The Digital Public Library of America and the National Digital Platform

BY EMILY GORE, MICHAEL DELLA BITTA, AND DAN COHEN

The Digital Public Library of America launched in April 2013 with the goal of maximizing access to our shared culture. Although numerous digitization efforts began early in the history of the web, in the mid-1990s, and have continued to the present day, there was not much coordination between these efforts and no easy, unified way to find what was available. Furthermore, there are types of materials, such as ebooks and audiovisual works, that have structural issues to access due to copyright, technology, or other issues.

DPLA was founded to solve these problems and to increase access as much as possible. Currently, the Digital Public Library of America holds over 15 million items from over 2,000 libraries, archives, and museums in the United States. When we launched in April of 2013, we had only 2.4 million items from approximately 500 institutions. While we are proud of this rapid and significant growth, we still have thousands of institutions that would like to join DPLA, and likely hundreds of millions of items, ranging from digitized books, photographs, manuscripts, and maps, to audio and video, to paintings and sculpture, to works from all fields of the natural sciences. So in a sense we are still at just the beginning of an important, multi-decade effort.

Unlike single libraries, even those of great size, we do our work in a highly distributed way. We have what we call state-based “Service Hubs,” and it is through those hubs that we are able to assemble a very large-scale virtual library. These hubs help us gather materials from across the country, ensure that there is good metadata about those materials, and store and serve the digital content to audiences from around the world.

In addition to this distributed model, we...
have more recently endeavored, through the Institute of Museum and Library Services (IMLS) funding and through a partnership with Stanford and DuraSpace, to provide a new digital infrastructure for our hubs that is robust and modern. Leveraging the Hydra Project, we have created Hylku, which can act as a turnkey solution for our hubs to host and to more seamlessly share their content with DPLA, and thus the world.

Our work therefore connects with the National Digital Platform in two main ways. First, it creates for the first time a highly networked digital library system that unites and makes maximally available the content from thousands of institutions; and second, it uses cutting-edge technology to serve that material in contemporary, advanced ways.

THE NATIONAL NETWORK OF HUBS
DPLA would not exist without the collaboration of our Content Hubs and Service Hubs, the organizations that both aggregate metadata from their partners — the library, museum, archive, and cultural heritage institutions from across the US — and then contribute it to DPLA. Combined, these institutions bring together millions of records about digital texts, photographs, manuscript materials, artwork, and more, available for use through the DPLA portal and application programming interface (API).

Content Hubs are large institutions, like the National Archives or The Library of Congress, that work with DPLA to share cultural heritage data on a one-to-one basis through a single data feed. Service Hubs, in contrast, work to share data with DPLA on a one-to-many basis through a single feed. Service Hubs, currently geographically focused, represent cultural heritage institutions in a single state or region of the country.

When launching DPLA, we worked with a number of states who had existing statewide digital collections, including the Digital Library of Georgia and the Minnesota Digital Library. Through participation in DPLA, both Georgia and Minnesota have been able to significantly expand their collections and the number of institutions that participate in their statewide effort. In 2013, when Minnesota joined DPLA as one of the initial Service Hubs, 175 cultural heritage organizations, largely small libraries, archives, museums and historical societies, contributed 46,000 records from a centralized database. Since that time, Minnesota has added an aggregation layer, which includes the digital collections of seven large institutions, and they now contribute over 500,000 items to DPLA.

Other Service Hubs, like the Empire State Digital Network (which as the name suggests covers New York), were not pre-existing, and were instead formed with the goal of sharing content with DPLA. New York had a number of collaborative digital cultural heritage projects, but not one that had statewide coverage. The Empire State Digital Network, administered by The Metropolitan New York Library Council (METRO), now has over 200 partners and contributes over 350,000 items to DPLA.

At launch, DPLA represented a collaborative of eighteen Content and Service Hubs, who together provided free and open access to 2.4 million digital objects. As of March 2017, DPLA is a collaborative of forty-five Content and Service Hubs, providing access to over 15.5 million digital objects and growing regularly. Within the next two years, we hope to complete the national network by having an on-ramp to DPLA in every state in the country. At that time, we will work to improve collection gaps and seek targeted content in order to round out the network.

When DPLA was first conceived, there was no stream of digital items ready and waiting. The first task was to build out the network of hubs that would together provide this stream of the nation’s cultural heritage. Since most of these hub organizations were yet to be founded, an early strategy to scale DPLA’s network involved meeting hubs where they already were in terms of technology and metadata, rather than dictate that the hubs provide data in a specific format via a specific channel.

As a result, the digital infrastructure of DPLA and constituent hubs is highly heterogeneous. On a regular basis, DPLA consumes metadata via diverse channels including OAI-PMH, bespoke APIs, and data dumps. This data arrives in a variety of formats, typically JSON or XML, that can correspond to numerous schemas and interpretations thereof. And the systems providing this data range from open source, off the shelf software, to proprietary services, to software custom-built for the purpose of participating in DPLA. No two DPLA hubs are alike.

Even with this polyglot take on metadata aggregation, DPLA does encounter providers that do not have the technological resources available to easily participate in the hubs network. Our hubs and providers have diverse quantities of funding and personnel, and the task of maintaining the niche infrastructure and technological know-how...
to participate in DPLA can be costly and time-consuming. Even well-resourced hubs have potential providers of their own who hold amazing items in their collection but lack the resources to share them digitally.

A solution that made it simple for these partners to contribute their collections to DPLA by providing them with the tools to record, preserve, and syndicate their metadata would be of utmost use. DPLA, along with partner organizations DuraSpace and Stanford University, banded together to develop a plan to satisfy this need.

Thanks to a generous grant from the IMLS, DPLA and its partners have embarked on a multi-pronged project to create a robust application for next-generation digital asset management. A core pillar of this project is to devote significant effort toward enhancing Hydra, which brings together several important platforms to form a coherent but flexible repository solution.

Hydra’s architecture is based on the availability of several key components, including Fedora Commons Repository for data preservation, Apache Solr for full-text indexing of repository content, Blacklight for search and discovery, Hydra-Head, a Ruby on Rails Engine for primary content management operations, and numerous Ruby gems to provide a variety of additional end-user interfaces and workflows.

However, because Hydra was never meant to be a one-size-fits-all solution for digital repositories, but rather an extensible and reconfigurable constellation of components, uptake can be daunting for new users, and turnkey installs were never meant as a deliverable for the general Hydra project.

Enter the Hydra-In-A-Box project. This effort strives to produce a polished, feature-complete, easy-to-install and maintain, turnkey Hydra-based application for next-generation digital asset management. This is being accomplished by standardizing and combining some components in the Hydra infrastructure into a unified release that is easy to install and highly cohesive. The main output of the Hydra-In-A-Box project has recently been named Hyku.

Another chief aim of this effort is to offer Hyku as a hosted service named Hyku-Direct. A customer of this service would be given access to a competitively-priced instance of the Hyku application in the cloud that will be fully managed and maintained by DuraSpace, which hopes to offer Hyku-Direct service after a pilot period to occur in 2017. Onboarding new institutions would be as simple as registering for any common software-as-a-service product, and costs would be minimized by economies of scale realized by hosting multiple customers in the same infrastructure. To avoid vendor lock-in, Hyku’s codebase will remain entirely open source and freely available, and migrations of content to and from this service will remain unfettered. The Hydra-in-A-Box partners are holding conversations with other potential service vendors who could offer Hyku as a service as well. Ideally, a potential customer will be able to choose from several vendors who in turn might tailor their services to specific markets or use cases.

DPLA sees immense potential for a federation of data providers armed with Hyku. ResourceSync, the new metadata syndication format conceived as a replacement to OAI-PMH, will be baked in, which means that parallel harvests and incremental updates are available out of the box. And the Hyku team has committed to producing exports in DPLA’s Metadata Application Profile, which will greatly reduce the friction in bringing in new providers to DPLA’s platform. Finally, Hyku features built-in IIIF (International Image Interoperability Framework) support, which will offer providers a great way to allow users to see zoomable, full resolution views of their content no matter where users encounter it on the Internet.

