The Future Organization of Things
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*Equity, Diversity, and Inclusion*

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**Cover Photo:** Patrons utilize the Oregon State University’s public card catalog in June 1974. Cataloging staff at the university stopped filing cards on July 31, 1988, but the catalog still resides in the staff area to aid in problem resolution and locating uncataloged materials.
*Photo courtesy of the Oregon State University Special Collections & Archives Research Center.*
My first experience cataloging was meticulously composing cards on a clunking typewriter for a high school librarian who refused to let go of the practice after automation. She had once regaled me with tales of technology’s impending doom as I click-clacked away. My first cataloging class was the last AACR2 course offered to students that only briefly mentioned the RDA developments followed by long sighs of frustration. My first original MARC record was the development of a template for a local seed library housed in card catalog drawers no longer used to file the public catalog cards. I have often felt, as I am sure many of you have often felt, perpetually in limbo between what was and what is coming to be—all while carrying on with the daily task of making accessible the exponentially increasing load of information available to us. I am convinced that cataloging is neither an art nor a science, but a superpower.

The issue of OLAQ that you currently hold in your—er—computer screen focuses on the “future organization of things.” I titled this issue not out of laziness or a lack of eloquence, but because I did not want to reduce our work to mind-numbing and siloed verbiage such as cataloging, technical services, metadata, and the long string of jargon that our job titles have become. I wanted this issue to approach current developments and future concerns of technical library work with an ease only accomplished by consulting the humble, articulate colleagues present in this state.

Rachel Zill
Rachel “Ray” Zill, formerly Rachel Kenny, is a monographs cataloger at the Oregon State University Valley Library in Corvallis. Originally from Omaha, Nebraska, she has worked at a variety of libraries and archives in the areas of interlibrary loan, digitization, and cataloging. Ray may specialize in digital data by day, but she prefers the analog: vinyl records, cassette tapes, and dusty books. She is currently publishing a small collection of her poetry by letterpress.
This issue begins with a very succinct, informative overview of current developments in the field through a practical lens. Then, we’ll delve right into faceted vocabulary, followed by lessons learned in making open electronic resources more accessible in the catalog. In fact, a lot of articles deal with improving our systems and leveraging our collections, because that is what we do. Learn how to evaluate workflows across departments, migrate to more adept systems, automate past practices, and implement a new discovery layer. Last but not least, we’ll consider some personal insight on developing technical training within a tight budget.

In this “perpetual limbo” in which we find ourselves, it is easy to feel bogged down or nostalgic or even forgotten. Our practices may seem to become less personal, more automated, and even rushed. But, our purpose has remained the same. We exist to connect readers with information in the most efficient and accessible way. As I write this introduction, I am reminded of the words of Adrian Frutiger, an influential Swiss typeface designer. I am currently working with his Univers typeface to print a book of my own, and I—of course—had to check out a collection of his complete works through interlibrary loan. The massive 32 cm high, 452 page book includes an introductory passage translated from his previous work entitled Denken und Schaffen einer Typographie, or Thinking and Creating a Typography. In this passage, Frutiger reminisces on his career, stating, “But then we found ourselves in an era in which type was no longer set using lead characters, but with beams of light.” Noting that evolution as one of the greatest learning experiences of his life, he touches on the difficulty of “designing characters that were readable not only to the human eye, but also to mechanical ones—something that stirred up, shall we say, an aesthetic conflict that taught me how to think about things in a different way.” Through it all, the reader is his primary concern. His art, his life’s work, is but a subtle vehicle to deliver the author’s words. The passage finishes with, “On my career path I learned to understand that beauty and readability—and up to a certain point, banality—are close bedfellows: the best typeface is the one that impinges least on the reader’s consciousness, becoming the sole tool that communicates the meaning of the writer to the understanding of the reader” (Frutiger, page 7).

Cataloging, like typeface design, is a tedious magic. The magic is in making it seem effortless and instant, reserving the spotlight for the intellectual property in which we deal. I hope you enjoy reading through the experiences of your technical colleagues and learn to appreciate the important, yet often-times invisible, work of organizing things.

Reference
For decades, catalogers have lived in a place of change. We’ve been in a nearly continual shift ever since library catalogs moved to digital environments, and before that as concepts and new formats emerged. In the past, many of these changes have taken years or decades to implement locally, let alone implement on a national or global scale. Our era in cataloging is no different. The implementation of RDA, the shift away from the MARC record, and increasing interest in linked data (among myriad other factors) are beginning to coalesce into a discernible future. This is an exceptional time when we can begin to imagine a practical future for the catalogers, copy catalogers, and staff-who-occasionally-catalog who might not always be privy to the inner workings of committee meetings, task forces, or academic conferences.

In this article, I will look specifically at how copy cataloging will likely look in the near future. The pace of evolution in cataloging is generally glacial, so by “near future,” I’m thinking of the next 20 years. I’ll also summarize current developments with RDA, linked data, BIBFRAME, and other factors, and discuss their impact. I will use the terms “catalogers” and “copy catalogers” interchangeably, since most of us are both or either, depending on the day or hour.

**RDA**

RDA’s initial implementation was a source of much trepidation—remember the “retirement date approaches” jokes? For many production-level catalogers, changing one’s thinking from the AACR2 format-based approach to the conceptual model supplied by the Functional Requirements of Bibliographic Records (FRBR) and delineating the concepts of Works, Expressions, Manifestations, and Items was a struggle. Rather than looking only at the item in hand, catalogers were encouraged to observe where objects existed in relation to the rest of the universe—the entities that created and contributed to it, the relationships between the
object and those entities, and the object’s relationship to other works—and then appropriately apply the conceptual model and its attendant complex language. One major objection to the switch to RDA continues to be that copy-cataloging staff should not be expected to spend so much time thinking about such a complex conceptual model.

The text of RDA is currently being rewritten and restructured under the auspices of the RDA Toolkit Restructure and Redesign (3R) Project. The goal of this project is to bring RDA in line with the IFLA Library Reference Model (LRM), which is a consolidation of FRBR, FRAD (Functional Requirements of Authority Data), and FRSAD (Functional Requirements of Subject Authority Data). According to the IFLA LRM website, LRM “was developed to resolve inconsistencies between the three separate models … IFLA LRM was designed to be used in linked data environments and to support and promote the use of bibliographic data in linked data environments” (IFLA, 2018). I’ll discuss more of the revised RDA’s integration with linked data later in this article.

The revised text of RDA relies on the use of application profiles. The text and the initial creation of these profiles may present a challenge, as the language of the revised RDA is even more highly conceptual and technical than the initial version of RDA. However, if these application profiles are implemented in the way intended by the steering committee, use of the new RDA Toolkit by copy-cataloging staff will ideally be more straightforward than it currently is. Application profiles would, in theory, be created for each subset of resources that a cataloger might need to catalog, and once a cataloger implemented the profile, the applicable set of RDA guidelines would be available in a user-friendly way.

Linked Data
The first version of RDA was the beginning of the boots-on-the-ground movement away from sequestered library data silos and toward a linked data environment. As a content standard, this initial version of RDA was intended to prepare our library metadata for a ponderous shift away from its historical container, MARC, and toward an environment where it could be encoded in Resource Description Framework (RDF) for easy crawlability and exchange on the web. RDF encoding is what transforms library data into linked data. It is “a web-based encoding model for making simple statements about entities and the relationships between them” (Balster, 2018), i.e. linked data triples. As of this writing, the first cloud-based environment for library linked data creation is being built by the Linked Data for Production: Pathway to Implementation (LD4P2) project. This initial attempt at a shared, native, linked data cataloging environment, called Sinopia, will include a lookup service for identifiers (see below for more on identifiers), as well as a BIBFRAME editor and BIBFRAME to MARC mapping (Li, 2019). The goal of the LD4P2 project is to build infrastructure and to see how linked data plays into discovery. UC Davis will be exporting data from Sinopia into a local system to experiment with how linked data functions with regard to circulation, acquisitions, and cataloging.

BIBFRAME
BIBFRAME, the Library of Congress-led project to build a replacement for the MARC encoding scheme, is being built for RDF so that library data will no longer be siloed in a library-specific format. BIBFRAME is intended for use in libraries, archives, and museums (Balster, 2018) and is meant to be content standard neutral. For example, BIBFRAME aims to handle EAD (Encoded Archival Description) as easily as it handles RDA. Therefore, the
application in which catalogers work with BIBFRAME will need to be flexible enough to accommodate elements from many content standards, and will need to use language that is, in Balster’s excellent phrasing, both “generic and granular.” Balster’s article is intended for an audience of serials catalogers, but is excellent reading for anyone seeking a review of BIBFRAME developments.

**Identifiers**

Catalogers have long been used to constructing strings to identify names and subjects (for example, “Dubuffet, Jean, $d 1901-1985”). Traditionally, when more than one possible string exists (e.g., an author changes their name, or a title is translated into a different language), catalogers have chosen one string as the preferred or “authorized” form, and the authority record has been structured based on that choice. The trouble with this method is that it allows no flexibility for different communities to display the particular string that may make more sense for their unique users. This has proven to be especially problematic when it comes to data interoperating between different languages and cultural communities.

Multiple projects, such as VIAF (Virtual International Authority File) and ISNI (International Standard Name Identifier), are working to match and consolidate the identities represented in various authority files all over the world. These projects make it possible to obtain persistent identifiers for entities that do not rely on matching strings. When we have persistent identifiers (such as URIs), and when our bibliographic utility and our local systems are able to display identities in a way that is meaningful for our local communities, we’ll have both authority and flexibility.

**Punctuation**

Another step toward readying our metadata for greater interoperability is the move toward omitting ISBD punctuation in descriptive fields. In a limited way, this change is already being implemented. According to the Program for Cooperative Cataloging (PCC) Policy Committee, PCC libraries are currently entering the first phase of implementation of their policy to omit ISBD punctuation in bib records (PCC, 2019). Without this library-specific punctuation, our data is more easily manipulated—meaning that our choices for display would depend on what a system is able to supply, rather than what is attached to the data itself.

**So what does this mean for the future?**

The development of Sinopia is a major step. A linked data cataloging environment that can be demonstrated and used makes it possible to imagine future hands-on copy cataloging. It makes it possible to imagine doing the work we do now in an environment similar to familiar bibliographic utilities such as Connexion or SkyRiver. There will be new concepts and functions to learn in order to bring linked data into local catalogs. It also remains to be seen whether the “record” will continue to exist in the form we know it, or if it will become a complex amalgam of Work, Expression, Manifestation, and Item elements mapped to the three BIBFRAME levels of abstraction (work, instance, and item) and pulling information from RDF triples.

