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ABSTRACT

Five academic libraries in Ontario (Canada) are collaborating in a shared last print copy repository project. The project, called Keep@Downsview, aims to consolidate and rationalize low-use print materials held by the partner libraries and ensure long-term preservation of these important scholarly materials in Ontario, while still providing access via document delivery and ILL. In doing so, each of the partner institutions demonstrates its commitment to the stewardship of print collections for future generations while repurposing valuable space on campus. This paper describes the background, rationale, challenges, and lessons learned for this unique Canadian project that leveraged funding from the province of Ontario, the University of Toronto's high density preservation facility at Downsview, and the commitment of all partners to preserve the scholarly record in Ontario.

KEYWORDS

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Collection management; shared print; preservation; academic libraries; Ontario (Canada)

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INTRODUCTION

In early 2014, armed with provincial funds to help the University of Toronto expand its highdensity preservation facility in north Toronto, representatives from among the largest academic libraries in Ontario met to discuss the potential of a shared print preservation project in Ontario. Initially known as the Downsview 5, the project has now been named Keep@Downsview and includes Queen's University in Kingston, the University of Ottawa, McMaster University in Hamilton, Western University in London, and the University of Toronto. The Keep@Downsview partnership is not a consortial project, but the five libraries have worked together through the Ontario Council for University Libraries (OCUL) consortia for many years and the group could see the potential for success. Not only did an established inter-library loan program provide an existing workflow for the transfer of physical materials and desktop delivery, the libraries have other important common features to unite them: all five libraries are members of the Association of Research Libraries (ARL) and the Canadian Association of Research Libraries (CARL), and all of their parent institutions have a medical school and a business school. Each of the libraries is also an active participant in national and regional consortia, including the Canadian Research Knowledge Network and the Ontario Council of University Libraries. As large academic libraries at research-intensive universities, each of the partners is committed to and has university-level support for the long-term access and preservation of extensive collections and a shared program to ensure that low-use print materials remain available in the province was a natural extension to their local and consortial activities. It has taken some time to negotiate the business terms of the memorandum of understanding (MOU) and the cost-sharing details which, at the time of writing, are not yet signed.

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Nonetheless, work on planning services and collection management has proceeded with relatively little difficulty. Similarly, the five libraries also quickly established the goals of the project and agreed to four key principles:

- •The project strives to save costs while maintaining access to a principal research collection by sharing in the responsibility of storing and maintaining one shared preservation print copy at the Downsview facility.
- •The project includes both journals and monographs.
- •All materials in Downsview are low-demand materials, as determined by the participating institutions.
- ·All institutions share ownership of the materials they transfer.

What the libraries do not share is a common experience with off-site storage. Slowly, it emerged that the key principles, while clear when first articulated, had the potential to mean slightly different things to each institution. It fell to members of the partnership's Coordinating Committee, made up mainly of associate university librarians for Collections at each institution, to sort through these different understandings to establish a common language and understanding of what each member of the group wished to accomplish. In doing so we observed that past experience with off-site storage dictates future expectations and that it cannot be assumed that each partner entering into a shared preservation project is participating for the same reasons. Each member of a partnership such as this must understand and acknowledge the motives of individual institutions for participating and address the specific needs of all participants, while agreeing (and believing in) an overarching purpose for, and outcome of, the project.

LITERATURE REVIEW

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Five models of library storage facilities are identified by O'Connor, Wells & Collier (2002): institutional; cooperative; collaborative; regional library centers; and repository libraries. They differentiated between cooperative storage as sharing space within a facility and collaborative storage as a shared approach to a collection in terms of growth, shape, management, and access. Collaborative storage is viewed as a more efficient use of resources.

As more collaborative storage facilities develop, the challenges and "lessons learned" show similar trends (Wright, Jilovsky & Anderson, 2012; Renwick, 2013; Walker, Schoonover & Margjoni, 2010; Bird & Ashoughian, 2012; vanDuinkerken, 2012). Reviewing the literature identified several common themes:

Ownership of the collection

Libraries are frequently valued by their collection size, and there may be a reluctance to rely on a repository copy. There may also be an emotional attachment to the physical collection. In addition, there can be very practical aspects to ownership in collaborative projects where multiple institutions are transferring materials to a centralized facility or are relying on a single copy included in a shared collection. This can be especially true for publicly funded institutions, whose library collections fall under state or provincial property laws and regulations (Sandler et al., 2012).

