan's laws of library science, every book its reader, every reader his or her book. This philosophy leads us to collect, preserve, and store content that has significant research value but that may not be popularly read right now. Not every reader will want an esoteric report on the properties of clay or will want to read Proceedings of the 1980 Prairie Grouse Symposium, for example, but we store these items so that when the researcher who wants these titles comes along, they have access to this information. These items that are scarcely used are not necessarily irrelevant, and many items rarely used currently may have increasing value in the future. It is actually the collection of these more scarcely held research materials that makes a collection special and sets it apart.

Of course, it is important to note that storage cost alone is not the only factor to consider when shelving books. It costs more to retrieve items with a certified operator using an industrial lift, and it can be less convenient for patrons to access items in high-density storage, although many fears in that regard have been allayed over time by efficient service from high-density storage facilities. The benefits of high-density storage are numerous. In addition to cost efficiency, these facilities provide environmental conditions designed for long-term preservation of physical materials. For example, University of Illinois' high-density storage vaults are kept at 50 degrees and 30% humidity, which makes it an ideal location to store materials of lasting value.

Shared print initiatives

In an environment where there is widespread digital access to particular resources, libraries are able to share print storage, keeping only one copy rather than duplicating substantial portions of their collections. Through this collaboration, libraries are able to draw down print collections while still maintaining easy access locally and long-term preservation consortially. Libraries have shifted from merely warehousing low-use print items to cooperating to create "comprehensive regional archival repositories" (Clement 2012, 164). As libraries begin to hold volumes in a shared environment, the way in which the "collection" is defined is evolving, and

collection management is being approached in a more collaborative context. "Libraries are on the cusp of one of the most far-reaching, national-scale collection management initiatives in modern history."(Demas and Miller 2012, 174). The University of Illinois has been able to take advantage of shared print initiatives, including the Big Ten Academic Alliance (BTAA) Shared Print Repository (SPR) and the HathiTrust Shared Print Program.

According to a report put out by the BTAA, previously the Committee on Institutional Cooperation (CIC), the libraries in the consortium hold more than eighty five million volumes, with print material taking up ten million linear feet, or 2000 miles, of shelf space (Sandler et al. 2012). The member libraries realized that new strategies were needed in order to successfully manage these print collections. The libraries looked at how much space was being taken up for print journal runs, sometimes multiple copies at each institution, for which the member libraries own access to the electronic backfiles. These volumes are available online in perpetuity to patrons, and so it was decided that, as a consortium, one print copy of these journal titles would be held.

The BTAA began the SPR project in 2011. The original agreement was to hold onto 250,000 volumes, on behalf of all participating libraries, in environmentally controlled storage for 25 years. The first phase of the project is stored at Indiana University's high-density storage facility in Bloomington, Indiana, and the University of Illinois contributed 38,000 volumes to that shared collection. One goal of the project is to connect users with the electronic versions of the journals for their research needs and avoid the print copies circulating unnecessarily for condition and preservation reasons. However, when it is necessary for a patron to see the physical volume, which we know is true but expect will continue to be rare, these items do circulate and so are not lost physical resources.

As the first phase of the project began winding down, the University of Illinois submitted a proposal to be considered for the second host site, which was accepted, ingesting an additional 250,000 volumes over the next five years, and agreeing to retain those volumes for 25 years. This project is complicated, with many factors and moving parts, but the University of Illinois was excited for the opportunity to be able to take the lead on the next phase of this shared print initiative. This is only one of many shared print programs that exists among libraries, as there has been an explosion in the past several years of shared print initiatives among academic libraries in the U.S. and around the world.

Another shared print initiative that the University of Illinois is participating in is the HathiTrust Shared Print Program. Through this program, HathiTrust member libraries have committed to retain more than sixteen

million volumes and hold them for the next 25 years. These sixteen million volumes correspond to more than 4.8 million titles in the HathiTrust Digital Library, which is approximately 65% of all of Hathi's digital monographs (HathiTrust Digital Library n.d.). The primary goal of this shared print initiative is the preservation of both physical and digital collections by linking them together, to help reduce the costs involved with managing print collections for member libraries, and to be a leader in this shift toward national, collective management of library collections.

Rather than all items being held in a single location, like the previously mentioned SPR, this program utilizes a distributed model, meaning that HathiTrust member libraries will commit to retain volumes and continue to store them within their own library collections. Another difference is that rather than focusing on bound serial volumes, this program is particularly focused on monographs. The University of Illinois has committed to retaining nearly 1.5 million volumes, and the notes indicating our commitment to retain these have been loaded into our online catalog.

Large-scale digitization

One way in which Hathi has gotten a good deal of digital content is through another library initiative, the Google Book Search Project. The University of Illinois participates in this project as part of a BTAA consortial partnership, as well. The Library began participating in 2010 and continues to digitize library collections through this initiative.