In whatever state “the record” exists, copy catalogers will still be reusing metadata from a bibliographic utility of some kind, which will not be a huge departure from what they do
now. Eventually, catalogers will likely have an interface that utilizes application profiles and prompts and is drastically more clear than our current catalogs about relationships to other objects. For example, a cataloger in a public library would experience the bibliographic utility through a profile that defines the type of material being worked on, and perhaps even the set of rules being followed (e.g., a sound recording cataloged in RDA), and only the applicable prompts would be visible. The goal for all catalogers in an RDA/linked data/BIBFRAME environment is more efficiency and less data duplication and maintenance. For the patron, the context and relationships of an object would be clear and easy to discover.

What we must hope occurs—for the sake of all copy catalogers—is that future local systems use accessible language that both patrons and catalogers can understand. While the new rewrite of RDA is a step forward in terms of aligning with IFLA conceptual models, it clearly is not an improvement in terms of being a readable text or an easy-to-follow set of guidelines. Trainers and cataloging supervisors would be wise to provide interceding tools for their copy catalogers, such as Robert Maxwell’s guides or local interpretive “how-to” documents. As much as possible, this duty should fall to supervisors and experienced cataloging staff.

Once we realize the dream of easy interoperability via RDF linked data, not only will exchange formats be far more compatible, but we’ll also be able to more easily ingest data from publishers, vendors, and the web. This data will be a starting point for manipulation and cataloging, rather than starting from scratch. Our resultant metadata will be much simpler to expose on the web, and at long last, we may find ourselves where our patrons already are.

In short, we are still on the trajectory that began with the first library catalog, and we continue to look for ways to meet our patrons where they are, provide access, and accurately represent the world of knowledge. We’ve been through innumerable growing pains before. Don’t panic.

References


Beyond the Subject: Non-Topical Facets for Exploration and Discovery

by Kelley McGrath
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Kelley McGrath is Metadata Management Librarian at the University of Oregon. She is an experienced media cataloger and an active member of Online Audiovisual Catalogers (OLAC). She has a long-standing interest in the potential of faceted navigation in library catalogs. She is particularly interested in ways to make library metadata more useful for humans and machines and ways to design discovery interfaces to make better use of library metadata.

New developments in the cataloging world can help libraries better answer questions like: What music do you have for string quartets? What young adult fiction do you have by African American male authors? Do you have any diaries written by pioneer women in Oregon in the late nineteenth century? Do you have any recent movies from China?

Introducing New Vocabularies and MARC Fields
Historically, the Library of Congress Subject Headings (LCSH) have included terms both for what something is about (topic) and for what something is (genre or form). Many users are looking for something either as a topic, or as a genre or form, and not for the two things mixed together. Sometimes LCSH makes a clear, albeit not intuitive, distinction. For example, “Symphony” is used for works about symphonies while “Symphonies” is used as a genre-form heading on records for scores and performances of symphonies. Sometimes subdivisions, such as “History and criticism” are appended to headings to indicate aboutness. So “Science fiction” is used for a collection of science fiction stories while “Science fiction—History and criticism” is used for works about science fiction. However, the guidelines for LCSH tell catalogers to omit genre and form information for individual works of literature. So, while an anthology of science fiction stories would get the heading “Science fiction,” a novel published on its own wouldn’t. All this creates an unpredictable and unwieldy landscape for users to navigate.

Starting in 2007, the Library of Congress (LC) began work on a new vocabulary, now known as Library of Congress Genre/Form Terms for Library and Archival Materials (LCGFT), to use for genre and form instead of LCSH (Library of Congress, Policy and Standards Division, 2017). The initial genre-form terms for film and television were issued in September 2007. Since then, LC has coordinated projects to develop basic sets of terms for additional areas such as music, literature, and legal and religious materials. Terms for visual and artistic works, the last planned project area, were published in 2018. New terms
are added to these basic sets of terms on an ongoing basis. In October 2018, Online Audio-visual Catalogers (OLAC) released a genre-form vocabulary for video games to compensate for a gap in LCGFT that LC currently does not have the resources to address (2018).

In the process of separating genres and forms from topical LCSH, the Library of Congress realized that LCSH contains other types of information that are neither topical nor genre and form. These include intended audience (e.g., “Conversation and phrase books (for medical personnel)”), type of creator (e.g., “Prisoners' writings”), and instrumentation (e.g., “Sonatas (Flute and piano)”). Since one of LC’s goals is to support faceted browsing (Young, 2017), which requires categories based on “clearly defined, mutually exclusive and collectively exhaustive” characteristics (Taylor, 2000, p. 274), they had to find somewhere else to put this information.

As a result, they created two additional new vocabularies: Library of Congress Medium of Performance Thesaurus for Music (LCMPT) for instruments and voices and Library of Congress Demographic Group Terms (LCDGT) for audiences and creators. An initial 800 medium of performance terms were published in 2014 and are now in widespread use for music cataloging (Library of Congress, Policy and Standards Division, 2019b). The first demographic group terms were published in 2015. However, the demographic group vocabulary is currently frozen following a pilot implementation, while LC reevaluates its underlying structure and principles (Library of Congress, Policy and Standards Division, 2019a). In 2012-2013, three new fields were created in the MARC 21 format as places to record this kind of information: 385 (Audience Characteristics), 386 (Creator/Contributor Characteristics) and 382 (Medium of Performance).

**How Improving the Searchability of Non-Topical Characteristics of Resources Can Help Users**

The following examples demonstrate some possible uses for these fields, as well as a number of other MARC fields for non-topical aspects of library resources. The illustrations are taken from a sandbox view of the University of Oregon’s Primo discovery interface. If you wish to experiment with your own searches, you can try it out at [http://alliance-primo-sb.hosted.exlibrisgroup.com/primo-explore/search?vid=UO_NRWG](http://alliance-primo-sb.hosted.exlibrisgroup.com/primo-explore/search?vid=UO_NRWG).

**Instrumentation**

Music students often come to the library looking for scores for their instrument. LCSH for instrumentation are inconsistent in their formatting and may be combined with other types of information. Even if a user limits their search to scores to eliminate resources about, say, saxophone music, they may have trouble searching effectively. In a traditional subject browse list, saxophone music may appear under “S” for saxophone, but it also shows up under the names of other instruments, after genres, and following terms such as quartets and woodwind trios:

- Didjeridu and saxophone music
- Marches (Saxophone and piano)
- Quartets (Piano, saxophones (2), vibraphone)
- Saxophone and piano music
- Saxophone music
- Saxophone music (Saxophones (2))
In a keyword search, the user must know to look for both singular and plural forms. Untangling these different characteristics and recording them in a consistent and predictable way eases the burden on the user. For example, in a discovery interface that includes separate facets for non-topical information, a search for Beethoven can be easily limited by the search facets, “Resource Type” and “Instrument or Voice (Music)” to scores that contain a part or parts for the violin.

These results can be further refined by genre or form, total number of performers, additional instruments or exact instrumentation.
Creators, Audiences, and Demographic Characteristics

In many cases, users are interested in the perspective from which something is written or created. This is particularly true for all kinds of autobiographical materials, including archival materials, and literature and the arts. Demographic characteristics of the creator, such as those found in LC Demographic Group Terms, can potentially be helpful. For example, users might wish to search for short stories by Mexican-American authors, poetry by Oregonians, or autobiographies by women written in the 17th century.

Demographic group terms can also be useful for bringing out the intended audience of a resource. Historically, this has most commonly been done for materials intended for children, and it is possible to leverage existing fixed field data in MARC records to bring this out. Existing data can also sometimes be used to distinguish among resources on technical, medical, or legal topics intended for experts, the general public, or children. The 385 field (Audience Characteristics) supports more fine-grained distinctions in audience and could identify such things as math textbooks for third graders. This new field expands the possibilities for expressing audience to things like Chinese language phrase books targeted at businesspeople versus tourists, or books on the job search process aimed at college students versus people over fifty.

Places, Dates, and Original Language

Places associated with works are often of interest. For example, a user doing a search for folk music might be interested in refining their search by place of origin. Users might also be interested in novels set in New York City or movies filmed in their hometown. Someone might also be interested in exploring performances of Beethoven’s Ninth Symphony by date of recording or browsing 19th century Russian novels. Currently, this information is most likely to be found as part of LCSH strings or in note fields. All of these searches will be more successful when non-topical information is more widely recorded in separate fields as structured data.

The transition to structured data for recording these characteristics is well underway in moving image cataloging. The definition of MARC 257 (Country of Producing Entity) was expanded in 2009 to permit its use in non-archival cataloging. 041 subfield h (Language code of original) was redefined in 2011 to include the original language of a work even when the resource being cataloged does not contain a translation. OLAC has promoted the use of these subfields and 046 subfield k (Beginning or single date created) in its widely-used best practices for cataloging DVDs and streaming video (Online Audiovisual Catalogers, 2018).
These fields support targeted searches. Unfortunately, Primo, the University of Oregon’s discovery interface, does not support faceted browsing prior to entering a search term, but a keyword search for “films” limited to French under the original language facet provides a list that can then be narrowed by country of production or original date of release.

Three other related MARC fields, 370 for associated place, 377 for associated language, and 388 for time period of creation were added to the MARC 21 format in 2014, but have been more commonly used in authority records to date.

Roadmap to Improving Access to Non-Topical Characteristics of Library Resources

A lot of work has gone into the development of these new vocabularies and MARC fields for non-topical characteristics of library resources, and they have great potential to support exploratory search for many types of library resources. However, much work remains to be done before they can be optimally realized.

Best Practices, Documentation, and Training

In order to accurately and consistently add these fields, catalogers need a shared understanding of how to use them and many decisions remain to be made about best practices. Documentation will then be needed to record these choices, and training will be needed to disseminate the decisions that were made and raise awareness in the broader cataloging community.

There are some existing training materials and documentation, but much is still in draft form. LC’s draft documentation for demographic group terms and genre-form terms, as well as their documentation for the medium of performance thesaurus is freely available online (Library of Congress, Policy and Standards Division, 2018a-c). The Music Library Association has created best practices for LCMPT and for LCGFT for music (2019). OLAC has developed best practices for LCGFT for moving images, although these have not been updated in almost eight years (Online Audiovisual Catalogers, 2011). Adam Schiff of the University of Washington has developed training materials for some of these fields (2019).