These advances will help our hubs harvest their providers as well, but potentially most important is the fact that they promote a national network of content access, aggregation, and analytics. DPLA hopes that the Hyku product will produce a vibrant, participatory community of adopters and contributors.

CONCLUSION
DPLA’s quickly growing national network of hubs and the new technologies we are working on with partners will directly and greatly contribute to the dream of a national digital platform. It has been exciting to see that platform develop, and to make large-scale contributions to it. DPLA’s open and extensible structure was always envisioned as a critical and helpful part of the knowledge ecosystem in the United States and beyond. The millions of items we serve to millions of students, teachers, researchers, and members of the general public every year are a testament to the strength of that model and the progress that has been made thus far.


ABOUT THE AUTHORS: Emily Gore is the Director of Content for the Digital Public Library of America, a position she has held since the inception of DPLA. Gore’s 17 year career in libraries has focused largely on digital cultural heritage collaboration.

Michael Della Bitta is Director of Technology at DPLA. Michael has worked in software development and publications and in the startup, library, and education spaces for nearly twenty years.

Dan Cohen is the founding Executive Director of the Digital Public Library of America. A historian by training, he has worked on large-scale digital projects to increase access and expand research opportunities.
Popular media images suggest that disability involves sensory impairments like blindness or mobility impairments like wheelchair use. However, according to the American with Disabilities Act (ADA), disability also includes emotional, cognitive, and learning disabilities. In the context of public institutions, libraries are at the forefront of working with the public, including the functionally diverse (also known as the disabled or differently abled). This is especially true as services for the functionally diverse, especially for those with mental health issues, continue to be defunded at the state and federal level (Embry, 2015).

While libraries have been on the vanguard of ADA compliance for physical spaces, an area libraries especially lag behind on is making our web presence accessible for screen reading software as well as general accessibility for people with mental and learning disabilities. Though there has been movement to make library webpages more accessible and especially to understand how screen readers interact with library websites, many of the databases that libraries purchase are not compliant with basic web accessibility codes to the contrary of what vendors may state (Yoon, Hulscher, & Dols, 2016; Delaney, 2015). However, this disparity still exists and is exemplified by how software can be set to almost any language spoken on Earth, but that same software is not accessible for someone with low or no vision. “The world’s roughly 3 million Lithuanian speakers get language support – as they should – yet accessibility features for the more than 7 million visually impaired people in the U.S. alone are often tacked on as an afterthought compared with internationalization” (Kelvey, 2015). Kelvey’s key point is not just that the Lithuanian language gets more support, but that a large segment of the population, the functionally diverse, don’t get nearly as much support in comparison to their numbers. The World Health Organization estimates that around 15% of the world’s population, about 1 billion people, have some kind of disability (World Health Organization, 2014). This is a significant segment of the global population that libraries are under-serving. Technological or built environment compliance means minimum accessibility and even though a library is ADA compliant doesn’t mean that it is actually accessible. By incorporating a more holistic approach towards disabilities that looks at the functionally diverse from an independent living model, as well as incorporating universal design into all aspects of our planning from the very beginning, libraries, on all levels from physical to technological to service, will become more accessible for all people.

**THEORIES OF DISABILITY**

There are several models that define how society sees the functionally diverse. The most common is the medical model, which “… is distinguished by perpetuating the notion that someone who has a disability is broken, in disrepair, or infirm” (Brown, 2000). The medical model lends itself to objectifying the functionally diverse in a very negative way, including treating them as if they were unintelligent, ignoring them and their needs, and devaluing the unique and rich identities that functionally diverse people add to society as a whole. The medical model can be seen in libraries by the reluctance of library employees to assist the functionally diverse in subtle ways like not making eye contact to more dramatic ways such as omitting the functionally diverse from library programs.

Another model that the functionally diverse fall under is the rehabilitation model, in which “… the main goal is to normalise men and women who are different, even if
it implies hiding the functional diversity’s difference or making it disappear” (Palacios & Romañach, 2007). The human leg and foot works because of all of the muscles, ligaments, tendons, and bones that work together to allow humans to be bipedal. Take away all of those moving parts and prothetic feet or legs that are shaped liked feet or legs, aren’t actually all that functional. Look to Oscar Pistorius, the Olympic runner who competed in the 2012 London Summer Games. Pistorius is a below the knee double amputee and runs on “blade” prosthetics, which has earned him the nickname “Blade Runner” (Whiteman, 2015). On the one hand, Pistorius is clearly adhering to the rehabilitation model by having fought for years to be allowed to run in the Olympics rather than the Paralympics. On the other hand, Pistorius is contradicting the rehabilitation model by wearing blade prosthetics that are radically different than what is typically expected. The rehabilitation model is the most prevalent approach in libraries, especially in terms of infrastructure. Signage and accommodation equipment for the functionally diverse fade into the background or are placed in low traffic areas so that it’s not immediately obvious that there is assistance available unless it is actively being sought out.

A third model is the Independent Living or social model. The idea behind the Independent Living model is “...that people with disabilities were the experts on their experience and could best decide for themselves what services they needed and how to use them” (Pelka, 2012). To use an example from popular culture, in Daredevil, a web television series on Netflix based on a Marvel comic book, Matt Murdock is a superhero crime fighting lawyer who navigates the physical world around him as a person who is blind, including finding information using a refreshable braille display (a small electronic device that translates print text into braille) (Buckley, 2015). In this particular case, while Murdock has friends and colleagues who support him, he lives alone and makes his way through the world largely on his own using assistive technology, like a refreshable braille display and a white cane. Murdock is certainly living an independent lifestyle, relying on no one but himself to survive and thrive. In libraries, a patron with a disability who can easily navigate the materials that they want, digitally or physically, without the assistance of a library employee, would certainly qualify as independently living in a library context.

In many cases, for the functionally diverse, the theoretical models have focused on repairing or fixing disabilities and not treating the entire person or even asking what the person may want or feel that they need. This is the case when looking at the physical layout of libraries, especially older ones, as defined by any period before ADA legislation but more specifically libraries built by Andrew Carnegie from the late 1880s to the 1920s. Carnegie was a major factor in bringing libraries to the general public in large part because he poured the millions he made as a steel magnate into building about 2,500 libraries (Harris, 1984). Carnegie’s libraries were a boon when they were built, but they are a product of their time and were not designed for the functionally diverse. Prizeman did a comparison study of two Carnegie libraries in Pittsburgh. He rightfully points out how race and economics effected the building of both libraries and he also describes both libraries in their similarities and differences. “The double-doored lobby, a necessity in the harsh climate of Pittsburgh, is extended to enclose a gently raking flight of steps at Homewood whereas at South Side the steps are left outside and the vestibule is reduced to the minimum length of a door swing” (Prizeman, 2013). He goes on to describe how at the South Side Library, the steps were eventually reconstructed to include a ramp and a less steep angle for easier entry. Steep steps, heavy doors, and tight spaces do not make entrances to buildings accessible for people with mobility impairments. The original construction of a Carnegie Library, while different in terms of time and space, often followed similar guidelines, including raised entrances like those depicted here. This, as well as the general layout of Carnegie Libraries, has not been generally conducive to accessibility though modern administrations have done their best to retrofit them. How often do we ask the functionally diverse for their input, especially in the initial planning stages of building a library or of any project that we take on? To be aware of the functionally diverse means that in whatever projects we do, we need to focus accessibility at the beginning of the design process and not as the last item on the list. Libraries being accessible for all
people is a radical and progressive act because it requires forethought and inclusion from the very beginning of any project.