Importance of Communication

While communication among partners is essential, communication with all library stakeholders is critical. Without adequate understanding of the key preservation principles driving the project, academic faculty and library staff may be resistant to the concept of remote storage and the loss of physical browsing.

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Concerns from the academic community

When attempting to create a statewide JSTOR repository in Florida, faculty in the arts and humanities expressed concern about the usability, reliability, and quality of some online materials (Walker, Schoonover & Margjoni, 2010).

Need for Collection policy

When reviewing CAVAL Archival and Research Materials Centre project (CARM1) prior to Stage 2 development, Wright, Jolovsky & Anderson (2010) noted that with no formal collection policy in place, there is a "dearth of information regarding the character of the collection ... no attempt to characterize the collection either by period or discipline, and no attempt to complete journal or serials run, which would support the concept of an identifiable collection." This may be contrasted with the Council of New Zealand University Librarians (CONZUL), who developed flexible parameters for the shared collection. "The serials should have enduring research value, be clean and in good condition, and there is a preference for bound volumes over loose issues. Substantial runs are preferred over shorter ones (agreed to be five volumes) and contribution to the shared store is voluntary" (Renwick 2013). A focus on serials, at least in the initial phases, is also a common thread. This does not necessarily reflect that serials are easier, and complications of holdings validations and cataloging are often noted. Serials do, however, have the advantage of releasing "more space per decision" than is the case with monographs (Sandler et al, 2012, 257; Walker, Schoonover, & Margjoni, 2010; Bird & Ashougian, 2012). Under-estimation of workload

"Holdings validation and collection analysis are costly and time-consuming processes which require development of very efficient workflows and financial commitment" (Bird &

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Ashoughian, 2012). Yet accurate holdings information is critical to the success of a print preservation endeavor. VanDuinkerken identified one of the largest workload issues as creating serial item records, updating holdings, and changing locations. Renwick (2013) noted that CONZUL decided to adopt a process of consecutive deposit such that only one library would send materials at a time. The other libraries would be provided with lists of the materials being sent and could then decide which materials they could withdraw. Walker, Schoonover & Raimonda (2010) reported that thirteen months after their start date only 340 JSTOR titles had been fully reviewed.

Positive Outcomes

When reviewing Phase 1 of the UK Research Reserve (UKRR) pilot project, a number of positive outcomes were identified, in addition to freeing shelf space and preserving print research material (Crawford, 2008). "These included improvement in catalogue and holdings records and increased knowledge of cataloguing practices and interest in collections management." The project was also seen to have made a useful contribution to staff training.

A 2007 report by Payne identified at least 68 high-density library storage facilities in the United States and Canada. Individual institutions operated 79% of these facilities, while only 21% were collaborative storage solutions. It is likely that these numbers have changed somewhat in the intervening years, and indeed the project described in this article represents the movement of a high-density storage facility from use by a single institution to a collaborative storage model. The Canadian context represents both of Payne's operational models, and a mixture of O'Connor, Wells & Collier's program types. In southern Ontario, the Tri-University Group, made up of the University of Waterloo, Wilfrid Laurier University, and the University of

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Guelph, was established in 1995 and by 1996 had begun work on a shared off-site storage facility. "While the original agreement stated that library materials deposited in the facility would be de-duplicated before transfer to the Annex [i.e. the Tri-Universities Group's off-site storage facility], in practice, the lack of policies and processes in concert with immediate needs to free up space in the campus libraries and merge collections from previous storage facilities resulted in duplicated materials being transferred from the three institutions (including the transfer of multiple copies owned by a single library)" Gillies & Stephenson (2012). In March 2011, the facility was at 94% capacity and a number of specific weeding projects were developed to extend the life of the repository.

Meanwhile, the universities in Western Canada that belong to the Council of Prairie and Pacific University Libraries (COPPUL) have built a Shared Print Archive Network (SPAN). (Bird & Ashoughian, 2012). A survey of member libraries indicated a preference for a distributed print repository network where individual institutions would agree to retain specified holdings on behalf of the group. COPPUL continues to follow this model in its current print archiving activities and SPAN has now entered phase 3, which includes monographs and government documents in addition to journals.

