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Chris Evin Long

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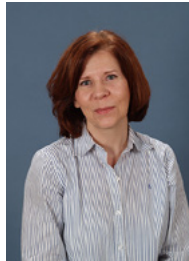
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Editorial

Mary Beth Weber



It is the time of year when the winners of the ALCTS annual awards are announced, and I am delighted to announce that the 2018 winners of the Edward Swanson Best of *LRTS* Award are Deborah M. Henry and Tina M. Neville for their paper, “Repositories at Master’s Institutions: A Census and Analysis” (*LRTS* volume 61, no. 3, July 2017). The authors studied a population of Carnegie-designated master’s institutions to quantify the existence of digital repositories at those institutions. They also conducted a content analysis of repositories containing some type of faculty content. The authors considered various ways that these collections might be discovered, including open web searching, inclusion in repository directories, and access through an institution’s website. The press release for this award notes “No other study has examined the IR’s of this group of academic institutions, nor so carefully analyzed their faculty, student, and other types of content while also gathering data on their platforms, or comparing discoverability using Google, OpenDOAR, ROAR and institutional websites.” I congratulate Tina and Deborah and am honored to be able to present the award at the 2018 ALA Annual Conference in New Orleans.

The work of technical services is often thought of as acquisitions or cataloging. It can be both of these things, as well as collection development and preservation. Our work is guided by procedures and best practices to document workflows that are intended to ensure consistency that will in turn facilitate discovery and research. I recently participated in a series of meetings aimed at business process improvement to identify, analyze, and improve existing processes within my department. There is overlap and duplication of work between my department and another within my library system, and the goal was to streamline processes and eliminate unnecessary duplication. It was an interesting and enlightening process that was frustrating at times. It also reinforced the importance of periodic review of workflows and procedures, particularly within the larger context of my library and the community we serve. My department’s work enables the work of my public services colleagues and the subject specialists. It is often easy to view one’s work in a vacuum without considering the time, effort, and costs involved or the larger implications. The papers in this issue of *LRTS* address collaboration, processes, and workflows to enable cataloging, preservation, and access to resources:

- In “RDA Implementation in Large US Public Libraries,” Chris Evin Long discusses the results and analysis of a survey he conducted to investigate how the transition to Resource Description and Access was handled in the hundred largest US public libraries. Long specifically examined whether catalogers believe that some of RDA’s major goals have been met and how some of the anticipated impacts of RDA implementation have been handled.
- In a paper with one of the catchiest titles possible (“Motley Crew: Collaboration across an Academic Library to Revive an Orphaned Collection”), authors Amy Jankowski, Anne Schultz, and Laura Soito relate

how difficult it can be to find time and motivation to effectively address collection management for materials in specialized areas that fall outside the primary scope of one's usual responsibilities. Their paper describes how a team of librarians and staff evaluated and consolidated an "orphaned collection" of books in health and medicine call numbers. The project team established a data-informed evaluation and weeding process that minimized affective decision making and considered the nuances of collection management between disciplines.

- Elizabeth Hobart demonstrates how conservation documentation provides important information about a library's collections, including condition assessments and treatment decisions in "Recording Conservation Information: The MARC 583 Field in Practice." She notes the shortcomings of paper files and local databases to document conservation information. Her paper outlines how Pennsylvania State University implemented use of the MARC 583 field to record conservation documentation for items in

the Special Collections Library, making it publicly viewable, searchable, and protected by regular database backups.

- The importance of name authority work cannot be disputed. Teaching library personnel, particularly non-catalogers, to create name authority work is an enormous challenge. In "Extending Name Authority Work beyond the Cataloging Department," Dana M. Miller and Amy Jo Hunsaker detail how the University of Nevada, Reno Libraries' Metadata and Cataloging Department partnered with their Special Collections and Digital Initiatives departments to obtain NACO certification. The three departments collaborated to create a new workflow and a tool that effectively extended name authority work and record contribution beyond traditional MARC cataloging.
- And for your professional development and enlightenment, this issue of *LRTS* includes book reviews courtesy of my colleague, *LRTS* Book Review Editor Elyssa Gould.

RDA Implementation in Large US Public Libraries

Chris Evin Long

This survey sought to investigate how the transition to the new cataloging standard, Resource Description and Access (RDA), has been handled in one hundred of the largest US public libraries, specifically examining whether catalogers believe that some of RDA's major goals have been met, and how some of the anticipated impacts of RDA implementation have been handled. A large majority of these libraries have implemented RDA for original cataloging, but respondents also generally believe that RDA has failed to meet some of its most important goals, primarily ease of use and cost-effectiveness.

The international cataloging community began an epic journey in June 2011 when the Library of Congress (LC), the National Library of Medicine (NLM), and the National Agricultural Library (NAL) announced that they planned to conditionally adopt Resource Description and Access (RDA), the new cataloging standard developed by the Joint Steering Committee for Development of RDA (JSC). Prior to the US national libraries' official implementation of RDA on March 31, 2013, several American libraries had already adopted it for their own use. The Program for Cooperative Cataloging (PCC) took a differentiated approach to RDA implementation, setting separate deadlines for the mandatory use of RDA in authority and bibliographic records. The PCC established March 31, 2013, as the date after which all new authority records entering the LC Name Authority File (LCNAF) had to be coded as RDA, but PCC libraries were allowed to continue to use the Anglo-American Cataloguing Rules, Second Edition (AACR2) for bibliographic records until December 31, 2014. All libraries that subsequently ingested the new records created by LC, PCC libraries, and other early adopters thus became de facto implementers of RDA, whether or not they had approved of the new standard.

RDA's developers sought to achieve a number of goals with the new standard. One of its primary objectives was to be responsive to users' needs, enabling them to fulfill the Functional Requirements for Bibliographic Records' (FRBR) objectives of finding, identifying, selecting, obtaining, and understanding information about resources and agents relevant to their research needs.¹

Providing effective bibliographic control for all types of resources, which AACR2 lacked, was deemed as a key component in meeting this objective. RDA specifically includes instructions to help catalogers better describe the types of materials acquired by twenty-first-century libraries, particularly non-print, nontextual, and unpublished resources.² Furthermore, RDA's increased reliance on cataloger judgment in applying instructions was aimed at attaining a greater focus on local user needs.³ In addition to users' needs, consideration was given to how RDA would be used and implemented by libraries and their cataloging practitioners. Cost-effectiveness and continuity were some of RDA's

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major design objectives. RDA metadata records must be produced in a cost-effective manner and compatible with existing records in online catalogs, particularly those developed using AACR2 and related standards.⁴ Moreover, the intent was for RDA to be clearly written and easy to use and interpret, with numerous examples provided that are appropriate and relevant to specific instructions.⁵ Finally, RDA was intentionally published as a web-based toolkit to incorporate the features and functionality of online access.⁶

Catalogers have had several years to apply RDA and assess its impact both on their own practices and their users. While there have been numerous post-implementation studies of RDA within individual libraries and national cataloging communities, most have focused primarily on training issues and changes to the local integrated library system (ILS) necessary to accommodate RDA elements and the corresponding new MARC fields. To date, however, there has been a paucity of research examining whether catalogers believe that RDA has met its stated purposes and goals. Furthermore, in studies where library type is the study's emphasis, the RDA research conducted thus far has concentrated primarily on academic libraries with scant regard for public libraries, despite the fact there are 2.4 times as many public libraries as academic libraries in the United States.⁷ This paper intends to fill both of these knowledge gaps by investigating how the transition to RDA has been handled in large US public libraries since LC/PCC's implementation, specifically using a survey that examined whether public library catalogers believe some of RDA's major goals have been met and how some of the anticipated impacts of RDA implementation have been handled. For instance, since one of RDA's goals was to provide effective bibliographic control for all types of resources, are catalogers in large public libraries using it to describe all the types of resources owned or acquired by their libraries? What have been the effects of RDA implementation on public library systems and cataloging procedures? How effectively are catalogers able to use and interpret RDA? How is ongoing RDA training being conducted? What are the general perceptions of cataloging managers in large public libraries regarding the cost-effectiveness of implementing RDA? Are these libraries using the online RDA Toolkit or accessing RDA some other way? The results of this survey can inform cataloging practitioners, public library administrators, professional organizations, and the RDA Steering Committee (RSC). For catalogers and administrators, the topics examined can provide a benchmark of practice, enabling them to see how their peers have handled various RDA issues. Professional organizations and national library agencies can see where more training is needed. For the RSC, it is hoped that the results point out aspects of RDA that can be improved.

Literature Review

Librarians, particularly catalogers, who worked in the early twenty-first century will well remember the vast amount of information disseminated about RDA during its development phase. Since the history of RDA's development and its philosophical underpinnings are already well examined in the literature, this review focuses on the implementation aspects of RDA specifically examined in the survey.

Pre-implementation Research

Training

Well before the US national libraries decided to implement RDA, librarians were grappling with how to understand it; much of the early literature on RDA focused on explaining the new cataloging standard and critiquing its merits.⁸ As RDA coalesced and its application became imminent, the literature began shifting attention to implementation issues. In this pre-adoption period, training in the new cataloging code was widely identified as the most pressing need for a successful RDA implementation. One of the earliest papers to address this was by Hitchens and Symons, who emphasized the need to use a number of educational formats to deliver the training content, including both online education and in-person conferences and workshops.⁹ Numerous national-level surveys and reports from libraries that participated in the initial RDA testing program buttressed the Hitchens and Symons assessment, generally agreeing that a wide variety of training methods should be made available. Many of the respondents reported a heavy reliance on online learning, especially LC's free training materials, supplemented by a steady diet of in-house, hands-on instruction.¹⁰ That catalogers were largely dependent on free online education is not surprising, since Sanchez's 2011 email survey found that funding for training was a serious concern for more than 60 percent of the respondents.¹¹ Tosaka and Park noted "it appears that the RDA training landscape currently remains fairly fragmented—characterized by the duplication of ad hoc efforts among various library organizations and continuing education providers," presenting catalogers with a wide, but perhaps bewildering, array of training options.¹² On the cusp of LC's RDA implementation in March 2013, these same authors in a separate study observed that the "low levels of familiarity reported for a wide range of RDA topics were rather alarming."¹³

Perceptions of RDA

Not all pre-adoption RDA implementation research centered on training—considerable effort was also made to

gauge what catalogers thought of the new code. General impressions of RDA tended to be influenced by the amount of direct experience respondents had with the code. Respondents to Sanchez's 2011 survey, most of whom were from small- to medium-sized libraries, showed that uncertainty, resignation, distrust, and anxiety towards RDA were common attitudes.¹⁴ Surveys conducted by the US RDA Test Coordinating Committee and Young and Bross, however, showed that catalogers who had actually worked with RDA were far more positive about it, leading them to conclude that negative perceptions would likely dissipate with more RDA practice.¹⁵

Anticipated Impact on Users and Catalogers

The long buildup to RDA's publication also allowed ample time to speculate on matters related to RDA's goals and purposes that have an impact on end users, catalogers, and library managers. Several aspects of RDA's responsiveness to users' needs were examined in the literature. Beall's finding that users most often prefer full spellings over abbreviations, affirmed by some of the RDA test participants, supported RDA's decision to avoid abbreviations whenever possible.¹⁶ Issues surrounding RDA's replacement of the General Material Designation (GMD) with what was intended to be more precise terms for content, carrier, and media types (CMCs) were also studied. Hider found that although end users recognized the new RDA terms for the CMCs, they did not always interpret them as RDA had intended.¹⁷ Catalogers who participated in RDA testing also had negative reactions to the abandonment of the GMD, questioning whether the new terminology and vocabulary used in RDA would be intuitive enough to end users, and in general they mostly believed that RDA records were not easier to understand than their AACR2 predecessors.¹⁸ The imminent loss of the GMD was debated by the librarians at Central Connecticut State University, who feared it would negatively affect their users. Ultimately, they decided they would not locally add GMDs to RDA records but would also suppress the new 33X fields in their public display.¹⁹ Pre-adoption impressions about RDA's cost-effectiveness were mixed. More than half of Sanchez's survey participants doubted that RDA would be cost effective.²⁰ Cronin, while acknowledging there would be costs involved for training and preparing the ILS to implement and display the new RDA fields, was hopeful that the RDA Toolkit could provide savings in the long term.²¹ Regarding RDA's promise of simplifying cataloging rules, Intner allowed that RDA better supported cataloger judgment than AACR2 but did not conclude that it was simpler to apply, an assertion that was later affirmed by some RDA test participants.²²

Anticipated Impact on ILS Systems and Cataloging Procedures

Cronin's 2011 paper discussing the University of Chicago's experience in adopting RDA considered the impact of its implementation on ILS systems and copy cataloging procedures. Library systems would need to accommodate the increased emphasis on the use of relationship designators in MARC records. Furthermore, cataloging managers would need to manage the integration of RDA records with AACR2 records and determine which RDA elements might need to be added to existing AACR2 records. Cronin addressed the issues surrounding the replacement of the GMD with the new CMCs and opined that cataloging managers would need to consider a number of options. Should RDA data be mapped in the ILS to harmonize its data values with corresponding ones in the GMD? Should GMDs be removed from public displays altogether? Should libraries do nothing to alter either RDA or AACR2 records and let existing GMDs continue to display to catalog users?²³ The latter view was supported by Central Connecticut State University, which decided not to modify existing AACR2 records to resemble their RDA counterparts.²⁴ Other authors also pondered implementation issues. Hunt and Danskin provided guidance on things to consider when preparing the ILS for RDA adoption, while a study by McCutcheon reported that Kent State University staff found RDA records to be compatible with AACR2 records in both the staff and public modes.²⁵

Post-implementation Research

Training

As libraries followed the US national libraries and made their own RDA implementation decisions, research from practitioners continued to proliferate. A number of individual institutions related their own adoption decisions, several national surveys reported on issues faced in their countries, and studies of how RDA was being implemented in specific types of libraries were conducted.²⁶ Perhaps not surprisingly, training continued to be an area of great concern, particularly the attendant costs, as several authors commented on the continuing need for affordable education options.²⁷ Consequently, many institutions relied heavily on LC's free training materials.²⁸ Preferred methods of training were scrutinized, and in-house and in-person training was often viewed as a valuable complement to online offerings.²⁹ Some authors noted that the overabundance of different versions of online training materials from LC and other organizations created confusion.³⁰ Lack of training materials for nonbook and foreign language materials was perceived as problematic.³¹

Adoption Rates

A number of national-level surveys documented RDA adoption rates in their respective countries or regions. In Canada, university libraries had the highest rate of partial adoption of RDA, while college, government, and special libraries reported high rates of non-adoption.³² Duchevea and Pennington reported that high costs were a common barrier to adoption in some European countries, while Brazil found RDA to be incongruent with its cataloging traditions.³³ Technical difficulties were also cited as an impediment.³⁴ Several papers noted the importance of existing national library structures and cataloging policies in aiding RDA adoption in some European countries, while the lack thereof in Turkey created difficulties.³⁵ The levels of adoption within individual libraries also varied. Choi, Yusof, and Ibrahim reported that staff at the National Library Board Singapore cataloged solely in RDA, regardless of whether it was original or copy cataloging.³⁶ RMIT University in Melbourne also decided to upgrade AACR2 copy to RDA and programmatically revised incoming copy cataloging records to conform as closely to RDA as possible.³⁷ The libraries of Kent State University and Concordia University, in contrast, chose to do original cataloging in RDA but to still accept AACR2 copy cataloging records.³⁸

GMD Questions

Discussion involving the replacement of the GMD with the new CMCs persisted in the post-adoption literature, much of which concentrated on its impact on users. Columbia University's librarians were not convinced that the vocabularies used in these fields were comprehensible enough for users to identify the right resource format.³⁹ Likewise, RMIT University's public services staff were not enthusiastic about the CMC terms, and the library decided not to display these fields.⁴⁰ Concordia University Libraries tried to ameliorate this problem by implementing additional icons to help end users identify resources in the desired format.⁴¹

Libraries were also confronted with format-related public display issues. Caudle and Schmitz reported that Auburn University tried to use the CMCs to display format information in their VuFind catalog, but were disappointed to find that RDA lacked the necessary granularity, and they resorted to using format data from other MARC fields.⁴² Jin and Sandberg found that none of the public display options in the University of Illinois at Urbana-Champaign Library ILS fully supported RDA.⁴³ The Z. Smith Reynolds Library at Wake Forest University encountered similar problems when personnel experimented with using CMCs to enhance discovery faceting. Although they judged the CMCs to be more granular and specific than GMDs, they found that "CMCs alone do not provide for sufficiently robust

faceting of public catalog searches," primarily because of their ILS's limitations and the MARC format.⁴⁴ Other libraries addressed the issue by hybridizing catalog records, with some adding GMDs to their RDA records and many others retrospectively adding the 33X fields to their AACR2 records.⁴⁵ Mississippi State University's catalogers took this approach one step further, concluding that retaining GMDs was the best way to support user tasks, but also determined that an even more effective solution was to update legacy GMD terms with more item-specific terms. They reviewed the GMD vocabulary to develop a list of "common terms" to replace the more general GMD terms. For example, terms such as "DVD" or "VHS" were substituted for the more general GMD "videorecording."⁴⁶

Perceptions of RDA

Overall, post-adoption perceptions of RDA were mixed. Some characterized RDA as an important tool and lauded the flexibility it allowed for cataloging decisions, its suitability for describing digital and nonprint library resources, and its straightforward instructions.⁴⁷ Parent reported that some of RMIT University's staff were uncomfortable with such freedom and were eager to see clear guidelines established.⁴⁸ Tosaka concluded, "Ultimately, it seems reasonable to conclude that RDA has not yet made our daily cataloging work any easier in the current implementation environment, with added time and energy needed for staff training and revising local workflows, for example, without immediate visible improvements in users' resource discovery experience."⁴⁹

Public Library Cataloging Research

The paucity of literature that examines cataloging in public libraries is stark in its contrast to the scholarly attention paid to the academics. A smattering of papers spread out over decades, however, sheds some light. Freedman and Bishoff both maintained that responsiveness to local user needs is imperative in public library cataloging.⁵⁰ Bierman asserted that the speed with which materials are made available to users is of utmost importance.⁵¹ McGurr, Mason, and Monaco observed that public libraries catalog a large variety of materials, with a special emphasis on nonprint resources like music CDs and DVDs, and concur with Bierman that they are expected to process material quickly.⁵² In one of the few studies that discuss public library catalogers' behavior, Miksa's 2008 survey of North Texas public libraries revealed a low usage of cataloging tools and resources such as AACR2, Cataloger's Desktop, and manuals like the MARC21 format manuals.⁵³ Lambert, Panchyshyn, and McCutcheon's 2013 paper is the only one thus far that focuses specifically on RDA implementation

in public libraries. They contend that significant new developments are often adopted later in public libraries, a position buttressed by their finding that almost one-third of Ohio public library catalogers had not heard of RDA as of a 2012 survey.⁵⁴ Given public library catalogers' focus on their community and the necessity for speedy cataloging of materials in a diverse array of formats and accessible tools, it would seem that a cataloging code like RDA that is intended to be easy to use and interpret, promotes effective bibliographic control for all types of media, is focused on local users' needs, and is accessible and cost effective would be readily embraced.

Method

The most recent survey database of the Institute of Museum and Library Services' *Public Libraries Survey* (at the time FY 2014) was used to determine the hundred largest public libraries in the United States as determined by overall collection size. Excluded from this group were three PCC libraries since RDA implementation for those libraries is dictated by PCC policies. Also excluded were two libraries that outsourced or decentralized cataloging operations, so that cataloging practices for a specific library could not be determined. Five libraries with the next largest collections were therefore included in their stead. The collections of the selected libraries ranged in size from 8,391,595 to 973,236; these counts reflect the data gathered by the Public Libraries Survey and include print materials, e-books, audio and video physical units, and audio and video downloadable files. The survey population was limited to a hundred libraries for two reasons. First, it was assumed that libraries of such size would have the number of catalogers able to provide original cataloging and would collect the amount of materials needing original cataloging that would provide a valid assessment of RDA's effectiveness. The second reason was more practical. It was a surprisingly difficult and time-consuming process to find email addresses for technical services librarians, catalogers, or even library directors in the targeted public libraries. Consequently, the author decided to limit the population to a hundred so that the survey could be conducted in a timely manner.

The research was conducted using an electronically administered survey, created using Qualtrics survey software. The survey's scope was limited to bibliographic records; respondents were not asked about RDA authority work. The survey questions addressed the following topics:

- the library's RDA original and copy cataloging practices;
- the effects of RDA on the library's ILS;
- access to RDA by the library;

- training;
- perceptions of ease of use and cost-effectiveness; and
- RDA's impact on local cataloging practices.

Responses were solicited by direct email from persons identified through the libraries' websites as those most likely to be knowledgeable about the organization's cataloging practices and were typically heads of technical services or cataloging managers. When contact information was available only for library directors or associate directors, they were requested to pass on the survey to the most appropriate person in the library. Survey content was pre-tested with several public library cataloging managers, and survey format and navigation were pre-tested with librarians and cataloging staff at the University of Colorado Boulder. The hundred solicitations were distributed on February 20, 2017, with reminder emails sent to nonrespondents on February 28 and March 8. The survey closed on March 12. Fifty respondents started the survey and forty-five completed it. The results for the uncompleted surveys were not considered in the study, so the response rate was 45 percent (forty-five respondents).

Findings

Demographics

The survey began with two demographical questions. Respondents were asked to indicate their library's geographic region according to their Office of Business Economics (OBE) region code. Most of the largest US public libraries are in the Far West, followed in descending order by the Southeast, the Middle East, the Great Lakes, and Southwest states. The Plains, Rocky Mountains, and New England regions have considerably lower representation, although the exclusion of PCC libraries somewhat depleted the total for New England. In general, the geographic distribution of respondents closely matched that of the survey population as a whole (see table 1).

Respondents were then asked how many full-time equivalent (FTE) employees performed some sort of cataloging duties as part of their jobs, broken down by:

- professional salaried employees (MLS/MLIS degree required);
- salaried library employees (MLS/MLIS degree not required); and
- hourly employees (non-salaried, MLS/MLIS degree not required)

The average number of professional employees is 2.77, with reported totals ranging from a high of nine to a low of

Table 1. Geographic Distribution of Survey Population and Respondents.