Google identified what materials from the library collections they wanted to digitize and refreshes that list periodically. Libraries can, of course, opt out of sending any materials that for some reason do not meet local criteria for digitization: fragile condition, course use, rarity, and so on. The library materials are retrieved and shipped, digitized by Google, and then reshelved when they return. Google keeps a digital copy for Google Books, and the library gets a digital copy, which the University of Illinois, along with the other BTAA members, stores in HathiTrust. In this way, patrons have online access to not just our digitized books but all of the books that have been digitized as part of this project. The priority of the digitization project is content that is out of copyright so that full text may be available for patrons to access.

Google of course cannot digitize everything that the University of Illinois would like to have digitized, due to any number of reasons such as condition, size, previous digitization, or cataloging restrictions. Because of this, the Library has created a digitization waterfall workflow. Essentially, anything that the Library would like digitized but is not sent through the

Google Book project to scan gets evaluated to determine whether it meets the criteria for scanning by the Internet Archive (IA), which is housed in the Main Library. If it is determined that IA scanning is not a viable option, it is assessed for digitization through the library's in-house scanning operations or outsourcing to external vendors. Each of these steps gets more costly and proceeds more slowly, with more focus and training on scanning delicate, damaged, or rare materials.

The University of Illinois has digitized many thousands of items through this workflow. The Google Book Search Project "represents one of the largest cooperative ventures of its kind in higher education," and one that will enable Big Ten libraries to preserve a vast range of legacy content (Big Ten Academic Alliance n.d.). This partnership with Google allows us to make our content available to a much broader audience.

Deduplication

Each of the opportunities mentioned has been beneficial in its own right. Although it is not a stand-alone, partnered initiative, the last opportunity to be discussed here is closely aligned with the other projects—deduplication. The cost of storing a book, as well as the need to free up space, has already been discussed. Deduplication of library collections is a vehicle through which libraries can address both of these issues. Libraries do not have the resources to keep duplicate copies of volumes unnecessarily.

Through different shared print initiatives as well as the increase of digital surrogates, the opportunity of deduplicating and withdrawing print volumes from our collections has presented itself. For example, through the BTAA Shared Print Repository project, the University of Illinois was able to withdraw 63,000 volumes from local holdings, representing more than 5200 linear feet of shelving space. For these volumes, not only is the content available online but Indiana University also has a copy on their shelf for the University of Illinois' patrons to access if needed, and so the space is able to be better utilized to shelve items that are more unique or specialized.

Until recently, it has not been possible for libraries to deduplicate collections on a large scale, even though more space has been an urgent necessity for some time. Discussions related to deduplicating collections are often politically charged, but with an infrastructure of commitments to shared and digital copies, the argument to deduplicate is far more palatable for many who would otherwise hesitate to withdraw library collections. Quite often deduplication does not actually result in a smaller physical collection, just one that provides the necessary growth room to accommodate incoming new acquisitions.

This moment in time has the potential to be the "Golden Age of Weeding" (Lugg and Fischer 2008, p. 88). Libraries have the opportunity to discard an unprecedented number of books. By removing the materials that are no longer of use, library patrons can more easily find or access the valuable resources available. It is the job of the information professional not to simply collect more and more and more stuff, but to shape collections based on knowledge of users' needs. The stakes are high with any deduplication or discarding project that permanently removes items from collections, so it is certainly a task that cannot be undertaken lightly. However, when duplicated and/or no longer needed books are identified, there is a real opportunity for libraries to reshape their collections in meaningful ways. These duplicated items are monopolizing space that can be better utilized for unique materials or special collections, or allow for more space for group research, classroom space, technology, or exhibitions and public performances.

Strategies and conclusions

Looking at these large-scale initiatives, it is easy to have an optimistic view of the future of libraries. Libraries, in some form, have been in existence for thousands of years. Libraries have continued to evolve and adapt, and there is no reason to believe that the professionals of today and the up-and-coming professionals of tomorrow will not carry on that legacy. Change simply is. It is how libraries approach change that matters. How do libraries address challenges as they come up? How do libraries identify and take advantage of opportunities when they present themselves, or better yet, how do libraries create opportunities in order to continue to serve library patrons and missions?

When thinking about successful collection management, there are several strategies that can be helpful, no matter the project or initiative. The first is to evaluate collections as they are in order to identify the library's collection management needs, as well as to always look for opportunities hidden amongst the challenges. It may be an opportunity to start a new project or to add a feature or piggy-back on an already running initiative. By folding in ways to address a need into another project, libraries can get more bang for their buck while managing collections. A classic form of this strategy is to make as many changes as possible while a physical item is actually in hand.