ADA AND DISABILITY AND THE LIBRARY
The original ADA in 1990 used language like “readily achievable” to indicate how making accessibility should be retroactively addressed when discussing buildings that already existed. This language is vague and leaves open to interpretation how far a building has to go to achieve accessibility. After all, a ramp might be readily achievable for one building and totally impossible for another. While the intent of the ADA was to create accessibility to buildings and services for all people, the law fell short in large part because of vague language, difficulty in actually enforcing the law, and built in loopholes like “readily achievable” that allowed executives to essentially opt out of doing accessibility modifications for almost any reason. For example, at the beginning of the period of retrofitting buildings for accessibility, there was noticeable resistance from some library directors as discussed in Scheimann’s master thesis (1994). Scheimann queried library directors of small to medium sized public libraries in Ohio in 1994 about their ADA compliance, only four years after ADA came into law. While his findings suggest that most library directors embraced the law, there were notable exceptions, such as, “...I have a $50,000 elevator that is used by less than six people! People must soon learn that a lot of things in life aren’t fair. There just are not enough resources to provide every individual and every group with everything he, she, or it desires,” and “We simply can’t afford it so we are ignoring it,” as well as, “In the eleven years I’ve been director of this library no has ever come in in a wheelchair and I doubt that they ever will” (Scheimann, 1994). The language in these quotes clearly indicates that these directors have a decidedly negative view of the functionally diverse. In the case of the elevator quote in particular, the director resents the cost involved and most certainly resents having been forced into installing an elevator that is actually used, albeit by six people. From that director’s point of view, they seem to suggest that those six people should struggle without the elevator in order to comply with some arcane idea of “fairness.” Scheimann himself shows a deep concern about these attitudes by stating, “Although they were not predominant, some responses seem to show an anger toward the mandates of the law. The source of this apparent anger may be a concern” (1994). While Scheimann regretfully doesn’t go on to adequately discuss why this anger is present, the fact that he acknowledges that those feelings and cultural attitudes are there is important because they are all too often not articulated.

To delve more deeply into this reaction to compliance, it is useful to consider how society has generally viewed the functionally diverse in the past. In the medical community, it is not uncommon for doctors and nurses to talk over the patient to each other and to vaguely acknowledge the humanity of the person by asking the patient to move their body in certain ways or to answer clinical questions that focus only on the disease or condition. A famous case that has been in various films and novels is that of the “Elephant Man.” Joseph Merrick was a young man in the Victorian period in London. Parts of his body grew out of proportion to the rest of him and to survive, he eventually landed at the London Hospital where he lived until his death at the age of 27 (Joseph Merrick, 2016). It is now thought that Merrick had proptus syndrome, an exceedingly rare condition that causes body parts, tissues, bones, and organs, to grow out of proportion to their size in asymmetrical ways (Genetics Home Reference, 2012). The cost of living in the hospital was offset by the general public because “The London Hospital was an overcrowded general hospital and thus not the appropriate place for an incurable like Merrick. Yet Carr Gomm [chairman of the hospital] had received only refusals to his applications on Merrick’s behalf to the established institutions for incurables. Thus Carr Gomm comes to the British public seeking advice, and, more crucially, support...” (Graham & Oehlschlaeger, 1992). To solicit donations to assist in making the argument that funding was needed not only to research his condition and keep him alive but to support so many others that were diseased or “deformed”, Merrick was put on display, something that he was familiar with from having been in a freak show. In the film, From Hell, this medical prostitution is graphically shown; Merrick is put on a pedestal and his robe removed, thereby revealing his deformed body covered only by a loin cloth. The crowd reacts in horror as they collectively whip out their checkbooks to financially assist the poor man and the courageous hospital trying to care for him (Hughes, 2001). It is not Merrick himself that the crowd, or the doctors assisting him, or the British public, are reacting to, it’s Merrick’s condition. This dehumanizes Merrick and objectifies him in a way that completely eliminates his humanity. While we have come a long way from the medical objectification that Merrick experienced, that medical model of disability has been the foundation of how the non-functionally diverse interact with those that are different, sometimes radically so. It is that objectification of disability that still lingers, even in our language, particularly when discussing the functionally diverse. Language can also reveal attitudes, even when the speaker might deny that a negative attitude is being articulated.

Language like “dealing with,” “mentally ill,” “difficult to manage,” and “problem patrons” are reoccurring themes throughout the library literature. This language often focuses on the functionally diverse who, in particular, may have mental or emotional disabilities. Even when an article is focused on ways to change how a library works with all patrons, especially functionally diverse
patrons, there can be problems. In Murray’s article about whether or not there is a place for patrons with mental health problems in Law Libraries, she states at the beginning of her article, almost as a warning, “The mentally ill library patron will continue to be a presence at your public library. If your library’s goal is to rid itself of this type of patron, the staff will be set up for failure” (2009). Her use of language, “mentally ill patron” rather than “patron who has a mental disability,” puts the condition (mental illness) first and devalues the person as a person by objectifying them via their medical condition. This is identity first language which has typically run counter to the current trend of people first language. However, there is controversy within the disabled community about person first versus identity first language. Dunn and Andrews lay out the differences between person first and identity first language and why some groups like the Autistic and Deaf communities see their disabilities as part of their identity and therefore embrace identity first language rather than person first language (2015). Murray’s use of identity first terminology does not apply to either of the communities that have been identified by Dunn and Andrews and therefore is more than likely inappropriate and shows a lack of sensitivity towards the patron she is assisting. Murray states at the end of her essay, “I confess that my initial goal when I began our library’s effort was to direct the population elsewhere” and “...the goal should really be identifying how to successfully coexist with the mentally ill patron” (2009). Again, her language use objectifies the patron, which is problematic, but more importantly, she admits that she wanted to get rid of functionally diverse patrons in the first place. Her final sentence about coexisting clearly indicates that functionally diverse patrons are still not actually welcome in her library but that they will be tolerated. This attitude is present throughout the entire article, especially when discussing policies and evicting functionally diverse patrons. On the other hand, Murray has made some inroads into her own prejudice against people who are different from her as well as developing a better set of policies in how her library works with patrons who are functionally diverse. Murray’s article is but one of many in the library literature that give mixed messages with regards to the functionally diverse. Her article is certainly not an indication of how all libraries interact with the functionally diverse, especially those that have mental or emotional disabilities. However, because of the relative recentness of this article, 2009, which was 19 years after the ADA was passed, it is clear that there is still work to be done regarding librarian attitudes towards the functionally diverse.

ONTLOGIES OF POWER
What does power look like? From the brightening lightbulb of the AHA! moment to easily entering a building to finding a journal article in a timely fashion, power in libraries is about access to information. When people have power all the time, like being able to navigate a building easily or being able to read anything at anytime, anywhere, it is hard to imagine not being able to do those things. The functionally diverse however are very often in this predicament, and because they are perceived as being so few in number, their needs are largely ignored. As the functionally diverse are typically perceived as powerless, it is difficult for others to understand their needs and it is exhausting for them to continually advocate for themselves and educate the people around them. “People with little power rarely have a voice in the negotiations over space, and thus their interests are often ignored, which makes it even more difficult for them to achieve functional independence and social participation” (Steinfeld & Maisel, 2000). This is particularly true when examined through the lens of the haves and the have nots, on almost any level: social, economic, political, etc. Dominant culture in the United States is marked by white, male, and able-bodied privilege with remarkable inroads being made by feminism and civil rights activism. In the context of the functionally diverse, the inequalities of power are still very much present within not only American society but global society. Nowhere is this more evident than in education, in which libraries play a substantial, if uncredited, role. While education has moved forward in creating curricula that integrate functionally diverse children into society, the examples of poor access are legion in libraries and show that libraries are lagging far behind in some areas such as mental disabilities. This is especially true when compared to how the educational system supports people with mental disabilities. Copeland examines some of these attitudes in his limited study which interviewed five people with varying levels of disability. In interviewing of patrons with disabilities, he asked about a variety of topics including physical accessibility of library buildings. He comments that, “Additional challenges for these patrons included inaccessible floor plans and space layouts that do not allow sufficient space for successful navigation of mobility equipment... Another major concern was the inaccessibility of restrooms, which many participants indicated was extraordinarily difficult and meant building in an additional 15 minutes or more into the time they spent in the library in order to navigate a bathroom that may or may not be ‘technically ADA compliant’ but still inaccessible” (2011). Copeland’s participants’ comments and concerns are not unique. This also is exemplified in the library literature in regards to what librarians research and publish on. In a content analysis project by Heather Hill, she analyzed articles written between 2000 and 2010 that focused on disability and accessibility. She found that of the 198 articles evaluated, 50 or 25% focused on digital accessibility (web, databases, software) (Hill, 2013). The rest of the articles in her study focused on services, programs, products, etcetera, while only 2% of articles actively talked about the acces-
When we discuss social justice, what is it exactly that we are talking about? Reisch gives a thorough and well thought out definition by saying social justice “...involves envisioning what a just society would look like.