Region	Survey Population (<i>n</i> = 100)	Survey Respondents (<i>n</i> = 45)
Far West (AK CA HI NV OR WA)	24 (24%)	11 (24.4%)
Southeast (AL AR FL GA KY LA MS NC SC TN VA WV)	21 (21%)	9 (20%)
Mid East (DE DC MD NJ NY PA)	16 (16%)	8 (17.8%)
Great Lakes (IL IN MI OH WI)	15 (15%)	7 (15.6%)
Southwest (AZ NM OK TX)	11 (11%)	5 (11.1%)
Plains (IA KS MN MO NE ND SD)	7 (7%)	5 (11.1%)
Rocky Mountains (CO ID MT UT WY)	4 (4%)	0 (0%)
New England (CT ME MA NH RI VT)	2 (2%)	0 (0%)

zero, with thirteen libraries (29 percent) reporting one. Support staff slightly outnumber librarians, with an average of 2.81. Support staff FTE numbers varied from seventeen to zero, with eleven libraries (24 percent) reporting the latter. The average number of hourly employees (1.33) was almost half of the other two ranks, with a high of five and twenty-three libraries (51 percent) reporting zero. One library's report of 360 hourly cataloging FTEs was assumed to be an error and was not counted in the average for that rank.

RDA and Original Cataloging

The survey next asked about the library's use of RDA for original cataloging, and 78 percent (*n* = 35) of the respondents reported that they have fully adopted it for original cataloging of some bibliographic formats. Of that group, twenty-nine reported that they use RDA to create original records for all types of bibliographic resources. The remaining six libraries were asked about the specific types of resources for which they use RDA in original cataloging. Not surprisingly, print monographs are the predominant format, followed distantly by sound recordings and video-recordings. When asked why RDA is not used for certain formats, responses included reasons such as lack of training (particularly for specialized formats), incompatibility with the discovery layer, and that very little original cataloging is done for formats other than print monographs.

There remains an appreciable percentage of non-adopters within the survey population. The ten libraries that reported that RDA has not been implemented for any original cataloging were asked to provide an explanation. The most common reason cited was that RDA is difficult for patrons to understand. One respondent commented, "Many aspects of RDA make it more difficult for patrons and staff in public libraries to access material." Another offered a similar observation: "RDA is a 'disimprovement' as a cataloging system . . . RDA's basis in FRBR, a set of theoretical mathematics principles, makes both the cataloging process

and the resulting records harder for our patrons to use, not easier." A participant offered these withering sentiments: "As a public library, our customers are not conversant with library jargon and certainly not with 'catalog-ese.' Nothing in RDA is relevant to the end-user, our tax-paying, bond-voting, library card-carrying public. Cataloging obfuscates information from the general public and is only relevant to

those in the profession." The focus on users' needs as a reason for non-adoption stands in contrast to that found in the literature review, which cited rationales such as the prohibitive costs of RDA implementation, conflict with cataloging traditions, and technical issues.⁵⁵

There were other justifications as well, including:

- RDA implementation is not a priority within the library;
- there was a managerial decision to not implement RDA;
- little original cataloging is done in the library;
- and, staff training would be needed.

The non-adopting libraries were then asked about future plans to adopt RDA for original cataloging. The answers were mixed, with four libraries indicating that they definitely or probably will, another four ambivalently stating that they might, and the remaining two stating that they probably or definitely will not.

RDA and Copy Cataloging

Participants were then queried about RDA and their institution's copy cataloging practices. The survey first inquired whether RDA additions or revisions are made to AACR2 records, and then conversely asked if any AACR2 additions or revisions are made to RDA records. In both cases, respondents who answered affirmatively were asked about the types of changes made and how they are done.

Twenty-six libraries (58 percent) replied that no RDA changes are made to AACR2 records, while nineteen (42 percent) answered that they are. The most common revision was the addition of the 33X fields, following closely by spelling out abbreviations and changing the MARC publication field from 260 to 264. Adding relationship designators to access points and removing GMDs are less common modifications (see table 2).

One respondent mentioned that his institution deletes all unique RDA fields and has instructed their vendors to follow this pattern when supplying customized records. Having catalogers make these modifications at the time of cataloging is by far the most frequent method employed, with some commenters noting that their catalogers do this programmatically using MarcEdit and OCLC macros and text strings. Applying ILS processes like global updates and using vendor services are less frequent approaches, although most libraries employed a combination of these procedures (see table 3).

The reverse scenario, making AACR2-related modifications to RDA records, is slightly more common, with a little over half of the respondents ($n = 23$, 51 percent) answering affirmatively. The most frequent revision is the addition of GMDs to RDA records. Notably, all libraries except for one that add GMDs also retain the 33X fields. A small number of libraries remove the 33X fields or the relationship designators from access points (see table 4).

As with RDA-related modifications to AACR2 records, having catalogers make these changes at the point of cataloging is the overwhelmingly preferred method used (see table 3). This hybridization of catalog records, mixing AACR2 and RDA elements to achieve desired results for search and discovery, closely aligns with the findings of previous studies.⁵⁶

RDA's Effects on the ILS

As previously noted, it was anticipated that RDA would present librarians with a number of ILS issues to consider, including how to utilize and display the new CMCs and how to cope with the increased presence of relationship designators in RDA records. Survey participants were asked if they retain the 33X fields, and forty (89 percent) responded affirmatively. Those who answered yes were asked whether they display the 33X fields in the public view of their ILS and if so, which fields. Twenty-seven (68 percent) of this group indicated that, even though they retain the fields, they do not display them. Nine of the remaining thirteen libraries answered that they show all of them, while four responded that only some of the fields are visible. Of these four libraries, all display the 338 carrier types (e.g., volume, video disc, online resource), while three display the 336 content types (e.g., text, still image, performed music) and two display the 337 media types (e.g.,

Table 2. RDA Changes Made to AACR2 Records.

Type of Change	Number of Libraries Making Changes ($n = 19$)
Add MARC 336, 337, and 338 fields	16 (84.2%)
Spell out abbreviations	14 (73.7%)
Change MARC field 260 to 264	12 (63.2%)
Remove GMDs	8 (42.1%)
Add relationship designators to access points	7 (36.8%)
Other	4 (21.1%)

Table 3. Methods by Which Changes to Records Are Made.

Method of Change	Number of Libraries Using Method	
	RDA Changes to AACR2 Records	AACR2 Changes to RDA Records
By catalogers at the time of cataloging	19 (54.3%)	23 (63.9%)
Through ILS global updates or a similar process	7 (20%)	5 (13.9%)
By a vendor service	6 (17.1%)	8 (22.2%)
Other	3 (8.6%)	0 (0%)

Table 4. AACR2 Changes Made to RDA Records.

Type of Change	Number of Libraries Making Changes ($n = 23$)
Add General Material Designations (GMDs)	21 (91.3%)
Remove MARC 336, 337, and 338 fields	4 (17.3%)
Remove relationship designators from access points	3 (13%)
Other	2 (8.7%)

unmediated, computer, video). Regarding use of CMCs to identify a resource's format in the public view of the ILS (as an icon, in faceting, etc.), only a small segment ($n = 5$, 12 percent) reported that they do this. This reluctance to display CMCs to the public and use them in faceting reflects similar practices discussed in the literature review.⁵⁷ When polled about the retention and display of relationship designators, the survey showed that while a large majority of libraries ($n = 36$, 80 percent) retain them, a smaller portion ($n = 23$, 68 percent) actually display them to the public.

Persistence of the GMD

The GMD was a recurring topic in much of the previous research on RDA implementation, and this survey revealed that it is still far from dead in large public library catalogs. As noted earlier, the questions on RDA and copy cataloging disclosed that many catalogers in the survey group are hesitant to remove the GMD from incoming AACR2 records, and in

fact a significant number actively insert them into RDA copy cataloging records. This trend also holds true for original cataloging practices; eighteen libraries reported that they add GMDs to original catalog records in their local ILS, while seventeen indicated that they do not.

The previous section revealed that, while most libraries retain the 33X fields, few display them to the public or use them to indicate a resource's format. In contrast, a substantial majority ($n = 38$, 84 percent) opted to retain the GMD in their legacy AACR2 records, and thirty-three members of that group (87 percent) continue to display it to their users. Clearly, many public library catalogers still champion the GMD's utility, and survey comments indicate that concern for their users is a key motivating factor. One participant stated, "We laboriously add GMDs into all outside records in order to provide better customer service and access for our patrons." Other representative remarks included: "The 33X fields are useless and the elimination of the GMD is very problematic" and "Our librarians and service staff prefer the GMD." Public library catalogers' perception that the GMD still benefits users is similar to opinions of other catalogers expressed in previous research.⁵⁸

Modes of Access to RDA

RDA was intentionally developed as an online tool, and that is how it is predominantly being used in large public libraries. Thirty-seven libraries in the group access RDA through the online *RDA Toolkit* and almost all ($n = 34$) do so through a single institutional subscription; only two libraries reported that they participate in a consortial or group subscription. The online *RDA Toolkit* is the sole means of access for the majority of respondents ($n = 32$, 73 percent). Eleven libraries (25 percent) also use the print version of RDA; six of these libraries use the print version in tandem with the online *Toolkit*, while print is the sole means of access for five libraries. One library indicated that it uses the e-book version in addition to print. The seven libraries that do not use the *RDA Toolkit* cited reasons such as ease of use, cost, and difficulties in gaining access.

Catalogers' Perceptions of Using RDA and Its Cost-Effectiveness

A primary goal of RDA was for it to be clearly written and easy to use and interpret. A majority of large public library catalogers are either uncertain if this goal has been met or

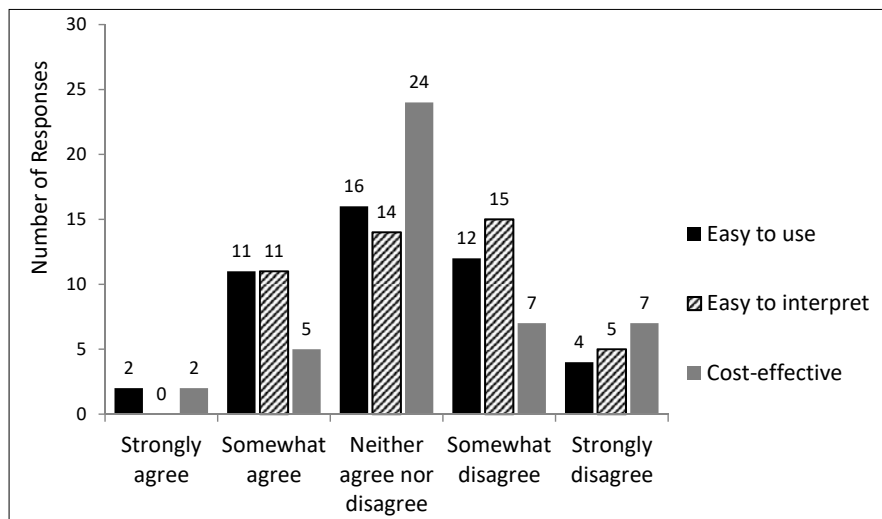


Figure 1. Do Catalogers Find That RDA Is Easy to Use and Interpret, and Is Cost-Effective?

definitely think it has not. Survey participants were asked to rate their level of agreement as to whether their institution's catalogers find RDA easy to use and interpret. Most of the respondents displayed ambivalence, neither agreeing nor disagreeing, while similar numbers either somewhat or strongly disagreed that RDA is easy to use and interpret. In both cases, agreement of any kind, cautious or strong, is the minority opinion. The survey did not delve into the reasons underlying these perceptions, but comments made throughout the survey indicate that much of the difficulty catalogers experience using RDA is related to the *RDA Toolkit's* structure. Survey respondents opined that it is not well organized (particularly in comparison to AACR2), is cumbersome to navigate, and would benefit from the addition of a user manual and index.

Cost-effectiveness was another of RDA's major objectives, but large public library cataloging managers are not convinced that this objective has been achieved. When asked to what extent they thought that RDA is a cost-effective way to support user tasks, over half neither agreed nor disagreed. Almost a third ($n = 14$) responded negatively, answering "somewhat disagree" or "strongly disagree" in equal numbers. Only two participants (4 percent) replied that they "strongly agree" and another five (11 percent) said they "agree" with this assertion (see figure 1).

When asked about the costliest aspects of implementing RDA, the cost of the *RDA Toolkit* subscription (eleven responses) and training (ten responses) were the two primary concerns cited. Modifications to bibliographic records are also considered a significant expense by seven libraries, whether the changes involved making records more RDA-compliant (e.g., by adding the CMCs) or by making AACR2-related revisions (e.g., adding GMDs and deleting relationship designators). These actions are considered

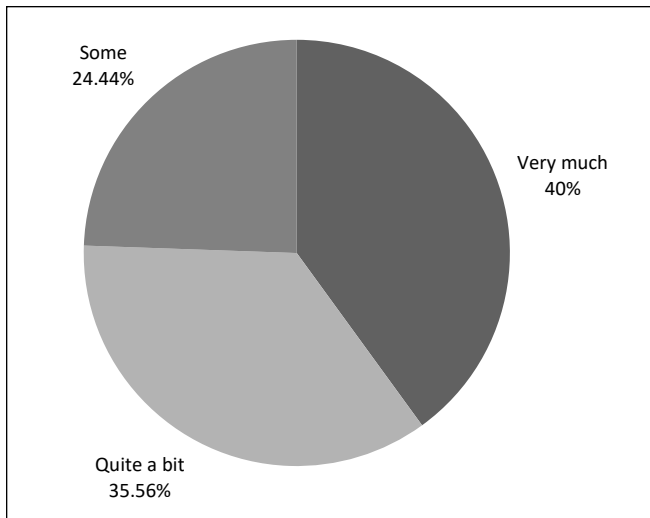


Figure 2. Extent to Which Catalogers Exercise Cataloger's Judgment.

costly in terms of both money and time, whether this work is done manually by staff or by vendors.

RDA's Impact on Local Cataloging Policy

RDA endeavored to be more focused on local end users' needs by allowing for more cataloger judgment. Given Freedman's and Bishoff's previously stated contention that responsiveness to local user needs is imperative in public library cataloging, it is logical to assume that catalogers in the survey population would welcome the increased freedom offered by RDA. The results show that this is unequivocally the case. When asked to indicate the extent to which catalogers in their institution are encouraged to exercise cataloger judgment, eighteen (40 percent) indicated "always," sixteen (36 percent) answered "very often," and eleven (24 percent) responded "some." No participants replied "very little" or "none" (see figure 2).

Nevertheless, the desire for clear guidelines observed in her staff by Parent is also evident in the survey results. Participants were asked to indicate how frequently their catalogers follow the LC/PCC Policy Statements. Over half of the people who answered this question ($n = 22$) reported that staff do this "very often," with another 10 percent ($n = 4$) indicating that it is done "always" and 17 percent ($n = 7$) saying it is done "often." The remaining 20 percent ($n = 8$) responded either "sometimes" or "never" in equal numbers (see figure 3).

Ongoing RDA Training

Training has been the predominant implementation issue addressed in the RDA literature to date. The cost of

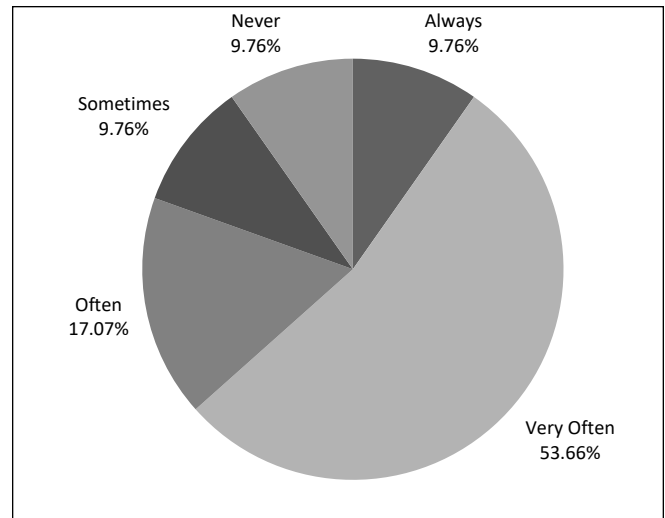


Figure 3. Extent to Which Catalogers Follow LC/PCC Policy Statements.

educating staff was worrisome to cataloging managers, both in terms of money and time. Other concerns were the lack of available instruction for some formats and confusion caused by the multiplicity of different versions of training materials. The survey findings show that these hindrances remain for many catalogers.

When asked how ongoing RDA training is being conducted, the results showed a mixture of formal and informal methods. Training materials or workshops conducted either in person or online by professional organizations other than LC was the most prevalent answer. Email discussion lists, blogs, social media, etc. received the next highest number of replies, closely followed by personnel from the respondents' own institutions. In contrast to previous research, relatively few institutions use the LC/PCC training materials. Other means of training cited were YouTube videos and using existing bibliographic records as exemplars (see table 5).

The question about ongoing training was followed by an inquiry into training obstacles respondents experienced. Four libraries indicated that they have encountered no impediments, but many more enumerated the ongoing challenges they face. In keeping with issues identified in previous studies, cost and lack of staff time to devote to training were regularly cited by respondents as abiding dilemmas, particularly in the face of heavy workload demands. Difficulty understanding RDA concepts, particularly regarding its relationship with FRBR and MARC, and low priority for training within the institution were reported several times. The frequency of change in RDA instructions was an oft-cited problem. One respondent encapsulated the sentiments of many by stating, "RDA is also just difficult to understand and seems to be constantly changing so it's hard to keep up." Guidance in applying RDA for specialized

formats like media resources is still seen as a neglected area of instruction. The largest number of complaints, however, involve the inadequacy of RDA educational offerings and the lack of advanced training. Participants repeatedly bemoaned the basicness of most RDA workshops and the prevalence of conflicting information from different trainers. One respondent stated, “Most training webinars/classes still cover extreme basics and make it a waste of time to hear ‘how RDA came to be’ over and over again. We’ve had enough of the ‘why’ and now we need the ‘how to.’” Another asserted, “It’s also hard to find very good quality training. I don’t need someone to read manuals to me, I need clear guidance on ‘how do I catalog this thing in RDA with all of the appropriate MARC fields.’”

The plea for more and better training continued to resonate in the survey responses. Participants were asked what assistance they need to help them learn more about RDA. A few respondents indicated that they need no help, while others simply said that more experience in using RDA will suffice. Many more, though, expressed the need for help and suggested a number of solutions. Not surprisingly, free or inexpensive training is the biggest request, although the desired mode varied, with some respondents asking for online offerings and others wanting in-person opportunities. Several people sought guidance in handling special formats and complex cataloging situations like compilations and revised editions, while others called for simplified RDA instructions, more and better examples, and additional direction on how to code RDA in MARC. The necessity for improved current awareness channels, particularly for RDA updates and new MARC fields, was frequently mentioned, as was more support from ILS vendors on how implemented RDA within local systems.

Conclusion

Restricting the survey population to the one hundred largest public libraries in the United States limits the generalizability of this study’s findings. It does not capture the behavior and attitudes of catalogers in other types or sizes of US libraries or libraries in other countries. However, it does provide a record of RDA implementation practices and catalogers’ perceptions of its efficacy in a sizeable but understudied segment of American libraries, and it does so on the eve of a major redesign and restructuring of the *RDA Toolkit*.

Over three-fourths of the largest US public libraries have adopted RDA for original cataloging, but a sizeable

Table 5. How Is Your Institution’s Ongoing RDA Training Conducted?

Method of Training	Number of Responding Libraries (n = 45)
Training materials or workshops conducted by other professional organizations (either in-person or online)	32 (71.1)
Email listservs, blogs, social media, etc.	21 (46.7)
Personnel from your institution	19 (42.2)
Library of Congress/Program for Cooperative Cataloging training materials	11 (24.4)
Other	9 (20)

minority of them have not done so and seem unlikely to do so soon. Most of the adopters are using the new cataloging code to provide original cataloging for all types of resources, which is in line with its goal of providing effective bibliographic control for all types of media, but in some libraries, its use in cataloging formats such as serials, nonprint materials, and online resources lags far behind that of print monographs. Survey responses suggest this is likely due to the lack of training for special formats. In accordance with the RDA developers’ original intent, most of these libraries use the online *Toolkit* rather than other options. Catalogers in these institutions also employ the greater degree of cataloger judgment that RDA affords in support of their strong focus on local user needs.

This study also shows that these libraries have grown comfortable with hybrid records, regularly adding new bibliographic elements introduced by RDA to AACR2 records, particularly the CMCs. However, they do not accept that the CMCs provide library users with more granular access to a resource’s format type and are reluctant to stop using GMDs, which many libraries retain in AACR2 records, add to RDA records, and display in their ILS’s public view. In contrast, while virtually all the respondent libraries retain the CMCs in their bibliographic records, few use them to identify formats in their public display.

Nevertheless, the survey results clearly show that large US public library catalogers believe RDA has failed to meet some of its most important goals, primarily ease of use and cost-effectiveness. Most catalogers in this group do not agree that RDA is easy to use and interpret, much of which they attribute to inadequacies in the *RDA Toolkit*’s structure and the lack of good examples. It is hoped that the RSC heeds this counsel as it restructures the toolkit. Respondents also said that they often struggle to comprehend underlying RDA concepts and to remain current with constantly changing rules and best practices. Better training could be an antidote for these ailments, but catalogers report many challenges in receiving this instruction, not just in terms of direct costs and staff time, but also in the

lack of advanced guidance. While LC and professional organizations have amassed a wealth of RDA training resources, it is time to move instruction beyond the basics.

This study suggests some potential directions for future research. In the short term, other types and sizes of libraries could be examined to determine if the practices and

perceptions of RDA and its implementation by catalogers in large US public libraries are unique to them or are more generalizable. In the longer term, after catalogers have had an opportunity to learn and apply the newly restructured *RDA Toolkit*, this survey could be replicated to see if they believe improvements have been made.

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Appendix. Survey Questions—RDA Implementation in Large Public Libraries

You are invited to take part in a brief research survey about how the transition to Resource Description and Access (RDA) has been handled in large U.S. public libraries. To protect the integrity of the data, the survey can only be completed once. However, if you cannot complete the survey in one sitting, you may close it and resume it at a later time. The survey will close on March 12.

Your participation will require approximately ten minutes. The survey questions deal with: original and copy cataloging; the effects of RDA on your ILS; access to RDA; ease of use, training, and cost-effectiveness; and RDA's impact on local cataloging.

There are no known risks or discomforts associated with this survey. Taking part in this study is completely

voluntary. If you choose to be in the study you can withdraw at any time without adversely affecting your relationship with anyone at the University of Colorado Boulder. Your responses will be kept strictly confidential, and digital data will be stored in secure computer files. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

If you have questions or want a copy or summary of this study's results, you can contact the researcher, Chris Long, at chris.long@colorado.edu. Please feel free to print a copy of this consent page to keep for your records.