Second, form partnerships and maximize resources. "Librarians and scholars should take comfort in knowing that there is a community of engaged librarians working to build not just regional collections but a communication grid to weave these dispersed local efforts into a national print

archive." (Sandler et al. 2012, 259). Libraries' collective power is great and libraries should continue to leverage that power to improve access to our vast collections for our users. Libraries are collaborative by nature, and it serves libraries well to take advantage of work already accomplished and of each other's expertise. Libraries not only have peers at other institutions but often underutilized staff in our own libraries whose skills can be vital for a variety of collection management functions. Getting as many stakeholders as possible involved benefits the project, and transparency is essential to demonstrate that decisions are not made by a nefarious unnamed person but are shared decisions that solicit many points of view.

Whenever possible, be organized and plan, plan, plan. This may be easier said than done in some circumstances, but good organizational strategies are essential, and not necessarily the same for every project or person. Each person must find what works for them, but the importance of planning cannot be emphasized enough. Even when projects are unexpected and the deadlines are tight, as the saying goes, proper planning prevents poor performance. Successful planning can save time, money, and headaches further down the road. Something may certainly still go wrong, but by planning as much as possible one will be poised to address the setback armed with the best information at hand.

Another strategy is to remain flexible and accept that change is inevitable. The timelines will change. The people we work with retire or leave. Universities themselves and their students change. New systems, new technology, new learning spaces, new buildings will grow around us. It is imperative that library professionals adjust and are actively looking for new ideas or ways to shake up potentially outdated thinking about managing collections. We should be looking for sustainable options that allow our libraries to continue to grow and evolve.

Additionally, it is important to be transparent and manage expectations. Lines of communication must be open, allowing all parties to understand what is possible, what is probable, what is questionable, and what is inconceivable. At stake are the relationships that have been developed with faculty and scholars, other units on campus, and partners at other institutions. There is an obligation to share information and engage the larger community, rather than allowing misinformation or rumors to run amok.

The large-scale collection management decisions libraries make and the projects they complete will have a lasting impact on access to local and shared collections. There are certainly challenges when thinking about large-scale collection management, but they are worth addressing in order to take advantage of the opportunities to improve access to our collections. Libraries must continue to follow the research and data available and be proactive in seeking out and anticipating new opportunities in collection management.

References

Barclay, D. A. 2010. "The Myth of Browsing." *American Libraries* 41(6/7):52–54.

Big Ten Academic Alliance. (n.d.). "Google Book Search Project." Accessed June 5, 2019. www.btaa.org/library/book-search/introduction.

Chadwell, F. A. 2012. "What's Next for Collection Management and Managers? Assessing the Value of Collection Services." *Collection Management* 37(2):58–64. doi: 10.1080/01462679.2012.664482.

Clement, S. K. 2012. "From Collaborative Purchasing towards Collaborative Discarding: The Evolution of the Shared Print Repository." *Collection Management* 37(3–4):153–167. doi: 10.1080/01462679.2012.685413.

Collection Management Working Group. 2017. "Collection Management Working Group Report." University Library, University of Illinois at Urbana-Champaign, Urbana, IL, 1–29. Accessed June 5, 2019. https://www.library.illinois.edu/ … /Collection-Management-WG-Report-2017.docx

Courant, P. N., C. Henry, G. Henry, M. Nielsen, R. C. Schonfeld, K. Smith, L. Spiro; Council on Library and Information Resources. 2010. The Idea of Order: Transforming Research Collections for 21st Century Scholarship. CLIR Publication No. 147. Council on Library and Information Resources, Washington, DC.

Demas, S., and M. E. Miller. 2012. "Rethinking Collection Management Plans: Shaping Collective Collections for the 21st Century." *Collection Management* 37(3–4):168–187. doi: 10.1080/01462679.2012.685415.

HathiTrust Digital Library. (n.d.). "*Shared Print Program.*" Accessed June 5, 2019. www.hathitrust.org/shared_print_program

Jones, W. G. 1999. *Issues and innovations in library buildings: renovation and reconfiguration.* Washington, DC: Association of Research Libraries, Office of Leadership and Management Services.

Kieft, R. H., and L. Payne. 2012. "Collective Collection, Collective Action." *Collection Management* 37(3–4):137–152. doi: 10.1080/01462679.2012.685411.

Lugg, R., and R. Fischer. 2008. "Future Tense – Weeding: The Time Is Now." *Against the Grain* 20(4):87–88.

Payne, L. 2007. *Library Storage Facilities and the Future of Print Collections in North America.* Dublin, USA: OCLC Programs and Research. Accessed June 5, 2019. https://www.oclc.org/content/dam/research/publications/library/2007/2007-01.pdf

Ranganathan, S. R. 1963. *The Five Laws of Library Science.* 2nd ed. Bombay: Asia Publishing House.

Sandler, M., K. Armstrong, J. Bobay, M. Charbonneau, B. L. Johnson, and C. Walters. 2012. "CIC Co-Investment to Protect Print Research Library Collections in the Midwestern United States." *Collection Management* 37(3–4):237–259. doi: 10.1080/01462679.2012.685432.