KEEP@DOWNSVIEW CONTEXT

Keep@Downsview began as a storage and preservation strategy specific to the University of Toronto. In 2000, the on-site storage facilities of the University of Toronto libraries (UTL) neared capacity and the stacks of its largest flagship library, Robarts, far exceeded capacity. As a result, the library began to seek off-site solutions for low-use materials. In 2005, UTL built Downsview - a temperature and humidity controlled preservation and storage facility that

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followed the Harvard model. Located in north Toronto, roughly twenty miles from downtown, Downsview featured two "pods" that each held one million volumes. Since 2005, low-use materials from throughout the UTL system have been transferred weekly to Downsview. Volumes stored at Downsview are available through an online request service in the library catalog and retrieved and delivered to the various campus libraries by a daily courier. Although Downsview ultimately succeeded in the practical goal of freeing physical space at Robarts without compromising accessibility to high-use material (less than 2% of Downsview material circulates annually), the process was not without controversy. Because the need for space was urgent, many faculty and librarians were dismayed to see materials removed without consultation and according to inscrutable criteria that often appeared arbitrary. Given the urgency, the process was also conceptualized and funded entirely as a University of Toronto initiative, in spite of considerable benefits and implications for higher education throughout Ontario due to the significant size and scope of the UTL collections (which comprises the largest collection in Canada with more than 13 million volumes). These benefits could have justified support from the provincial government and other Ontario universities at the outset. UTL also recognized that Downsview would benefit considerably from an economy of scale cost advantage by including other universities with similar storage challenges. The opportunity to explore this possibility emerged in 2012, as UTL began plans to expand the Downsview facility. The expansion called for the construction of three additional pods, corresponding to space for three million volumes, by 2025. In the summer of 2013 Queen's was looking for a solution to their space problem and contacted UTL to identify an opportunity to collaborate in a shared preservation project. UTL's chief librarian then began reaching out to the

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university librarians at three of Ontario's other large academic libraries: Western University, McMaster University, and the University of Ottawa. Each of these libraries faced immediate or future space constraints in their campus locations, and while all but one had existing off-site storage in some form, the potential benefits of a shared preservation collection were attractive. By late 2013, the partners had submitted an application to the Ontario Ministry of Training, Colleges and Universities' Productivity and Innovation Fund (PIF). The proposal sought funding for the purchase of the racking and mechanized vehicles to store, sort, and retrieve the print materials to be housed in the new pods. In writing the application, the partners emphasized the benefit of moving low-demand items to high density storage, which would allow them to release space in their campus buildings currently dedicated to collection storage. Among the key benefits that the partners anticipated in their application were opportunities for the creation of improved user space and new services, and to realize cost savings across institutions by creating a shared, de-duplicated collection rather than storing multiple copies of little used titles in several locations around the province.

The PIF application was successful; a grant of \$2.29M was awarded, and construction of the new pods began in mid-2014. Even before construction was underway, the five partners began working more closely together in anticipation of the facility's opening. The first official meeting of the schools participating in the project that was to become Keep@Downsview was held on February 14, 2014. The university librarians, associate university librarians (AULs), and collections and services leads from the five partners gathered at the existing Downsview facility for a day-long discussion of the broad parameters of the project, the collection, and next steps.

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A key outcome of the February meeting was the creation of a Steering Committee made up of the university librarians from each partner school and a Collections Coordinating Committee, consisting of AULs for collections or the equivalent collection heads from each of the partner institutions. The Coordinating Committee was tasked with further exploring the needs and expectations of the partners, developing a shared understanding of the project's components and goals, and developing parameters for the shared collection. As construction progressed through 2014, the Coordinating Committee worked through these questions, submitting a final report and recommendations to the Steering Committee in October. In the report, the Coordinating Committee laid out broadly the shared ideas and principles that would guide the project's development, a costing and ownership scenario that reflected various levels of sharing of items in the collection—a complex formulation that reflected the thinking at that time, but was subsequently simplified—and a recommendation to create three new working groups: a Service Delivery Sub-Committee and a Metadata Sub-Committee, both reporting to the Coordinating Committee, and a Business Committee, reporting to the Steering Committee.

The work of these committees has been the main area of activity through 2015 and early 2016. The Metadata and Service Delivery Sub-Committees were both able to conclude the initial planning stages of their mandate relatively quickly, laying groundwork for how the partners expected the program to operate. These policies and procedures will be put to the test as the partners begin transferring volumes to the Downsview facility or attaching their holdings to an existing Downsview volume. It is anticipated that additional work from the Metadata and Service Delivery Sub-Committees will be required as transfers of materials and bibliographic information get underway and complications are encountered. In a project of this scale, the devil

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can be in the details. We expect any challenges (as described further below) to be resolved through the experience of the pilot projects in 2016.