The American Library Association Subject Access Committee (2017) has released a white paper on implementation of these new faceted vocabularies and charged a subcommittee with the development of best practices and training materials (American Library Association Subject Access Committee, 2019). This work should result in more authoritative and comprehensive guidance.
Retrospective Record Enhancement and Recall

Even if catalogers agree on a shared practice and begin routinely adding these fields to new records, there are many, many existing records that lack these data points. Since it is not practical to recatalog all of these materials, it will be necessary to use automated or semi-automated methods to enhance existing records. Music catalogers have made the most progress on this front. The Music Library Association, in collaboration with the programmer librarian Gary Strawn, has developed a music toolkit, which was released in April 2018 (Mullin, 2018a). The toolkit works on individual records in OCLC’s Connexion client cataloging software. It is run as a macro and uses complex algorithms to analyze existing LCSH and some coded information in records for scores and musical recordings. It then adds new fields to the record, including genre and form, and medium of performance. The music toolkit is only as good as the existing metadata in the record. Therefore, it must be reviewed by a cataloger and may need to be corrected or expanded manually. However, assuming the existing metadata is sound, it is largely accurate in its inferences and saves significant typing time. Mullin (2018b) anticipates that the tool will be adapted for larger-scale automated enhancement projects with selective human review. It is likely to be more difficult to expand this approach to other materials, such as individual works of literature, where the desired information is often not explicitly recorded in the bibliographic record in any form.

Although tools are being developed to populate existing records with these fields, this will take time and will likely be less complete and less granular than is possible in new cataloging. Libraries may be reluctant to expose these new fields to the public due to concern about incomplete retrieval. Clearly some minimum level of recall is necessary. On the other hand, all large datasets have errors and omissions and 100% retrieval for all queries can only be an aspiration. Flaherty and Morgan (2019) argue that “one of Google’s original competitive advantages was that it recognized that precision was more important than recall in the context of searching an almost infinite data source like the web—in other words, displaying only relevant results for a query is better than returning every result that could potentially be relevant (at the penalty of including many low-value hits).” Questions to consider moving forward include: What is a minimally acceptable level of recall and how will we know when we have reached it? Will the relevancy ranking provided by library discovery systems be sufficient to provide a satisfactory user experience?

Incorporation into Discovery Interfaces

Although getting the data into the records is an essential first step, it is of little use if public-facing discovery systems can’t take advantage of it. In some cases, such as LC’s demographic group terms in the audience and creator characteristics fields, the data is already in a form suitable for basic display, search, and use in facets. All that is needed is a system that provides local flexibility in deciding which fields to display, to include in search indexes and to use for creating facets. However, some of these fields require more manipulation in order to be useful. This, in turn, requires either a system that is hardcoded by the vendor or developer to perform such manipulation or which provides tools that a library can use to do this itself. An example of this type of data is a typical 382 (Medium of Performance) field (see table below). A raw, unmanipulated display of the MARC field is unlikely to be helpful to users (e.g., “viola 1 clarinet 1 piano 1”). McGrath and Lowery (2018a, 2018b) were able to use the data manipulation tools of Primo’s Back Office to produce the more human-readable display on line 3 for the Orbis-Cascade Alliance’s shared Primo discovery layer. However, it
was impossible to reproduce the Music OCLC User Group’s recommended display (Belford, 2015) due to technical constraints on the types of data modification Primo supports. Coded data, such as dates from the 046 field or original language information from 041, will also require transformation to be useful to end users.

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<th>Formatting Issues with MARC 382 (Medium of Performance) Field</th>
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<tr>
<td>MARC field</td>
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<td>Unmanipulated display</td>
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<td>Orbis-Cascade Alliance display</td>
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<td>Music OCLC Users Group (MOUG) recommended display</td>
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**Conclusion**

LC’s new vocabularies and related MARC fields have great potential for helping library users find resources based on their non-topical characteristics, but much work remains to be done to turn these possibilities into reality.

**References**


Leveraging Cataloging and Collection Development Expertise to Improve OER Discovery

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Introduction

While there is ongoing improvement in some of the larger open educational resources (OER) search engines, librarians sending emails to listservs asking “anyone know of OER on this topic?” and keeping old-fashioned reading lists of valuable OER are common occurrences. Compared to searching for books in a library catalog or scholarly articles in a research database, finding OER wherever they may be is challenging even for librarians, not to mention instructional faculty. The reason is technical: subpar and variable metadata in OER search engines leads to difficulties searching, capturing, and sharing data across repositories. In other words, the current lack of robust, descriptive metadata for OER results in fewer access points. Thus, OER are comparatively hard to find.

Bibliographic control for purposes of information storage and retrieval is something librarians are experts in, but we have not shared our methods with the Open Education community yet. So far, the majority of library advocates for OER have been reference and instruction librarians, as well as library directors. This is great, and we need them to continue to champion OER creation and adoption, but the Open Education movement needs technical services librarians to step forward and apply their cataloging and systems administration expertise to streamline access to the sprawling landscape of OER content; our profession would do well to share our collection development expertise as well. To this end, Clare Sobotka, Reference Assistant at Linn-Benton Community College (LBCC), Holly Wheeler, Library Cataloging and Metadata Specialist at Mt. Hood Community College (MHCC), and Heather White, Library Technical Services & OER Coordinator, along with their colleagues, have started to experiment with creating collection development policies and MARC records for OER. Ultimately, they hope for the development of a metadata schema that is shared between the Open Education and library communities and is mapped to MARC and RDA, to improve both catalog records and OER search engines across the web.

Collection Development

One of the first questions to ask is: what sort of OER is appropriate to add to my library collection? Adding OER isn’t necessarily in the scope of every library, but MHCC wants to add OER published by MHCC faculty the same way they would with any commercially published work by their faculty. They also want to add high-quality OER gathered from various sources across the internet to build a special collection in direct support of college instructional programs. LBCC also wants to increase the discoverability of OER so faculty can search their catalog, see what OER are being used or have been used in the past, and adopt them if desired. Students should be able to access the library’s OER collection with ease for research and personal interest as well (with the possible exception of testing banks and other ancillaries). Curating an OER collection within the library decreases barriers to affordable textbooks by gathering high-quality OER from across the internet, often from places non-librarians may not think to look. Furthermore, adding OER to the library collection promotes them as high-quality resources to campus communities, thereby curbing the misguided notion that OER might be lower in quality than commercially published works: items found through scholarly library resources have a legitimacy that search engine results do not. At both institutions, when a colleague determines one particular OER should be added to the library catalog, the item is given to the cataloger. MHCC uses an internal Lib-
Guides webform that asks for access and publication data, along with subject terms before it is sent to cataloging. At LBCC the process is more informal; the item to be cataloged is added to a spreadsheet or mentioned in an email.

Shared Challenges
When deciding what metadata to track in OER bibliographic records, neither MHCC nor LBCC librarians found best practices or many examples to go on. Both teams were immediately concerned that a lack of cataloging guidelines across institutions may reduce MARC record usefulness if access points are not standardized across local OPACs and OCLC. A lack of MARC standards for OER causes unique OER to have multiple and inconsistent bibliographic records. This, in turn, causes faculty, staff, students, and research librarians to have inconsistent search experiences and technical services librarians to have more local cataloging rules to follow. It defeats the goal of discoverability. Furthering the issue is the inconsistency of metadata in OER. Examples include non-standard ways of using creation, publication, and edit dates, variation in expressing open licence types, lack of place of publication, and sometimes even a lack of authors and contributors. Another hurdle is a lack of remix or revision statements, not only to inform version control decisions, but to help faculty determine which version of an OER they might want for their course and why.

LBCC
At LBCC Library, we formalized our efforts to catalog OER and alternatives to traditional textbooks in 2017 with the arrival of our first OER and Textbook Affordability Librarian, Michaela Willi Hooper. Willi Hooper and Jane Sandberg, LBCC’s Electronic Resources Librarian, began planning a systematic approach to cataloging OER to make them findable in our OPAC, Evergreen. For a time we kept a list of OER used at LBCC in a LibGuide, but it became unwieldy and was not easily searchable.

There are three types of resources we are including in our OER cataloging efforts. We pull in texts provided by our e-book and database vendors that are used by faculty to provide no-cost textbook alternatives; even if these are not OER, they are a component of our textbook affordability efforts, and we enhance the bibliographic records with course information to consolidate students’ discovery experience. In addition to subscription resources, we catalog OER from the web and OER created by our instructors, housed in our institutional repository, CommunityArchive@LBCC. Our separate discovery layer already included records from the UMN Open Textbook Library that may or may not be in use by instructors, but adding them to our library catalog allowed us to enhance them. At this time, the only resources being cataloged are full texts or chapters. Print and electronic records are separated, and all records are RDA. In the beginning, Willi Hooper and Sandberg settled on several MARC fields to add to or modify in bibliographic records, with indicators, subfields, and their accompanying set values and style. Most of the record importing, editing, and creation has been done by Clare Sobotka, who found that additional fields and rules were needed for original cataloging of OER. It’s worth noting that within the Linn Libraries Consortium, LBCC is the sole academic library and currently the only library
cataloging OER, and so has great flexibility in describing them (in the absence of a county-wide library district, multiple Linn County Libraries banded together to share resources and a catalog).

The first MARC fields agreed on were a 653, a modified 856, a 971, and two 972s. These were added to all MARC records imported from OCLC into Evergreen. The 653 tag signals an uncontrolled index term. We assigned only one to each record based on the resource's location within a subscription service or the open web: “653 \ $aLibrary Online Textbooks” OR “653 \ $aOER.” Unfortunately, “Library Online Textbooks” may not be intuitive; we were uncertain how to overcome that. Originally, we were going to spell out OER as Open Educational Resources, but decided OER was a more likely search term. This metadata may differ across libraries, decreasing discoverability in the catalog by people from other institutions. The only addition to the 856 field, Electronic Location and Access, was to add a note that it was an LBCC access point with a subfield $9: “856 40 $uURL $9LBCC $yClick here to access this e-book.” $9 is a special-entry control subfield that's normally not useable with an 856, but our ILS Evergreen does allow it.

Finally, we decided to add three local fields to improve findability and consistency based on the needs of our campus. We added one 971 and two 972s that are indexed in our catalog and were already used with our cataloged course reserves: the “971 \ $a” with the instructor's name in Lastname, Firstname format, a “972 \ $a” with the name of the course in all caps, and a “972 \ $a” with the course number with no spaces. This means that students can check the library for their textbooks, and instructors can see what has been used in their department. We decided not to update the list of instructors each term or each year due to lack of staff power and the difficulty of tracking instructor changes; instead, we'll review on an as-needed basis.