Accessibility of buildings or of physical texts (Hill, 2013). While Hill’s work focuses on library literature, the author of this article’s observations of physical buildings and spaces, as well as evaluative walkthroughs of several libraries have led to the following observations. Accessible entrances into libraries are all too often placed in hard to get to areas, typically by docks and dumpsters, or there might only be one accessible entrance located on the side of a building rather than in front where everyone else enters. Bells are sometimes installed where the functionally diverse can ring to summon assistance to ask for help rather than being able to help themselves. Bathroom stalls are hacked together to create a larger stall but doors continue to have knobs or are not power assisted, thereby making getting into the restroom difficult. One of the major issues that surrounds these afterthought retrofits to comply with the ADA is the very ideas that encompass functional diversity, and in particular, what it means to be functionally diverse and how that functional diversity affects individuals and the world they inhabit. Making our world universally accessible requires a great deal of social justice work.

TOWARDS SOCIAL JUSTICE

When we discuss social justice, what is it exactly that we are talking about? Reisch gives a thorough and well thought out definition by saying social justice “…involves envisioning what a just society would look like. It requires us to address fundamental questions about human nature and social relationships; about the distribution of resources, power, status, rights, access, and opportunities; and about how decisions regarding these distributions are made” (2014). Librarians have a rich history of being passionately involved in social justice movements. We have to look no further than “learn to read” programs, the Occupy movement and the position that many librarians took in it, as well as the outreach that occurs into disparate and underserved population areas. When information access is extended to all people and not just those that have the most privilege, librarianship becomes a revolutionary act. For example, at the height of the Occupy Wall Street (OWS) movement in New York City, three academic librarians from different institutions came together under the auspices of the myMETRO Researchers Project, which is run through the Metropolitan New York Library Council, to try and support OWS with research. The librarians were eventually embedded into the Eco-Cluster of OWS, where they provided an extensive annotated bibliography that abided by copyright law as well as exposing the cluster to more dynamic collaboration tools. In their own words, the librarians state, “This project explores the possibilities and limitations of a ‘library without borders,’ and confronts issues of open access scholarship, open source communication, information poverty, and the digital divide” (Gervasio, Ecklund, & Ress, 2013). These are admirable goals and can certainly be applied to the functionally diverse population. One way to think about this level of accessibility is how and when we incorporate accessibility into our workflows. Universal Design offers a potential solution to the workflow problem.

In the architectural and technological worlds, as well as in education, there is a movement towards Universal Design, which is very different from accessible design and accessibility in general. As defined, “Universal design, also known as life span design, seeks to create environments and products that are usable by children, young adults, and the elderly. They can be used by people with ‘normal’ abilities and those with disabilities, including temporary ones” (Null, 2014). The idea behind Universal Design is to create spaces, physical, technological, or educational, in which all people, regardless of ability or age, can move, use, or learn. Accessibility is something that is added on after the initial design, whereas Universal Design focuses on including accessibility for all from the very beginning. Said another way, “Accessibility is a property of the relation between the user and the resource in the context of how that is mediated, not a property of the resource. Accessibility must be situated within the real world context, and acknowledge the unequal power structures that constitute disability and accessibility” (Cooper et al., 2012). The argument here is that accessibility tacked on after the initial design of something will never truly be accessible because it is added as an afterthought rather than part of the design from the very beginning. The key to integrating accessibility into a process, whether that is architectural designing, programming, or teaching, is to use universal design, which places accessibility at the forefront.

Before the ADA, very little thought was given to functional diversity. It’s not that architects were deliberately malicious or obtuse, they just designed for the 85% of people that had enough usage of their limbs, brains, and senses to use buildings and products. As well stated here, “Stores, theaters, and other buildings were never deliberately intended to shut out people with disabilities—but the built environment has been highly effective in denying access to people who have limited use of hands or legs. A single step, a one-inch threshold, a heavy door, or a round doorknob can make entry into a building difficult, if not impossible” (Ep arent.com, 2011). Going a step further, the same article points out that, “...for many, accessible [places]...can mean the difference between a life of independence and full immersion in the community and one of dependence and restrictive living situations” (“The Impact,” 2011). Now that it is understood that places aren’t accessible even if they are ADA compliant, there is a push to make places accessible for all; not just for greater equality, but also so that functionally diverse people can live their lives as independently as they wish to. Freeman sums up this argument eloquently as someone with a physical disability, “I should be able to use the technology and resources available to me when and if I want to. No one should tell me how to navigate my body” (Freeman, 2015). This swing towards the social model of disability has been going on within the functionally diverse community for quite some time. It is only relatively recently that the social model of inclusivity through Universal Design has been making...
its way into the actual fabric of society.

Returning to Null’s definition of Universal Design, he makes a clear distinction between people by saying, “...people with ‘normal’ abilities and those with disabilities, including temporary ones” (2014). This quote clearly illustrates the division between those that are functionally diverse and those that are more “normative”, especially in a social model of our world. Contextually speaking, disability is something that is more often thought of as a medical issue (the medical model) or an integration issue into the environment (the rehabilitation model) and more recently an issue of integration into society (the social model or the independent living model). The social model of disability is exemplified by, “...it was not our impairments that were the main cause of our problems as disabled people, but that it was the way society responded to us as an oppressed minority” (Oliver, 2004).

This indicates that there is a greater need to challenge the cultural perceptions of disability. The social model in particular makes it clear that it is society’s view of the functionally diverse that create barriers to timely access to information, the environment, goods, services, etc. A goal of the social model is to challenge societal norms. “An emancipatory meaning of difference is one of the goals of a movement concerned with social justice. This involves challenging definitions and assumptions that legitimate and maintain relations and conditions that marginalize and exclude, and replacing them with definitions which engender inclusion, dignity, and solidarity” (Barton, 2004). Said another way, in terms of social justice and the social model of disability, raising issues of language, access, and design of spaces is an act of rebellion against still commonly held beliefs rooted in the medical and rehabilitation models. For someone who is functionally diverse, to speak up against the societal view of disability is a radical act. To be inclusive in the library is to keep in mind all aspects of the human population rather than focusing on the greatest common denominator. Universal Design, rather than Accessible Design, is certainly a key component of obtaining social justice for functionally diverse people, especially in libraries where Accessible Design has been predominated.

Steinfeld and Maisel argue that accessible design is about “...[applying] design criteria in accessibility regulations in a mechanistic way” (2012). While adapting physical environments to laws like the American with Disabilities Act is a requirement of the law, Imrie, while discussing the United Kingdom’s Disability Discrimination Act of 1995, states very aptly that, “There are too many get-out clauses and exemptions in law to expect anything other than the continuation of practices which treat accessible design as an ‘add-on’ or part of compensatory design” (2004). The same could be said of public entities that are in compliance with the ADA in the United States. Compliance indicates no more than the absolute minimum required by law and in many cases, buildings of a certain age are exempted from making rigorous accommodations for the functionally diverse because of the large costs involved. However, as libraries, we pride ourselves on being available for our patrons so that they can get what they need in a timely fashion in order to educate themselves or for leisure. Can we still take pride in this when there is a large segment of the population that can’t efficiently, or sometimes at all, use our services because we are not actually accessible, even if we are ADA complaint? This question isn’t just about the physical environment; it also includes how we interact with our functionally diverse patrons, some of who maybe nonverbal, have completely different body language, or be unable to communicate at all. Librarianship as a profession has focused on accessible design, but instead the focus should be on universal design for everything that we do from developing programs to the layout of our spaces to answering questions at the reference desk.