Clicking the "Next" button below indicates that you are 18 years of age or older, and indicates your consent to participate in this survey.

I. Demographics

- Please indicate the region in which your institution is located.
 - New England (CT ME MA NH RI VT)
 - Mid East (DE DC MD NJ NY PA)
 - Great Lakes (IL IN MI OH WI)
 - Plains (IA KS MN MO NE ND SD)
 - Southeast (AL AR FL GA KY LA MS NC SC TN VA WV)
 - Southwest (AZ NM OK TX)
 - Rocky Mountains (CO ID MT UT WY)
 - Far West (AK CA HI NV OR WA)
- How many FTE employees have some cataloging duties as part of their job?
 - Professional salaried employees (MLS/MLIS degree required)
 - Paraprofessional salaried employees (MLS/MLIS degree not required)
 - Hourly employees (non-salaried, MLS/MLIS degree not required)

II. RDA and Original Cataloging

- Has your library adopted Resource Description and Access (RDA) for original cataloging of any bibliographic formats?
 - Yes
 - No

(If yes, go to Question #6. If no, go to Question #4.)
- What is your institution's reason(s) for not adopting RDA for original cataloging?
- Does your library plan to adopt RDA for original cataloging in the future?
 - Definitely yes
 - Probably yes

- Might or might not
- Probably not
- Definitely not

(Skip to Question #10.)

- Do the catalogers in your institution create original records for all types of resources using RDA?
 - Yes
 - No

(If yes, go to Question #9. If no, go to Question #7.)
- For which types of resources are your catalogers creating original records using RDA? Please select all that apply.
 - Print monographs
 - Print serials
 - Ebooks
 - Ejournal
 - Sound recordings
 - Videorecordings
 - Scores
 - Maps
 - Rare materials
 - Websites
 - Unpublished materials
 - Other (Please specify)
- What is your institution's reason(s) for not using RDA in the original cataloging of certain formats?
- In your local integrated library system (ILS), do you add General Material Designations (GMDs) to original records that you create?
 - Yes
 - No

III. RDA and Copy Cataloging

- For copy cataloging, do the catalogers in your institution make any RDA additions or revisions to AACR2 records? Examples of this might include adding MARC 336, 337, and 338 fields, spelling out abbreviations, etc.
 - Yes
 - No
 - Don't know

(If yes, go to Question #11. If no or don't know, go to Question #13.)
- What additions or revisions do they make? Please check all that apply.
 - Add MARC 336, 337, and 338 fields
 - Spell out abbreviations
 - Change MARC field 260 to 264
 - Add relationship designators to access points
 - Remove General Material Designations (GMDs)
 - Other? Please explain.

12. How are the elements added or removed? Please check all that apply.
- By catalogers at the time of cataloging
 - Through integrated library system (ILS) global updates or a similar process
 - By a vendor service
 - Other? Please explain.
13. Conversely, do the catalogers at your institution make any AACR2 additions or revisions to RDA records? Examples of this might include removing MARC 336, 337, and 338 fields, adding General Material Designations (GMDs) to records, etc.
- Yes
 - No
 - Don't know
- (If yes, go to Question #14. If no or don't know, go to Question #16.)*
14. What additions or revisions do you make? Please check all that apply.
- Remove MARC 336, 337, and 338 fields
 - Remove relationship designators from access points
 - Add General Material Designations (GMDs)
 - Other? Please explain.
15. How are the elements added or removed? Please check all that apply.
- By catalogers at the time of cataloging
 - Through ILS global updates or a similar process
 - By a vendor service
 - Other? Please explain.
19. Does your library display the MARC 336, 337, and 338 fields in the public view of your ILS?
- Yes, all of them
 - Yes, but only some of them
 - No
 - Don't know
- (If yes, but only some of them, go to Question #20. Otherwise, go to Question #21.)*
20. Which 33X fields do you display? Please check all that apply.
- 336 (content type)
 - 337 (media type)
 - 338 (carrier type)
21. Does your library use the 33X fields in some way (as an icon, in faceting, etc.) to identify a resource's format in the public view of your ILS?
- Yes
 - No
 - Don't know
22. Does your library retain the relationship designators (generally found in subfield "e" of the 1XX and 7XX MARC fields) in RDA records that you use?
- Yes
 - No
 - Don't know
- (If yes, go to Question #23. If no or don't know, go to Question #24.)*
23. Does your library display the relationship designators in the public view of your integrated library system (ILS)?
- Yes
 - No
 - Don't know

IV. RDA's Effects on the Integrated Library System (ILS)

16. Has your library retained the General Material Designations (GMDs) in your legacy AACR2 records?
- Yes
 - No
 - Don't know
- (If yes, go to Question #17. If no or don't know, go to Question #18.)*
17. Does your library display GMDs in the public view of your ILS?
- Yes
 - No
 - Don't know
18. Does your library retain the MARC 336, 337, and 338 fields in RDA records that you use?
- Yes
 - No
 - Don't know
- (If yes, go to Question #19. If no or don't know, go to Question #22.)*

V. Access to RDA

24. Does your library have online access to the RDA Toolkit?
- Yes
 - No
 - Don't know
- (If yes, go to Question #25. If no or don't know, go to Question #26.)*
25. Please indicate how you subscribe to the RDA Toolkit.
- Institutional subscription
 - Consortial or group subscription
 - Don't know
- (Skip to Question #27.)*
26. What are your institution's reasons for not using the RDA Toolkit? Please check all that apply.
- Cost
 - Ease of use
 - Don't know
 - Other? Please explain.

27. Do the catalogers in your institution access RDA in a way other than the Toolkit? Please check all that apply.
- Yes, the print version
 - Yes, the e-book version
 - No
 - Don't know

VI. Using RDA

28. Please rate the extent to which you agree or disagree with the following statement: The catalogers in my library find RDA easy to use.
- Strongly agree
 - Somewhat agree
 - Neither agree nor disagree
 - Somewhat disagree
 - Strongly disagree
29. Please rate the extent to which you agree or disagree with the following statement: The catalogers in my library find RDA easy to interpret.
- Strongly agree
 - Somewhat agree
 - Neither agree nor disagree
 - Somewhat disagree
 - Strongly disagree

VII. RDA Training

30. How is your institution's ongoing RDA training conducted? Please check all that apply.
- Library of Congress/Program for Cooperative Cataloging training materials
 - Training materials or workshops conducted by other professional organizations (either in-person or online)
 - Personnel from your institution
 - Email listservs, blogs, social media, etc.
 - Other? Please explain.

31. What training obstacles have you experienced?
32. What do you believe you need to help you learn more about RDA?

VIII. RDA's Impact on Local Cataloging

33. Please indicate the extent to which the catalogers in your institution follow the LC/PCC Policy Statements.
- Always
 - Very often
 - Often
 - Sometimes
 - Never
 - Don't know
34. Please indicate the extent to which the catalogers in your institution are encouraged to exercise cataloger's judgment.
- Very much
 - Quite a bit
 - Some
 - Very little
 - None
 - Don't know

IX. Cost-Effectiveness of RDA

35. What has been the costliest part(s) of implementing RDA?
36. Please rate the extent to which you agree or disagree with the following statement: RDA is a cost-effective way to support user tasks (finding, identifying, selecting, obtaining, and understanding resources).
- Strongly agree
 - Somewhat agree
 - Neither agree nor disagree
 - Somewhat disagree
 - Strongly disagree

Notes on Operations

Motley Crew

Collaboration across an Academic Library to Revive an Orphaned Collection

Amy Jankowski, Anne Schultz, and Laura Soito

It can be difficult to find time and motivation to effectively address collection management for materials in specialized areas that fall outside the primary scope of one's usual responsibilities. The pressure of crowded shelves in the authors' largest library and the associated difficulties of helping users locate materials led a team of faculty librarians and staff to evaluate and consolidate an "orphaned collection" of books in health and medicine call numbers. The authors describe how a project team established a data-informed evaluation and weeding process that minimized affective decision-making and considered the nuances of collection management between disciplines.

In interdisciplinary and general collections for which no subject selectors are assigned primary responsibility for the material, relatively passive and fragmented collection management easily leads to the development of collections with an "orphaned" or secondary status. Management of these collections presents challenges, particularly in the context of space issues. The proliferation of online resources has done little to ease the challenges of maintaining stack space for physical collections as academic libraries continue to acquire new print materials and also develop new user-focused spaces. Space issues are compounded as increased demand for library services and broadening librarian responsibilities divert efforts from collection management activities, which can lead to the abandonment of regular collection evaluation and deselection. When, after a period of passive management, a combination of space issues necessitates aggressive deselection of an orphaned collection to meet competing library needs, it can be difficult to develop a precise assessment of what exactly is in the collection, who should be responsible for its downsizing, and how to develop an efficient and effective plan for collection review.

In late summer 2016, the University of New Mexico Libraries initiated a project to consolidate circulating books within the Library of Congress (LC) Medicine classes, R-RZ, into a single location and reduce the size of this call number range by approximately half. Project PiRate—nicknamed for the R call numbers—provided the opportunity to eliminate overflow shelving in our largest library, deselect outdated volumes, and align the bulk of the science and technology collections in a single physical home, thereby resolving previous access issues caused by overcrowding and physical dispersal. At the project's inception, many of the institution's subject librarians were relatively new and none held primary responsibility for this interdisciplinary area. For this reason, the project was approached collaboratively, drawing upon the interdisciplinary expertise and experiences of employees throughout the libraries.

In undertaking Project PiRate, the project team considered a number of questions to design a process to prioritize necessary collection maintenance and improve collection usability in an interdisciplinary subject area that had become orphaned. These questions include the following:

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- How do we establish a culture for cross-disciplinary and cross-departmental collaboration?
- What data and subject expertise are available, and how can we use these resources to make informed deselection decisions?
- How do we develop and facilitate efficient collection management workflows?

Literature Review

Motivation and Contexts for Weeding

Weeding library materials is often presented as an undesirable but necessary task in collection management.¹ Librarians face conflicts as they calculate the cumulative expense of years of collecting, consider time needed for higher priority activities, worry about removing materials that might be needed in the future, and fear deselection mistakes or faculty disapproval.² Stress and aversion associated with making withdrawal decisions have been documented not only in libraries but across other collection-based professions. For example, Greene suggests that archivists may be wary of reappraisal and deaccessioning work because of assumptions that a collection focus cannot be appropriately reevaluated in new context, materials contained within archives are permanent, and people will be upset if things are removed or, more severely, material removal will destroy an archive's reputation.³ Similarly, in a thesis, Lapos describes "deaccessioning paralysis" for professionals in small museums who may face the inability to find new homes for unneeded collection items, ethical dilemmas, legal restrictions, the daunting need for collection plans, and shame in deaccessioning parts of their collections.⁴

However, a variety of pressures and strategic initiatives prompt librarians to examine their collections and pursue projects to reduce the physical space occupied by information content. As such, there are numerous reports on the motivations and strategies for weeding library collections. Considering recent reports from academic and research libraries, they cite efforts to repurpose space for other use, reduce items to move in preparation for renovations, and reduce general overcrowding due to existing collection policy.⁵ These goals are consistent with library and user benefits noted in Ward's book *Rightsizing the Academic Library Collection*. She notes that some libraries, particularly those at research universities, often avoid fully removing access to materials by instead shifting access to a shared print collection or electronic copies of materials.⁶

Considering medical and health information collections more specifically, reports tend to focus on collections within medical libraries, rather than these materials within the context of a general collection. As an exception, Leslie

and Martinez describe their process for assessing and weeding an AIDS/HIV collection using a timeline approach to maintain both sources that are current and those that provide historic context.⁷ Additionally, Flaherty and Kaplan reviewed consumer health content in North Carolina public libraries and found these materials to often be outdated.⁸ It is worth noting that Levin-Clark and Jobe's analysis of book use across fourteen academic libraries place the LC call number R (Medicine) among the most heavily used part of the surveyed collections, suggesting that this is a specialized collection area where libraries might want to consider more focus.⁹

Planning and Collaboration

Library weeding projects can be challenging since they impact a large and diverse stakeholder group, including staff from various library departments and groups external to the library. For these reasons, planning and communication are often cited as essential to project success. Czechowski et al. found weekly meetings and making minutes available to all in the library "invaluable," and Dubicki's suggestions included scheduling meetings with all involved staff, seeking faculty input, and establishing a clear project plan.¹⁰

These projects can be stressful and seen as a departure from normal workflow, thus it is important to provide motivation and support for coping with change. Jarvis et al. looked beyond standard staff meetings to introduce creative ways to provide support, such as a fun project name and the creation of a project video in which project participants could star.¹¹ That project and one described by Soma and Sjoberg encouraged librarians to work in supportive teams.¹²

Data and Decision-Making

A key component to any weeding project is identifying which materials to withdraw. Material age and lack of recent circulation are often suggested as fair and objective means to inform these decisions, particularly in disciplines that rely heavily on recent materials, but these factors may be less meaningful in disciplines that rely on older, low-use material.¹³ A 2013 SPEC Kit on print retention in Association of Research Libraries suggested duplication as the most likely factor for deaccession among surveyed libraries.¹⁴ Libraries may also consider factors such as local or historical interest, availability of materials from other libraries, inclusion on core title lists, notability of authors, curricular needs or program alignment, value, and faculty input in refining these criteria.¹⁵ To more directly consider usage, evaluation of citation data as an alternative has been proposed, though the availability of citation data may limit this approach's scalability.¹⁶ Data-driven deselection projects have been

supported through list-based approaches.¹⁷ List-based processes can also be supported by the Sustainable Collection Service tool described by Lugg and Fischer, which provides deselection data parallel to those used in approval plans for material selection.¹⁸ Several libraries have used this tool to conduct data-driven deselection.¹⁹

While the literature emphasizes data-driven approaches to deselection, human-mediated decision-making relies upon values and emotions. In 1990, Kovacs emphasized a gap in the literature created by a focus on cognitive approaches to decision-making in collection development and noted that there is “more to the decision-making process than collecting data and evaluating that data in terms of a specific framework.”²⁰ In a more recent paper, Quinn argues that librarians should consider how factors such as mood and interest impact their memory, judgment, and collection decision-making.²¹ Framing is one way to lower barriers to making collection decisions, where the desired decision is presented in a way that reduces cognitive load, and librarians must justify an action against the default. Often librarians feel they must justify a reason to weed each item, but using data to present librarians with lists of weeding candidates reverses this decision-making frame in that they now need to justify why not to weed. This was illustrated in Way and Garrison’s work, where a data-driven list of items to withdraw gave librarians confidence to make final deselection decisions.²²

Background

The University of New Mexico (UNM) is classified as a Carnegie Research University with Highest Research Activity (R1) as well as a federally designated Hispanic-Serving Institution. UNM serves approximately twenty-six thousand undergraduate, graduate, and professional students through more than 215 degree and certificate programs. The UNM central campus libraries serve the campus community through four libraries, collectively named the University Libraries (UL). The UL includes Zimmerman Library, the largest and oldest campus library, which supports humanities, education, and social sciences, and houses the UL’s Center for Southwest Research and Special Collections (CSWR); Centennial Science & Engineering Library, which supports science, technology, math, and engineering; the Fine Arts & Design Library, which supports the visual and performing arts plus architecture; and Parish Memorial Library, which supports business and economics. Additionally, UNM is home to two separately administrated special libraries, the School of Law Library and Health Sciences Library & Informatics Center (HSLIC), supporting UNM School of Medicine and other biomedical programs, which are located on the adjacent north campus.

Partnerships with allied campus programs, the desire to enhance and modernize collaborative spaces for students and other users, and growing physical collections have driven space issues to the forefront for the UL. Centennial Library became the home for a large computer-based classroom for introductory math classes in 2012; Zimmerman Library provides extensive space for the campus peer tutoring services on its third floor and has recently redesigned its first floor as a collaborative Learning Commons space. A 2014 analysis of UL collections space by two librarians provided data on our current collections space allocation and raised concerns regarding future space needs.²³ Space constraints in the libraries are significant, particularly for Zimmerman Library, with its ever-growing general and special collections, limited existing storage space, and no existing offsite storage. Project PiRate is one of many recent UL efforts designed to strategically address collection space issues and management throughout our libraries.²⁴

At the beginning of Project PiRate, materials in the project’s scope numbered more than 20,000 items and occupied 577 shelves across the four libraries. The collection supports students and faculty in a variety of nonclinical programs including sociology, history, education, public policy, and general sciences. At the time of Project PiRate’s proposal, approximately 85 percent of R call number items were located in Zimmerman Library, 15 percent in Centennial Library, and less than 1 percent in the Fine Arts & Design Library and Parish Memorial Library. The planning team targeted a 45 to 60 percent reduction in the overall size of this collection based on circulation data and anticipated space availability in Centennial, where the remaining collection would be relocated at the end of the project. It was an aggressive approach, justified by two factors: HSLIC has the responsibility to support clinical disciplines in addition to maintaining a special collection dedicated to history of medicine; and materials in clinical subject areas become obsolete and potentially dangerous for practical applications. This project gave the UL an opportunity to leverage significant space generated by a previous JSTOR journal withdrawal project in Centennial Library and to address issues of overcrowding in Zimmerman Library.

Method

Participants and their Roles

Project PiRate was complicated and required clear communication between multiple library stakeholders, the acquisition of complex collection data, flexibility in application of weeding parameters, and respect for all participants’ time and workload constraints. A small management team was formed in September 2016 to coordinate the project’s

multiple facets. This team consisted of the Centennial Library Operations Manager (Access Services), the Director of Collections (Public Services, with responsibilities bridging Technical Services), and two science subject librarians (Public Services). These team members served as logistical planners and the points of connection and coordination for all stakeholders who would come to be involved through the production of collection data, inventory, deselection decisions, record deaccession activities, and physical removal and relocation of materials. While not a member of the core team, the project's workflow and management was also informed and vetted by the Director of Technical Services. As with any weeding project, Project PiRate required close collaboration and coordination among many of the UL's departments. Departments identified as critical to the full project's progression and success included Access Services (seven of thirteen staff and twenty-four of seventy student employees at Zimmerman and Centennial Libraries), subject selectors (thirteen of twenty selectors), Technical Services (six of fifteen department members), and Facilities Services (three of three staff members).

Access Services staff and student employees in Zimmerman and Centennial Libraries were critical to logistical aspects of collection assessment, review, and eventual physical consolidation and relocation of retained R call number items. The department's focus on library patron needs and physical usability of the R call number collection continually helped to reinforce project objectives and keep practical concerns in mind throughout the process. Access Services student employees inventoried the R book collection in Zimmerman Library prior to the project's start to provide an accurate understanding of the bulk of physical holdings and any discrepancies between the physical collection and catalog data; they also worked to shift materials in Centennial Library to create space for the R collection items that would be transferred from Zimmerman Library. During the selector review process, Access Services staff and student employees served as a bridge between subject librarians and Technical Services staff, relocating materials throughout the decision process. Access Services staff monitored the deselection process, providing status updates and communicating progress towards the deselection goal.

The process of identifying R collection items for deselection fell to subject selector librarians who, in addition to instruction, outreach, and specialized reference, are responsible for collection development and management in defined subject areas. Responsibility for review also included the Curator of Latin American Collections, responsible for Latin American subject materials in the general and special collections (including Spanish and Portuguese language items), and the Director of the Center for Southwest Research and Special Collections, both of whom were essential in identifying unique items to retain and

often transfer to the UL's special collections. The Project PiRate management team communicated and coordinated with the HSLIC Resource Management Librarian to offer deselected materials for transfer. Due to significant space restrictions for physical collections in HSLIC and the quickly evolving nature of clinical health sciences information, the primary interest in selecting content for HSLIC's medicine collection was historical, particularly any reports or documents from New Mexico-specific programs plus any noteworthy broadly significant historical works.

Six members of the Technical Services Department were responsible for the deaccession of weeded items from the UL's Integrated Library System (ILS), resolving item-level cataloging issues for retained items, and changing retained item location information in the ILS following the physical relocation of materials. The Facilities Services Department worked closely with Technical Services to successfully move all deaccessioned items through the disposition process. Deaccessioned materials were recycled and repurposed through the commercial bookseller Better World Books (BWB); through their Discards & Donations program, the library earns a percentage of net sales, and BWB donates a book for each one sold.

Timeline

The project timeframe weighed heavily on all participants. Originally, Project PiRate was proposed to be completed within twelve to eighteen months. However, it abruptly transitioned to a shorter ten-month window to take advantage of the availability of limited funds for external movers, which would be exhausted at the end of the 2016–2017 fiscal year. The project team aimed for strict adherence to the proposed condensed timeline with deselection decisions to be completed by May 2017, allowing the physical move of the remaining materials to take place by early June (see figure 1).

The time demands of early project planning, preparation, and piloting—including resolving unanticipated complications—condensed the timeline, providing a limited four months for the active deselection and deaccession processes.

