ABSTRACT:

This article reflects on the first eighteen months of a long-term project to digitize a large and still-growing postcard collection. The project is notable for its use of student workers, developing an active donor base, establishing a significant online presence, and igniting interest in, use of, and donations to the collection itself. Throughout 2014, statistics from Google Analytics, CONTENTdm, and Flickr were monitored and analyzed. Combined with a review of the project itself, this case study examines how cultural heritage materials may be made available on a limited budget and used in the Digital Age.

KEYWORDS:

Digitisation, Internet, Postcards, Search engines, Students

MAIN TEXT:

I. Introduction

The Walter Havighurst Special Collections at Miami University in Oxford, Ohio, holds a collection of half a million postcards dating from the 1880s to the 1990s and from around the world. Although a majority of the collection was organized geographically or topically by its original donors, approximately 20% remains unsorted. The collection is uncatalogued and its contents remain largely unknown even to the librarians. Furthermore, being held in a closed-stacks library prevents users from being able to freely browse the collection. In response to these challenges, a project was launched to develop a digital collection of the postcards called the Bowden Postcard Collection Online. Currently, the project is managed by the Special Collections Digital Librarian and includes three part-time student workers. The goals of the project are twofold:

- 1) To create searchable records to help make the collection more accessible
- 2) To raise awareness and use of the postcards in the classroom and outside the university

II. Project History

The project began as a pilot in the summer of 2013, with the goal of determining whether a digitization project of the postcards was feasible relying on student labor and, if so, what sort of workflow and time frame would be necessary. Over the course of ten weeks, a student worker digitized 6-12 postcards from each state in the United States and created a sample digital postcard collection. At the end of the pilot, the project was evaluated and the library decided to invest in a long-term project to develop a larger digital postcard collection.

As part of the evaluation, the metadata schema was also reviewed. Because the project currently focuses on geographically-sorted postcards, it was decided that more attention was needed for not only the location depicted on the postcard, but also to where the postcard was sent. In addition to the Dublin Core Location field, hidden fields are used for the exact street address or coordinates of the location depicted (where possible) as well as the destination of the mailed postcards. These more exact locations are used to generate an interactive map to enhance the browsing functionality of this geographically-oriented collection. Currently, a map of the locations shown on the postcards is a part of the digital collection website, and future plans include a second map which will trace the origin and destination of mailed postcards and the dates they were sent. The maps are made with a combination of PHP, the CONTENTdm API, and the Leaflet Javascript library.

Based on the pilot, and restrictions of time and funding, it was decided that more short-term goals than digitizing the entire collection would be necessary. For the first stage of the project, these goals were:

- To digitize the already-sorted postcards from Ohio to supplement the library's collection of local and regional history.
- 2) To expand the project staff to increase the output rate of the project.
- 3) To explore bulk digitization options to allow the student workers to focus on the metadata.

The latter two goals were made possible in the summer of 2014 as a result of donor support. One of the original collection donors, in addition to others who learned of the project, made a series of generous contributions which allowed the project to contract the digitization of the remaining sorted Ohio postcards (approximately 26,000) to an external company. The postcards were delivered to the company in sleeves marked with indexing keys; these keys were used to name the directories in which each pair of scans (the front and back of the postcard) were stored. As a result, no metadata creation was necessary on the part of the company, allowing them to focus on digitizing the postcards and cropping the images. This external digitization halved the time needed to create each digital object.

Currently, the project is focusing on creating metadata for the scanned Ohio postcards, although other locations have been prioritized when specifically requested by faculty and other users. With the digitization already complete, students are able to add an average of ten postcards per hour to the digital collection. After completing the Ohio postcards, the project will move on to the Kentucky and Indiana postcards to complete the Cincinnati tri-state area, the region surrounding Miami University.

III. Student Workers

Being able to rely on student workers without a library and information science background has been essential for this project to be possible on a limited budget. Given that each worker will be with the project for no more than a few years before graduating, it has been necessary to quickly train them so they can begin work immediately. Structured workflow and extensive guides have been developed to help them adapt to the process. All new records are reviewed by the project manager, and hidden metadata fields are used to flag problems, ask questions, and leave other notes the project manager should be aware of when reviewing the records. Where possible, new workers' schedules are made to overlap with more experienced students so they are able to rely on one another for help, and regular

reviews of the metadata guidelines and project workflow are conducted at the beginning of every semester.