GOING BEYOND COMPLIANCE

What can we do to not only go beyond compliance but also to ensure that the functionally diverse have a space within our society on their own terms, rather than the terms that society might try to assign to them? An excellent place to start is with Universal Design. When we design things – spaces, technologies, educational platforms – from the ground up with accessibility in mind rather than as an afterthought, we are including everyone and not just the normative 85% who can easily use whatever we are designing. Harihareswara has an excellent point that “Naturally, all this stuff [accessibility, empathy, hospitality] is then smushed out of our software [or hardware, physical environments, etc.] because it’s just not incentivized, it’s actually penalized, and when the group making the software isn’t very diverse, the cycle repeats itself, and becomes even worse” (2015). Her remark points out that it is part of the human condition to gravitate towards people and ideas that are akin to us.

Harihareswara espouses that we not only change the way we design so that our designs are universal, but that we also include the points of view and opinions of people that are extremely different from ourselves. This is completely possible, especially when utilizing usability design principles, most particularly through the use of functionally diverse team members and failing that, personas. “Personas are a way of combining user research data from many sources into a fictional but realistic character. Personas have names and personal characteristics and abilities, along with aptitudes for using technology, and attitudes about their experiences. They let us look across individuals to see patterns. They are used as stand-ins for all of the real users during the design process so that we remember to put people first, considering how we can make their experience an excellent one” (Horton & Quesenbery, 2013). In short, personas are constructs that allow the designer to test the design against a
We also need to consider the fact that while we would like to have a one size fits all approach to making things accessible, this simply isn’t true.

paper person that has the attributes of a real person. When a design has reached a stage where it’s ready to be reflected on, the designer can take the personas of Joe, Alice, and Mark, who are all fundamentally different, and test the design against each one of them to see if they will react in the ways that are expected. Another aspect of user experience design, the universal design version for programmers, is to use heuristic evaluation. Heuristics is where software or websites are evaluated based on a series of agreed upon metrics (the heuristics) (Nielsen, 1994). Because of the varying needs of software and website designers, how much usability testing gets done is contingent on a whole host of factors. However, the sooner the iterative user experience process is brought into the design cycle, generally speaking, the more usable it is. While usability design is something utilized with technology, it can also be applied to libraries in terms of using personas or heuristics when a new website is designed, or there is discussion of rearranging furniture, or an evaluation of how patrons interact with people at the reference desk.

While personas can go a long way in helping non-disabled web developers and others create some level of accessibility in whatever it is they are creating, it is far better for those developers to have a working knowledge of accessibility guidelines and to include people with disabilities in the testing phases of their end product, whether that is a website or a room layout. Web Accessibility In Mind (WebAIM) is an organization that works to create greater awareness around accessibility of the internet for people with disabilities. They rightly point out that, “Most accessibility errors on web sites are the result of a lack of awareness, rather than malice or apathy” (Web Accessibility In Mind, “Introduction,” 2016). This lack of awareness is often because leadership of an organization doesn’t make accessibility a high priority (Web Accessibility In Mind, “Introduction,” 2016). While awareness around accessibility will help create more usable web interfaces, rooms, services, etcetera, the best method for anyone looking to create more accessibility is to do usability testing with people who have disabilities (Web Accessibility In Mind, “Rocket”, 2011).

Hill’s research also bears this out and that of the research articles (n=70) in her study on library and information sciences literature, only 36% included participation from people with disabilities, a clear indication that libraries don’t solicit feedback from the functionally diverse nearly as often as we should (Hill, 2017).

We also need to consider the fact that while we would like to have a one size fits all approach to making things accessible, this simply isn’t true. Freeman accurately points out that, “One student’s accessibility needs will not match another’s – not exactly. So supporting all student’s accessibility needs will cost money if the right services (and the people to carry out those services) are to be provided” (2015). Public institutions have clung to the belief that ADA compliance means true accessibility. As Freeman discusses, this is not true because each condition, even if it is the same condition, doesn’t affect people in the same ways. In a recent focus group study, one participant with PTSD mentioned that they struggled with seeing uniformed security patrolling the library while another person with PTSD commented later that their issues had nothing to do with uniforms at all (Pionke, 2015). Both people have the same condition but their experiences of that condition and what triggers it are totally different.

To accommodate both of their needs, two very different approaches would have to be taken in the library. By no means a panacea, a potential partial solution is to create services that are malleable in nature and can adapt to the patron rather than having the patron adapt to the situation. This is a proactive rather than reactive approach.

As such, a specialized training where the librarian doesn’t necessarily use their skills in information finding but instead acts as the eyes for a person who is blind or the ears for a person who is deaf, could be highly beneficial to the functionally diverse because the service would act as a support structure for the functionally diverse to find what they are looking for. While most functionally diverse people want to navigate the world on their own terms, the reality is that our spaces, websites, and databases haven’t been adequately made for them yet. Having an assistant who understands accessibility and information needs to speed up the lengthy process of information finding, because the lack of accessibility is getting in the way of timely information retrieval, will go a long way to assist the functionally diverse. Assistance, however, isn’t the only thing that we should consider as librarians.

A major recurring issue is the lack of training on not only assistive technologies but also on how to interact with the functionally diverse in a non-offensive and helpful way. There is no singular training program that will ever address all of the information that is needed when helping the functionally diverse. Many programs, whether small or large, focus on creating an awareness of disability and accessibility as well as providing resources on how to handle issues surrounding making a space or service more inclusive. Project ENABLE, developed at Syracuse University, is an online training tool designed to allow for as needed training in regards to disability and accessibility (Project ENABLE, 2015). Utilizing a “just in time” training model may be the best methodology for ensuring that librarians are adequately prepared. To that end, various videos and training modules about assistive technologies that are aggregated into one place for easy reference is a definite and even easy recommendation to make. The second, and harder, part of training involves educating librarians about the points of view of the functionally diverse. While activities like being blindfolded and walking around the library while “blinded” are well known and problematic, less attention is paid to the functionally diverse who have mental, emotional, cognitive, or learning disabilities. A program like Mental Health First Aid, while being an investment in time, is also useful in that it teaches lay people, who have no mental health training, to be able to realistically assist, in a variety of ways, people who have a mental disability. In their own words, “Mental Health First Aid is an 8-hour course that teaches you how to help someone who is developing a mental health problem or experiencing a mental health crisis. The training helps you identify, understand, and respond to
signs of mental illnesses and substance use disorders” (Mental Health First Aid). In short, a greater awareness of the issues that the functionally diverse face can significantly positively affect the outcomes of how librarians interact with this segment of the population. Said a different way, librarians often put a lot of effort into understanding other cultures and ethnicities. It’s far past time for us to put that effort into understanding a hidden in plain sight population: the functionally diverse.

CONCLUSION

While libraries and librarians have always been deeply concerned about the populations that we serve, and the stories of extraordinary outreach efforts to patrons is voluminous, we have fallen short of assisting patrons who are on the very margins of our society; the functionally diverse. The American with Disabilities Act was a major piece of legislation that sought to create a greater level of equality for the functionally diverse but because of societal views of disability, libraries can do better. By doing greater training and education surrounding the use of universal design principles, libraries can do better. Through the use of universal design principles, innovative and scalable outreach, as well as greater training and education surrounding disability, libraries can do better. By doing better, we will continue to hold our place as a center within our communities and for all the people in them.


ABOUT THE AUTHOR: JJ Pionke is the Applied Health Sciences Librarian and an Assistant Professor at University of Illinois at Urbana-Champaign.

REFERENCES:


Embry, D. (2015, April 7). The demise of the mental health system is not the result of SAMSHA [Blog post].


Increasing Online Discoverability of a Mixed-Format Collection

BY LESLEY PARILLA

THE COLLECTION

In 2004, Smithsonian Libraries acquired the mixed-format Russell E. Train Africana Collection for its special collections division. This collection contained items that had broad public appeal and significant historical value. The collection’s diversity of materials has been a source of excitement and challenge since Smithsonian Libraries acquired it in 2004. Judge Russell E. Train created the collection around his decades-long fascination with the history of exploration and wildlife in Africa.