The work of the Business Committee has been particularly challenging. Charged with writing the memorandum of understanding and developing a methodology for sharing the cost of operating the facility and its growing collection, the Business Committee was composed of a mix of accountants and librarians with a variety of perspectives and skills. Developing a memorandum that was crisp and precise but flexible and a detailed cost-sharing plan based on actual costs for the construction and operation of the new pods while meeting the needs of all of the partners took longer than was initially anticipated. Happily, at this writing, work on both is near completion.

Prior to participating in the Downsview project, each partner school had its own way of handling storage. Western University built a high-density storage site on campus in 2003 to supplement an existing on-campus storage space but by 2011 both were at capacity. A private sector company is currently under contract to store and retrieve medium- and low-use material. The University of Ottawa currently operates an off-site storage facility housing approximately 950,000 low-use items but is nearing capacity. For nearly a decade McMaster has stored 200,000 monographs off-site in leased warehouse space. Because the site is poorly suited for both preservation and access, the university wishes to relocate its material to a site specifically configured for efficient access and long-term preservation. Although Queens has not yet used on-site or off-site storage facilities, its limited space has required selective weeding, an unsustainable practice for long-term collection integrity.

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For all partners there will be at least a common gain: a coordinated strategy for serial preservation. Through their membership in the Ontario Council of University Libraries (OCUL) consortium, each member of the Keep@Downsview partnership already has a well-developed strategy for the preservation of electronic journals. This strategy was born out of OCUL's early commitment to negotiating with publishers for local load rights for digital content. The platform is called Scholars Portal. In 2013, following a rigorous process, the Scholars Portal journal repository became the first certified Trustworthy Digital Repository in Canada. By choosing to move serial titles to the Downsview facility each of the Keep@Downsview partners will not only meet the goal of freeing up space on-campus quickly, they will also be making a commitment to share the responsibility of preserving both print and digital serials in Ontario.

CHALLENGES

There are numerous challenges for this project that can be summarized and shared. Perhaps the biggest challenge was the fact that the initial impetus for the collaboration was cost savings, with a shared desire for preservation being a secondary driver. This led to challenges in coming to a common understanding during development of the MOU. Another challenge in writing the MOU was coming to agreement on the governance of the project. Building consensus on the role of the partner institutions in governance was a challenge since the storage facility was owned and operated by the University of Toronto. The roles and responsibilities for each partner in a model where one institution manages the facility and delivery of service on behalf of four other partners needed to be clearly defined and understood, both in practical and legal terms.

Accurately matching collections and identifying duplicates created a challenge for the Metadata Sub-Committee. There are four different ILS systems represented at the five institutions and over

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time serials and books have been cataloged according to differing cataloging standards and practices. This lack of system uniformity had a major impact on the efficacy of data analysis, the ability to view, verify, and share data on holdings and titles, and the ability to accurately match metadata. Finding a common match point for data was challenging since only two of the five institutions had carried out an OCLC Batch reclamation project, thus enabling the use of unique OCLC numbers for matching. The University of Toronto Library catalog is being used for verification; this needs to be done at the item level since there isn't any automated tool available. This manual process involves substantial investment of time by local support staff and is likely to be one of the most important limiters of the project in terms of processing capability over a longer period of time.

Developing matching processes was also complicated by the fact that one of the collections is cataloged in both of Canada's official languages – English and French. One of the partner institutions (University of Ottawa) is fully bilingual and catalogs all French language materials fully in French, including the application of subject headings from the Répertoire de Vedettes-Matières (RVM) de l'Université Laval, and materials in all other languages in English, with subject cataloging from Library of Congress Subject Headings (LCSH). This is noteworthy because, at the moment, the exact same title at two different institutions will have two different OCLC numbers - one for the LCSH record, another for the record containing RVM - thus adding to the complexity of matching materials across the five collections. For example, the novel 'Age of Reason' by Jean-Paul Sartre would be cataloged in English using LCSH, whereas the same edition of this work the French version ('L'Age de Raison') would be cataloged using RVM, thus creating two unique records for a translated work.

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Lack of resources is another significant challenge. There has not been any funding, beyond the initial grant from the province, and no project manager or additional staff has been hired at any of the institutions. The coordination of Keep@Downsview relies upon the ability of existing professional staff in the partner institutions to absorb additional work. At each step, from planning the project and developing the workflows to implementing the transfer of material and creating a communications plan, representatives from each institution have volunteered their time to move the project forward. It is expected that once we are in an implementation phase, the planning work will decline and the operational workflow will increase but, when one considers the number of committees (four) with representation from each school, the collective amount of time dedicated to this project has been significant. This confirms that for each of the partner institutions print preservation is a priority.