This accelerated timeline was taxing on project participants and required flexibility by all departments involved to incorporate required project duties into already demanding workloads. Administrative support for the project helped to free up time, including excusing subject selectors from reference desk shifts for the duration of the deselection period, thus providing standard windows of time that could be used for concentrated project work. Access Services regularly devotes a certain percentage of staff and student time to projects, so the work required for this project took priority for its duration. To accommodate the influx of work in Technical Services, staff developed a workflow to allow

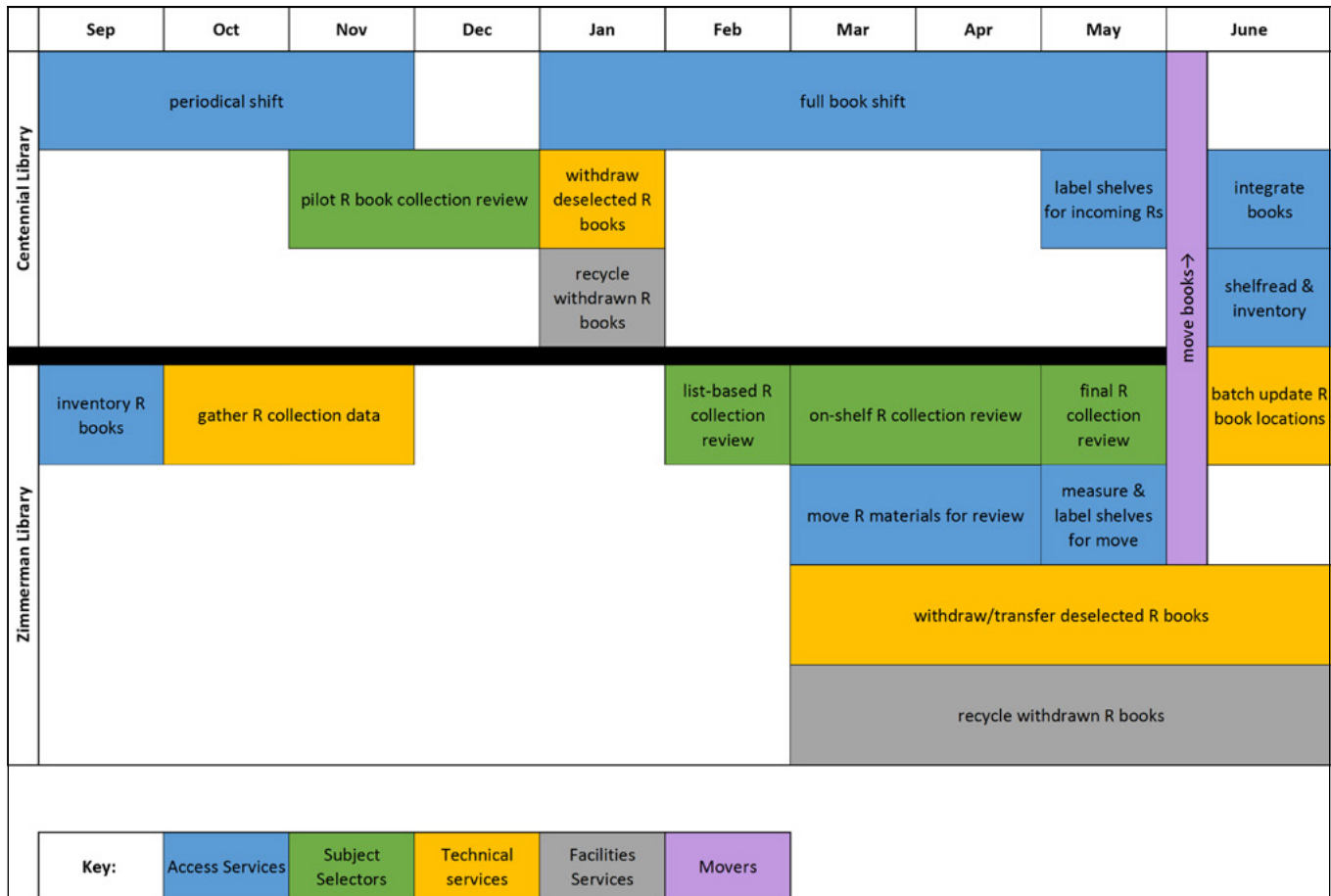


Figure 1. Overall Project Timeline

small batches of withdrawals to be incorporated into their workload. The finite project with its precise end date also helped in that it was broadly accepted that the demands of Project PiRate were strenuous but temporary.

Data and Decision-Making

In approaching the initial design of the deselection plan, the project team aimed to combine high-level collection data, subject selector expertise, and a network of social support to enable informed and effective decision-making within a limited timeframe.

Gathering Data

In consideration of the weeding literature, the project team first approached the R collection review and deselection process with a data-focused, list-based methodology. Circulation data and collection metadata were obtained to provide a clear and detailed picture of the collection, after

which the team began the process of developing criteria and considerations for weeding decisions and a project timeline. Beginning in late September 2016, Access Services and Technical Services staff initiated a download of all R call number collection data, including circulation history, from UNM’s integrated library system, OCLC’s relatively new WorldShare Management Services (WMS) platform. Collection and circulation data essential for a data-driven review were identified by the project team as publication date, total circulation, circulation year to date, date of last circulation, OCLC shared holding numbers, language, and the presence of terms associated with New Mexico in the title, author, or publisher fields.

Though straightforward in concept, the data extraction process proved to be significantly more difficult in practice. Due to ILS limitations, collection data and circulation data required separate downloads and the two datasets were then merged. As an added complication, it was not possible to download just the subset of R call number collection data, but rather data for the entire collection had to be downloaded in full. This process resulted in substantial

delays due to large data file size and the requirement of significant technical support from OCLC. Upon review of data, an issue related to data duplication became apparent, in which a portion of holdings, including barcode number, were duplicated; this apparently resulted partly through an output error for multi-copy holdings but also occasionally occurred for single-copy holdings without any obvious cause. Following initial review of data, it became apparent that there was a significant proportion of items cataloged that were not present in the physical R collection inventory data. Some of these discrepancies were attributed to known issues that occurred following previous ILS data migrations. Due to these unanticipated data complications, associated delays resulted in a shift and compression of the timeline for the next stages of the project.

With data in hand, the project team next identified specific targets that could be employed as high-level defaults to guide selectors' decisions. The literature points to publication date and circulation metadata as major factors to consider, but exact recommendations as to material age cutoffs from a conservative twenty-year to more aggressive four-year consideration period; use of circulation data varies by data available in each institution's ILS.²⁵ For Project PiRate, the project team identified 2000 as a publication date cutoff, meaning that weeding efforts would focus most heavily on all items published more than fifteen years ago. This date was intended to provide a clear dividing line to subject selectors that easily separates older content most likely to be scientifically invalid but is not so ambitious as to place undue strain on the social science and humanities content. Since the data showed that the proportion of materials in the R collection published prior to 2000 was high (76 percent), focusing on this pre-2000 content provided ample opportunity to meet physical downsizing goals that would make the collection move feasible. Regarding circulation, the project team selected 2006 as a cutoff date, meaning that selectors would focus deselection efforts on items that had not circulated in the last ten years, which included 56 percent of the collection. Considering these two parameters together, the proportion of items that fell under both categories was 44 percent, providing an ideal baseline for which to aim in required downsizing via deselection; these were thus emphasized as the cutoff parameters throughout the project.

Addressing an Interdisciplinary Domain

Historically, collection management and selection responsibilities for R call number items were highly distributed in the UL, due in large part to the interdisciplinary nature of medical subject matter associated with many wide-ranging campus programs and shifts in librarian responsibilities. The UL's R collection is not defined by a formal collection

policy or scope, but it is broadly understood that it aims to provide strong support for main campus programs and subjects with any peripheral association with medicine, including public health, speech and hearing science, exercise science, nutrition, psychology, biology, Latin American studies, New Mexico and broader Southwest area studies, and Native American studies. Additionally, other subject matter covered by the R collection that relates to components of main campus programs includes environmental health, medical physics, biomedical engineering, history of medicine, additional area and ethnic studies programs, medical anthropology, architecture and design of medical facilities, art and music therapy, bioethics, and women's studies. Together, these subjects intersect on the disciplinary domains of nearly every UNM subject librarian, plus the Curator of Latin American Collections and CSWR Director.

To assign subsets of the R call number range to specific subject selectors, the project team looked to Gale's SUPERLCCS 13 schedule, UNM's last purchased print schedule, to fill in gaps from the freely available LC Classification Outline, rather than the online alternative, Classification Web.²⁶ The team roughly mapped selector subject areas of expertise to corresponding content in the schedule, with occasional interdisciplinary overlap where multiple selectors were assigned to a single section. These assignments were transferred to the full R collection data set, mapping subject selectors to individual items by call number subclass. Three caveats overrode these call number assignments: all Spanish and Portuguese items were assigned solely for review to the library's Latin American Collections Curator; all items published prior to 1900 were assigned for review to the CSWR Director; and items with the word "Mexico" in the title, author, or publisher data field—thus designated with a level of local or regional relevance—were assigned for review by both the CSWR Director and HSLIC librarian. Individual project assignments varied widely, ranging from approximately one hundred items to nine thousand items, averaging around eighteen hundred.

Throughout the review stage, decision-making was delegated to subject selectors, who developed subject-specific considerations beyond key data parameters during their individual deselection processes. Specific information used by subject selectors in their analyses included additional metadata, such as OCLC holding numbers; content, particularly table of contents information; and physical condition. Additionally, subject selectors were encouraged to frame their decisions within the context of their disciplines, considering an item's historical significance, relevance to campus programs, "outdated" content that may be harmful if applied in practice, prominence of specific works and/or authors, and citation history, as evident through citation network data in Web of Science or Google Scholar.

Support for Decision-Making

Since the materials in the call number R were orphaned for many years, Project PiRate faced the issue of low levels of individual selector familiarity with the existing R collection. Thus in designing a deselection plan, the project team prioritized mechanisms for social support to aid in effective decision-making. The majority of UL subject selectors began their work at UNM within five years of the project's start date, including many on the more recent end of that timespan. Individuals' relative newness, compounded by the status of the R collection as peripheral to the scope of all subject selector focus areas, resulted in widespread unfamiliarity with the collection's materials, and the context of collection development, related subject-matter, and associated campus programs. This unfamiliarity led to initial anxiety, both within and beyond the project team, about effective individual decision-making abilities in the deselection process. Partly due to these anxieties, the project team aimed to make the design and execution of the deselection process as inclusive, communicative, and collaborative as possible, with the assumption that these combined qualities would mitigate tendencies for emotional decision-making and bring about the quickest route to thoughtful, confident, and effective weeding.

Since UNM has a separate medical library on the adjacent Health Sciences campus that serves the primary constituents of medical subject materials, the main campus libraries' R collection technically lacked a primary constituency—thus its orphaned status. This meant that gathering faculty input was not viable. Instead, the project team conducted an initial environmental scan to develop a high-level collection framework identifying peripheral main campus groups, programs, and courses that may be impacted by project collection decisions. This analysis included Interlibrary Loan (ILL) data, the existing approval plan profile, UNM's course catalog, UNM's website, and selector knowledge about tangentially affiliated departments. With the resulting data, the team took a nuanced, individual selector-driven approach to communicating project goals, details, and decisions with campus faculty or other identified stakeholders.

Internally, the project team made it a priority to establish a thorough, consistent, and open method of communication to individuals involved in the project, taking the form of early informational meetings, regular emails, and working meetings to encourage progress and exchange feedback. The team created a shared, cloud-based folder that project participants could reference to easily find key project communications and data. An emphasis on two-way communication allowed the project team to accommodate different workflows for material deselection and adjust expectations to existing workloads. Together, these efforts

to establish and maintain strong communication within and across departments played a significant role in fostering a culture of collaboration, responsiveness, and understanding throughout the project.

Deselection Procedure Development and Implementation

Piloting a List-Based Review Process

In the interest of testing the originally proposed deselection data parameters prior to a broader rollout, the project team's two subject selector members—the life sciences and physical sciences librarians—conducted an initial “pilot” weed of the R call number items housed at Centennial, roughly 15 percent of the total R call number collection; at this stage, the goal was to reduce the Centennial R collection by approximately 25 percent. The materials already housed in Centennial trended heavily towards more “hard science” content, such as biological engineering, nuclear medicine, environmental health, pharmacology, and internal medicine.

Rather than work exclusively from the data, these selectors worked together in the Centennial stacks, where both the physical items and supporting collection data helped inform effective deselection decisions. This process was used to test the feasibility of using the cutoff parameters determined by examination of the data and level of collection size reduction needed. Through this scaled-down collaborative process, the librarians identified items for deselection, indicated through a physical flag placed within each item and on the accompanying data sheet. The total number marked for deselection was slightly below the target but within reason for overall project success. Shortly thereafter, the subject selectors based in FADL and PML conducted a similar deselection process of their extant R materials, making up less than 1 percent of the total R collection; all retained items were sent directly to Centennial.

Following the success of this initial pilot portion, the project team felt confident to move forward with the deselection of the Zimmerman Library R collection, bringing all relevant subject selectors into the process. Though the Centennial pilot incorporated a dual list-based and physical collection review, the project team decided to roll out the Zimmerman Library phase of collection review through data-driven, list-based deselection to simplify the process to enable expedited decision-making, an approach heavily supported in library weeding literature.

List-Based Review Roll-Out

In February 2017, after the remaining R collection data was fully assigned to subject selectors, the project team

created and distributed personal Excel data files to each selector. The project team also created a number of filtered data subsets within each subject selector file, which isolated assigned collection data corresponding to certain parameters. Based on prior data analysis, the project team advised that selectors focus the most robust deselection efforts on the filtered data subset of older items that had not circulated in the last ten years, particularly those items that lacked recorded circulation. It was suggested that selectors also consider OCLC holding numbers, but this was left to the individual's discretion.

Selectors were asked to begin this data-driven deselection process as soon as possible to gain a sense of logistics and feasibility, which would be discussed during the early project feedback meetings. Prior to the first meeting, selectors began to communicate anxieties and doubt towards the project timeline's achievability. Rather than make quick data-reliant deselection judgements, selectors shared that they frequently looked up individual item records to gather additional information to inform decisions. Many individuals expressed difficulty working within the confines of a dataset without easy access to physical materials and the broader context of the full collection. However, because selector subject areas within the R call number range were often highly dispersed, viewing the physical collection with an individual's list in hand was also perceived as a highly unwieldy process.

Flipping the Review Process and Designing a Hands-On Approach

In response to broadly expressed anxieties, project meeting conversations quickly shifted to alterations or alternatives to the proposed list-based weeding process that would mitigate the significant intellectual and emotional energy required to thoughtfully and effectively weed the R collection by half within the originally proposed timeframe. A suggestion was to flip the decision process from "what to discard" to "what to keep" and add the element of physical review back into the process, which quickly gained favor among subject selectors as an instinctively more manageable and less stressful decision process. The newly proposed review process suggested that the project managers find a way to physically identify or isolate the R call number materials most likely to be weeded, including those materials conforming to the key parameters of published prior to 2000 with no circulation since 2006. Subject selectors could physically review the materials with corresponding data, depending on personal preference, and, from that group, choose to keep only those items with discernable value to the collection and its current and future users. This value would vary by subject selector and call number, allowing for variations in collection preferences between distinctly different disciplines, such as history of medicine, where age

and circulation does not necessarily equate value, versus genetics, where retaining older, low-use items is more likely to equate with misinformation.

Selectors were encouraged to conduct reviews in groups or pairs to provide further opportunities for thoughtful decision-making through discussion and the sharing of different perspectives and priorities, though some chose to work independently. Because no selector had prior extensive knowledge of the R collection or felt ownership over it, this more cooperative, hands-on approach mitigated associated anxieties to make the process more collaborative than dependent on the individual. As an exception, the Latin American Collections Curator requested that Spanish and Portuguese materials be reviewed in one group within the original Zimmerman Library R collection space to consolidate the process within a shorter timeframe and to allow for a single, more holistic analysis of Spanish and Portuguese language materials in medicine.

On-Shelf Review Trial

The newly proposed process required a significantly different workflow to physically identify and/or isolate a dispersed subset of materials, as illustrated in figure 2.

The project team, selectors, and other key library stakeholders agreed that flagging or marking items as review candidates in situ within the full R collection could be problematic due to high user activity in this area of the library on Zimmerman's third floor, which could disrupt the process. Alternatively, it was suggested that materials could be physically pulled and relocated for review to an area with lower user activity in the Zimmerman Library basement. This physical relocation would require a significant time and labor commitment from the Access Services Department staff and student employees but would otherwise drastically transform subject selectors' ability to make quick and effective collection decisions. Despite the added demands on Access Services, it was agreed that the revised review process would more likely result in a successfully executed project within the proposed project timeframe, at that point down to just three months, and thus be more beneficial for the library in the long run.

With broad buy-in, the project management team created process documentation, an optimistic schedule, and designed a trial round of physical review to determine if this new approach would work both in practice and concept. In preparation for the physical review, the project team created a pull list for all RM-RZ call number items that met the defined parameters. A copy of this list was sent to the HSLIC Resource Management Librarian for review. Student employees in Access Services used the lists to pull items from Zimmerman Library's third floor R range and physically relocated them to the designated

deselection review staging area, adjacent to the Technical Services work area. Item location information was not edited in the ILS, but prominent signage was placed on both the third floor R shelving and basement review staging areas directing users to consult the library circulation desk for assistance with R call number items. The general RM-RZ pulled items were shelved by call number, and a separate shelf beside these materials was designated for all RM-RZ items identified specifically for CSWR review.

The project team designed and printed a visually distinct flag for subject selectors to reflect decisions to keep material. A separate simplified flag was used to mark any items that the HSLIC Resource Management Librarian requested for transfer, making this process distinct from other internal collection decisions. Regardless of the decision communicated, all flags required selectors sign and date them, and this information was intended to enable communication should questions arise in the retention or deaccession processes. The default status of all items during the review was “deaccession,” but physical flags placed inside an item and shelving locations were used to communicate the following decisions:

- **Keep:** retain item in the main R collection
- **CSWR Review:** suggest review by the CSWR Director—and if necessary, history selector—for local, regional, or broader historical relevance
- **Other:** a rarely used alternative that accommodated nonstandard requests, such as to catalog an electronic surrogate or alter a call number

The trial RM-RZ deselection review period was scheduled for one week, and the project management team designated the first day of this review, the Monday of spring break, as a collaborative subject-selector work day during which the majority of selectors made time to test the new review method and work collaboratively through decision workflows. In the interest of conducting a prompt litmus test, the project management team scheduled an all-selector meeting the following day for individuals to provide initial feedback or send comments via email. Since the feedback was overwhelmingly positive, the project management team

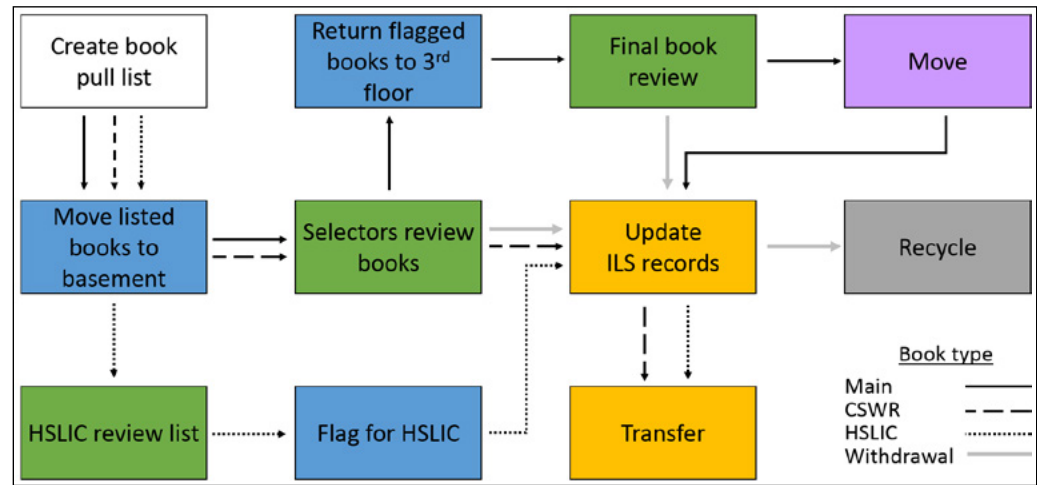


Figure 2. Final Project Workflow

quickly developed a detailed project timeline and solidified workflow to bring the project to its completion by the end of May, in approximately ten weeks.

Deploying the Full Review Process

The remainder of the R call number collection was divided into six sections of comparable size following the LC call number breakdown. Each section review was scheduled for approximately one week, with the objective that review of all Zimmerman Library’s R call number items within the standard cutoffs would be completed by the end of April 2017. Two subject selector “section leads” were assigned during each round of review, and these assignments were based on the significance of the individuals’ liaison departmental subject areas to the content being reviewed during that period. Section leads were responsible for conducting a thorough collection review to identify items that should be kept or transferred within the libraries. All other subject selectors were encouraged to review each week, with the understanding that any nonlead individual was welcome to skip content identified as irrelevant to their subject domain. All selectors agreed that any individual was welcome to review and identify content to “Keep”—aside from special collections and Spanish and Portuguese language items. A sign-off sheet was posted in the basement R deselection review area on which selectors were asked to indicate when they finished a round of review to help communicate progress and participation among project constituents. At the end of each review period, any items marked and shelved together under the “Keep” heading were reshelved within the full R collection on Zimmerman’s third floor, while all other items were routed through Technical Services for transfer or deaccession.

The project management team planned one final full-collection review period in May 2017 to give subject selectors the opportunity to view the remaining R call number collection in full and identify areas that would benefit from additional deselection. This final May review period was when full collection review of Spanish and Portuguese language items (more than two thousand) was conducted by the Latin American Collections Curator. The full collection review period was open for approximately four weeks, but a high proportion of deselection was concentrated during two designated selector work days scheduled during the intersession following spring finals week. The project team emphasized to subject selectors that content with high potential for deselection included multi-copy items, outdated older editions, items out of scope for the main campus collection, and items that may have recent or high usage but were not recommended representative resources on a given topic due to the significant advancement of the subject. In a reversal from the first round of review, in this final full collection component, new project flags indicated when an item should be deaccessioned as this represented a minority of items.

Material Deaccession and Records Processing

Materials identified for withdrawal, left on staging area shelves in the Zimmerman Library basement or flagged for withdrawal on the third floor, were moved on carts to the Technical Services Department and distributed among three cataloging staff members for processing. The catalogers deleted the item record and holdings for the books in OCLC using the WMS acquisitions module, and library ownership markings were removed or covered. As the items were withdrawn, materials were packed in boxes by a single staff member. The boxes were collected and placed on pallets for shipment to BWB.

As noted in the “Other” category of the selector slips, a limited number of items received electronic holdings information, replacement spine labels, or barcodes. No hard deadlines were established for processing withdrawn materials, and this work was incorporated into Technical Services staff members’ work as time was available. With efficient workflows, the Technical Services staff easily kept pace with selectors. After materials were moved, Technical Services staff worked with OCLC to perform a batch shelving location change in corresponding catalog records.

Stack Preparation and Collection Move

Transferring three hundred shelves of materials from one library to another, even on the same campus, is not trivial. Stack preparation for the eventual move began early in the

overall timeline, during the data gathering phase. Student employees in Centennial Library spent about five months shifting significant portions of the collections to free up the necessary space. The R books in Centennial Library were also moved to a temporary location at the end of the semester to provide completely empty shelves at the time of the collection transfer.

As the review process concluded, the remaining items in Zimmerman Library were consolidated and careful measurements were taken to confirm adequate shelf space was available in Centennial Library. To facilitate the moving company’s work, the shelves to be emptied in Zimmerman Library were labeled and corresponding labels were applied to the empty shelves in Centennial Library. The first item on each shelf was flagged with the shelf number to clearly indicate to the moving crew when to begin filling the next empty shelf. The move took place over a two-day period in early June and was completed without incident.

Several shelf maintenance tasks remained to be done after the move. Student employees integrated the Centennial Library holdings into the newly transported materials to complete the collection, after which they conducted limited spot shifting and shelf-reading. The final step was to inventory the complete collection, ensuring that the project managers knew exactly what had moved and had an accurate representation of remaining materials in the catalog.