Train acquired materials from historic figures like Theodore Roosevelt during his African Expedition in 1909–1910, as well as explorers David Livingstone and Henry Morton Stanley. The collection includes documents, photographs, and personal items from more recent figures, like Ernest Hemingway, when he was on safari during the 1950s.

Questions arose concerning how to best describe the content and make that description discoverable to as wide an audience as possible, while still adhering to library and archival standards. Books in the collection were simple to address, as they could be cataloged following the existing rare books workflow. However, the nontraditional library content, including manuscripts, photographs, original artwork, posters, maps, and ephemera, presented additional questions.

The collection creator, Russell E. Train, had supplied a detailed inventory of these materials in a text document along with the collection. The Smithsonian Libraries wanted to make these descriptions in the inventory widely available and to supplement, expand, and—if necessary—reformat them to increase their utility for researchers. In the spring of 2015, Smithsonian Libraries decided to pursue a short-term project to make the description available, while taking into consideration interoperability with the publishing platforms, both internal and external, to which the library had access.

Through this process, staff dealt with questions relating to the needs unique to digital content, challenges of data reuse, and descriptive standards.

The libraries initially looked at two options: create records for each item or a finding aid for the collection. Records for each item would take advantage of the wide range of online catalogs to which Smithsonian Libraries contributes, like Biodiversity Heritage Library and Digital Public Library of America. Smithsonian’s Office of the Chief Information Officer started providing support to institutional departments and divisions that wish to use Encoded Archival Description (EAD), the archival profession’s standard descriptive schema. This support made a finding aid more plausible and more appealing. An online finding aid would enable users to search the Train Collection alongside other Smithsonian archival collections, as well as show collection- and item-level relationships more clearly.

Over the course of the project, Smithsonian Libraries created 500 item-level MARC records and an online EAD finding aid. For many libraries, this would be potentially problematic. Item-level records offer more information than a box list in a finding aid, so why risk confusing users by essentially offering duplicate records in two schemas (item-level MARC records and an EAD finding aid)?

“CROSSWALKING” EAD AND MARC

Special collections and archives have recognized the increasing need to reach audiences beyond the traditional “silos” of library and archive platforms. Since the early 2000s, there has been work conducted, like Katherine M. Wisser and Jennifer O’Brien Roper’s project in 2003 at North Carolina State University Libraries, to crosswalk from EAD to MARC. Since then, there have been articles discussing in greater depth how to bridge multiple schemas, as well as repurposing and reusing existing description. This idea of reusing description or metadata has now become part of the data curation con-
By this time there were significant developments in the online environment. These complicated the discussion about how to best make these materials discoverable. Several online platforms such as Internet Archive, Digital Public Library of America, and Biodiversity Heritage Library to which Smithsonian Libraries now contribute did not exist or were in their infancy. Online catalogs that aggregate EAD finding aids were still in development. When the collection was acquired, reference requests were usually directed to Special Collections staff, so the detailed inventory from the collection creator was often sufficient to answer questions.

As digitization increases and online platforms multiply, researchers may end up never interacting with special collections staff for access. The inventory met basic needs for searching the physical materials, but the special collections staff is no longer dealing with just the physical object. Some of the collection materials have been digitized and are available online; more will be digitized. Additionally, the digital object is not constrained in the same way as the physical object. The physical materials reside in a special collections library, but the digitized versions would make sense in online platforms containing materials from libraries, archives, or museums. Smithsonian Libraries wanted to create records to address the needs of both the physical and the digital materials.

The materials in question could be described in several different descriptive schema based on their physical location (in a library) and the nature of their content (original materials). The libraries decided that the greatest priority was to make the description available in as many places as possible. User confusion could be
kept to a minimum as long as staff used best practices for record creation whenever possible. The project coordinator would work with staff from the Smithsonian Online Virtual Archive and the cataloging staff to determine what descriptive standards would be used. The resulting item records would meet two needs: items could be found online and provide ready-made metadata for digitization. The finding aid would display the hierarchical relationship between materials and the collection context.

So how did Smithsonian Libraries decide on MARC and EAD?

EAD is clearly the standard for archival collections, but there are numerous standards that could be used for item-level records, especially if the records are to be used as metadata. Given the variety of formats, Dublin Core, a schema designed to be “broad and generic... for describing a wide range of resources” would surely be the most logical choice. These questions springboard into additional queries complicated by differences in archive and library description methods.

Smithsonian Libraries looked at the current organization and determined that the existing structure in the Access database was sufficient. Following this line of reasoning, project staff determined to make decisions that would make the best use of existing description and structure. The existing structure fit better with MARC than Dublin Core, since the Special Collections cataloger at one point had augmented some records with subject headings and other MARC-based description. It also meant records would be in the department’s preferred schema (MARC). Existing item description was robust. Staff thought about splitting apart collection “items” that might normally be cataloged separately. Project staff determined the priority was to make the most of existing description to make materials discoverable and would not use limited staff time to reorganize the collection to meet a standard cataloging definition of “item.”

**THE PROJECT**

The Smithsonian Libraries started the three-month project with a team that included members of the cataloging department, digital services, special collections, and a project coordinator who worked on another Smithsonian project between the Institution Archives and the Libraries. This team investigated how to best use the existing description in the Access database created by the Access Database from the collection inventory. This involved looking at what standards to use, where to contribute, and how to make the records sustainable, that is, how to take into account that some online publishing platforms would require manual updating of the records if they were changed in the future. This last concern was particularly important because the Smithsonian Libraries are very active in contributing to online consortia. If content was contributed to one location, it would be automatically uploaded to additional sites over which the Libraries had little editing control.

Due to the range of possible solutions, the project coordinator also worked with the staff at OCLC, the Smithsonian Libraries DAMS coordinator, and the Office of the Chief Information Officer, to name just a few. To inform these decisions, the project team compared the existing description to online catalog requirements, what standards they wanted to meet (library and archival) and how much editing would be needed; what online locations would be both desirable in terms of reaching new audiences and sustainable in requiring minimal future editing; and how to fit this work into existing workflows so that records would be used by staff and easily maintained after the project was finished.

**ACCESSING ONLINE LOCATIONS IN LIGHT OF THE DIGITAL ITEM**

The first step in this cataloging project was to select ideal platforms where the new collection records would be made available. Staff determined that there were three ideal destinations for records: the institutionwide online catalog Collections Search Center (CSC); the Smithsonian Libraries online catalog Smithsonian Institution Research Information System (SIRIS); and Smithsonian’s Online Virtual Archive (SOVA). To determine the costs and benefits of each, the project team assessed current workflows as well as what changes and additional time would be necessary to bring a set of records to each platform. This process proved illuminating in terms of understanding that many staff would be needed to contribute and maintain records in each location unless the work was carefully structured to use as much machine effort and as little staff effort as possible.

The project team determined that the following principles would guide the creation of new records and workflows for online publication:

- Creating “new” records would be defined as transforming existing item-level descriptions into currently used library and archive standards (such as RDA, EAD, and MARC)
- When creating records, existing item descriptions would be used without significant edits to save time
- Current department workflows should be used for creating and uploading records when possible—records would therefore reside in expected locations, and future edits, corrections, or additions could follow current workflows
- Assign structures and data fields to the records so that they are searchable in a way that will make sense to researchers and to the library staff that assist them
- Ensure that all the records for the entire collection are available and searchable in one place, and/or are collocated within each online platform
- If possible, the resulting description would be used to make archival portions of the collection available alongside other archive collections at Smithsonian through contribution to Smithsonian’s Online Virtual Archive (SOVA)

Of the three ideal publication platforms identified, the easiest to use was the Smithsonian Collections Search Center (CSC).
had no identified creator. biographical notes, while other materials standard, such as library standard AACR2 did not appear to meet one descriptive purchased or combined by Train. Content small groupings of materials that were described in the database were sometimes like “folders” in archival terms. The “items” item ideally receives its own record; however, “items” in this collection were more varied. In terms of library cataloging, each record—an exceedingly appealing possibility for the research user community.