While doing original cataloging, two other fields proved necessary to add context to the bibliographic records. Information regarding copyright status, 542, was where a note on Creative Commons Attribution licenses seemed to fit well: “542 \ $f,” and since “655 \ $aElectronic books” was included in many imported records, we decided to add that as well.

When the first few MARC fields were agreed on, LBCC tracked those decisions in a shared Google doc. As we began creating original catalog records in OCLC Connexion, we wanted a template with the most common MARC fields and repeating metadata (like RDA fields 336, 337, and 338) so we wouldn't have to continuously move between documents copying and pasting. We utilized Connexion's “online constant data,” which allows a user to create a form to hold frequently used data and apply it to bibliographic records in OCLC (see figure 1). Standard workflow involves creating a new book bibliographic workform, erasing all pre-set fields, then applying the online constant data with fixed and variable fields before entering data (see figure 2). Since it is saved online, anyone at LBCC can use it and it isn't workstation-specific. After some trial and error, original cataloging of OER is much more efficient using this tool; however, the fields specific to LBCC—the term in 653, $9 in the 856, 971, and 972s—could not be included in OCLC, dampening its usefulness.
Figure 1. LBCC’s online bibliographic constant data for OER in OCLC Connexion that can be applied to OCLC workforms. Notice that the local fields that LBCC adds: 653, 865 $9, 971, and two 972s are not included.
Figure 2. The bibliographic workform in OCLC Connexion after the constant data has been applied, but prior to entering metadata.
At MHCC, we began our OER cataloging project with three groups of OER in mind: open textbooks created by our faculty, print and electronic versions of OpenStax textbooks, and other relevant OER from places like Open Textbook Library and the Rebus Community. Some of the latter two types of OER were already cataloged by other institutions in MARC records, which gave us a starting point for creating our MARC template.

To begin, we looked at the MARC records available from the Open Textbook Library (Open Textbook Library, 2018). We noticed there were not any fields in use to specifically indicate that the material are OER. The records all included 542 fields with the license (usually Creative Commons), but otherwise were fairly basic and straightforward e-book records. From there, we looked in OCLC Connexion to see how the OpenStax books were cataloged. Due to the collaborative nature of OCLC, there was a lot of variation in the records. However, we saw records with 540 fields with Creative Commons attribution statements and 653 fields with either “OER” or “Open educational resources,” which helped set us on the path of standardizing our template.

We wanted our MARC records to designate the items as OER in a searchable field, and we decided to make use of two different fields to accomplish this. As we had seen in other records, we used the 653 field with a second indicator of 6 to record both “OER” and “Open educational resources” as uncontrolled genre/form terms. Although one or the other would likely suffice, we made the decision that until the larger community had settled on a controlled version of the genre, we would make use of both to aid in discoverability. Additionally, we used the 380 field to record “Open educational resource” as the form of work, using the full name to fit the pattern of other uses of this field.

One of the major pieces we wanted to include in all of our records was the Creative Commons attribution statement which includes the license type. Given that Creative Commons licenses govern use, distribution, and adaptations, it seemed that the attribution statement fit better into 540 “Terms governing use and reproduction” rather than the 542 “Information relating to copyright status,” so we settled on the 540 field.

A relationship we wanted to include, especially for our collection of OpenStax books, was print and electronic copies of the same work. Again, MARC made this easy, as it is already quite commonplace to use the 776 field to link either a print or electronic copy of the same work. Unfortunately we face challenges in generating an actual link in our OPAC, Primo (Ex Libris), which seems to require some additional configuration of Alma and Primo in order to make this functional.

Given that one of the major ideas behind OER is the ability to reuse and adapt portions of it to create new materials, we needed a way to track these changes and communicate them to the OPAC user. Lucky for us, MARC has an array of fields for displaying relationships between works. Thus, we were able to use the 787 field quite easily to link original and derivative works. This has also been a challenge to display in the OPAC.

Another field we included specifically for our catalog display was the 506 field to create an indicator that the resource is open-access. This is a feature of Primo that many academic libraries throughout the Orbis Cascade Alliance library consortium have implemented, so we followed suit. This was achieved using the phrase “Unrestricted online access” from the Standardized Terminology for Access Restriction (STAR) list (OCLC, 2007).
Conclusion and Wider Efforts
It is clear that MARC records have tremendous benefit for articulating detailed metadata and relationships between works in a way that’s lacking within OER databases that do not operate with such a detailed bibliographic record infrastructure. Despite working independently, both MHCC and LBCC came up with similar ideas and field usages. Both institutions use the 653 “OER” field and included open license information, albeit in different fields. This points to shared goals and needs for cataloging OER that likely extend beyond our two libraries. That being said, LBCC placed more emphasis on local fields, while MHCC included no local information, to follow cataloging guidelines of a shared ILS environment, where local information is handled separately from the bibliographic records.

So far, faculty love seeing their OER fully cataloged in our collections, and it contributes to their OER’s scholarly credibility. It remains to be seen, however, if library-cataloged OER collections will prove a useful tool for OER discoverability and implementation among faculty unfamiliar to the practice. Marketing efforts to alert them of this growing special collection are needed. More work needs to be done on the scope and vision of an OER special collection, or textbook affordability collection that includes library-subscribed content. Perhaps these could be built collaboratively through library consortia that share bibliographic records, such as the shared catalog model that is becoming more common these days.

Our field would benefit from more technical services librarians collaborating with OER content creators and repository managers on how library cataloging can capture OER metadata to solve challenges, such as inconsistent publication data. Other challenges to work on include: having a matchpoint or unique identifier between a library’s MARC record and its listing in an OER database, such as OER Commons; how to catalog entire OER courses and individual curricular modules, such as those from Lumen Learning and LibreTexts respectively; and agreeing to controlled vocabulary so faculty can search multiple platforms by learning objective or course outcome and have a consistent discovery experience. Anyone interested in working on these and other challenges may contact Heather.White@mhcc.edu to join a group of technical services librarians and OER database administrators working to set these metadata standards and build bridges between library OPACs and non-library OER databases.

References

Abstract
After Hillsboro Public Library (HPL) used design thinking to build a collaborative service model on the public floor, we wanted to extend it behind the scenes. How could we achieve our goal of getting items from door to floor in under 48 hours? How could we improve the workflow with selection, acquisitions, cataloging, and processing to create a 7-day-a-week operation? The library teamed up with the City’s Eureka! Project to use process improvement tools to analyze our systems and workflow. We involved non-library staff on the team to get an outsider’s perspective, and we asked the staff doing the work lots and lots of questions. After three days we identified short, medium, and long-term action items to meet our goals and ultimately provide better service to patrons.

Service Evolution and the Collaborative Service Model
Several years ago, Hillsboro Public Library (HPL) used design thinking, a human-centered approach to innovation, to change its public service model. We identified two main goals: improve the patron experience and bring more value to staff. That led to our collaborative service model by merging traditional reference and circulation service points and cross-training staff to be able to answer most questions.

We also realized our department names (e.g., public services, technical services, circulation) no longer fully described the work and services we provided because we all provide public service. So we changed our department language to reflect the experiences we want patrons to feel (connect, explore, cultivate and innovate) and to solidify the notion that public service extends to all that we do, including essential back-of-the-house operations.
It was now time to reexamine this work from a service evolution and collaborative service model perspective and unpack the entire process of what it takes to get materials into the hands of patrons.

**Eureka!**
The City of Hillsboro has a culture of innovation and the City’s Eureka! process plays a big role. It is a way of thinking about innovation and process improvement where employees are empowered to work together to find better ways to do their jobs and deliver excellent services. Eureka! employs a combination of Lean, Six Sigma, and other innovation tools and techniques. The name comes from the creative spark that ignites positive change. The library already had success using Eureka!: in 2016, we looked at our holds process and improved the lag time of getting holds to the shelf by 94 percent. For our new project, we used an intensive three-day Eureka! Rapid Improvement Event (RIE) to analyze our entire workflow—covering selection, acquisitions, cataloging, unpacking, and processing. Whew! It was a lot to bite off, but we knew we needed to look at the processes individually and study their connections to one another.

**Preparation**
In the six months prior to the project, library staff completed process mapping of three areas: acquisitions, cataloging, and door-to-floor (unpacking and processing). From that work, we had already made some improvements. For example, we use Customized Library Services (CLS) to catalog and process most of our books. The three staff members who handle the CLS import mapped out the process step by step. Not only did they learn from one another, but we found quite a few tweaks to make with Washington County Cooperative Library Services (of which HPL is a member), the vendor, and our internal processes. These added up to a significant time savings per load. Furthermore, we developed a two-tiered process allowing us to train more staff to share this daily work.

We continued to map all of the individual processes (lots and lots of sticky notes!) to serve as our roadmap and visual aid for the team. To prepare, we also interviewed staff doing the work to hear what they did, what was working well, and what was not.

**Team “No More Red Tape”**
In July 2018, three library employees, three city employees, and our City’s Innovation Team Leader met for the three-day RIE. It can be hard to step outside one’s knowledge, experience, and preconceived notions. So, having outsiders in the group brought a fresh perspective. Library Director and RIE sponsor, Stephanie Chase, started us off by explaining why this work is a priority for the leadership team and what was driving the change. We were expected to be open to what came up and ask the questions that not many libraries were asking. Success was to open the box to see how far we could look inside.

The goals were essentially the same as our public service model changes: 1) improve patron experience by providing access to materials as quickly as possible while still maintaining integrity and quality of work, and 2) provide more opportunities for staff interested in learning and working with materials. This would also ensure cross-training to avoid bottlenecks in workflow with staff and volunteer absences.
Selection and Acquisitions
During the RIE, we used 5 Whys when looking at acquisitions. Taken from Lean Management, 5 Whys is part of the Eureka! toolkit. It’s a way to explore the cause-and-effect relationships underlying problems by asking simple questions. On this process map, the dark red sticky notes indicate time-consuming steps. We asked: Why are we behind in acquisitions? Because orders take a long time. Why do they take a long time? Because we have to calculate discounts. Why do we have to calculate discounts? Because the cart is mixed with paperbacks and hardbacks and they get different discounts. Why do we have mixed carts? Because that’s the way selectors build their carts. Why do selectors build carts this way? Because that’s how they’ve always done it. We learned that we needed to take a closer look at the selection process.

After several rounds of 5 Whys, we saw a strong relationship between selection and acquisitions. We were able to significantly reduce the time it took the acquisitions team to place each order by changing procedures on the selection end. Instead of mixing formats, collections and/ or funds in one order, we decided on one format, one collection, and one fund per order.