Project Closeout

Because Project PiRate grew to encompass the work of a high proportion of employees across the UL, the project management team thought it best to close out a successful project with a celebration in thanks. Taking advantage of the project nickname, Project PiRate, the team organized a pirate-themed party to celebrate the time and hard work that was collectively invested to complete the project that enabled the library to meet its ambitious project deadline. Participants were also asked to take a brief survey to share their overall impressions of the project, input on what worked well or was difficult, and to provide suggestions for future library collection projects.

Results and Discussion

At the completion of Project PiRate, the UL effectively reduced the size of the interdisciplinary R book collection across all main campus libraries by approximately 45 percent (from an original 577 shelves to 310), completing all core project work within the established ten-month timeline. Through a collaborative, responsive, and evolving workflow, the project team coordinated the successful deselection, consolidation, and relocation of all R book

collection items into a single branch library. This process resolved location-based access issues and resulted in significant clean up of ILS bibliographic records for the R collection. Despite starting with substantial discrepancies between records and known physical items, Project PiRate enabled Technical Services to clean up local holding records, solidify an understanding of exactly which items remained in the collection post-project, and set the stage for follow-up work to establish a standard library-wide process for resolving issues with missing items.

In tackling Project PiRate, the project team established a culture for cross-disciplinary and cross-departmental collaboration through an emphasis on maximum participation, communication, and responsiveness to individual perspectives and needs. This approach provided transparency across all library units involved and helped to ameliorate the anxiety rooted in widespread unfamiliarity with the R book collection. Through this approach, the team designed a collaborative workflow that was understood and supported across the libraries. The collaborative approach to deselection during the physical review of items most likely to be weeded provided natural opportunities for discussion among selectors, effectively reducing emotional deselection decision-making through built-in mechanisms for social support. Selectors essentially gave colleagues decision confirmation or permission to weed individual items, imbuing deselection decisions with more confidence through mutual support. Through this collective, communicative process, selectors learned from others' evaluative practices and became comfortable with decisions to keep or weed items. The move from reliance on only data for final decision-making led to nonstandard approaches to deselection, which can be viewed both positively and negatively. Though this approach gave selectors more control over the process, allowing for dynamic choices informed by widely varying collection management practices in sub-disciplines from the sciences to humanities, it also enabled factors such as different personal preferences and even temporary mood and energy levels to influence decisions in an inconsistent way. Future projects would benefit from both a more generous timeline and selector-wide training regarding basic evaluative tactics to establish an element of standardization during reviews.

Through the project's design, both available data and multidisciplinary subject expertise were employed to inform user-focused decision-making to produce a highly accessible and relevant R book collection. Beyond straightforward issues with data reliability (e.g. duplication, missing physical items, etc.), the project team found that the decision-informing abilities of collection data are limited, despite the popularity of data-driven deselection practices. Within the UL's interdisciplinary R book collection, standard data parameters were broadly acknowledged not to address the

differences in collection management practices within widely varying sub-disciplines, such as history of medicine and health policy. In tangent with basic data parameters, the nuances of individual disciplinary considerations, specific campus programs, and subject expertise were broadly leveraged, enabling inclusive deselection practices that encompassed nearly every UL subject librarian. Additionally, this approach facilitated the use of "collective wisdom" to reinforce confidence in decision-making in a situation where all selectors were unfamiliar with the collection and no one felt ownership of it. The process of collection review enabled subject selectors to gather information that will inform an R collection scope moving forward, with the goal of revitalizing active management and making future acquisitions more targeted to specific information needs on campus; this included a passive survey of all related campus programs, consideration of R ILL borrowing data, and a critical analysis of the UL's existing approval plan.

The project's ambitious timeline, further motivated by financial expediency, required the development and facilitation of efficient collection management workflows to ensure project success. The review workflow evolved through the course of the project, moving from data-driven, list-based deselection to data-informed physical review of older and lesser-used material, focusing on items that should be kept. This adjustment to workflow created unanticipated demands on Access Services, which was responsible for the physical moving of items to be reviewed. However, the new workflow simplified the work of Technical Services staff, who were able to deaccession full shelves of materials rather than locate individual items by list or flag; the close proximity of the collection review area to the Technical Services Department workspace, both located in the Zimmerman Library basement, was a further advantage to deaccessioning workflow and productivity. The overall benefits of a completed project outweighed any strain, and the additional demand on Access Services through time and physical labor was accommodated with the significant help of student employees. Despite full UL support of the final project workflow, several complications arose during the collection review stage. The Access Services department experienced difficulty reconciling collection pull lists with items on the physical shelves due to known issues with collection data; however, it can be surmised that the same problem would have been encountered during a purely list-based deselection process. During the selectors' process of physical collection review, occasional disarray made a systematic review of items difficult. The disarray was partially attributed to complications that arose during pulling and moving items to the review area, but it was also evident that disorder of items occurred during the review process, with multiple selectors examining material and not always reshelving precisely by call number. The workflow could be

streamlined for future projects by fully resolving data issues when feasible and developing standardized guidelines for management of items during the physical review.

The informal post-project feedback survey circulated among key project participants lent additional insights to inform future collections project planning. Overall, general feedback about the project was positive, reaffirming its overall success particularly regarding outcome, responsiveness to participant needs, and emphasis on inclusivity and collaboration. Perspectives about areas for project and workflow improvement varied significantly between library departments, such as in the case of project timeline. On opposite ends of the spectrum, different project participants communicated that the timeline was both too fast and too slow, which in both cases was seen as a strain on workload. This disparity highlights the need to establish a middle ground in cross-departmental projects to accommodate diverse preferences and the difficulty in finding a single ideal workflow. Another aspect of note frequently identified for improvement was thorough communication with all library stakeholders early on in project planning. When the R project was initiated, it was generally assumed that the two science librarians would do the majority of the deselection work. However, when the initial collection analysis revealed the extensive interdisciplinary nature of the collections, many project participants were caught off-guard by Project PiRate and adjusted their workload significantly for a short period of time. The project and participants would have benefited from early meetings

and broad planning discussions scheduled significantly in advance of the beginning of the collection review period. Making small adjustments to early communication planning and reconsidering project timelines from all perspectives in the future has the potential to significantly improve the efficiency of cross-departmental collaboration, early workflow design, and overall project morale.

Conclusion

Project PiRate resulted in an institutional workflow to review, consolidate, and move an interdisciplinary and previously orphaned book collection. The project's inclusive management approach supported cross-departmental and multi-library collaboration. The workflow leveraged broad subject selector expertise, and a flipped data-informed physical review process facilitated effective deselection based on an infrastructure of social support, reducing emotional decision-making. This collaboration-centered approach to the project built broad support and helped the library successfully achieve project goals within an aggressive timeframe. Though several areas can be optimized, particularly demanding workload considerations and advanced communications, Project PiRate is well poised to serve as a model for future collection management projects, especially in the context of interdisciplinary subject areas.

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Notes on Operations

Recording Conservation Information

The MARC 583 Field in Practice

Elizabeth Hobart

Conservation documentation provides important information about a library's collections, including condition assessments and treatment decisions. Paper files or local databases, however, can make this information unavailable to most library staff and create problems for searching and preservation. To avoid these problems, in 2016, Pennsylvania State University (Penn State) started using the MARC 583 field to record conservation documentation for items in the Special Collections Library. By placing this information in the catalog record, conservation information was publicly viewable, searchable, and protected by regular database backups. This article describes the process of implementing the MARC 583 field at Penn State for conservation documentation, including selecting standards, encoding the field, and outcomes from the project.

Conservation documentation provides important information about items in a library's collection, but is often inaccessible. Documents stored in a file cabinet or on a local hard drive are unavailable to most library staff. Local files are often difficult to search, especially if they are analog. Preserving documentation stored in local files is also problematic and typically requires additional work for conservation staff.

In fall 2016, the Senior Book Conservator at Pennsylvania State University (Penn State) approached the author to discuss the possibility of using the MARC 583 field in the bibliographic record to preserve conservation information for items in the Special Collections Library. The MARC 583 "Action Note" field may be added to bibliographic or holdings records to record information about actions taken on library materials. In this case, the MARC 583 field was used to record conservation actions, including rehousing, condition appraisals, and conservation treatment. They implemented the MARC 583 field, beginning with a sample batch of items conserved during the fall semester. The goals were to note the condition of an item at the time of examination; to document conservation treatments, housing, and other decisions; to record specific materials used for housing and conservation; and to enable staff to find and collocate items that were treated in a certain manner. This paper describes the process used to implement the MARC 583 field to record conservation documentation in the library's bibliographic records, including selecting standards, encoding the field, and problems encountered.

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Literature Review

The author surveyed literature in the fields of preservation, conservation, library science, and museum studies to familiarize herself with current practices for recording conservation documentation with particular emphases on electronic

documentation and encoding conservation information in the MARC 583 field. The foundational guidelines for conservation documentation are from the American Institute for Conservation of Historic and Artistic Works' (AIC) "Code of Ethics and Guidelines for Practice."¹ They state "The conservation professional has an obligation to produce and maintain accurate, complete, and permanent records of examination, sampling, scientific investigation, and treatment."² Additionally, the "Code of Ethics" includes a paragraph on preserving the documentation, stating that it "should be produced and maintained in as permanent a manner as practicable."³ The "Commentaries to the Guidelines for Practice," also published by the AIC, further expand on this: "A written record should be made any time that cultural property is examined, analyzed, sampled, treated, altered, and/or damaged and when the cultural property is temporarily under the care or study of the conservation professional."⁴

Although the "Code of Ethics" and "Commentaries" provide substantive information on what information to include in conservation documentation, they provide little guidance about format, directing conservators to "follow recommendations developed by AIC specialty groups."⁵ For book conservators, this guidance is found in the "Written Documentation" section of the *Paper Conservation Catalog*.⁶ The *Paper Conservation Catalog* provides extensive information, including intended use, audience, and future access. It touches briefly on electronic documentation in section 6, "Permanence of the Written Record," suggesting that promising uses for computer storage include saving space, and ease of access, duplication, and dissemination.⁷ The *Paper Conservation Catalog* notes that preservation is a concern, but that similar concerns for the preservation of paper records exist. Further, the *Paper Conservation Catalog* states that optical media can help to guard against data loss. However, it does not explicitly recommend electronic documentation or suggest a particular format for electronic documentation.

Since the early 2000s, literature about conservation documentation has increasingly focused on the benefits and risks of recording documentation electronically. The Andrew W. Mellon Foundation convened the meeting "Issues in Conservation Documentation: Digital Formats, Institutional Priorities, and Public Access" to address this topic; first in New York in April 2006, and then a follow-up meeting in London in May 2007. Both meetings focused on conservation practices in museums and for works of art.

Prior to the New York meeting, surveys were distributed to participating institutions, and the answers were shared so that meeting participants would arrive with knowledge of other participants' attitudes. Rudenstine and Whalen summarized this meeting.⁸ They noted that "since the 1980s, many museums have established digital collections management systems. . . . But conservation information typically is

not yet incorporated into these internal management systems—either because it has not been digitized at all, or because it is held in stand-alone databases or files—and it is therefore likely to be increasingly isolated and unavailable for study."⁹ Regarding paper versus digital records, they found that "most museums are now to some degree engaged in digitizing," and that "all participants considered this activity was desirable and inevitable, while conceding that it was unlikely that digital records would entirely replace paper in the foreseeable future."¹⁰

The following year, Roy, Foister, and Rudenstine published a paper about the London meeting.¹¹ The follow-up meeting placed greater emphasis on European institutions' conservation documentation practices. Meeting participants noted that their institutions were enthusiastic to pursue digital documentation, which would increase discoverability and aid in preservation. Analog photographic documentation proved to be particularly problematic for both access and preservation, and meeting participants hoped that digitization could mitigate these problems. However, some participants, particularly those from European institutions, expressed concern about available resources, especially in light of decreased public funding. Participants from the United Kingdom further noted the "galvanizing effect" of the Freedom of Information Act: "Since the public are now about to request to see museum records including conservation information . . . it is expected that institutions should survey their records and be readily able to locate requested information."¹² A number of meeting participants "confirmed their belief in the value of making [conservation] documentation remotely available to enquirers, preferably in mediated or interpreted form in instances where enquiries were likely to come from the general public."¹³

Documentation of Conservation Data via the MARC 583 Field

Library science papers addressing the topic of conservation documentation specifically discuss electronic documentation using the MARC 583 field. The earliest instructions for use of the MARC 583 field for conservation documentation is "Standard Terminology for the MARC Actions Note Field," published by the Library of Congress (LC) Network Development and MARC Standards Office in 1988.¹⁴ This relatively short document outlines fifteen terms that can be used in the "Action" subfield of the MARC 583 field. It lists thirty-eight terms that can be added to subfield \$! ("Status") with the action term "condition reviewed." "Standard Terminology for the MARC Actions Note Field" also lists twenty-eight terms to encode in subfield \$i ("Method of action").

In 2004, LC published “Preservation & Digitization Actions: Terminology for MARC 21 Field 583” (PDA), which superseded “Standard Terminology for the MARC Actions Note Field.”¹⁵ As noted in PDA, “with the passage of time, however, the list of preservation terminology [as recorded in “Standard Terminology for the MARC Actions Note Field”] has become outdated and the inability to record digital reformatting and digital transformation actions has become a hindrance.”¹⁶ PDA greatly expands the terminology available. The terminology for the “Action” subfield now includes seventeen actions, nine prospective actions (e.g., “Will conserve”), and seven negative actions (e.g., “Will not conserve”). Following this, PDA provides guidelines for each action term, including mandatory and recommended subfields, and lists terminology appropriate for each.

“Standard Terminology for the MARC Actions Note Field” and PDA provide practical instructions for encoding the MARC 583 field, but neither is mandatory. Libraries can implement the MARC 583 field using either terminology list or without one. In “Conservation Documentation in Research Libraries: Making the Link with MARC Data,” McCann studied conservation documentation practices at research libraries, including use of the MARC 583 field.¹⁷ In a survey and follow-up phone interviews with conservation professionals, she asked how conservators document their treatments, how this documentation is used, and where this information is recorded. McCann particularly asked about the use of the MARC 583 field. Institutions using the MARC 583 field were asked if conservation documentation was also stored in other systems. Libraries not using the field were queried about possible future use.

Before delving into the survey results, McCann discussed options for using the MARC 583 field, including the use of a “pointer” model or a “comprehensive” model.¹⁸ She offers the following examples: with the pointer model the bibliographic record includes minimal information and directs users to a more complete source:

583 1# \$a conserved \$b 04-074 \$c 20041221 \$z For
treatment information, contact the Conservation
Division \$2 pda \$5 DLC

The comprehensive model places detailed information directly in the bibliographic record:

583 0# \$a conserved \$c 2004 \$x treatment included
washing, deacidification, page and spine repairs \$2
pda \$5 NIC

McCann discussed using indicator values to make the note public or private and adding the MARC 583 field to either the holdings record or the bibliographic record.

Survey results indicated that conservators routinely documented conservation activities for special collections materials. Fewer created this documentation for general collections. While use of the MARC 583 field to record conservation information was relatively low (only 12 percent of respondents always or usually used the MARC 583 field), there was “strong interest” in using it.¹⁹ However, 86.8 percent of respondents using the MARC 583 field also maintained separate systems for recording conservation documentation. McCann suggested that this “implies the use of the pointer model for encoding rather than the comprehensive model.”²⁰ McCann’s follow-up interviews confirmed this: “the pointer model was unanimously preferred over the comprehensive model” due to the “rich descriptive nature of special collections conservation data.”²¹

McCann asked respondents using the MARC 583 field which descriptive standards they used for recording conservation information. Only eight of fifty-three respondents used PDA. “Standard Terminology for the MARC 21 Actions Note Field” was used by eighteen respondents. Others used local terminology or free-text terms. McCann noted that the infrequent use of PDA is “surprising considering the terminology was designed for use in the MARC 21 field 583.”²² Although respondents who used locally defined terminology were asked to enter the terminology they used, no participants entered it.

Examples of local terminology may be found in “Documenting Library Conservation Treatments: Using the 583 Action Note Field in the MARC Record.”²³ In this paper, Hinz and Gehrlich argued strongly in favor of recording conservation documentation in the MARC 583 field. They outlined several benefits of using the MARC 583 field, including searchability, visibility to library staff, and regular database backups. They also describe the use of the MARC 583 field at their respective institutions, the Hagley Museum and Library (Hinz), and the American Antiquarian Society (Gehrlich). Both authors provided brief documentation for their local procedures, accompanied by examples. They concluded the paper with sample vocabularies that might be employed in the MARC 583 field, and instructions for linking to visual documentation using the MARC 856 field. The instructions and examples provided by Hinz and Gehrlich are valuable, but a major oversight is their assertion that “there is currently no pre-determined conservation terminology in MARC,” as PDA was published two years prior.²⁴

To gain a better sense of the MARC 583 field’s practical application, the author examined publicly available documentation from libraries and consortia. Member libraries in a consortium often use this field to note retention decisions, thereby documenting agreements for an institution to retain certain items. In the documentation examined,

the phrase “committed to retain” was recorded in subfield \$a (“Action”), often paired with an additional 583 to record “completeness reviewed.” Examples of this include the Association of Southeastern Research Libraries and the Colorado Alliance of Research Libraries.²⁵ In both cases, no standard terminology was used. The Maine Shared Collections Cooperative (MSCC) likewise uses the MARC 583 field for “committed to retain” and “completeness reviewed” notes, and also adds “condition reviewed.” Although the MSCC does not use a standard terminology, “condition reviewed” is an action term in both “Standard Terminology for the MARC 21 Actions Note Field” and PDA.²⁶

Of the library documentation examined, only the Folger Shakespeare Library uses standard terminology in the MARC 583 field.²⁷ The Folger uses this field to capture information about both cataloging and conservation, drawing conservation terminology from PDA. The library uses a limited list of action terms, yet the list is more extensive than seen in other libraries. In total, the Folger’s list includes seventeen action terms to describe conservation activities. Additionally, they provide a list of statuses to encode in subfield \$1 with the action term “condition reviewed.” The Folger provides instructions for encoding other subfields. Some are mandatory in PDA, including subfield \$c (“Time/date of action”), subfield \$2 (“Source of term”), and subfield \$5 (“Institution to which field applies”). Others include subfield \$b (“Action identification”) to record the conservation database number, subfield \$h (“Jurisdiction”) to record a project code, subfield \$k (“Action agent”) to record the name of the person performing the action, and subfields \$x and \$z to record notes.

Background on Use of the MARC 583 Field at the Penn State Libraries

Prior to this project, Penn State used the MARC 583 field to record conservation information in a limited fashion. The field was used for two main activities: to record information about resources conserved off-site and to describe enclosures and de-acidification for cartographic resources. For items conserved off-site, the notes included an action term (either “Rebound” or “Deacidified”), date, method of deacidification, and the vendor’s name and address. Notes for items conserved off-site lacked standard terminology. The notes created for cartographic resources used PDA. These notes included an action term (“Housed” or “Conserved”), method (“Encapsulation” or “Deacidified”), a public note to record the item’s barcode, source of term (PDA), and the local institution code.

Conservation notes for special collections items require more detail. As Baker summarized: “Special collections

conservation usually reverses the basic approach of general collections conservation. Instead of fitting an item to be treated in the available specifications of treatment, this type of library conservation tailors the available treatment options to the particular item.”²⁸ As a result, each conservation note must be constructed individually to fully record the details of the treatments.

At Penn State, on-site conservation work is conducted by the Preservation, Conservation, and Digitization Department (PCD). When the Special Collections Library sends an item to PCD, staff discharge the item and print a call slip using Aeon, a computer program for automating patron requests in special collections libraries.²⁹ As PCD staff construct housing or perform conservation treatments, they annotate the Aeon call slip in pencil with notes about their work, including condition assessments, treatments performed, and materials used. At the end of fall 2016 semester, the Department had accumulated thirty-three of these annotated call slips, which became the “Batch I records” for the new workflow.

Formulating the MARC 583 Field for Penn State’s Special Collections

A primary goal was to collocate items conserved or housed in a certain manner. Using a standard terminology helped to accomplish this as it ensured that notes were entered consistently. Although some institutions create local terminologies, participants used a pre-existing one to save time and reduce the need to create local documentation. The existing terminologies that can be used are from “Standard Terminology for the MARC 21 Actions Note Field” and PDA. PDA was chosen as it was already being used locally for cartographic resources conservation notes. Although McCann’s research suggested that PDA was not widely used by conservation professionals, as noted earlier, it is more current than “Standard Terminology for the MARC Actions Note Field” and expands the number of action terms available from fifteen to thirty-three.³⁰ PDA also includes detailed instructions. Each action term includes both mandatory and recommended subfields plus additional terminology appropriate to the action. The level of detail and use guidance in PDA and its more current vocabulary led us to select it over “Standard Terminology.”

Although recommended subfields vary throughout PDA, four subfields are mandatory: subfield \$a (“Action”), subfield \$c (“Time/date of action”), subfield \$2 (“Source of term”), and subfield \$5 (“Institution to which the field applies”). Subfield \$a will always contain one of the action terms listed in PDA. Following the MARC format standards, time and date are encoded in subfield \$c using the ISO 8601 format, omitting hyphens (YYYYMMDD or YYYY).³¹ Subfield \$2 is always “pda,” and subfield \$5 uses

the institution code from the *MARC Code List for Organizations* (in this case, “PSt”).

Certain action terms in PDA include recommended subfields, typically subfield \$i (“Method of action”) or subfield \$l (“Status”), with suggested standard terminology. PDA allows for internal notes (subfield \$x) and public notes (subfield \$z) as needed. Both subfields can be used to record information beyond the standard terminology, such as materials used to construct housing or details of a condition assessment. The author decided to include public notes to capture this information. Internal notes are only viewable in the staff client. Since information recorded in internal notes risked being overlooked, a decision was made not to implement them. To fulfill local policies and AIC guidelines, participants routinely add a few other subfields. In accordance with local practices in the Special Collections Library at Penn State University, all MARC 583 fields start with subfield \$3 (“Materials specified”) to specify to which copy the note referred. Adding \$3 supports the goal of enabling staff to find items that have undergone certain conservation treatments since it pairs the 583 field with a specific item. Additionally, the “Commentaries to the Guidelines for Practice” lists the name of the documenter as part of their minimally accepted practice for documentation.³² This information can be recorded in subfield \$k (“Action Agent”). However, because some conservation work at Penn State is performed by student interns, not professional conservators, initials are recorded, rather than full names.