REUSING THE DESCRIPTION

The project team felt that, for this collection, item-level records in MARC could be created using the content provided by the collector. The descriptions provided by the collector were very detailed and already loaded into a database, which would make reuse and transformation much faster. All the collection holdings could then be searchable at the “item” level together in the online catalog—an exceedingly appealing possibility for the research user community.

However, the database content did pose some challenges. The meaning of “item” varied. In terms of library cataloging, each item ideally receives its own record; however, “items” in this collection were more like “folders” in archival terms. The “items” described in the database were sometimes small groupings of materials that were purchased or combined by Train. Content did not appear to meet one descriptive standard, such as library standard AACR2 or archives standard DACS. Description varied. Some items included abstracts and biographical notes, while other materials had no identified creator.

To use the database, library staff decided to use the existing level of description; “item level” would essentially mean “folder level.” Whatever grouping level Train maintained would be the level of description. This would free up staff time to focus on the greater goal of the project—getting these records to the public via an online discovery platform. This also worked well toward the goal of creating a full finding aid. Since the project would be using the folder level as item level, item-level records could be transformed into a box list for the finding aid.

Project staff then focused on accessing the content and quality of the existing description. They determined which parts of the database content correlated with MARC fields. They also looked at records already created by the special collections cataloger for archival items in the collection, and mapped out how the database descriptions would be used to create minimal MARC records.

DESCRIPTIVE STANDARDS

Two ideas guided many of the decisions made in terms of record editing. First, as these records are unique, there is little chance that they will be copied. For this reason, staff focused on only editing or adding content if it affected the searchability and accessibility of the record. Second, these would be MARC records, but they would not be entirely DACS, AACR2, or RDA compliant. Changes focused on clarifying description by removing abbreviations and terms specific to rare books. This was also done in the spirit of RDA, which often focuses on spelling out terms and transcribing what is on the item. Text in title and summary was largely left unchanged. Special care was given to standardize access points like creator, related names, and subject headings to comply with the International Standard Bibliographic Description (ISBD). Subject headings taken from the collection record were added to all item-level records. Since there are so many different formats, staff standardized format description with the Getty Research Institute’s Art & Architecture Thesaurus. Changes were made to maximize searchability alongside other records, using carefully chosen professional standards.

THE RESULTS

The project was able to create 500 item-level MARC records and a finding aid in three months by working with staff who had expertise in library and archival description, with a goal of adapting existing description. These records also go well beyond minimum descriptive standards. The MARC records have been well received by the special collections department and the finding aid has received compliments from across the units. These records have already enabled staff to make digital content more widely available. These include not only fully digitized versions of materials, but also images originally taken for conservation purposes that are now available on the finding aid in the Smithsonian Online Virtual Archive.

Records also meet the other characteristics deemed necessary by the project team. Because staff used the prevailing cataloging standard for which existing workflows were designed, they benefited from Smithsonian Libraries’ relationships with online platforms and the increasing institutional support of EAD. Because the records were created in MARC, the Train archival collection item-level records are now part of the regular cataloging department workflow for any future edits and contributions. Staff will be able to quickly meet any digitization requests for the unique materials, because MARC records already exist for needed metadata. The entire process has been fully documented and can be edited to convert
and contribute other nontraditional materials in library holdings.

Though records were not cataloged to the standards of the rare books workflow, they do provide a strong alternative to standard cataloging for special collections. The archival community has developed the approach of “more product, less process,” for processing collections. Who is to say that the expedited approach can’t be applied to other library activities, such as more granular (series- and item-level) record creation? The goal is to make materials discoverable through the judicious use of staff time and expertise. Many libraries already have some type of description that accompanies new collections for inventory purposes. These documents can provide a framework for item-level record creation for both internal and external (online) use. Once the collection has basic item records in a familiar format like MARC, it can become even easier for catalogers to strategize which records are deserving of additional descriptive work. Abbreviated item records also gain powerful meaning when they enable digitization and are published online alongside digitized materials. When researchers can see the resources for themselves and verify the content, the possible downsides of abbreviated item description may prove negligible.

LESSONS LEARNED

With so many possibilities, it is easy to forget that the technology and systems are tools. They should not overshadow the project goals. Our goals were to make the most of existing description in a way that can be easily managed in the long term, as well as take full advantage of existing workflows and institutional relationships for record distribution. We selected schema and descriptive standards for their longevity and adaptability with Smithsonian Libraries’ current systems.

MARC may seem problematic because of its wealth of standards and requirements. However, these can be treated as guidelines and best practices. It is important to determine what is “good enough”; description that is sufficient to ensure staff can find and identify materials and that researchers have enough description to determine if materials may be pertinent to their research. By focusing on what makes the items unique, and their access points, we were able to make the most of staff time when editing.

The catalogers on our project team took on the important role of subject matter experts, able to advise what was necessary in the records, what description had to be standardized, and what could be left alone. This allowed a cataloger whose primary background is not in MARC to complete much of the cataloging work and optimize the Special Collections Cataloger’s time on the project.

If a library decides to pursue data reuse for records in multiple schemas, the library must be aware of which description is primary. Staff will not have time to update both if there are changes in the future. Because we are, by definition, a library, and our staff and researchers default to our MARC records, we created the primary description in MARC. Since we do not anticipate substantial content changes, we can embrace the opportunity to make description available in EAD, which only creates more connections and access points to the materials. Archives have embraced EAD as a way to finally make available archival collections in a manner that is searchable online and represents an item’s context. Libraries with nontraditional materials and archival collections like the Train Africana Collection can significantly benefit by participating in EAD’s growth. Repurposing MARC records makes that possible in the face of staff and budgetary constraints.

The process was helpful in other ways. Library staff is now more familiar with archival description through EAD with the guidance of Smithsonian Online Virtual Archive (SOVA) staff. Cataloging staff were able to edit and fill out descriptions more easily when the information was put in a format they are used to (like MARC). Finally, this process of targeting the type of editing done to record description is now informing other Special Collections cataloging projects in the works.

“Increasing Online Discoverability of a Mixed-Format Collection” by Lesley Parilla, first published in the spring of 2016 issue of RBJ: A Journal of Rare Books, Manuscripts, and Cultural Heritage (the “Work”).

ABOUT THE AUTHOR: Lesley Parilla holds the title of Cataloger, Discovery Services for the Smithsonian Libraries.

FOOTNOTES:

Developing and Implementing an Onboarding Program for an Academic Library

BY LORI SNYDER AND ERIN CRANE

Rapid growth in enrollment and the planned opening of a new, free-standing library building resulted in a large influx of new employees at the Jerry Falwell Library in summer 2013. As a result, the library administration wished to implement an onboarding program to ease the transition for both existing employees, who would have a large group of people to get to know, and new employees, who would need to learn the organization and their duties quickly. With a three-person steering committee reporting directly to the dean of the library, the New Employee WIFI Connector Program was born. This article chronicles its development and implementation.