We also changed the size of orders. Due to schedules that include time on the public floor with patrons, acquisitions staff knew they were most efficient when they could get orders done in one-hour chunks. That led to a change in procedures for selectors to submit orders containing a maximum of 30-40 items. We also decided to train each selector in the acquisitions process so they would better understand the downstream implications of their decisions or errors. Plus, this would give us a back-up pool of people to pitch in when orders built up. We also saved time by empowering acquisitions staff to make certain decisions about editing orders, such as correcting obvious mistakes.

Cataloging
In addition to the changes already made with the CLS process, the RIE uncovered more cataloging efficiencies. We learned that decisions made during selection and acquisitions can have a negative impact on CLS. For example, ordering sets of materials creates a headache in the process, so selectors are now more aware and thoughtful when deciding to order sets.

Another outcome of the RIE was to prioritize pursuing CLS for additional formats and vendors. Although CLS is a cost outlay, previous analysis determined that the money spent
was significantly less than what was spent on staff time to do the work. Staff positions were not in jeopardy because our collaborative service model changes how their time is spent.

We realized that our main backlog of items were those needing original cataloging. We have limited staff hours and expertise for this time-intensive work, so we focused on how to balance growing a diverse collection centered on our community’s needs with our limited cataloging resources. We started purchasing original cataloging from vendors where possible (after reviewing the quality of their records). We also started bringing catalogers to the table with selectors before embarking on purchasing new formats or items from non-traditional vendors. Just because we can get records from a vendor doesn’t mean the quality is sufficient or that we have the processes and templates in place to handle them. By bringing catalogers in early, we could assess the impact on staff time and create expectations around priorities before placing orders.

Unpacking and Processing
Mapping out door-to-floor processes gave us the most contact with the people and space. We went on a Gemba Walk, another Lean process. The idea is to experience the physical space, touch the items and listen. Ask staff how they feel and how things work. We learned that the workspace was cluttered, and it was not often clear to staff which items were a priority.

Some things were quick and easy to change, like removing shelving that was messy and full of binders collecting dust. Other things took longer to implement, like rearranging cubicles and furniture in the work area to design spaces for workstations and carts to match the workflow. These changes have made it easier to get a visual read on the work and potential bottlenecks.

The processing phase is when we came up with our team name “No More Red Tape.” One processing task is putting red tape on all new items and writing the month/year as a visual cue. We put red tape through the 5 Whys and decided to get rid of it. Our non-library team members had no idea what the tape represented. If we got rid of it, we could eliminate a tedious task and create visual cues in other ways, like clear signage on and near bookshelves.

Impact on Staff
One project goal was to provide more opportunities for staff interested in learning and working with materials. The Eureka! process gave us a clear understanding of individual tasks making up each process. From that, we were able to identify which tasks took basic, intermediate, or advanced skills. We broadened our cataloging and acquisitions team and now have more staff trained to do the work. Our more experienced staff play a key role as trainers and mentors. We’ve created redundancies and no longer have just one volunteer or employee who knows how to do a certain task. One staff member expressed relief because she no longer feels stressed out about being absent or even taking a vacation; she knows others will be there to do the work.

Takeaways
The RIE revealed many places to tweak our work. We also learned a few takeaways that can apply more generally to process improvement projects:
1. The ripple effect—What happens in one area has an impact downstream.

2. Clutter creates confusion—When there isn't visual clarity about what comes next, staff don't know how to prioritize their time.

3. Cross-training helps workflow—Unburden and empower staff to share and collaborate.

4. Question what you are doing—Is something necessary or a holdover from a bygone time? If it is necessary, can a vendor do it?

5. Allow those doing the work to inform the process—An outside perspective is key to getting outside the box, but those doing the work have details that inform the process. Both are critical.

6. Change management is an important part of the process—How people feel is as important as what they think. Listen and involve them in solutions. Communicate more than you think is necessary. People take pride in what they do; recognize that a change may connect to a core value and be difficult to accept. Understanding that goes far.

Conclusion
The RIE gave us an action plan of short, medium, and long-term changes to implement. Some are in place, some are taking longer than expected, some are great, and some need to be reevaluated. Team “No More Red Tape” got rid of a lot of “bureaucratic” red tape, but we are still in the pilot phase with our literal red tape. Upon closer inspection, we realized we hadn’t fully examined other parts of the process like changing item record collection codes from new to “not new” and programming the materials handling equipment. We’re still working on it! If we’ve learned one thing for sure during our Eureka! RIE, it’s that we’re in a perpetual state of iteration because there’s no innovation without iteration.

Further Resources


What do you do when your cataloging infrastructure is outdated, unusable by your patrons, and creating excess work for your staff? Get new infrastructure! At Special Collections and Archives in the Reed College Library, we are in the process of implementing ArchivesSpace, a collection management tool for archives. As we go, we are professionalizing our description practices, preparing to contribute to regional aggregations (Archives West), and, most importantly, increasing access to our collections. The software is also easier to use and reduces the time we spend doing research for our patrons.

Archival materials can be challenging to catalog, and confusing for patrons to navigate. Where a book will have a clear title, author, and date of publication, materials found in archives are the byproduct of daily life and business. They are usually created without any intention that they will end up in a library catalog or an archival database. Archival materials are also context-dependent, meaning that a single page or document might make no sense on its own. Knowing a little about the surrounding materials can help, and knowing a little about the creator might also help. Imagine a photograph of a group of people. You might not know who they are or what they’re doing. But if the next photograph shows the same people, in the same clothes, cutting the ribbon for a new building, then you can infer that the first photo was also of the groundbreaking of that building. For this reason, archival materials are usually described in finding aids, rather than in a catalog like books.

Our existing infrastructure consisted of finding aids in PDF format, linked from our web page by last name of the collection’s creator. Patrons could view them, but couldn’t easily search across collections. The other major component was a FileMaker database, set up in 1991. Now, there’s nothing wrong with FileMaker as a piece of software! But this database was only set up with records for individual folders of archival materials, or sometimes for individual items. There was no collection-level information. Imagine a library catalog without records for any books, but with thousands of records for book chapters and sometimes even pages.
To find the physical folder or item from a record in FileMaker, staff had to memorize where to go. Sometimes, we would find something in the database that was interesting or relevant but not know where to find it. The FileMaker database was set up before any professional archivists worked in Special Collections and Archives, and we struggled to implement standard descriptive practices in the database.

Even more problematic was that the FileMaker database was internal-use only. When patrons visited, they might describe their question or what they hoped to find. Special Collections and Archives staff would then search the database and pull out what we thought was relevant. Patrons couldn’t browse, couldn’t search, and couldn’t evaluate for themselves what was relevant and what wasn’t. As librarians and archivists, this didn’t sit well with us. We don’t collect archival materials only for the sake of having and preserving them; we collect them to be able to provide access! In addition to ideological concerns, we simply couldn’t keep up. For a small school, we were relatively well staffed at 2.5 FTE, but we struggled to do research for patrons as well as complete our other duties.

Our goals in leaving our PDF + FileMaker infrastructure were to (a) allow patrons to search and browse descriptions of our holdings, with our assistance only when they needed it; (b) to reduce the extremely high institutional knowledge needed to search and locate our holdings; and (c) to describe archival materials following best practices.

Selecting a system was easy: ArchivesSpace is a standard tool used in many archives in the United States. More importantly, it is supported by our regional consortium, the Orbis Cascade Alliance, so we knew we would have workshops, training guides, and the support of many colleagues. ArchivesSpace is free and open source, and we are lucky to work at an institution with an IT department friendly to open source software. We had a locally-installed and maintained instance of ArchivesSpace without much trouble.

To migrate, we started with the easy stuff: the 70 or so finding aids available in PDF format. Although these did not follow current archival standards—using EAD and DACS—they were close enough that there wasn’t much trouble. Initially, I tried to automate the ingest: saving the text of the PDFs to various plain text and CSV formats, then attempting to systematically clean up the data into a format that could be uploaded to ArchivesSpace. The PDFs had been created in various versions of Microsoft Word, though, without a standard template or formatting. After a week or two of messing around, I asked one of our student employees to simply copy and paste the data of a finding aid into a new record in ArchivesSpace. Five minutes later, task complete, they asked what else they should work on! I was hoping for a less manual process, but realized that sometimes the simple option is the best option. Two student employees, each working about 6–8 hours per week, had the PDF finding aids in ArchivesSpace within two weeks.

The FileMaker database has proven to be more challenging. Although it was easy to export data, the data itself frequently lacked context. ArchivesSpace is made to support current archival description standards, the most important of which is to have information about the collection: what it contains, how much stuff it contains, how it is organized, and who created it. That is exactly what we didn’t have. Instead of leaving those uncertainties in place, we started to create these collection-level descriptions so that we would have a place to put the records from the FileMaker database. Where information was lacking, we re-
corded what we did know and were transparent about what we didn’t. Midway through this process, one of our staff received training on DACS (the archival description standard), so that they were able to write these descriptions according to best practice. After some training, our student employees were able to help as well.

As collection descriptions were being established, I started working on attaching folder and item descriptions exported from FileMaker. The export itself was simple, as the database was only one table, and search sets could be easily saved to Excel. With several rounds of iterative searching, I was able to get sets of records that mostly belonged to the new collection descriptions.

In the exports, it was fairly easy to see what fields and values were no longer needed—for example, fields with no values or information that had been out of date for years—but there was one big problem: almost all information about a folder or item had been entered into the Title field. A typical title might contain the folder or item title, subtitles, alternative spellings, dates, keywords, relevant names, notes about where the information came from, and sometimes even transcriptions of the content of the folder. All this in one title field and with inconsistent formatting! This had been done to ease cross-field searching (by eliminating the use of other fields) in FileMaker, but made it nearly impossible to easily migrate data from FileMaker to ArchivesSpace.

We also still faced the problem of finding a record in FileMaker, but not really knowing where to find a hard copy—or if it even existed physically. Because one of our goals was to reduce the high levels of institutional knowledge required to find resources, we decided to take on the additional work to fix these problems, instead of simply migrating the existing data. After export, I would attempt to sort the records to match what the arrangement was: usually alphabetically, sometimes chronologically. Then, I would review the export against the physical boxes, noting what boxes the folder record was in, or if it was missing, and fixing the order of the records as needed. This was, and continues to be, the most time-consuming part of the process. Imagine if your library catalog contained titles of books, but no call numbers, and the books were organized on the shelf by call number. You would either need experts to translate titles to call numbers, or would need to go through the painstaking process of connecting titles and call numbers in the catalog.