In total, the MARC 583 fields include the following information:

```
583 $3 [Collection name] $a [action] $c
[YYYYMMDD] $k [initials] $z [public note] $2
pda $5 PSt
```

Note that subfield \$i (“Method of action”) or \$l (“Status”) is added as needed.

After making these decisions, it was time to start encoding MARC 583 fields for the first batch of records. To begin, the author examined the annotated call slips to determine which action terms to encode. In this initial group, two terms from PDA stood out: “condition reviewed” and “housed,” both of which were used in twenty-eight of the thirty-three items conserved. Other MARC 583 action terms were considered as needed.

“Condition Reviewed” Action Data

For “condition reviewed,” PDA recommends including subfield \$l (“Status”), and provides a list of thirty-four standard terms for this subfield. PDA also recommends including subfield \$x (“Nonpublic note”) or \$z (“Public note”) to include terms beyond the standard terminology, or to

provide additional details. The MARC 583 field for “condition reviewed” would be constructed as follows:

```
583 $3 [Collection name] $a condition reviewed $c
[YYYYMMDD] $k [initials] $l [status] $z [public
note] $2 pda $5 PSt
```

Recalling that the Batch I records come from Special Collections Library materials that received housing and/or conservation treatments from PCD, of the twenty-eight items in Batch I that had condition notes, twenty-three included qualitative assessments, such as “Excellent condition.” Of these, seven included additional details to justify the assessment, such as “Book in good condition; foxing (slight) on most leaves,” or “Fair condition—small markings (stains) on book’s cover + back.” The remaining five items provided factual information about the book’s condition without a qualitative assessment (e.g., “Torn paper”). One note provided more detail: “Book checked for mold as per request—deemed to be grime + not mold.”

For the items described by interns as excellent condition, the MARC 583 was constructed as:

```
583 $3 Rare Books Fine Printing copy $a condition
reviewed $c 20160923 $k abc $l undamaged $z
Excellent condition. $2 pda $5 PSt33
```

In cases when interns described the condition as “Good condition” with no additional qualifiers, subfield \$l was omitted, as it was not clear what damage was present. PDA includes the generic term “damaged,” which could be used in this case, but in the absence of other information, it could also be misleading.

When provided, details of existing damage were recorded in subfield \$l. For instance, for an item with slight foxing, the MARC 583 field was constructed as:

```
583 $3 Rare Books Fine Printing copy $a condition
reviewed $c 20160916 $k abc $l foxed $z Good
condition; slight foxing evident on most leaves. $2
pda $5 PSt
```

Although somewhat repetitive, the subfield \$z in this case provides additional details about the extent and location of the foxing. Subfield \$l may also be repeated, as needed:

```
583 $3 Rare Books copy $a condition reviewed $c
2016 $k abc $l loose $l stained $z Back cover loose;
spots on pages. $2 pda $5 PSt
```

While subfield \$l is optional, its inclusion is recommended by PDA. Using standard terminology in this subfield ensures that items in a similar condition will be

retrieved in a search, regardless of the text in the public note. For example, if the conservator wanted to train interns on flat paper mending, the presence of the word “torn” in the subfield \$l would quickly identify books needing that particular treatment, regardless of keywords used in the public note.

The PDA terminology for subfield \$l does not cover all possible scenarios. In these cases, this subfield may be omitted:

583 \$3 Rare Books Goodman Collection copy \$a condition reviewed \$c 20161104 \$k abc \$z Book checked for mold; deemed to be soot and grime, not mold. \$2 pda \$5 PSt

Here, the intern’s assessment provides valuable information. In the future, staff will not have to send this book to PCD for another assessment; they can confirm from the bibliographic record that the item has been examined and was determined not to be moldy. This assessment could not be easily captured using the subfield \$l terminology, but can be expressed clearly and concisely in a public note.

“Housed” Action Data

For “housed,” subfield \$i (“Method of action”) is recommended but not required. PDA provides a short list of terms to use in subfield \$i: box, encapsulation, envelope/sleeve, folder/container, or jacket. Additional information, such as details on the type of housing constructed or materials used, would be added to subfield \$z as needed. Put together, MARC 583 notes for “housed” would be constructed as follows:

583 \$3 [Collection name] \$a housed \$c [YYYYMMDD] \$i [Method of action] \$k [initials] \$z [public note] \$2 pda \$5 PSt

As documented in the Batch I records, the interns constructed only two types of enclosures: phase boxes and book shoes. In both cases, the term “box” was added to subfield \$i. PDA defines “box” as: “Custom-fitted board stock enclosure, preservation quality materials & construction, often used for rare book collections.”³⁴ This definition was a clear fit for phase boxes. However, for book shoes, which are four-sided enclosures that leave the spine and top edge of the book visible, it was less clear. Since PDA does not specify that the box must enclose the item on all sides, we decided to also use the term here.

In total, twenty-four of the interns’ notes described phase box construction. One of these notes stated only “Phase box constructed,” without additional information. One described the box’s shape as it had been custom-built

to support a trapezoidal-shaped book. The remaining twenty-two notes included information about materials used to fill the box: thirteen used ethafoam (an archival-quality polyethylene foam), and nine used corrugated board. For these items, we added notes in subfield \$z to describe the type of box, materials, and other details as needed:

583 \$3 Rare Books Fine Printing copy \$a housed \$c 20160921 \$i box \$k abc \$z Phase box with ethafoam filler. \$2 pda \$5 PSt

None of the book shoe notes included additional details. In these cases, subfield \$z was used only to note the type of box constructed:

583 \$3 Rare Books copy \$a housed \$c 20161104 \$i box \$k abc \$z Book shoe. \$2 pda \$5 PSt

Other Notes

Four items included notes stating “Replaced red string w/ Velcro.” The wording varied for each item. Sometimes “cloth” was provided instead of string, or the mention of the color was omitted. After consulting with the conservator who supervised the students’ work, the author learned that these were items with loose covers that had been tied with red string for stabilization. The strings had left impressions on the bindings, and therefore needed to be replaced. The interns had built bands out of acid-free material, which they secured with Velcro.

For these items, we used the action term “stabilized,” defined in PDA as: “Non-invasive procedures used to minimize deterioration and maintain the integrity of the item.”³⁵ As with “housed,” subfield \$i (“Method of action”) is recommended but not required. For this action term, PDA includes three standard terms for subfield \$i: cleaned, shrink-wrapped, and tied. Since none of the terms fit precisely, we omitted subfield \$i and used substantive public notes, instead:

583 \$3 Rare Books Fine Printing copy \$a stabilized \$c 2016 \$k abc \$z Replaced red string with Velcro. \$2 pda \$5 PSt

One remaining note still needed to be encoded: “Need to fix/touch-up leather.” This note fit well with the “prospective actions” in PDA. Since it pertained to conservation treatments needed in the future, “will conserve” was chosen as the action term. PDA’s recommended subfields for this term are \$x (“Nonpublic note”) or \$z (“Public note”); unlike the other action terms discussed, “will conserve” uses neither subfields \$i (“Method of action”) nor \$l (“Status”). This field was encoded as:

583 \$3 Rare Books copy \$a will conserve \$c
20161104 \$k abc \$z Need to fix/touch-up leather.
\$2 pda \$5 PSt

Project Assessment and Next Steps

Adding the MARC 583 field for the first batch of records was successful. All the initial project goals were fulfilled. However, there were a few problems, mostly the result of the handwritten notes. Some of these problems included spelling errors (e.g., “ethyfoam” instead of “ethafoam”), inconsistently adding initials, and variations in date information (full dates, year only, or omitting dates completely). Spelling errors were the easiest to address, particularly as only one cataloger was entering data, and therefore able to quickly spot variations. Lack of initials or incomplete dates were harder to catch and correct, especially since, in some cases, the interns wrote the notes several months before the information was handled by the cataloger.

Another problem was variation in recording details about housing or condition assessments, which was particularly apparent with the phase boxes with corrugated filler. Of the nine notes about corrugated filler, two stated only “corrugated board filler,” two specified “acid-free corrugated board,” two stated that the “upper portion [was] filled with acid-free corrugated board,” and the remaining three mentioned the flute size (E- or B-flute). While it might be clear to current employees that these are all acid-free fillers, it might not be so to staff in the future. Standardization could help to prevent confusion at a later time.

To mitigate these problems, the author created an online form, which interns will complete in lieu of handwritten notes. Certain fields, such as date and initials, are required, ensuring that this information is always provided. Additionally, catalogers will be able to see data entered into the form, enabling them to immediately address any problems or questions that arise. Student interns began using the form during the fall 2017 semester.

An additional problem was the need to display data from the MARC 583 field in our online public access catalog (OPAC). Following the examples in PDA, the MARC 583 fields were constructed without punctuation. However, this generated an incomprehensible display in the public view of the catalog:

Rare Books copy will conserve 20161104 abc Need
to fix leather. pda PSt

In part, this was fixed by suppressing subfields \$2 and \$5 from display. Initially, the plan was to suppress subfield \$k from display to protect the interns’ anonymity. However, materials conserved off-site recorded the vendor’s name in

subfield \$k. Setting this field not to display would have created difficulties for these items. Instead, the interns’ initials are recorded in the subfield \$x (“Nonpublic note”), which is likewise set not to display.

Readability was provided for the other subfields by adding punctuation. A colon is provided after subfield \$3, and subfield \$z is treated as a complete sentence, preceded by and followed by a period. Other subfields are separated with semi-colons:

583 \$3 Rare Books copy: \$a will conserve; \$c
20161104. \$x abc \$z Need to fix leather. \$2 pda
\$5 PSt

This creates the following public display:

Rare Books copy: will conserve; 20161104. Need
to fix leather.

While some portions of this information may remain unclear to library users (particularly dates), it is much more readable.

Using the MARC 583 field and PDA enabled the author’s library to capture all the information provided by interns in the Batch I records. However, adapting the MARC 583 field for more detailed documentation would likely be difficult. Although the notes created by interns included some added details, all of their condition assessments and conservation treatments could still be concisely summarized. Documenting more complex conservation treatments requires more detail. While the AIC “Code of Ethics” permits the extent of documentation to vary according to circumstances, a complete record would include details of examination, a treatment plan, and documentation of the treatment.³⁶ To fully capture this information, it is necessary to either create very long public notes or to add multiple MARC 583 fields. One of McCann’s survey respondents described this as “exhausting to think about.”³⁷ Additionally, the “Code of Ethics” further states: “When appropriate, the records should be both written and pictorial.”³⁸ At this time, images cannot be embedded directly in a MARC record. It is possible to link to images using either the subfield \$u or a MARC 856 field, but the image would need to be hosted elsewhere. Because of these limitations, documentation for items requiring lengthy notes and pictorial documentation will not be added to the MARC record. For the shorter notes prepared by our interns, however, the MARC 583 field was effective.

Conclusion

As a whole, the project was successful and met all the original project goals. We added conservation notes for special

collections materials to our bibliographic records. The notes were publicly viewable, allowing library staff to ascertain condition and conservation information about items in the collection, collocate items, and find the items using the call number and location information recorded in subfield \$3. By using standard terminology, staff could search for items based on treatment or housing type. The new practices adhere to national standards, including MARC 21 format standards and PDA.

Some of the results exceeded the initial project goals. The interns' condition notes, in particular, will help to avoid repeating work in the future and allow staff to learn whether damage to an item occurred before or after the date of examination. One stand-out example is the intern who noted that an item was dirty, rather than moldy. By adding this information to the catalog record, her examination is preserved.

Some additional work is needed. As noted in the "Project Assessment and Next Steps" section, we implemented a form to mitigate problems created by handwritten notes. In fall 2017, after using the form for a semester, we evaluated its effectiveness. The form does ensure that dates and initials are always recorded. However, as this is a new step in the workflow, we are still working with interns and library staff to ensure that it is always completed. This project was conducted for a limited time period during which the interns only performed a small number of treatments. As a result, certain notes appeared frequently, but these same notes may not occur as often in the future. As interns handle other treatments, we will need to construct new notes to describe them. Despite these minor issues, overall the MARC 583 field is an effective means of recording conservation documentation. We plan to implement this field as part of our permanent workflow.

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Notes on Operations

Extending Name Authority Work beyond the Cataloging Department

A Case Study at the University of Nevada, Reno Libraries

Dana M. Miller and Amy Jo

The University of Nevada, Reno Libraries' Metadata and Cataloging Department partnered with the Special Collections and Digital Initiatives departments to obtain NACO certification. To meet the needs of our users and better represent Nevada figures in the Library of Congress Name Authority File, the three departments collaborated to create a new workflow and a tool that effectively extended name authority work and record contribution beyond traditional MARC cataloging.

Recent technological and cultural changes have led to an increasingly networked world. At the same time, information overload creates the potential for lack of clarity, muddled context, and false information offered (inadvertently or advertently) as fact. In this environment, it has become even more important for librarians to provide the kind of trustworthy information for which we have become known. Those in the cataloging and metadata arenas are keenly aware of the need to prepare for a future in which linked library data requires more diligence in discerning and disambiguating the identity of the creators of intellectual property and records. To provide access to rare and unique materials, archivists, special collections librarians, and digital collections experts can learn from catalogers and adapt their name authority tools and workflows to meet their own needs in information management.

It is important for those who create metadata to consult and use the available cooperative databases such as OCLC Connexion and the Library of Congress Name Authority File (LCNAF). Traditional MARC catalogers have long recognized the value of established name authorities, but this valuable information is often overlooked by non-MARC metadata creators in special collections, archives, and digital collections. Considering the uniqueness and local value of materials housed or exhibited in special collections, or online in digital asset management systems, search and retrieval of these materials need to occur with precision and quality; to ensure this it is vital to adhere to national name authority standards. If an institution considers the holdings of its repository as a local or internal resource, it might be acceptable to create metadata without intending it to interact with that of other institutions. However, as special collections and digital collections are increasingly shared with broader audiences through regional archival consortiums such as the Online Archive of California and Archives West, and digital aggregators such as the Digital Public Library of America (DPLA), it becomes each institution's responsibility to make their

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materials, and the creators of those materials, discoverable on a broad national and international level.

When archivists and digital collections librarians view their own holdings in this wider context, their vision of the collective library and archives universe is expanded. The need for that expanded view is clear when it comes to name authority work. There is not just one “John Smith” represented in one archive—there are many “John Smiths” represented across many archives. How do users determine which one is the John Smith whose papers are held at a certain repository or locate the precise John Smith they are seeking? Not only should individual institutions distinguish their records’ creators from others, they should share this work in established databases such as the LCNAF. LCNAF’s role as a compilation of creator information that has been collaboratively gathered and collectively maintained has the potential to reduce metadata creators’ workload in special and digital collections while connecting more users to the information for which they are searching. When other authority systems, including those using non-MARC metadata, draw content from LCNAF records, it is unnecessary for individual institutions to duplicate that work. Rather, they can make valuable contributions by adding to the LCNAF and maintaining it with their own institution’s knowledge, providing a solid starting point for public-facing name authority work in the anticipated linked data future.

It was with these goals in mind in spring 2017 that the University of Nevada, Reno’s Metadata and Cataloging Department embarked on a project to extend name authority work beyond the department and into the metadata universes and workflows of the special collections and digital initiatives departments.

Literature Review

MARC and non-MARC metadata creators in the library and archives professions frequently encounter anti-metadata attitudes exhibited by those who declare that Google and keyword searching negate the need to do authority work. The LC Working Group on the Future of Bibliographic Control offered a contradictory statement: “While such mechanisms as keyword searching provide extremely useful additions to the arsenal of searching capabilities available to users, they are not a satisfactory substitute for controlled vocabularies. Indeed, many machine-searching techniques rely on the existence of authoritative headings even if they do not explicitly display them.”¹ Although most catalogers understand the usefulness of authority records, a review of the literature reveals that little focus has been placed on the use of controlled vocabularies, particularly name authority headings, in special or digital collections. Thus, the practice

of name authority control beyond a traditional cataloging department cannot yet be said to be evolved or established.

The authors of this case study approached the literature with a variety of questions: Who outside of cataloging departments is using authority data? Is it being used in a regular and consistent manner? How are non-catalogers handling authority data internally? Cataloging departments have legacy tools and workflows for handling name authority work and creation, but special collections and digital repositories manage name authorities in ways that vary so greatly it suggests there is no industry standard outside of MARC cataloging practice.

Nearly two decades ago, Vellucci argued for the need for authority control in the non-MARC metadata environment. She asserted that success depended upon implementing “the controlled vocabulary, uniform access points and syndetic structure created by the authority control process.”² While authority control in non-MARC metadata has not yet been fully embraced or implemented, periodic examples of collaboration and calls for more have appeared. Baca and O’Keefe describe a cross-community approach in which catalogers and curators collaborated on authority records for Medieval and Renaissance materials at the Morgan Library and Museum. Whereas curators accepted cataloging standards including AACR2 and LCSH, they also made useful recommendations to catalogers creating authority records to submit to LCNAF. They concluded that

this kind of contribution from curators and other subject experts can enhance the intellectual value of records, while helping to cut time and costs for creating high-quality descriptive metadata. The incorporation of input from creators, scholars, and other subject experts is an area that institutions should actively pursue, if they want to provide rich, accurate descriptions of the non-bibliographic works in their collections. Information from non-cataloger subject experts could be routinely captured if there are effective methods for communication and collaboration between catalogers and curators.”³

Diao and Hernandez later encouraged catalogers to redefine their roles to collaborate with digital projects librarians to extend their legacy values of accuracy, consistency, and completeness to the metadata being created for digital projects. “Through collaboration with other metadata professionals, catalogers may be able to turn metadata creation into a community practice with individual engagement at different professional levels.”⁴

Diao and Hernandez acknowledge that systems are not in place for easy authority control for digital projects: “Even though many cultural institutions involved in digital

projects have been awakening to the significance of authority-control mechanisms in software that helps them build digital collections, unfortunately this problem still remains mostly unsolved.” Despite Dublin Core metadata and standard digital asset management system tools providing little to no authority control, some digital collection metadata projects are rooted in the authority practices established in cataloging departments. For example, Dragon describes how metadata creators for the Eastern North Carolina Postcard Collection chose to apply LC Subject Headings (LCSH) and LCNAF vocabularies to align the collection with existing metadata for other items in the repository. Many of the original materials in the collection were digitized books that had LCSH and LCNAF terms assigned to them. The creators decided to continue the practice to maintain consistency and make “the repository more compatible with the library catalog.”⁵ Other institutions create identical fields and use local shared vocabularies across all digital collections to ensure consistency within their own institution’s databases. Metadata creators at the University of Nevada, Reno argue that using one shared vocabulary across all digital collections allows for better control of name authorities and enables linking not only within collections but for future linked open data endeavors.⁶ However, as was UNR’s concern, not all institutions share their local controlled vocabulary with national authority databases, effectively meaning that they are working in a vacuum. The benefits of their efforts are limited to their own local institution.

The University of Utah’s J. Willard Marriott Library is responsible for maintaining the Mountain West Digital Library (MWDL). With that responsibility comes the challenge of standardizing metadata created by over seventy-five partners while adhering to standards set by the Digital Public Library of America (DPLA). Jeremy Myntti of the University of Utah partnered with Nate Cothran from Backstage Library Works to automate a process to update and standardize metadata fields in Extensible Mark-up Language (XML) fields in an attempt to replicate a MARC21 automated authority control process. The project was motivated by not the desire to implement standards across collections, but the desire to implement linked data-friendly metadata. “The premise of linked data is that information need only be updated once since the relevant information in linked data references resides in a single location”⁷ Myntti asserts the importance of using LCNAF records when possible because they are stable but acknowledges that digital collections tend to use local names that are seldom present in the LCNAF.⁸

Linked data initiatives provide another motivation for digital collections managers to create authority records that are interoperable across institutions. UNLV’s librarians are experimenting with linked data and recently developed an

interface that exposed relationships between subjects and objects (called triples) which are created from authority records. Southwick of UNLV maintains that linked open data will only work if records are created using interoperable uniform resource identifiers (URIs) and that this is best done by incorporating existing LCNAF records, though the workflow does not include creation of new LCNAF records even when they might be necessary.⁹ Since linked open data may be the framework that libraries embrace in the future, it makes sense to generate authority records that provide access to stable URIs for linking. “By ensuring name consistency, the cataloger is creating the potential for heading links across discovery tools and setting the stage for the implementation of a federated search function that would enable users to discover traditional library materials as well as digital projects in the same search.”¹⁰

Sometimes when partnered with special and digital collections, institutional repositories are another area where name authority work is direly needed but is not present in many cases. Salo notes that the do-it-yourself nature of depositing content in institutional repositories creates what could be referred to as a near metadata crisis, but the name authority situation is worse. “In practice, librarian-mediated deposit has turned out to be the most viable method of repository population” but the repository software design did not consider the need for authority control.¹¹ The lack of standards also contributes to poor search results. “The naïve user of an institutional repository will swiftly find that the absence of name authority control inhibits retrieval of items by a single author. Should a user arrive at a specific item and desire to see more items by the same author, clicking on the author’s name will lead only to results for that particular name spelling or variant.”¹² Once name variants creep into the institutional repository, they are difficult to distinguish and eradicate, meaning that many irrelevant names may show up in a user’s search results. Salo advocates for institutional repositories to make use of metadata and authority standards for the benefit of their beleaguered users.