Although the students do not have any formal training in metadata creation, within this structured environment they have been able to create effective and consistent metadata with limited oversight. Their largest challenge has been transcribing the varied handwritings, many of which are faded; however, this would likely be as much a challenge for someone with a background in library and information science as an undergraduate student. There have also been concerns that the vast majority of the collection remains unknown, and among the postcards there may be content that is graphic or offensive in nature. Students are instructed to mark any postcards they are not comfortable viewing for the project manager to complete; no explanation on the part of the student is necessary.

Although prior metadata training or experience are not reasonable expectations in evaluating undergraduate student applications, the project's experience has found that students with a background in data entry more easily adapt to detail-oriented metadata creation, and students with advanced computing skills are more comfortable learning the software used in creating the digital collection (CONTENTdm). These experiences are supported by a similar project at Queens College Graduate School of Library & Information Studies, which used developing a digital postcard collection as a course assignment (Perry and Surprenant 107-109).

IV. Promoting Access & Use of the Collection

If digital collections are to be effective sources of information, they must be findable outside of their institution's individual repositories. Kalfatovic et al. observe:

"There is too much information in today's online world to continue to build silos of content that may or may not be accessed by increasingly online and mobile audiences. The connected world is increasingly finding virtual content in spaces where they already live, work, or play. Content

providers – especially the library, archives, and museum communities (LAMs) – must work to move their content from single access point portals to large shared spaces." (268)

A review of the 2014 Google Analytics for the digital collections website at Miami University suggests that relatively few users come to the main digital collections website to search and browse, but rather arrive directly at individual items from external sources such as search engines and social media sites.

This trend is not without precedent, and Lally and Dunford (n. pag.) cite a 2005 OCLC report which found that "only 2% of college and university students begin searching for information at a library website". A more recent OCLC report found that "seventy-nine percent (79%) of Internet users begin their online information search on a search engine" (75). Lossau (n. pag.) cites a survey of university students which found the respondents to strongly prefer general search tools such as Google to more specialized tools such as online library catalogues and databases. The survey revealed that the students only used those specialized tools for materials that were not available through a more generalized tool.

A study by Matusiak of university student search behavior found that most observed students relied solely on either browsing or simple keyword searches, and the only student who used Boolean searching had been taught in a library instruction program (483). She concludes, "if keyword searching is indeed a dominant search strategy in the online environment, digital librarians and website developers need to take this into consideration" (486). It is important to note that search engines do not adhere to traditional library metadata practices and instead anticipate natural language and other searching habits of their users. While online library catalogues and other traditional digital repository software rely on Boolean searching, search engines are "based on advanced linguistic analysis and semantic dictionaries, [and] are increasingly integrating algorithms of approximate searching that allow a greater fault tolerance of search terms" (Loosau n. pag.). As the audience of users who grew up with Internet search engines continues to grow, the library must plan for their resources to be findable through these methods that are increasingly becoming the default information retrieval method.

Beyond search engine optimization, bringing materials to where the users already are, rather than waiting for them to find the collection, is another crucial step in expanding the use of a digital collection. Buczynski (197-198) states that "Word-of-mouth (WOM) marketing of a digital library's resources is the most promising marketing solution to the challenge of marketing a library's digital holdings in today's information consumer marketplace ... people have always used social networks as a starting point to get information". Instead of bringing news about the collection into people's social networks, it is more effective to bring the actual collection into their conversations, allowing it to spread by technological "word-of-mouth" (e.g. reposts). Although new additions to the digital postcard collection are announced through a variety of means beyond the collection website, including RSS, Facebook, and Twitter feeds, more traffic to the collection has come as a result of posting the actual materials on image-based social media sites such as Pinterest and Flickr.

Flickr has been particularly successful in helping the Bowden Postcard Collection Online reach new users. At the beginning of 2014, all the digitized postcards known to be out of copyright were added to the Miami University Libraries' Flickr account. When the Miami University Libraries joined the Flickr Commons, the account's daily views rose to an average of 20,000. As part of the image description on Flickr, a link was included to all objects in their full digital collections in CONTENTdm. Monthly views of the digital postcard collection in CONTENTdm immediately increased by approximately 33% after joining the Commons and have continued to rise since, making the postcards consistently the libraries' most viewed digital collection every month by a large margin.