After the export is sorted and box information is recorded, the remaining steps are to label the physical boxes and upload the data to ArchivesSpace using Harvard’s “aspace-import-excel” plugin. Finally, I mark the records as “migrated” in a newly created field in the FileMaker database. At the end, I expect to have a few hundred random records left in FileMaker that do not easily fit into a collection, which we plan to review later on a case-by-case basis.

After nearly a year and a half, we’ve migrated about 90 percent of the collections to ArchivesSpace, with one archivist working an average of about 70 percent of time on the project, another at about 10 percent time, and with an archives specialist dedicating about 30 percent. Our student employees, as always, are crucial to our success, and have contributed about 40 percent of their total hours. Most of the time spent has gone to fixing discrepancies between the FileMaker database and the materials in the pre-migration stage.

We turned on the public interface for ArchivesSpace early, after only a few months, which allowed people to search what we have migrated. We continue to point our patrons...
there and have already noticed an improvement. Almost every spring, a history class has an
assignment where they need to research a topic in the college archives. It has always been a
fun class to help with, but it can take a lot of our time to search for relevant materials for
10–20 students, all on the same deadline. It has also been frustrating, because students get
a skewed version of archival research in which the archivists and staff translate their queries
into boxes and folders magically pulled from the stacks. Last spring, we started showing
students how to search our resources using ArchivesSpace, explaining the components of a
finding aid as we went along. Students pick up quickly, and seem to appreciate the ability to
do part of their research outside of our open hours.

Although we still have more work to do before the migration is complete, we have
learned a few lessons along the way. Finding a good balance between fixing old errors and
getting the project done can be challenging. The first collections that I tackled had been
processed in such a way that, to migrate them, I essentially ended up reprocessing them.
That quickly sucked up available time, and I learned to only fix what would be difficult and
very time-consuming to fix post-migration. Another lesson was a reminder to be flexible.
Since the FileMaker data is so easy to export, I had originally thought it would be the sim-
plest part. The lack of consistent structure to the data in the title field, along with the inabil-
ity to identify physical locations without a manual check, made this stage take much longer
than I had planned. Finally, ArchivesSpace is not a perfect piece of software. We knew that
going in, but the public interface leaves much to be desired from a user experience perspec-
tive. For example, in finding aids, each level in a hierarchy inherits information from the
levels above it, allowing archivists to avoid repeating information. In practice, patrons are
sometimes confused by what they see in component-level records, especially when they
arrived at a component via search instead of browsing the finding aid from the top. Still, a
sub-optimal user interface is better than no user interface at all.

As we move to the final stages of the migration, an increasing number of our collections
are browseable and searchable by patrons. We still provide assistance and consultation, but
now are able to let patrons do the bulk of their research for themselves. Our student em-
ployees are able to find materials without relying solely on staff, and we hope to have refer-
ence and instruction librarians take regular turns at our reference desk. Lowering the level of
institutional knowledge required to provide reference assistance in Special Collections and
Archives helps greatly as personnel move to different positions or leave the library for other
opportunities.

Most migrations are a challenge, and moving from PDFs and an outdated FileMaker
database to ArchivesSpace has been no exception. The good news is that the benefits are
already noticeable, and more are on the horizon.
Introduction
Between October 2018 and February 2019, the Warrenton Community Library began a transformation of library services. With the funding and support available through a 2017 voter-approved levy and a joint LSTA grant with the neighboring Seaside Public Library, this small coastal library was able to introduce a full suite of online services to its patrons. Just as importantly, Warrenton was able to join a shared ILS environment and facilitate patron access to a wider range of resources.

Previously, the library used card-based checkout. A simple MARC software application was used to create a catalog of bibliographic records accessible only to staff. In 2018, the license for the MARC database expired and the library no longer had a catalog of its materials. The collections became accessible only by browsing.

Warrenton patrons embraced the many outstanding services provided at the library: a diverse selection of resources, collection development that is responsive to patron needs, and a supportive, small-town atmosphere. However, it was time to embrace the opportunities afforded to Oregon libraries in the digital age.

This LSTA project, for which I served as Project Manager Librarian, resulted in many expanded services. These included circulation and expanded resource sharing in a shared ILS. Warrenton also joined the Oregon Digital Library Consortium, developed a new library website, and provided patrons with access to Gale databases.

For this article, I will be focusing on the systems and cataloging aspects of the project. Through the four months of automation work spent in Warrenton, I gained a new appreciation for the interconnectedness of library services, as the change in systems drove transformations both anticipated and unexpected.

The Path to Automation
The Warrenton Community Library serves the approximately 5,200 residents of the city of Warrenton, which includes the previously incorporated community of Hammond.

By the Public Library Survey definition, WCL’s service area is considered a “Town, Remote,” which is “more than 35 miles from an Urbanized Area” (“Data File Documentation,” 2017). WCL also meets the definition of a small public library serving a population of 2.5 to 10K (Swan, 2013).
The scale of Warrenton’s service population is fairly common in the state. In Oregon, 76.2 percent of public libraries qualify as “small,” and a total of 36 Oregon libraries were in the 2.5 to 10K range (Swan, 2013).

Many of the benefits and challenges commonly seen in small and rural libraries are relevant here. As noted by Swan et al. in *The State of Small and Rural Libraries in the United States*, “Small and rural libraries, which are present in so many communities, serve a strategic role in extending public services to residents that may be hard to reach by other means,” though funding and adequate staffing are common challenges in the growth of services (Swan, 2013).

For years, financial constraints required a heavy reliance on donated materials and volunteer labor at WCL. In this context, the library was able to provide basic services to the community, though with minimal computerization and limited collaboration with other libraries in the county.

Recently, however, a series of events precipitated transformation. In the summer of 2017, spurred by structural issues in its previous space, the library moved into a larger and more suitable building (Bengal, 2017). Then, in November 2017, the first increase to the operational levy funding the library in 15 years was passed by Warrenton voters (Frankowicz, 2017).

The larger space and increased funding facilitated improvements such as space for children’s programs and two additional public computers. Staffing also increased from a baseline of 0.88 FTE in FY 2016–2017 to 1.665 FTE in FY 2018–2019, which enabled expanded services and longer hours.

In addition to a small but devoted staff, the library has a team of dedicated volunteers. These individuals support a wide range of library services, from building maintenance to tech support to social media.

In the numerous transitions that have occurred through the grant project, staff and volunteers alike have ensured the library’s success.

**Library Automation as an Engine for Institutional Change**

One central component of the LSTA grant proposal was to bring the Warrenton library into the hosted instance of TLC Library Solution used by the Seaside Public Library. This would result in a shared catalog environment between the two libraries and enhanced access to resource sharing for patrons.

This choice of systems and collaboration necessitated a series of other decisions. Some choices were made internally, but many were made in consultation with the Seaside Public Library. For the first time, practices at WCL would have major impacts on a wider community. This consortial framework drove many positive innovations.

**Weeding and Cataloging: Measure Twice, Cut Once**

To prepare for automation, Nettie-Lee Calog, the Library Site Manager, performed weeding in print collections. I initially viewed any further deselection as outside the scope of the automation project. However, cataloging required us to handle every item, which provided another opportunity to assess these items.

We wanted to expend cataloging resources only on items that provided value to the community. A second round of weeding concurrent with cataloging became an unexpected
but rewarding process. The physical collections that resulted from these two rounds of weeding were refreshed and relevant.

There were many such moments throughout the automation process, as larger questions would arise within the context of cataloging or classification. In most cases, we had the best results by stopping to consider the options available and then making choices and changes accordingly.

With so much concrete work to accomplish on a tight timeline, I was cautious about taking this approach. However, these pauses for deliberate decision-making resulted in sustainable practices and better user experience. The iterative processes of developing and documenting policies, and training staff, were the most important pieces of this project, as they enabled the success of activities such as cataloging, processing, shifting, and circulation.

Local Libraries, Distinct Collections
Initially, it was expected that most WCL resources would already be held in Seaside, and that for the most part, Warrenton would use bibliographic records imported from OCLC by Seaside catalogers.

However, this turned out to not be the case. For instance, in adult fiction collections, only 38 percent of items in the WCL collection and 14.5 percent of items in the Seaside collection have ISBNs that exist in the other location.

One reason was a difference in acquisition practices regarding hardcover and mass market paperback editions. Seaside tends to purchase hardcover editions when possible, and Warrenton acquires paperbacks more often. Beyond this approach to format, the two libraries built unique collections, informed by the interests of their respective patron communities.

The difference in collections extends the resource-sharing potential of the two libraries. However, it also meant that cataloging the Warrenton collections was more labor-intensive than expected.

The program provided by our ILS vendor for rapid retrospective cataloging did not interface with OCLC, and its more limited databases often did not include the records we needed. Conventional copy cataloging, and original cataloging for local authors, was required during this project.

On our first pass, we often cataloged over 400 books per day and 1,000 per week. On the second pass, our pace slowed as the materials grew more complex and challenging. Thanks to our dedicated cataloging team, we added a total of 10,299 items to the bibliographic database in four months. The end result was Warrenton’s first complete catalog of library materials, and a full suite of search and assessment tools.

Classification and Library Spaces
Library spaces and local classification practices are interdependent in every library. Choices in one area drive changes in the other, as we pursue colocation that works best for our users.

Are we going to classify by genre, by format, by audience? How will such differences be reflected in the catalog and in the division of physical space? Are we going to use Dewey, and if so, with what tools and local practices? Are we going to incorporate series numbering and, if so, for which resources?

These are all questions we considered prior to assigning local call numbers for various collections. We had to balance two factors: patron needs and long-term feasibility for a very small, volunteer, technical services staff.
We opted for Dewey in nonfiction collections. In most cases, we used class numbers from the 082 field in imported OCLC records. I also borrowed Dewey manuals from Seaside for use in original and complex copy cataloging. In the future, for nonfiction records without 082 fields, Warrenton catalogers will use the Dewey outline available online, the principle of collocation, and consultation with professional staff at Seaside to make local classification decisions.

Past practice separated biographies and autobiographies on opposite ends of the nonfiction section, using nonstandard numbering. We merged these sections under a basic 920 designation, in order to facilitate browsing of biographical works.

The children’s and young adult areas were analyzed and redesigned prior to cataloging. Marian Rose, the youth services librarian at the Seaside Public Library, guided a second round of weeding and provided new ideas for spaces. We merged many previously distinct collections in order to streamline the processes of shelving and classification and facilitate patron access.