Besides helping to avoid such search and retrieval disasters, a library’s participation in the Name Authority Cooperative (NACO) or a NACO funnel can help to disseminate locally held resources to benefit others. In 2009, Folkner and Glackin published a study that considered the number of Idaho-related corporate records generated by a group of Idaho libraries that became NACO certified in 2005. The study questioned whether their NACO certification had a positive effect on the creation of authority records for Idaho corporations. It revealed that from 2005 to 2007 the total number of Idaho corporate name authority records in the LCNAF increased by approximately 12 percent. The pre-existing body of records dated back to 1977, showing a very notable increase in two years versus forty years of legacy authority record creation. Folkner and Glackin concluded

that “Through the participation of Idaho institutions in the NACO program, authority control of Idaho agencies has significantly increased when measured by the number of authority records created for Idaho corporate bodies.”¹³

Special collections and archives professionals have begun to recognize the importance of using standardized names in their work. Some advocate creating separate XML name authority records and databases, while others call for the creation of software and automated processes to identify, pull, and standardize names within non-MARC metadata. Veve discusses XML schemes for authority elements in non-MARC metadata, such as Encoded Archival Context, but notes that machine selection and extraction of names from XML metadata is unreliable, and the labor costs associated with building an XML name repository make it impractical. Conversion is also not recommended: “The idea of converting from MARC authority records into records that use the local XML schema sounds appealing, but this method creates double work for the library.”¹⁴ With conversion, a library would still need to establish new names in the LCNAF to complete the process, and LCNAF records have the advantage of being shareable in a national database. “If many headings have to be locally established in XML schema following the rigorous LCNAF standards, then libraries may find establishing the headings directly in the LCNAF more worthwhile because other libraries can benefit from this authority work. This approach can save the time necessary to convert names to another schema and to build a database to manage them. For these reasons, relying on conversion of authority records from MARC to XML may not always be the best approach to support name authority control in XML.”¹⁵

According to Xia, in 2006, name authority control in digital repositories was “still a dream for a long time to come.”¹⁶ Xia describes the lengthy process required to create and maintain reliable name authorities and suggests that software may be the only way to meet the demand. He also maintains that “customizing software, metadata, and databases so that name identifiers can become most unique at the time data are deposited” is our only hope.¹⁷ Others disagree and maintain that human intervention is required to clarify and normalize name variants, even though it is a time and resource commitment. Salo suggests that “institutions considering name authority control a priority must liberate sufficient staff time to do the work. The initial plunge of correcting a populated repository will take far more time than once- or twice-yearly maintenance work afterwards, except perhaps for swiftly growing repositories.”¹⁸ Veve maintains that “no matter how difficult keeping track of name access points in digitized materials is, it is necessary in order to keep digitized objects retrievable. Access points not only help in the retrieval process of documents but help keep materials by the same creators or about the same

subjects together.”¹⁹ Dragon agrees, stating “access points can make relationships explicit.”²⁰

Some archives and digital libraries have begun to experiment with creating cooperative, national name authority repositories using XML, but these programs still use the LCNAF as a starting place. Many of these XML name repositories use LCNAF name authority records as the primary or sole source for harvesting names. EAC-CPF (Encoded Archival Context for Corporate, Personal, and Family names) and SNAC (Social Networks and Archival Context) are two noteworthy initiatives that rely heavily on LCNAF records for their starting point. If these other tools are based on LCNAF, the most practical approach may be to first do the work directly in LCNAF. EAC-CPF and SNAC records can easily be generated from LCNAF name authority records, and the authors hope to use these tools to expand discovery options for their collections and creators. In their discussion of the need for archivists to create shareable descriptive metadata, Riley and Shepherd address the need to actively push metadata beyond local systems, and they extend this argument to name authority work, stating, “Yet not only descriptive metadata about archival holdings can be of use in the shared environment. Structured description about the creators of archival resources could be useful in many ways.”²¹ They further assert that contextual data created for archival records can be beneficial to “third-party services seeking data from multiple sources to provide high-level discovery and use services.”²²

Background of the Name Authority Record Initiative

In January 2017, the Metadata and Cataloging Department at the University of Nevada, Reno (UNR) Libraries received NACO training from a regional trainer. This training made UNR Libraries the first library in Nevada to embark on the path to NACO certification. Through the NACO certification program, participating libraries contribute authority records for personal, corporate, and jurisdictional names; uniform titles; and series headings to the LCNAF. NACO is one of the Program for Cooperative Cataloging’s (PCC) four different programs, including BIBCO (the Monographic Bibliographic Cooperative Program), CONSER (Cooperative Serial Program), and SACO (Subject Authority Cooperative Program). Active NACO membership is typically required for a library to join the other programs, and it is often the first step towards more active participation in the wider bibliographic universe.

Four years of new leadership had brought UNR’s Metadata and Cataloging Department to the point of NACO certification, though it was a goal that some staff had envisioned

for more than a decade. The Head of Metadata and Cataloging joined the Libraries in late 2012 from an archives metadata and technical services background and brought a drive to catalog the rare and unique local materials that had been neglected or ignored within the libraries' more remote units. Under this new direction, each year the department assumed large projects to establish new procedures and efficient workflows to provide better discovery and bibliographic access for tens of thousands of materials, including the Special Collections Department's publications, manuscripts and university archives, and photograph collections; published and manuscript materials from the Basque Library; and specialized maps and government documents held by the DeLaMare Science and Engineering Library.

The department's efforts to increase resource description for these local and unique materials produced a lot of additional work for the cataloger managing name authority work. Beyond wanting UNR to actively contribute to bibliographic knowledge, the Head of Metadata and Cataloging noted there was an increasing number of local and regional names they encountered either as existing older name authority records that could be updated or names lacking authority records, which justified the need for the department to receive NACO training. The fact that the department was not only approved to pursue the training but encouraged to do so was a welcome departure from previous library leadership that did not support cataloging initiatives and denied the usefulness of quality metadata and authority work.

Prior to 2017, authority work at the UNR Libraries consisted of diligently checking LCNAF and OCLC Connexion during bibliographic description and uploading the appropriate existing records into the local Sierra ILS. After cataloging, name authorities in the catalog were maintained using a monthly authority file maintenance and overnight authorities services provided by MARCIVE. It was meaningful for the catalogers to engage in this authority work since library administration prior to 2011 had forbidden even these passive approaches to authority work, and the consequences for catalog searches had been quite destructive. More potential names were discovered during the cataloging of local and unique materials. When confronted with the need to establish a local name, whether to disambiguate it from an incorrect existing name or to set a local preferred form of a name and create a consistent local access point, UNR catalogers could only save temporary authority records in the catalog for local use. This meant that their work benefitted only those in the cataloging department and existed outside the typical authority workflows. Without NACO certification they could do very little to affect these situations and due to other conditions in Nevada, there was no one else in the vast state's small library community upon whom they could rely to perform the task.

Compared to other Nevada libraries, UNR Libraries was well-situated to become a leader in name authority creation in the state. Despite its large physical size and continuing growth trends, Nevada remains a sparsely populated state, with its 2.9 million residents concentrated mainly in the urban cities at either end of the state, Reno in the north and the more populous Las Vegas in the south. These metropolitan centers are also home to the two major university campuses in the state, the University of Nevada, Reno and the University of Nevada, Las Vegas, with other smaller colleges often clustered in the same metropolitan areas or located in small towns and rural areas isolated by hundreds of miles and several hours' drive. Due to the very small staff of the latter and past agreements, the university libraries have often provided cataloging for some of the smaller community colleges, as was the case for UNR. The campuses of UNR in Reno and UNLV in Las Vegas are themselves extremely distant when compared to many other states, as one would have to drive almost eight hours and over 450 miles to get from one to the other. For Nevada's libraries, the distance and the difference between urban and rural environments has historically been a challenge to collaboration in addition to struggling with limited funding and staff resources. With its consistent leadership and productive, accomplished staff in the cataloging department, UNR decided to pursue NACO training and certification with the intent of eventually establishing a NACO funnel project to serve the entire state.

The Head of Metadata and Cataloging was personally involved with the process of bibliographic description for unique and local materials and understood the need to develop a workflow that served more than just the cataloging department. With a fairly small cataloging team for a university library and collections of its size, the head was responsible for most of the libraries' original cataloging. Resources requiring original MARC records included published materials from many areas of the library, though one of the largest concentrations was from Special Collections. Special Collections' manuscripts and archives collections needed original MARC cataloging records that often contained links to the digital surrogates and item-level metadata the Digital Initiatives unit produced to highlight those holdings. The Head of Metadata and Cataloging drew on her background in archives and special collections metadata by focusing on bibliographic description of these unique local materials, and the link between the triad of departments grew stronger.

After four years of original cataloging and leading the department, the Head of Metadata and Cataloging gained sufficient familiarity with the kinds of name authority gaps that cataloging staff frequently encountered for persons (particularly well-known state politicians and artists), corporations and organizations (especially University entities),

families, and the many jurisdictional place names within Nevada that were largely unknown elsewhere (including mining districts and ghost towns). The Metadata and Cataloging Department had been supplementing both the Special Collections and Digital Initiatives departments with descriptive metadata support, which in turn meant that open and effective channels of communication and collaboration were established between the three departments. Furthermore, while name authority work has traditionally been handled by catalogers and cataloging departments, UNR catalogers were convinced it could also be provided elsewhere. Multiple faculty members had significant metadata creation experience in one or more archives, cataloging, and digital collections departments, and catalogers knew

that names, whether personal, corporate, family, or place, were just as vital to set and distinguish in non-MARC metadata for unpublished materials as they were in MARC bibliographic records for published materials. Finally, after much experience performing original cataloging work on their holdings, the Head of Cataloging and Metadata concluded that as the most frequent sources of names needing new authority records or updates to existing records the two departments should be included with the cataloging team in the training and the resulting workflows.

With this goal in mind, half a dozen members of both the Special Collections and Digital Initiatives departments were invited to attend the weeklong training, accounting for about a third of the attendees. Because of our collaborative nature and awareness that Special Collections and Digital Initiatives were encountering a lot of new names, the Metadata and Cataloging Department invited Digital Initiatives and Special Collections non-cataloger metadata creators to attend at least a portion of the training so that they could understand the process of creating a name authority record (NAR). The plan was to have Metadata and Cataloging librarians and staff who regularly work with MARC records and the RDA standard create and submit name authority records to the LCNAF, and the Digital Initiatives and Special Collections librarians and staff were included to enable them to understand basic principles and to suggest names and share the workload in record creation.

Non-catalogers from both departments later described the training as highly informative, although they reached a

LC control no.: no2017033249
LCCN Permalink: <https://lccn.loc.gov/no2017033249>
HEADING: Ault, Chris, 1946-

000 01474nz a2200241n 450
001 10402035
005 20170316073555.0
008 170315n1 azannaabn la aaa c
010 __ la no2017033249
035 __ la (OCoLC)oca10735080
040 __ la NvU lb eng le NvU le rda
046 __ lf 1946-11-08 l2 edtf
100 1_ la Ault, Chris, ld 1946-
370 __ la San Bernardino (Calif.) le Reno (Nev.) l2 naf
372 __ la Football l2 lcsb
373 __ la University of Nevada, Reno l2 naf
374 __ la Coaches (Athletics) l2 lcsb
375 __ la Males l2 lcsdgt
377 __ la eng
510 2_ lw r li Employer la University of Nevada, Reno
670 __ la Nevada Wolfpack Athletics website,16 February 2017 lb (Chris Ault, head football coach from 1976 to 1992, 1994 & 1995, and 2004 to 2012, and athletics director from 1996 through March of 2004. Ault also played football for Nevada as a student, graduating in 1968)
670 __ la Wikipedia, 3 February 2017 lb (Chris Ault, born in San Bernardino, CA November 08 1946, graduated University of Nevada, Reno 1968, head football coach and athletics director. Also became head football coach Rhinos Milano, Milan, Italy in 2015)
678 0_ la Chris Ault was a college football player who graduated from the University of Nevada, Reno in 1968. He was a football coach for Bishop Manogue High School before becoming head coach for the University of Nevada, Reno during three periods (1976 to 1992, 1994 & 1995 and 2004 to 2012) and serving as athletic director there from 1986 to 2004.

Figure 1. LC Name Authority Record Created for Chris Ault

point at which the learning material became too complex for them to follow. They noted that the experience allowed them to understand the need to provide context for NAR creation. The non-catalogers also recognized the need to exercise restraint when determining which names are appropriate to include in the LCNAF. By witnessing the level of detail required to create a new NAR, non-catalogers in Digital Initiatives and Special Collections adjusted the judgments they made to decide which names need authority records.

For the training exercises, non-catalogers from both departments contributed names they had encountered in their descriptive workflows and outside of published materials. One name provided by Digital Initiatives, Chris Ault, illustrates a perfect example of a notable individual who previously did not have an LCNAF record. Ault coached Nevada football for several decades and led the team to several important victories. He was awarded numerous regional honors, inducted into the College Football Hall of Fame, and has a rich Wikipedia entry. Although professional players who Ault coached, such as Colin Kaepernick, already had LCNAF records, Ault lacked an entry, so the team created a record for him during the NACO training (see figure 1).

Establishing a Workflow

An important consideration was how to continue and foster collaboration on name authority work beyond the training. With unique Nevada names being discovered in

all three areas, UNR catalogers knew they needed a workflow that would help them to manage name authority work efficiently but also keep track of the names generated from descriptive work done in other systems outside the cataloging department. It was essential to make sure authority work would extend to those departments while also avoiding working on separate “islands” and duplicating efforts across teams.

It seemed necessary that all involved parties, regardless of department, would continue to draft name authority records from their own sources, which would then be checked by the lead authority work cataloger. While Metadata and Cataloging would continue to use OCLC Connexion and Sierra to create and import bibliographic and name authority records, most Special Collections Department metadata work was done in Archivist’s Toolkit, which lacked the catalogers’ tools authority control capabilities and shareable authority creation mechanisms. CONTENTdm, used so ubiquitously to create and store metadata for Digital Initiatives projects, also lacked authority control mechanisms. Still, UNR catalogers assumed the workflow would have both the catalogers and their non-cataloger partners working on bibliographic description in their native tools and databases, and when a new name was triggered by descriptive work, both cataloger and non-cataloger would create a name authority record in OCLC Connexion, save it to a designated online save file, and the cataloging department’s appointed NAR coordinator would review and submit a group of records on a regular basis.

First Attempt: Constant Data Template

UNR needed a tool to facilitate communication and continuing name authority practice between catalogers and non-catalogers. The most practical workflow seemed to include embedding the tool directly in the name authority work process. Thus, using the constant data tool in OCLC Connexion, UNR catalogers created name authority record templates based on the standards and guidelines taught in the training and the local best practices they had adapted. These constant data templates were intended to function as fill-in-the-blank forms with prompts and hints on standard content plus formatting and punctuation, mainly for those

Rec.stat	n	Entered	20170324
Type	z	Upxl status	a
Roman	■	Ref status	a
GovLagn	■	Auth status	a
Series	n	Auth/ref	a
Ser num	n	Name	a
		Enc lv	n
		Mod rec	
		Subj	a
		Geo subd	n
		Subdiv tp	n
		Source	c
		Name use	a
		Subj use	a
		Ser use	b
		Rules	z
046		#f YYYY-MM-DD #g YYYY-MM-DD #2 edtf	
100		Last, First, MI., #d YYYY-YYYY	
370		place of birth #b place of death #e place of residence/headquarters (repeatable) #f other associated place #2 naf if applicable	
372		Field of activity #2 lcs# [this should be a field or a topic they did something in]	
373		Associated organization #2 naf [need one from NAF if you're going to link it in a 510]	
374		Occupation #2 lcs# [this should be a class of people by profession or group; they don't have to be a professional at it]	
375		Gender #2 lcdgt	
377		eng	
378		#q Fuller Form of Name [spell out initials if you have them]	
400	1	Variant form of name found in your sources [#d mirror any dates you put in the 100]	
510	2	#w r -OR- for Politicians: #a Related organization, must be in NAF [For employees of UNR: #i Employer: #a University of Nevada, Reno #i Corporate body: #a Nevada. #b Legislature. #b Assembly #w r - no period between Assembly and #w]	
670		#a Title proper of the source, year of publication: #b location in source (data you're recording) [(for sources with a specific page number or place]	
670		#a Title proper of the source, year of publication/date viewed, etc: #b (data you're recording) [omit the colon for online sources or those with no specific page number]	
678	0	Narrative, grammatically correct biography of the person you are establishing, starting with their full name and dates and summarizing relevant information about them, all of which must be justified somewhere in a 670.	
690		Record your name or initials and that it's a new record.	

Figure 2. Name Authority Control Date Template Created by UNR Catalogers

non-catalogers who did not typically provide MARC/RDA cataloging. The constant data templates were designed to resemble a standard MARC/RDA-compliant name authority record, while providing flexibility to accommodate the variety of information available or appropriate for any given name. For the pilot use of these templates, constant data was created only for personal and corporate names. They included the characteristic fixed fields, required and recommended MARC field tags, indicators, field contents and formatting, and punctuation. A one-page best practices guide was created to guide template users in name authority creation, including the guidelines for choosing preferred form of the name, appropriate use of qualifiers, and inclusion of other detailed information. These constant data templates were used from February through May 2017, or approximately the duration of the semester immediately following UNR’s NACO training (see figure 2).

However, even with these guiding tools and intentions to make it easier to complete the task, lack of familiarity and practice in MARC format, RDA cataloging, and in the use of OCLC Connexion proved to be too wide a gap for the non-catalogers. Though they consistently reported high levels of interest in creating name authorities and belief in the value and importance of contributing names to the LCNFAF, collectively the non-catalogers (four core partners with up to seven possible contributors) submitted fewer than five draft name authority records during the four months that the constant data templates and best practices were available.

Descriptive bibliographic work continued for all librarians and staff in all but one case (explained below), yet several names that could have been submitted were held back because the tasks had proved too difficult to integrate into workflows existing outside of Connexion and the ILS. The major roadblocks to adoption were a lack of fluency in MARC format and RDA and a perceived inefficiency in the workflow and process. Much like learning a new language, if one does not consistently use MARC format and RDA it is ineffective to attempt to dabble in this work, even with the help of a constant data template as a guide. The MARC record format and the RDA descriptive standards used in bibliographic cataloging and name authority record creation are so intricately formatted and their tags, the indicators, and subfields coded to such specificity that even a stray space or period can create indexing errors. If an individual only performs this task one to five times per month, retention is minimal, and drafting the record will require much more time, particularly to accommodate looking up field tags, indicators, subfields, and their contents.

The constant data templates and best practices were intended to avoid this time sink and detailed double-checking, but those intentions were subverted by the complexity of MARC format and RDA. Additionally, three of the five records created by non-catalogers contained errors that demonstrated a misunderstanding of essential concepts, such as how to choose the preferred form of name, the purpose of the 780 biographical note field, and how to use the source note fields to document what was input in various structured fields in the upper variable fields. This might be attributed to novice practice, but it suggested that a general lack of familiarity with broader MARC format and RDA cataloging principles might be more of a problem than initially hoped.

Switching programs and thought-processes mid-description proved to be disruptive for the non-catalogers. Breaking their bibliographic work cycle to use an unfamiliar program (e.g. OCLC Connexion), in a “foreign” metadata language (e.g. MARC), using “foreign” descriptive standards (e.g. RDA) created barriers to adoption. In contrast, if one provides bibliographic description in a cataloging environment that supports MARC format and RDA, such as OCLC Connexion, it is easy and efficient to navigate within the same tool and metadata schema into authority work and name authority file creation. One could even switch between the bibliographic record and the authority record in the program to complete the latter. Asking the non-catalogers to switch between metadata schemas, descriptive standards, and tools was too challenging.

Finally, and what may be the most unique facet of the situation, the Head of Metadata and Cataloging, possessing years of experience managing projects in archives and special collections, left the cataloging department to serve

as the Director of Special Collections. A consequence of this role change was that the Cataloging and Metadata Department lost one of the two staff who provided the final review and submission of name authority records plus someone with MARC format and RDA original cataloging expertise. Losing a direct contributor of authority creation was a significant challenge. In the interim months, the catalogers continued to create name authority records as they encountered them in their own workflows in regular published materials, but most name authority work from Special Collections and Digital Initiatives was put on hold.

Take Two: Conquering the Jargon

To overcome the many roadblocks inherent in the first workflow that included non-catalogers attempting deep MARC-RDA work using unfamiliar tools and creating name authority records without enough practice to allow for mastery, UNR’s catalogers and the new Head of Special Collections decided to pilot a translation tool. It would be quite possible to translate the required and recommended MARC fields into plain language, but it needed to be done thoughtfully to make it a genuine time saver.

To be non-cataloger friendly, the tool needed to remove the MARC field tags, indicators, and other jargon, and replace them with natural language questions and helpful hints for how to answer those questions. It would also need to be possible for a non-cataloger to have the “trigger” collection or item in hand or, if digital, open on the desktop, and from there open a form and provide the necessary information without having to worry about MARC formatting or RDA rules, and then return to the descriptive work. This would allow the non-catalogers to document their knowledge and almost all the information needed for the eventual record while they are working with a collection or item, as opposed to doing so much later when such knowledge and information might be forgotten. For example, if an archivist in Special Collections processes a collection and discovers a name that is not in the LCNAF but the collection provides enough information to create a name record, the archivist can complete the NAR form while processing the collection. At that point, information will be fresh in the archivist’s mind and relevant details can be provided; after a week or longer, the information learned from processing that would be useful in NARs can be forgotten and time lost looking up the information again. An important aspect of the workflow is the desire to capture information while it is still fresh and to eliminate the need to take extra steps later that will waste time and resources.

Equally important, the tool should also aggregate the suggested name records into a single queue regardless of type (personal, corporate, place, etc.) and/or the department or individual originating the request. With a

single queue, the cataloging department's name authority coordinator could regularly check for proposed names as part of their name authority creation workflow. It was necessary for the tool to be able to capture all or most of the data needed for the NAR in that same place so that everyone using it was going to the same list and form. Since three departments are simultaneously creating records, the form also provides a way to eliminate duplication of effort. If Special Collections archivists, Digital Initiatives personnel, and catalogers continue to create name authority records within the confines of their own units, it is possible for duplicate records to emerge that will later need to be reconciled; having all proposed name authority records on the same list greatly reduces the likelihood of unintended duplication.

UNR catalogers considered using an Excel spreadsheet, but the column headings did not allow for adequate explanatory information to tell users what to include or when to cite sources. A spreadsheet also seemed to limit some responses to only one answer per field, whereas multiple answers were sometimes more appropriate, such as when listing the different forms of a name found in a given collection. In addition, some members of the special collections team are not comfortable using spreadsheets so even if there were a spreadsheet view, to get the widest buy-in, another view would be necessary for some potential users to adopt its regular use.

At the same time, the library's units and subunits had begun to use *Airtable*, a flexible, extensible, easy-to-use spreadsheet and database tool that offers both free and fee-based options. Because both the cataloging and special collections departments had begun to use this tool to track and manage other projects, it was an easy choice to use it to manage name authority record submissions. It is worth noting, however, that other libraries may prefer to choose tools based on budget or policy constraints, but this should not have a negative consequence for the project's outcome.