LESSONS LEARNED

Our experience has taught us a number of important lessons.

It is essential to begin with a very clear statement of intent linked to core beliefs and a shared vision. This is the foundation on which to build a partnership and if this vision is not clarified at the outset, in writing, it can lead to difficulties with developing the processes and understanding the roles and responsibilities necessary to move the project forward. While there will need to be a cost-share model and efficiencies of scale, these can only be addressed once there is a shared understanding of the purpose of a partnership for shared print management and preservation and shared understanding of the long term goal. Frequent internal communication and consultation at all levels of the organization are needed for this to occur. Roles, responsibilities, and policy decision-making need to be very well defined and in writing whenever possible.

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Do not underestimate the data challenges caused by heterogeneous systems in place at different institutions. Data verification and exchange are impacted by differences in systems and workflows. As well, there are different cataloging practices that impact how items can be searched, matched, and disposed. Involving senior cataloging staff is essential to mapping a workflow that enables the process to function. Likewise, involving senior staff responsible for document delivery/interlibrary loan is essential for ensuring that a delivery model suiting the needs and interests of all partners can be established.

Developing a detailed and realistic project plan at the outset is very important. The project plan is a roadmap for the many moving parts and will govern the milestones that need to be achieved in order to build a model that can be implemented and sustained.

Staffing capacity is another fundamental issue to address. While Keep@Downsview has succeeded, so far, without hiring additional staff or appointing someone to the project full time, we would have benefitted from a deeper understanding of how much time planning the project and writing the MOU would take. Going forward, questions remain: who will carry out the implementation and the ongoing operations? Which staff, at which institutions? Is there a funding opportunity to hire a dedicated project manager and support staff? It is important to be realistic at the outset regarding the major commitment in staff time that will be required from each institution during the planning phase, and then plan for what will be required once the operational phase is launched.

Thinking early on about communications is time well spent. The key stakeholders – senior administrators, faculty, library staff, students, and granting agencies – need to receive messaging that is timely, succinct, and that delivers a common story across the partner institutions. This will

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affect the degree of comfort and buy-in for the new initiative and will have a political impact since perceptions can easily translate into support or lack of support for the library. This is also about marketing the library. We have lately realized the importance of a focused and forwardlooking approach to communications, and we have enlisted the assistance of communications experts at each institution to actively pursue a coordinated communications strategy. The value of in-person meetings cannot be over-stated. Although teleconferences and email were used heavily, a small number of highly structured in-person meetings were critical in clarifying definitions, roles, and group understanding.

Recognize that over time, even in relatively short periods, the project may change as personnel change and new opportunities arise. As just one example, McMaster University has already shifted its priorities regarding material they will be sending first to Downsview, stemming from a previously unexpected renovation opportunity.

And lastly, patience is not only a virtue but a necessity for a project of this scale and complexity. We now know that, despite sharing what appeared to be a common vision and a history of collaboration, it takes time to articulate, commit, and prepare for a shared print archive. This is particularly true when staff are distributed across a large geographical area. There will be issues large and small that were not considered at the outset and details that require resolution will crop up when workflows are being developed. If everyone is committed to the project and its long term vision, benefits, and goals, then it should be possible to work together to overcome or work around the challenges as they arise. It is an important test of collaborative spirit to be able to use the collective expertise and knowledge to solve these problems.

CONCLUSION

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Academic research libraries across North America are striving to achieve the optimal-mix of collections, spaces, and services that best position them for the future. Having developed large and nationally significant collections over a period of many years, the five academic libraries in Ontario (Canada) participating in Keep@Downsview are acutely aware of the competing pressures of collections and space, and over two years ago, came together to meet this challenge with a strategic vision that would benefit each institution. The MOU for Keep@Downsview is moving toward final approval and considerable time and effort has been expended by member institutions to ensure that the project is launched in 2016. In late spring, we embarked on a series of pilot exercises sending small batches of journals to test the workflows carefully mapped out during the planning process, allowing us to 'kick the tires' of the new model and verify what works and what needs adjustment before ramping up the scale of the workflows over time. As the year progresses we expect low-demand items from the collections of each institution to be transferred to the Downsview facility. When this happens, Keep@Downsview will create the first shared, de-duplicated preservation collection in Ontario, and the goals of balancing space and financial concerns with ensuring that low-demand materials from our collections remain readily available for research and study will be achieved.

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