RELEVANT LITERATURE
The concepts and benefits of onboarding, organizational socialization, and acclimatization are well documented in the human resources literature. Tang defines organizational socialization as “the process by which newcomers acquire the attitudes, behaviors, and knowledge needed to make the transition from being outsiders to becoming effective members of an organization.”1 Tang found in a retail setting that proactive socialization fosters in newcomers “a sense of role clarity and positive career attitudes, which further facilitate[s] commitment to the organization and reduce[s] employee turnover.”2 The following authors also note that providing onboarding in the workplace is important as it contributes toward employee satisfaction which can then positively impact employee retention. Korte and Lin found that “newcomers who remained unsure of their position indicated higher levels of disappointment and anxiety because of feelings of isolation or neglect”3 and “that relationships have a huge influence on what they can do (performance) and how they feel (satisfaction) toward the organization.”4 Allen and Shanock discovered that socialization “tactics that provide more content and more social interaction are related to subsequent embeddedness [in the organization].”5

Within library science literature, onboarding is not well documented. While mentoring or orientation programs are often covered,6 an organizational socialization process is not. Some exceptions include a study documenting best practices for onboarding but the authors note that “the library literature has limited information regarding onboarding best practices.”7 The authors also state that “only one institution (6 percent) discusses either politics or language with new employees.”8 Another exception is Chapman who notes the importance of the socialization process in her review of the literature concerning onboarding. Chapman states that “it is the aspect of socialization that ensures that [the newcomers] will begin to feel part of the organization” and that “acceptance of the new employee from supervisors and co-workers . . . is crucial to whether or not that person will fit in and stay with the organization.”9 Other articles reiterate this need for socialization based on human resources literature,10 but there is no library science literature concerning the implementation of such an onboarding program. The focus in library science literature is less on onboarding and more on acquiring necessary job skills or navigating the tenure process.
One close example that does exist in library science literature is from Ballard and Blessing at North Carolina State University Libraries. They describe an orientation program that was updated specifically in response to the socialization literature in human resources. Their program includes orientation, checklists, and meetings with key co-workers. The emphasis is on the core values and mission of the library in order to facilitate socialization rather than solely on day-to-day functions. They are also “developing a new program in which each new staff member will be paired with an ‘orientation partner’ outside his or her assigned department.” This partner will informally meet with the new employee to discuss any concerns in a more comfortable environment. However, no literature yet exists in which a library implements an onboarding program that includes familiarizing the new employee with the institutional politics, language, and unspoken rules.

BACKGROUND
Founded in 1971, Liberty University is a fully-accredited non-profit liberal arts institution with 450 programs of study, offering degrees from the associate to doctorate level. The university remains grounded in its foundation as an evangelical Christian institution and has experienced rapid growth over the last decade. Enrollment at the university is approximately 100,000 students, the largest percentage of whom take classes online. Current residential enrollment is over 13,500 students and is expected to continue to grow. The Jerry Falwell Library plays a fundamental role in the academic, cultural, and social life of Liberty University. The library’s materials and services are available to all enrolled students as well as to faculty, staff, and the community.

FORMATION AND IMPLEMENTATION
In summer 2013, the Jerry Falwell Library was preparing to move to a new library three times larger than the previous facility. Subsequently, over twenty new positions were approved by the university to support new and expanded services. With the arrival of this large group of new employees, the dean formed a committee to develop an onboarding approach intended to help with acclimation to the library and university culture. A pilot for the New Employee WIFI Connector Program began in fall 2013. The pilot offered opportunities for learning best practices and the program continues today in a modified format.

Upon initial implementation of the New Employee WIFI Connector Program, the stated purpose was to help new employees more quickly acclimate to the library and Liberty University. This purpose was fulfilled by providing institutional history and cultural knowledge; lessening initial uncertainty with regard to policies, procedures, and expected activities; addressing basic questions about the library and/or the university; providing a connection outside of the new employee’s department; and making the workplace friendlier. New employees were matched with a veteran employee, called a connector, who was selected based on his or her experience and personality. The steering committee matched new employees with connectors from a different division of the library. These match criteria were based on the belief that it is beneficial for participants to see a different side of the organization and to get to know someone who is not connected to their normal workflows.

The New Employee WIFI Connector Program was so named as a tie-in to the library’s customer service initiative: WIFI (Welcoming, Informative, Fast, Impressive). Because the connector program is considered to be a component of internal customer service, the steering committee felt that the tie between the two would help connectors remember that they are performing internal customer service and facilitate new employees understanding of the library service model. In the pilot year of the program, connections were made for the entire academic year with the veteran employee and new employee meeting once a week for the first month and monthly thereafter. Surveys were conducted at the one-month and six-month points to evaluate the success of the program.

SUCCESSES AND FAILURES
Overall, the library administration deemed the program a success in terms of acclimating new employees to the library and university culture. Determining the success of the program regarding retention was more difficult. Retention figures from previous years were not readily accessible for comparison purposes. The steering committee decided to use the pilot program year as a benchmark for measuring future years. The overall retention rate for new hires was 88%. Further investigation showed that retention of benefitted new employees was 100%, but non-benefitted employees were retained at a rate of 81%. This difference offers an opportunity for more research to determine if the reason for the difference is benefit status.

Initial, one-month surveys were distributed to participants in October 2013 and had a return rate of 42% for new employees and 69% for connectors. These surveys were
Onboarding programs of three months or less with new employees matched to a same gender veteran employee in a different department would be possible at even the smallest libraries. In cases where the library is made up of one or two people, the connector could come from outside the library.

Survey results were mixed when rating the matching criteria. Respondents were asked to rank the following criteria from one to three, with one being most important:

- Same age
- Same area of the library (public/technical)
- Same employment category (staff/faculty)

The results differed slightly between the connectors and new employees. Connectors ranked the same area of service highest while new employees ranked the same category of employment the highest. In both cases, the same age was lowest in importance. Several new employees added comments to this section indicating that they provided the ranking as requested but did not see any of these as being particularly important to the success of their connector matches. One such participant said, “I actually think that it is good to have differences in each of these areas because it gives a broader perspective of the library.” Taking all rankings and comments into consideration, the steering committee decided to not change matching criteria.

A few of the survey questions were unique to the connectors. These addressed the most important resource the steering committee could offer to connectors, the maximum number of new employee connections they could handle, and whether or not they would be willing to serve again. The steering committee was most interested in how it could better support the connectors. The results revealed that the most important resource was the provision of funds for taking the new employee to coffee or lunch while the second most important involved providing goal sheets or talking points for the meetings. As a result of these responses, the steering committee requested funding and created helpful talking point sheets for the connectors. In addition, the steering committee began to hold connector meetings to pass along helpful information and to provide an on-going means for gathering feedback.

After the conclusion of the pilot program, the organization and succession plan for the steering committee was altered. The initial committee had been established for the purpose of the pilot program and was intended to last for its duration. Once the program was deemed successful and planned for continu-
the library in order to foster commitment, acceptance, and growth.


ABOUT THE AUTHORS: Lori Snyder (lsnyder9@hmc.psu.edu) is Collection Management and Digital Resource Management Librarian at the George T. Harrell Health Sciences Library, Penn State College of Medicine. Erin Crane (ecrane@germanna.edu) is E-Resources and Instruction Librarian at Germanna Community College.

REFERENCES:


FOOTNOTES:
14. Ibid.
Strategic Library™ focuses on innovation, best practices, and emerging trends in the complex and rapidly evolving library landscape.

Published monthly, Strategic Library assists administrators and managers in all types of libraries as they deal with day-to-day and strategic challenges. In-depth articles, written by highly regarded professionals in the field, focus on leadership, management, evaluation, assessment, marketing, funding, and more to promote organizational success.

Strategic Library™ is delivered direct to your desktop, as a digital download.

Special Charter Subscriber Offer!
Yes! Please enter my subscription to Strategic Library at the special charter subscriber rate of $99 for one year (12 issues), a $60 savings, or $299 for a site license (save $200).

Pay Online
Subscription Options
Single Subscriber $99.00 USD

Pay by Mail
Please complete and mail this form to:
LibraryWorks, Inc.
7823 Stratford Rd, Bethesda, MD 20814

(Make check payable to LibraryWorks, Inc.)

FIRST NAME: ________________________________ LAST NAME: ________________________________
TITLE: ________________________________ ORGANIZATION: ________________________________
CITY: ________________________________ STATE: ________________________________ ZIP/POSTAL CODE: __________
PHONE: ________________________________ E-MAIL ADDRESS: ________________________________

Bill Me
FIRST NAME: ________________________________ LAST NAME: ________________________________
TITLE: ________________________________ ORGANIZATION: ________________________________
CITY: ________________________________ STATE: ________________________________ ZIP/POSTAL CODE: __________
PHONE: ________________________________ E-MAIL ADDRESS: ________________________________
PO # (IF APPLICABLE): ________________________________

Thank you! Your subscription will begin upon receipt of your payment.

Jennifer Newman
PUBLISHER
jenny@libraryworks.com
240.354.1281

© 2017 LibraryWorks, Inc. All rights reserved. www.LibraryWorks.com
info@LibraryWorks.com 240.354.1281