Airtable allows three distinct and necessary views: the individual questionnaire form that the non-cataloger completes to submit a name to the cataloger who coordinates name authority records (see figure 3), the spreadsheet or overall "queue" view that the authority cataloger checks, and a completed version of the questionnaire form the cataloger opens to view the data supplied by the non-cataloger for creating each name authority record (see figure 4). Separate forms were created for personal and corporate names for the pilot, with other forms for other types of names such

Personal Name Authority Record Form	
1.	Creator Name (casual)
2.	Your Name
3.	Date sent to MCD mm/dd/yyyy
4.	What is the Title and Call # of the collection that triggered this NAR? (for Special Collections)
5.	What is the Title and Digital ID of the collection/item that triggered this NAR? (for Digital Collections)
6.	Check the name in LCNAF. What form of the name did you find? (N/A if no name is found.)
7.	Check the name in OCLC if you have access. What did you find? (N/A if no name is found.)
8.	Check the name in Sierra ILS. What did you find? (N/A if no name is found.)
9.	Check familysearch.org. What did you find (name, date of birth, family, etc.)? (include link to record.)
10.	How does the name appear in the collection? (List all the different ways you have found it while processing.)
11.	What is the most common form of the name you found in the collection?
12.	Are there any nicknames or other names they are commonly known by that are not found in the collection? Where did you find that or how do you know? (Cite any sources not in collection.)
13.	Birth and death dates? (Include months and days if known; if unknown skip. Cite all sources.)
14.	Place of birth? Place of death? (Cite any sources not in collection.)
15.	Where did they reside for most of their lives or careers? (Cite any sources not in collection.)
16.	Any other places where they did something significant? (Cite any sources not in collection.)
17.	Any important associated organizations, such as companies they worked for or founded? (Cite any sources not in collection.)
18.	Using plain language, what was their occupation? (Cite any sources not in collection.)
19.	What fields were they active in? This can include non-paid labor too. (Cite any sources not in collection.)
20.	Was this person a politician? NV state or Federal? What offices did they hold and when? (Cite any sources not in collection.)
21.	Gender?
22.	Biography (using data listed above, write a brief 1 or 2 sentence biographical sketch. Only include information substantiated above with a source.)
23.	Link to digital file
24.	Anything else you want catalogers to know?
25.	Attachments

Figure 3. *Airtable* Questionnaire Form Non-Catalogers Use to Submit Name Information

as place planned for a later phase. Once completed and submitted, each new form then auto-populates the queue and the name authority coordinator in cataloging is automatically notified when something is added to the queue. All views are accessible to all departments, but the catalogers generally focus on the completed forms, while the non-cataloger contributors mainly use the questionnaire form.

Both the personal and the corporate name forms (and later the place names) feed into the same queue or spreadsheet, which serves as a hub for the variety of forms. Since the MARC fields for personal, corporate, and other types of name authority records overlap to some extent, massaging was necessary to record all the data in a single spreadsheet. Similar or overlapping MARC fields from the different types of records feed into one spreadsheet column with a general label that covers both ideas, or in some cases, MARC fields that are distinct for one type of record have their own column that simply remains blank for other types

Figure 4. Portion of a Complete Airtable Questionnaire Form with Queue View in Background

of records.

Whether it is a personal or corporate name, the form's purpose is to collect as much information as possible to create a name authority record, both at the time the knowledge is fresh in the non-cataloger's mind, and doing so using plain language that does not require deep knowledge of MARC or RDA or expertise with cataloging tools. As shown in figure 3, the personal name form poses a series of simple questions to the non-cataloger, the answers of which correspond to all required and most recommended MARC fields and codes found in an RDA compliant name authority record.

Lessons and Outcomes: More Organic Workflows

The Digital Initiatives NAR Workflow

Prior to NACO training, staff and student workers in Digital Initiatives were using a metadata workflow that consistently incorporated checking personal names in the LCNAF. Additionally, since the NACO training, staff, and students have been trained to look up corporate names, such as publishers or record labels, when processing published materials. Digital Initiatives metadata creators found

that corporate names can be more difficult to look up in the LCNAF since names change as companies merge or fold. Yet the time invested in verifying authorized corporate name entries provides substantial benefits, making it easier to maintain a clean controlled vocabulary list of these entities. Digital Initiatives also plans to integrate LCNAF place names into their metadata workflows at a later date (see figure 5).

It is expected that most of the individuals identified in Nevada photograph collections most frequently encountered by Digital Initiatives will not have a name authority record in the LCNAF, but metadata creators still perform due diligence by searching for every notable person. After the training, it was apparent that there was a need to determine criteria for when a record should be created. This echoes the experiences of the Eastern North Carolina Postcard

project librarians, who noted that authority work consumes large amounts of personnel time and they applied a selection process to "pare down the number of specific headings created."²³ At UNR, user retrieval was the main consideration when deciding which names should be added to the authority file, so to facilitate decision-making, librarians at both institutions created a checklist of criteria to pinpoint which names warranted inclusion.²⁴

Notable individuals are usually defined as local politicians, business owners, philanthropists, scholars, etc. Since Digital Initiatives' metadata work already includes locating names in the LCNAF, it was a logical next step to integrate the NAR form into the workflow. When Digital Initiatives metadata creators encounter potential notable persons, the LCNAF is checked to determine whether that individual has a record. If a record exists, the preferred version of the name is inserted in the appropriate metadata field. If not, the metadata creator completes the NAR form with information provided by the item in hand and whatever else has been collected during the research process. Most of the records in Digital Initiatives are created for photographs, which are usually accompanied by brief information with very little context. To provide accurate records, metadata creators perform research to discover more about the people in the photographs, which takes considerable time (see figure 5).

In testing the new workflow, metadata creators in Digital Initiatives could successfully provide information by completing the NAR form. Although researching notable individuals was part of Digital Initiatives' existing procedures, the process of suggesting a name to add to the LCNAF was more complicated than expected. The NAR form requires a lot of information pertaining to the individual to whom the suggested name belongs, both in terms of their relation to an existing digital collection plus personal information pertaining to that individual. Finding and including this information involves cross-referencing it with the collections to which the name is related, doing cursory research regarding the individual, and including links to the collections and sites from where the information was collected. Digital Initiatives metadata creators found that the benefit of this somewhat extensive process is that it prompts them to go beyond the LCNAF to check the local ILS to ascertain whether there is a temporary local name authority record, and to consult other biographical databases to obtain additional information pertaining to their identification, such as family relations and places of birth and death. The NAR form added time to the metadata creation process both in the research required and the additional step of completing the form. Nonetheless, Digital Initiatives metadata creators understand the benefit of adding names of notable Nevada individuals to the LCNAF for future projects and/or collaborations, particularly those in which name authority metadata becomes outward-facing as linked open data.

The Special Collections NAR Workflow

Like Digital Initiatives staff, the archivists, manuscripts librarians, and processing staff in Special Collections were already familiar with the LCNAF. Some were consistently checking the LCNAF during metadata work, though not everyone possessed a clear understanding of how to ascertain and use preferred versions of names prior to NACO training. Some archivists tended to try to change preferred versions of names for local use and to include extraneous information, such as titles, roles, middle names, or birth and death dates, in the name access points included in finding aids, in addition to and outside of the preferred form of a name, which was well-intended but did not follow standard construction of name access points. Additionally, in a few cases, Special Collections staff proposed names when a name authority record already existed in the LCNAF. It was informative for some Special Collections staff to attend the NACO training and gain a deeper understanding of the principles behind the local and national use of the LCNAF.

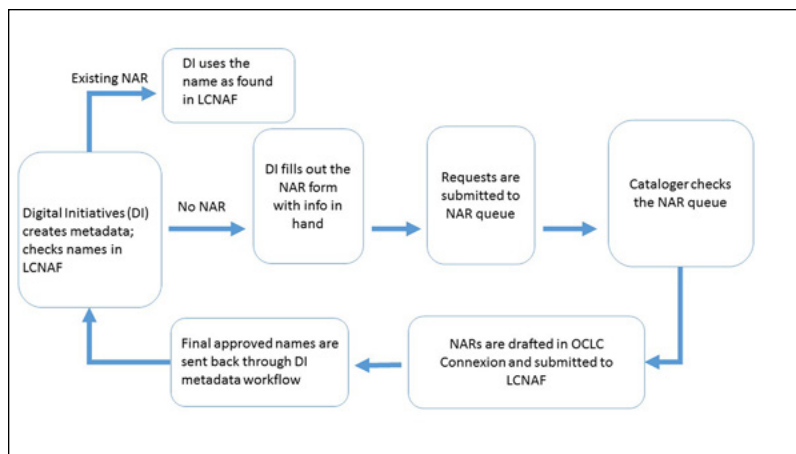


Figure 5. NAR Workflow Developed for Digital Initiatives

Integrating consistent and reliable checking of LCNAF into the Special Collections' descriptive metadata workflows was a gradual process that began a year prior to UNR's NACO training. This was likely a result of increased advocacy from the Head of Metadata and Cataloging regarding the particular benefits that NACO certification for UNR would offer for the Special Collections Department and from asking for their support when proposing the training. The further step of performing deep biographical research came naturally to Special Collections metadata creators but completing the name authority record form was initially awkward and not intuitive. Early tests of the form resulted in questions being changed to clarify the information being requested, plus changes and clarification to the labels for the answers that catalogers viewed from the completed forms.

The workflow for coordinating bibliographic and authority work between the Special Collections and Metadata and Cataloging Departments is also more complex, indirect, and convoluted than is desirable. Special Collections staff create metadata in Archivist's Toolkit that is exported in two forms as draft EAD finding aids and MARC records. During the metadata creation process, name headings are checked against the LCNAF; if a new authority record is needed, descriptive work is temporarily paused for brief biographical research (consulting mainly the contents of the collection itself or the genealogical aggregator database familysearch.org). In most cases, this can take anywhere from a few minutes to an hour, with typically one to four potential name authority records resulting from any single collection. Catalogers then review the exported draft MARC records and the authority coordinator checks the NAR queue in Airtable for new name suggestions, provides any associated authority work, and submits a record to LC via OCLC. Finally, after a new NAR

Departments have a deeper understanding of the value and use of the metadata they create. As we look forward to a linked data universe in digital collections, and name

authority initiatives such as EAC-CPF and SNAC continue to gain popularity among archivists, contributing LCNAF records is a solid foundation upon which to build the future.

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Book Reviews

Elyssa M. Gould

Affordable Course Materials: Electronic Textbooks and Open Educational Resources. Ed. Chris Diaz. Chicago: ALA Editions, 2017. 144 p. \$65 softcover (ISBN: 978-0-8389-1580-6).

The nine case studies collected in *Affordable Course Materials* cite research that points to the same truth students across the country face with each new academic term: the price of textbooks far outpaces the rate of inflation. According to an oft-cited report released by the Government Accountability Office in 2013, the price of the average new textbook rose 82 percent in the preceding decade—three times the rate of inflation.¹ These case studies assert the claim that libraries, already both a central part of the campus community and committed to equal access to information resources, are perfectly poised to mitigate the cost of core texts. By facilitating access to course materials in innovative ways, libraries can alleviate the financial burden on the students they serve. This volume showcases approaches taken by academic libraries to benefit their campus communities, the challenges the authors faced, and the lessons learned. It serves as a valuable source of information and inspiration for those wishing to implement their own initiatives.

Because the projects undertaken by the authors of these case studies were generally library-wide (or even campus-wide) efforts not limited to a single library department, this text can serve as a guide for academic librarians regardless of specialty. Librarians involved in the cited projects ranged from acquisitions librarians to instructional designers. The book's format allows the reader to choose which case studies to read, and each has a unique perspective to offer. There is repetition among the case studies, but this only underscores both the need for action and the fact that these methods have found success in academic librarianship.

The subtitle of this collection suggests two means by which libraries might provide access to course materials: electronic textbooks and open educational resources (OERs). Although libraries have not traditionally collected textbooks for general circulation, many of the projects outlined in this volume evolved from the practice of placing print textbooks on course reserve. The introduction of these types of resources into library collections as required course materials can manifest in different ways but provide the same outcome: a cost benefit to students.

Libraries seeking to provide electronic versions of traditional textbooks assigned by faculty may face the challenge

some of the authors faced: obtaining a list of the texts required by faculty. Such a list is typically compiled by and accessed via the campus bookstore; for some institutions, such as the University of Central Florida in chapter 8, this posed a bigger challenge due to the language of the bookstore provider's contract with the university. In contrast, the University of Arizona in chapter 2 describes their relationship with UA's campus bookstore as a "partnership" (17).

Although some libraries focused on providing access to textbooks already assigned, others questioned the definition of a textbook and sought to affect change at the source: faculty selection of required texts for their courses. As the commercial textbook market has profited from the status quo, scholars and educators have responded by amplifying awareness of OERs, and academic libraries in particular have been on the cutting edge of this trend. Many of the cases in this collection have involved partnerships with faculty to encourage adoption, or even creation, of OERs to replace traditional textbooks. While there are other books or resources able to offer a more introductory guide to OERs themselves, those seeking practical ideas for engaging with faculty will find this book helpful. Some case studies detail the setup of institutional grants for faculty who adopt OERs in lieu of commercial texts, plus tangible examples of their own documents and communications with outside stakeholders. These resources can aid readers who wish to reach out and develop those relationships within their own campus communities.

These case studies cover a wide variety of topics related to affordable course materials, although one concept that would have benefitted from further expansion is the notion that initiatives that mitigate students' financial burden could have a profound effect on retention. As this is a topic of great interest to most university administrators, being able to assess student retention as a key aspect of projects like these provides a potential avenue for cooperation and partnership with stakeholders outside the library.

Smaller libraries or libraries with fewer resources may find the projects within these case studies to be daunting; the workflows were typically described as time-consuming, and implementation generally involved a high level of interdepartmental cooperation. However, the ideas represented are both practical and broad in their appeal. Especially of

benefit are cases that offer opportunities for scalability and adaptability. There are similarities among all the initiatives presented, but one powerful theme is that libraries are positioned to lead the charge to uniting diverse campus communities around a common goal.

Hopefully this exploration of library-led initiatives facilitating access to course materials will foster a new wave of similar projects dedicated to providing cost savings to students and to expanding the creation and utilization of

open access educational resources.—*Julie Gaida (juliegaida@pacificu.edu), Pacific University*

Reference

1. "College Textbooks: Students Have Access to Textbook Information," Government Accountability Office, June 6, 2013; accessed January 17, 2018. www.gao.gov/products/GAO-13-368.

Textbooks in Academic Libraries: Selection, Circulation, and Assessment. Ed. Chris Diaz. Chicago: ALA Editions, 2017. 148 p. \$65.00 softcover (ISBN 978-0-8389-1587-5).

Do textbooks have a place in academic libraries? Nearly all of the nine chapters in this text begins by addressing this question. Long-standing concerns about the acquisition and inclusion of print textbooks in the library's collection, including cost, frequency of replacement, etc., are cited in many of the case studies presented here. What is interesting is that this diverse group of institutions, representing both small and large private and public universities, all reached the same conclusion: the textbook reserve program aids in student recruitment, retention, and success.

The introduction, written by Diaz, explains that questions regarding the following aspects of a textbook reserve program are both asked and answered in the text: contribution to campus recruitment and retention efforts; assisting with library outreach to students and faculty; effects on library staffing and workflows; working with the campus bookstore; budgeting for a long-term program; and analyzing textbook circulation data (viii–ix).

How well does this book address each of these areas? Impact on retention is explored in more detail than recruitment. It is still a challenge for libraries to make the case that programs such as these directly contribute to retention, but at the very least these studies demonstrate highly effective ways of considering institutional priorities and provide examples of how they have successfully connected programs such as these to student recruitment and retention.

Outreach to students and faculty is a key part of introducing textbook programs. Managing student expectations is noted in more than one study. The first chapter, "Basically Everything I Need, I Know the Library Has It: A Case Study of SUNY Canton's Textbook Program," alludes to the fact that students very easily misconstrue the library's textbook reserve program as one that will have their texts for all their courses. The discussion of marketing and communication as a critical piece of the implementation process is a strength of this text. None of the libraries claim that their programs supplant the need for students purchasing their own texts for their courses. The case studies illustrate that the program acts as a stop-gap for students who would

otherwise be unable to purchase textbooks due to high costs and gives these students a chance at academic success.

It is clear from the studies in this book that a textbook reserve program is not one that should be introduced lightly. The impact on staffing and workflows detailed in these studies can be significant. Selection, acquisition, cataloging, processing, communication, and marketing require time and personnel. Some institutions target specific audiences while others provide general access to large-enrollment undergrad classes. The scope of the service plays a significant role in the library's commitment. Creative solutions are described to mitigate supply and demand problems, including self-service reserve rooms and pager systems.

Most of the chapters detail their library's experience with a textbook reserve program from its inception, including examples of how the program was funded, how the library identified the resources needed, how materials were designated in catalogs and discovery layers, how the program itself was delivered, and how success was assessed. Ease of discovery and timeliness of acquisition and cataloging of materials were identified as a critical means to success. More than one case study noted that if students checked the library catalog once for their materials and they were not there, they would not check again (84). The campus bookstore becomes an essential partner in this initiative as they are key to identifying the texts themselves. Some case studies reported success in utilizing the campus bookstore for purchasing textbook copies, while others moved away from the bookstores as a supplier due to issues pertaining to timeliness of delivery.

Of particular interest to library administrators will be the variety of ways that textbook reserve programs were funded. The most frequently mentioned collaborations were with student unions and governments. Most libraries did not develop a budget derived strictly from library funds; rather, these programs were made possible from funding supplied or supplemented by these partners. It was encouraging to read that even for the programs that started off with modest budgets, success was still achievable.

Circulation data was the most compelling factor in determining success. While the trend among these libraries was the decline in circulation for regular library materials, circulation of textbooks as part of these reserve programs was up, sometimes outperforming the whole of a library's regular circulating collection by upwards of fifty percent. Additionally, student feedback from survey data and focus groups helped libraries to identify strengths and weaknesses of their programs and to identify why students use the program, which overwhelmingly had to do with cost savings to the student. This data provides libraries with an avenue not only to demonstrate the success of a much-needed program but also to illustrate the need for a larger conversation on textbook affordability in higher education.

The authors of these studies realize that there are limitations to this service. Although not addressed in depth, access to Open Educational Resources (OERs) is where many of these institutions are looking for solutions to the problem of the sustainability of this program, plus overall affordability to students. The advantages of a library offering a textbook reserve program are many, including

increased value and increased circulation, but more importantly, it places the library in the position to introduce and provide leadership into the area of OERs. A nice companion book to this text would be another of Diaz's books, *Affordable Course Materials: Electronic Textbooks and Open Educational Resources* (ALA Editions, 2017), also reviewed in this issue of *LRTS*.

Each of these essays is well-written and makes good on Diaz's claim that "if you are interested in building a textbook program or have one but are interested in new insight for increasing efficiency of your workflows or impact on campus, these case studies will help you collect and manage college textbooks" (ix). Many of these studies offer a blueprint on how to manage a program start to finish, and they all offer their own insights and experience that are helpful to any library considering this program. This book is a must-read for any library interested in building or re-tooling a textbook reserve program as it offers fresh insight into strategies for maintaining the program and where the conversations should go from there.—*Sue Maszaros (sue.maszaros@belmont.edu), Belmont University*

Marketing Your Library's Electronic Resources, 2nd Edition. By Marie R. Kennedy and Cheryl LaGuardia. Chicago: ALA Neal-Schuman, 2018. 218 p. (ISBN: 9-780-8389-1565-3).

This how-to manual for librarians provides valuable information on how libraries can use marketing to increase usage and better serve patrons. While it discusses electronic resource (e-resource) examples and issues, the true focus is on larger concepts that apply to marketing any type of library resource. It provides a valuable reference for librarians seeking to implement a marketing plan. The second edition has new examples of marketing plans from real institutions. The authors' stated goals are to "give colleagues the specific means of developing, implementing, and assessing marketing plans for e-resource collection management," and to improve awareness of the value of e-resources among library users (xvi). They succeed in providing content that will help library practitioners of all levels of experience in marketing e-resources.

The first six chapters, grouped as part 1, discuss concepts, practicalities, and assessments of marketing plans. Several of these chapters include recommended reading lists. The authors contend that essential questions must be considered before haphazard marketing is attempted and that all marketing activities should take place within the structure of a marketing plan that addresses nine vital components. The book guides the reader through creating a comprehensive marketing plan. Chapter 1 is introductory and discusses concepts that should underlie all marketing attempts. One central theme, which is reinforced throughout the book, is that e-resources marketing must

be integrated into all workings of a library. Staff, librarians, and assistants all should be involved in marketing, which must be integrated into the whole e-resources lifecycle. The next two chapters define the nine components, describe their recommended sequence in the marketing cycle, and present examples of each component with evidence to support them through a literature review. These chapters also include a valuable library-specific list of questions to guide readers through completing each element of a SWOT analysis. Chapter 1 recommends how to formally write a marketing plan for the library or its administration. Chapters 5 and 6 address assessment and revision of each plan component, but include asides on assessment of the library website and of existing e-resources collections. These essential, valuable discussions might fit better in earlier chapters that address the evaluation of the library's strengths and weaknesses since these assessments are not necessarily linked to particular marketing plans. The text emphasizes the importance of measuring marketing outcomes against clearly defined goals, and provides a number of suggestions that will help libraries meet assessment requirements of parent institutions or funding organizations.

The nine components are at the heart of the book and define how Kennedy and LaGuardia discuss both theory and implementation of marketing. They are presented as roughly chronological steps that can be applied to develop any marketing plan, from an overall library communications

plan to one that promotes a particular resource. Throughout the book, these components are treated both as practical steps in marketing and as elements in a report of a marketing plan, blending planning and implementation in a way that sometimes feels a bit awkward. Due to the authors' choice to address each component iteratively in most chapters, a reader may need to resort to flipping between the chapters to review different sections addressing the same component. Despite this structure, not much of the content is repetitive, and what repetition exists seems to speak to the nature of marketing as a continuous back-and-forth flow of work and planning.

Part 2 of the book has seven example marketing plans, including three plans not included in the first edition. All of these plans can be downloaded for free on the ALA Editions website as Word documents or PDF files to allow readers to re-use or modify sections. These plans are among the book's most valuable sections, particularly for librarians already familiar with marketing concepts. The report

formats, components, strategies, and assessments in these plans are a trove of information that can be mined to help inspire projects. The main text refers to all plans, with commentary and recommendations for use. In addition, one example plan uses a helpful online marketing plan template. The template is a great way to help beginners get started on their plans as it breaks down daunting tasks into smaller, more manageable questions.

In addition to the extra plans, the new edition includes short discussions of each plan in the main text. Other updates are minimal, but mention current issues such as social media. This text is perfect for any practicing librarians seeking ways to formalize their marketing. It is most useful as a reference for beginners unfamiliar with marketing concepts who want library-specific advice. In this text, readers will have the tools to articulate their marketing efforts with others and to conceptualize existing efforts in a strategic, thoughtful context.—*Christine McEvilly* (*Christine.McEvilly@csi.cuny.edu*), *College of Staten Island*



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