With the guidance of Nettie-Lee Calog and her knowledge of community needs, we also preserved some important subsections. A Pacific Northwest collection remained distinct, showcasing an interesting assortment of books about the area. We also kept a small collection of videocassettes, as many Warrenton patrons still use VHS players.

Physical Processing, Accessibility, and Collection Longevity
Due to changes in the organization of collections, and the development of uniform classification practices, we needed to relabel all library materials. At the same time, we had the supply budget to apply book jacket covers to hardcover books for the first time.

New spine labels, bright genre labels, and jacket covers enhanced the appearance of collections. We opted for minimal text and large lettering on spine labels in support of visibility and accessibility. As physical processing progressed, volunteers and patrons remarked on the visual effect. New physical processing workflows will also protect the library’s materials from wear and tear, extending their useful lives.

Learning Curves
The scope of the project expanded out of necessity. In the end, it encompassed not only cataloging and staff training, but also a great deal of general collections and library policy work. The many other systems that had to be brought online took development time. There were also day-to-day demands such as staff scheduling, troubleshooting technology, and waiting for supplies. Due to the current levels of staffing, support for different processes sometimes hit bottlenecks.

Our initial estimated time of completion was January 31. We ended up extending the project through February 27, but even this deadline was tight. I devoted most of my last two weeks to documentation, training, and making sure professional support was in place. Ultimately, I was able to leave the WCL staff confident in their abilities to finish cataloging the last remaining materials, to finish physical processing, and to run the front desk.

In addition to the magnitude of the project, we had one significant setback. A portion of the item barcodes ordered for WCL overlapped with borrower numbers already in use in the Seaside patron database. This situation did not come to light until we were well into cataloging the adult fiction collection in Warrenton. Fortunately, due to the generosity of our technical services volunteers, we were able to handle the re-barcoding efficiently, losing little time in the long run.
Based on these and other experiences we had throughout this project, I gleaned three major takeaways for approaching large-scale transitions.

ONE: Triple-check everything, especially on critical matters relevant to multiple parties. Make sure everyone impacted takes a look at a configuration, process, or purchase.

TWO: When embarking on unprecedented projects, prepare for processes to take longer than expected, and to involve more steps and decisions than anticipated. Having enough skilled people with a professional outlook is essential for success.

THREE: Sustainability is an essential component of completion. I spent far more time than I initially expected on education, and organizing information for staff use after I left. Additionally, beyond written documentation, training, and project management, a long-term professional support network is vital for sustaining a large service upgrade.

Training and Staffing for Technical Services and Beyond
At the Warrenton Community Library, technical services tasks, including cataloging and physical processing, were, and continue to be, accomplished by volunteers. The typical volume of new acquisitions, approximately 50 items per week, is one reason this is possible.

Even more important, however, are WCL’s exceptional copy cataloging volunteers. Cheryl Conway and Cindy Bellaque are retired math educators who have the requisite technological and problem-solving ability, and attention to detail, accompanied by the generosity to spend their free time immersed in MARC. Without volunteers with the aptitude and time to spend on cataloging, this model would not be possible. A necessary long-term goal for WCL remains: the introduction of regular paid staffing in technical services.

In training copy catalogers, including the two volunteers and Nettie-Lee Calog, I introduced core cataloging concepts in addition to the mechanics of the programs used. I was concerned that incorporating a significant amount of theory at the beginning could be overwhelming. Yet ultimately, I felt that getting the “how” of cataloging right in the long term required an understanding of the “why,” while respecting the profession and the people preparing to dive into this work.

The learning curve was steep, but the Warrenton catalogers persevered. They quickly adopted a focus on sustainable, standards-compliant practices centered on the patron experience. I believe that the time spent on education at the outset and throughout the project helped empower these new catalogers to make good decisions with confidence.

Now that my part of the project is complete, Esther Moberg, the library director at the Seaside Public Library, is providing ongoing support to staff at WCL. This includes original and complex copy cataloging, and assistance with systems and ticketing. The establishment of a professional support network has been a necessary component of the transition to an automated, collaborative environment.

Libraries and Collaboration
Isolation can be a hazard for small libraries in remote areas, especially when access to specialized knowledge and resources is needed, as in technical services. However, there are many resources available to help libraries of all sizes.
Once an initial infrastructure of resources and space was established, the community of Warrenton was able to explore the myriad opportunities available. Pursuing these opportunities for support in enhancing services relied on a network of libraries and library professionals who were instrumental in making the transition to automation a success. These included the iMLS and LSTA grant program; Ross Fuqua at the Oregon State Library; Esther Moberg and the staff the Seaside Public Library; our ILS vendor, The Library Corporation; the State Database Licensing Program; and the Oregon Digital Library Consortium, to name just a few.

This collaborative, community-oriented spirit is one of the most powerful values of libraries and librarianship, and one which I am thankful to have encountered in all quarters throughout the course of this project. I encourage small libraries looking at the prospect of major changes in technical services to remember that there is an equally large community out there, willing to help and encourage along the way.

References


Between May and November of 2018, Washington County Cooperative Library Services (WCCLS) implemented BiblioCore, a discovery service from BiblioCommons that would become the public interface for our existing Polaris catalog. We had a successful launch on November 14, with positive feedback from both staff and patrons. It was a highly visible project with a tight timeline. The project team was small—I was the solo cataloger and responsible for all the parts of the project that were cataloging related.

My office oversees the catalog in general, but each library manages the cataloging of their own items, so there were staff in all our libraries who needed to be kept up to speed on the changes brought by BiblioCore. That was also my responsibility.

Until the project was underway, I didn't know what work would be required, but I discovered the knowledge I had gained on previous projects was tremendously useful. Additionally, earlier cleanup projects had improved the condition of our catalog in a way which made the implementation go much more smoothly than it might have otherwise. There were, of course, things I wish I had done differently, and a few solutions I had to come up with along the way that I will use again on future projects. Every discovery layer, migration, and catalog is different, but I hope some of what I learned can be useful to others, whether or not you work in technical services, have to plan projects, or are considering a discovery service.

And what better way to organize and share what I learned than in that most ancient of organizational systems, a top ten list?

**#10 Know your stuff—become highly knowledgeable about the formats and collections in your catalog.**

The bulk of the cataloging work on our BiblioCore implementation was what was called “mapping.” Mapping is creating a key to translate formats and audiences from our Polaris ILS to the discovery layer. This involved giving BiblioCommons a list of “if/then” rules, such as: “If the Type of Material in Polaris is Audiobook on CD then the Format in Biblio-
Core is Audiobook CD.” Many of the formats were just this straightforward, but some of our formats, such as Book Club Kits and Oversize, exist on library shelves but not in any specific way in MARC21 format. Fortunately, BiblioCommons allows more complex mapping rules (employing “and/or”) and could incorporate information from the descriptive fields of the MARC record, as well as some fields of our item records. The puzzle to solve then became deciding which items and records would fall into a particular category and determining which attributes those records—and only those records—had in common.

I got very lucky here. I did not have to do a lot of research or experimentation in order to come up with additional mapping rules, because I had two key experiences already under my belt: a 2017 project to convert all our juvenile materials to fine-free and an ongoing assignment working on WCCLS’s cataloging procedures manual.

For the fine-free project I reviewed all of the nearly 400 collections used in our system: What were they called? Who used them? And for what kinds of items? All of that was still fairly fresh in my mind when I needed to create additional rules based on item records, making the process much quicker and less labor-intensive than I feared it might be.

I review our cataloging procedures manual at least twice a year. So again, all of our local conventions for differentiating Book Club Kits and other special formats were at front of mind and only required confirmation, not additional research.

We had a few formats—like books with DVD-ROMs in the back—that could be made more easily identifiable simply by adding 33X and 34X MARC fields. And I discovered that Polaris includes specific formats for Periodicals and Newspapers, but that we hadn’t been using them, leaving everything coded as Serials. After a quick survey of cataloging staff and a couple of bulk changes, I had much clearer and more accurate mapping for those formats.

#9 Clean your house—updating bibliographic and authority records before the project saves time.
In the year before the BiblioCore project, one of my colleagues spearheaded a project to clean up old, minimal “legacy” bibliographic records in our system. After many items were weeded, catalogers replaced the legacy records with new, more complete records from OCLC. The record quality overall was higher, and it decreased the number of records in our system without OCLC accession numbers.

WCCLS has also been sending our records out to a vendor for authority control maintenance for several years. When we got our first look at the BiblioCore instance for our catalog, I was surprised at both how few mapping exceptions there were and how well the BiblioCore grouped (“FRBR-ized”) search results were working. I’m convinced that the legacy bib cleanup project and ongoing authority control maintenance were major contributors.

#8 Be prepared for dirty laundry—a new interface will expose previously invisible problems.
Even with all the cleanup, there was still some “dirty laundry” to deal with. Things that were invisible, or at least much lower impact, in Polaris became very apparent in BiblioCore. For example, our Overdrive-provided records for Spanish language e-books had been coming in coded as English, but BiblioCore’s “smart search” feature surfaced the issue and drove us to find a solution. (The Digital Resources Librarian now orders Spanish e-books separately and creates record sets for me to bulk change.)
#7 Become a power searcher.
Several of the issues I encountered required finding and bulk-changing records containing specific text or MARC field indicators. These searches—856 fields without a second indicator or an edition statement with specific text—often required SQL searching, which is available in Polaris but which I had not used before. I was fortunate to have lots of example searches to work from, but training and practice ahead of time would have helped even more.

#6 Data helps with decision making.
Power searching and knowing what kind of reporting options were available helped with prioritizing which problems to troubleshoot first. As an example, being able to get a snapshot of how many patrons were placing item-level holds on periodicals gave the project team the data we needed to assuage staff fears that this would be a major issue at launch.

#5 Perfect your plate-spinning technique—plan how to delegate or pause tasks.
Of course the rest of my work didn’t stop. I felt like I was in one of those vaudeville plate-spinning acts, constantly worrying I was going to let one fall and break. Right away, I had to determine if there were any plates that could be set down. Some non-critical routine clean-up tasks were put on pause, and as many of my daily maintenance tasks as possible—like creating schedules and purging old records—were handed off to other staff. If I had to do it over again, I would spend more time before the project planning out how I could delegate and train other staff to be my backup. I work with some brilliant library assistants who were happy to take over spinning some of my plates. They could have done more, but other tasks would have required additional training, and doing that in the middle of the project wasn’t something I could take on.