The notable exception to the high viewership has been during university finals and breaks. When the students were not available to work and no new postcards were added, views fell by roughly 50%. A similar effect has been observed in Flickr, where a sharp rise in viewership is observed when a batch of new postcards are added, with daily visits roughly doubling before slowly trailing off. Additionally, the rise in viewership did not seem to significantly vary based on the number of new postcards added, and it

appears that smaller but more frequent updates are more effective in reaching users than larger but less often additions. Given the large number of viewers who arrive at the full digital collection through social media, it is clear that regular updates to the collection both in CONTENTdm and Flickr are essential to promoting access and use of the postcards.

V. Conclusion

The project has accomplished much in the first eighteen months. In addition to developing the most-viewed digital collection at Miami University, it has also attracted interest and use by university instructors and private researchers. Beyond the digital collection, it has also ignited growth to the physical collection which has expanded by nearly 4,000 postcards given by multiple donors.

Furthermore, the project has successfully relied on student workers without a library and information science background to create effective metadata, and the students themselves are given valuable project experience as undergraduates. Early experiences in promoting access and use of the digital postcard collection have revealed three important challenges:

- Being findable: Most visitors to the digital collection will find it by external sources. This means
 that search engine and social media user behavior, must be considered when developing
 metadata for digital collections.
- 2) *Being noticed*: Even with search engine-friendly metadata, it can be difficult to be noticed as one website out of many. One of the strongest correlations to the number of visitors to the postcard collection has been the frequency of new additions.
- 3) *Being there*: In the Digital Age, it is necessary to anticipate where potential users already are and bring the digital collection out of its silo and to them.

These are not unique to one project, but rather challenges that any library with digital collections that wishes to improve their utility must overcome. In order to maximize access to and use of digital collections it is necessary to format the information in a way that reflects user expectations and actively seek out potential users where they are, rather than waiting for them to find the collection.

Making the postcards publicly available online has found a massive new user base, which raises new questions about the library and its users in the Digital Age. Less than a third of users of the Miami University Libraries digital collections in CONTENTdm in 2014 came from Oxford, Ohio, IP addresses and fewer than half of all users hailed from Ohio; 15% of all users came from outside the United States.

Although the academic library's primary mission is to serve the students and faculty of its institution, such a majority of users of the digital collections coming from outside the university suggests that librarians should also consider the behavior and needs of this new global audience.

Works Cited

Buczynski, James. "Referral Marketing Campaigns: 'Slashdotting' Electronic Resources." *The Serials Librarian: From the Printed Page to the Digital Age* 53.3 (2008) 193-209. Web. 3 March 2015.

Kalfatovic, Martin R., Effie Kapsalis, Katherine P. Spiess, Anne Van Camp, and Michael Edson.

"Smithsonian Team Flickr: A Library, Archives, and Muesum Collaboration in Web 2.0 Space."

Archival Science 8.4 (2008): 267-277. Web. 3 March 2015.

Lally, Ann M., and Carolyn E. Dunford. "Using Wikipedia to Expand Digital Collections". *D-Lib Magazine* 13.5/6 (2007): n. pag. Web. 3 March 2015.

Lossau, Norbert. "Search Engine Technology and Digital Libraries: Libraries Need to Discover the Academic Internet." *D-Lib Magazine* 10.6 (2004): n. pag. Web 3 March 2015.

Matusiak, Krystyna K. "Information Seeking Behavior in Digital Image Collections: A Cognitive Approach".

Journal of Academic Librarianship, 32.5 (2006): 479-488. Web. 3 March 2015.

OCLC. "At a Tipping Point: Education, Learning and Libraries, 2014". Web. 3 March 2015.

Perry, Claudia A., and Thomas T. Surprenant. "METRO Grant Success Story: Waterways of New York

Project". Digitization in the Real World: Lessons Learned from Small and Medium-Sized

Digitization Projects. Ed. Kwong Bor Ng & Jason Kucsma. New York: Metropolian New York

Library Council, 2010. 100-122. Web. 3 March 2015.