#4 Keep it together—organize your work process with a Punch List.
The overall project was run on the Agile/Scrum framework, but in order to track my cataloging work, I created what I called my punch list. (It was really a to-do list on steroids crossed with a project plan, but punch list sounded somehow less intimidating.) The punch list was a Word document, laid out in a table. The columns were: Issue, Support Ticket #, Action/Notes, and Status. The rows were divided up into categories. These changed as the project progressed—“Display Issues” and “Mapping Issues” were big at the beginning, but then gave way to “Establish cleanup task” and “Update Cataloging Procedures.” Several categories remained throughout. “Currently on Fire,” “Communicate to Catalogers,” and “Resolved.” Nothing was ever moved completely out of the document, just into the “Resolved” category. Each entry would start as a brief description of the issue or question followed by a note in the Status column of what should happen next. For more complex issues, I used the Action column to plan out multiple possible courses of action. I copied email discussions and pasted them in their entirety. I also pasted in relevant sections from Bibliocommons’s documentation and the full text of any support tickets I created. In this way, I had everything in one location, keyword searchable. This, along with the category organization, allowed me to quickly pull together lists of needed procedural updates, currently open issues, or, at the end of the project, a list of all the decisions made with the thought process behind each one. As I was constantly pulling information from this document, I found the upfront effort of compiling all the information there was a timesaver in the long run.
With some modifications, the punch list could have been used with a partner or teammates. A shared Google Doc or Trello board would have also done the job quite well, but I'm comfortable with Word tables. And at over 80 pages printed out, it made for a substantial trophy at the end.
#3 Leave lots of time for questions.
Every carefully drafted email or slideshow sparked several days of follow-up questions and email threads. I was surprised at first, but then I changed how I approached my project communication. I let go of trying to explain everything perfectly in the first attempt, which left me time to research the questions that I didn’t anticipate, such as the request to find out exactly which MARC subfields were indexed for keyword and advanced searches.

#2 Know how to play the accordion, but don’t—organize and prioritize communication.
The musician Tom Waits posted to his Twitter account in 2009, “A gentleman is someone who can play the accordion, but doesn’t.” (I’ve heard variations of this quote with bagpipes, but I come from a family of accordionists, so I prefer this version.) This is one of those sayings that’s easy to hang on whatever meaning you want, and I chose to use it as my mantra when planning out what information about the project I was going to share with library catalogers. My understanding of the cataloging side of the BiblioCore project was my ability to play the accordion. I needed to be ready to play if asked, but if I communicated to other staff about absolutely everything going on, it would be about as useful and as welcome to them as unsolicited accordion music.

When deciding what information to share, I eventually refined my criteria to:
1. Will this information help them do their jobs?
2. Will it help them be local experts in their libraries and resources to other staff?
3. Does it explain something that will be confusing or look unusual?
4. Do I need to share it for the sake of transparency?
5. Or is it accordion music?

As I mentioned above, this was an Agile/Scrum project, so daily communication with the rest of the project implementation team was baked in and I didn’t have to come up with a communication strategy for that. But sharing information with catalogers in all the WCCLS member libraries was also my responsibility and required a communication plan. I had three main channels for communicating with them: an email list of all the catalogers in WCCLS, a blog on our internal staff Extranet, and monthly cataloging meetings where each library sent a representative. I used the “Communicate to Catalogers” section of the punch list as a de facto communication plan. As issues moved into that section, I would decide which channel could be used to share them. Urgent matters (such as a change in procedure) went out via email. Information that would be of lasting interest (such as a rundown of how keyword searches worked) was posted to the blog. Everything else was saved for the monthly meetings.

I used Google Slides to create slideshows, which were shared before the meeting, allowing catalogers to come prepared with questions. I self-imposed a limit of fifteen slides per show because I felt like it represented a digestible amount of information for one sitting. If I ran over fifteen, I would start looking for any remaining “accordion music,” or any information that could be rolled to the next meeting.

I tried whenever possible to include fun images or humor in my communication. Sometimes this required spending time finding or creating the perfect meme for what I wanted to convey. As I was scrolling through gifs, all of my instincts would be telling me that this wasn’t crucial; I shouldn’t be wasting time on it. But based on positive feedback that I
received from staff, the effort was reciprocated with goodwill. Putting a silly or cute face on it made it easier to enlist help with all the rapid changes to workflows and procedures. That would be my final piece of advice to anyone embarking on a large project in technical services or otherwise …

#1 Never underestimate the power of a well-chosen cat meme.

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Three Tips for Creating Local Technical Services Trainings

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One challenge that many Technical Services supervisors face is providing little or no-cost training opportunities for their staff. With limited professional development budgets and constant change in Technical Services workflows, it can be difficult for libraries, particularly public and school libraries, to keep up with staff education needs. The purpose of this article is to address common issues encountered in creating little or no-cost local trainings on a variety of topics, ranging from concrete tasks to complex theory. By the end of this article, readers should be able to navigate common issues faced in creating and implementing locally created/adapted staff instruction. Readers who are interested in free professional development resources should utilize email lists and professional organization resources.

I am a senior librarian in the Technical Services division of the Tigard Public Library whose primary responsibility is cataloging. Over the past four years, I have worked with colleagues at the Washington County Cooperative Library Services (WCCLS) Automation office and with staff at other WCCLS member libraries in order to provide countywide professional development opportunities for Technical Services staff responsible for cataloging and serials management. These trainings have included in-person instruction with customized guides, gamified self-guided exercises, and basic introductions to complex post-MARC concepts. Each of these professional development opportunities came with unique challenges and led to some lessons that I would like to share, including (I) keeping trainings simple and focused, (II) assigning local experts if one does not already exist and (III) relating complex terms to existing practices.

I. Keep instruction simple and practical

The most important lesson that I learned while creating local professional development resources is that it is critical to keep instruction simple, focusing on practical knowledge. Keeping the scope of training simple will help both the instructor and the trainees. In Guila Muir's Instructional Design that Soars (2013, pp. 21–24), Muir states that having a clear purpose in instructional design both helps the instructor to stay focused and provides the structure for the entire training. Muir’s instructional design method promotes identifying roughly three clear learning outcomes that will be stated during the instruction, i.e., “the purpose of this training on using the Serials module is to help you create SHRs, build prediction patterns and check new issues in using the built-in ILS tool.”
One problem that I regularly face while attempting to articulate a clear purpose for instruction is identifying what other staff members actually need to know in order to perform their assigned duties. In her book, Muir states that instructors must first identify the actual problem before proceeding with identifying the purpose of training. Once you identify the actual problem, what trainees actually need to learn, building your purpose statement will be much easier. Don’t focus on high-level knowledge or complex concepts in instruction on practical skills. Instead, focus on tasks trainees will need to be able to complete in their daily work. If you can state three specific tasks that participants will be able to complete by the end of the training, developing the training will be more manageable. This may seem easier than it is in reality, but if you keep a clear purpose statement in mind while creating professional development resources, that clear purpose will translate to the trainee.

Part of this first lesson in creating local professional development opportunities is that you may need to provide multiple trainings on larger topics. Attempting to include more than three learning outcomes in one instruction session will backfire. By limiting trainings to three or fewer learning outcomes, you will allow participants a chance to absorb the lessons. Trying to include a large amount of information in one training session will create a stressful environment for both the instructor and the participants, who will most likely not be able to absorb any of the learning outcomes. This is not to say that you cannot provide multiple instruction sessions in one day, but that, for the purpose of keeping learning outcomes manageable, you should treat each set of learning outcomes as a separate training.

II. Assign a local expert

The person who will be responsible for identifying clear and manageable learning outcomes is your assigned local expert. Assigning one local expert who will use a high-level of knowledge to train staff at a variety of levels can work. Not all staff need to understand why tasks must be completed in a certain way. You just need one person who can make educated decisions about workflows. This local expert can create trainings that are meaningful to your local staff, can act as a local go-to person for troubleshooting, and continue to fine-tune local resources as problems arise.

Like the first lesson, assigning a local expert is often easier said than done. Local experts will need dedicated time in order to complete their assignment—time away from the interruptions inherent in public service desk work. They will also need clear guidance and support from a supervisor, peer, or mentor. Guidance and support may come in the form of direction on which resources to use (ILS help sections, email lists, working one-on-one with a regional expert) but also in the implementation of instruction. Without dedicated time, guidance and support, your local professional development opportunities may not be successful.

The suggestion of assigning a local expert assumes the existence of staff expertise and availability—a luxury not afforded to all libraries. For smaller libraries, this local expert may be a library director/manager or a paraprofessional who is responsible for technical services work. If you are the local expert for your library and do not have the support or resources of a medium to large library (or a local cooperative), reach out to your peers through local and national professional organizations and email lists. You might be able to repurpose training materials created by other libraries or receive guidance on how to make local decisions.
III. Relate complex terms to existing practices

Utilizing an assigned local expert in order to prepare and implement local training should help with most staff education needs but, unfortunately, not all local professional development demands will relate to practical skills. This leads to the third lesson I have encountered in developing local professional development opportunities—how to approach the introduction of complex concepts. When you identify local educational opportunities related to complex concepts, i.e., introducing staff to projects like BIBFRAME, you will need to find a means of making these abstract concepts approachable. This can be achieved by relating jargon to concepts that trainees already encounter in their daily work.

When working with complex terms, remember to keep it simple. Ask yourself what the trainees already encounter in their daily work that could help them relate to new terminology. What practical skills relate to the concept? How does this concept relate to trainees’ daily lives? Is there a way that trainees could view the work that they already do through a different perspective? Below is an example of how to make an abstract concept more approachable.

One of the local educational tools that I worked on for WCCLS catalogers was a series of blog entries intended to introduce linked data concepts. This four-part series introduced three general concepts related to linked data (concepts discussed in BIBFRAME updates from the Library of Congress) with three posts introducing one new concept in each post, tying them all together in the final post (Milbrodt, 2018). One of these concepts I introduced was identifiers. Rather than focusing on how identifiers will be used in a post-MARC environment, I focused on how we already use identifiers in the form of barcodes, item record control numbers, and bibliographic record control numbers. By scaling the concept of an identifier back to a basic level, readers are able to recognize that they already use this component of linked data, making the concept more approachable and allowing participants an opportunity for reflection.

In conclusion, developing little or no-cost staff trainings is often easier said than done. Developing and implementing meaningful staff education opportunities can be stressful for both the trainer and the trainees, but it is possible. Providing or seeking support for a local expert and focusing on keeping instruction relevant to the work that staff complete on a daily basis can ease the stress of providing local professional development opportunities for everyone involved. Remember to keep learning outcomes simple and focused in order to set clear expectations for trainers and trainees. When in doubt, reach out to the larger library community for guidance and existing resources.

References


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