2017

Beyond ADA Compliance: The Library as a Place for All

JJ Pionke
University of Illinois at Urbana-Champaign

Beyond ADA Compliance: The Library as a Place for All
JJ Pionke

Abstract

In 2015, the American with Disabilities Act (ADA) celebrated its 25th anniversary. While libraries have instituted ADA compliance initiatives since the law came into effect in 1990, and new libraries are generally designed with compliance in mind, to be truly accessible for all people, libraries must incorporate principles of universal design not just into the physical building but into all aspects of the library, including our web presence and the services we provide to patrons. This paper argues that libraries are falling far short of true accessibility and that there needs to be a serious mental shift in how we think about access to our services and spaces. A potential tool for this shift lies in incorporating universal design into all aspects of libraries.

Keywords: disability, universal design, accessibility, disability theory, social justice

Bio: JJ Pionke is the Applied Health Sciences Librarian and an Assistant Professor at University of Illinois at Urbana-Champaign. Their work focuses on disability and accessibility in the library, for which they are a vociferous advocate. In their spare time they ride their motorcycle and play with their two Maine Coon cats.

Introduction

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; DeLancey, 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 underserving. 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 prosthetic 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 to 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 regrettably 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 proteus 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.

Ontologies 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 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 impassible" (Eparent.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 predominate.

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 non-verbal, 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 insure 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 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 those who are different, the law has been relatively unenforced. Libraries are on the forefront of social change and we can apply to those principles of social change and social justice as we design our spaces and services for the functionally diverse. 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.

References

Barton, L. (2004). The disability movement: Some observations. In J. Swain, S. French, C. Barnes, & C. Thomas (Eds.), *Disabling Barriers – Enabling Environments* (pp. 285-290) 2ⁿᵈ Ed. London: Safe.

Brown, S.E. (2000). *Freedom of movement: Independent living history and philosophy.* Houston, TX.: ILRU bookshelf series.

Buckley, D. (Producer). (2015). *Daredevil.* [Television series]. New York, NY: ABC Studios.

Cooper, M., Sloan, D., Kelly, B., & Lewthwaite, S. (2012). A challenge to web accessibility metrics and guidelines: Putting people and processes first. *In W4A 2012: 9ᵗʰ International Cross-Disciplinary Conference on Web Accessibility.* Lyon, France.

Copeland, C.A. (2011). Library and information center accessibility: The differently-able patron's perspective. *Technical Services Quarterly*, 28(2), 223-241.

DeLancy, L. (2015). Assessing the accuracy of vendor-supplied accessibility documentation. *Library Hi Tech*, 22(1), 103-113.

Dunn, D.S. & Andrews, E. E. (2015). Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *American Psychologist*, 70(3), 255-264.

Embry, D. (2015, April 7). The demise of the mental health system is not the result of SAMSHA [Blog post]. Retrieved from http://www.cmhnetwork.org/media-center/morning-zen/the-demise-of-the-mental-health-system-is-not-the-result-of-samsha

Freeman, D. (2015). Ableism and the academy: What college has taught me about my disabled body. *In ModelViewCulture.com*, 28.

Genetics Home Reference. (2012). Proteus Syndrome. Retrieved from http://ghr.nlm.nih.gov/condition/proteus-syndrome

Gervasio, D., Ecklund, A., & Ress, A. (2013). Library research for the 99%: Reaching out to the Occupy Wall Street Movement. *Urban Library Journal, 19*(1), 1-6. http://ojs.gc.cuny.edu/index.php/urbanlibrary/article/view/1398

Graham, P.W. & Oehlschlaeger, F.H. (1992). *Articulating the Elephant Man: Joseph Merrick and his interpreters*. Baltimore, Md: Johns Hopkins University Press.

Harihareswara, S. (2015). User experience is a social justice issue. *Code4lib*, (28). http://journal.code4lib.org/articles/10482

Harris, M.H. (1984). *History of libraries in the western world.* Metuchen, NJ: Scarecrow Press.

Hill, H. (2013). Disability and accessibility in the library and information science literature: A content analysis. *Library & Information Science Research*, 35, 137-142.

Horton, S. & Quesenbery, W. (2013). *A Web for everyone: Designing accessible user experiences*. Brooklyn, NY: Rosenfeld Media.

Hughes, A., & Hughes, A. (2001). *From Hell* [Motion Picture]. United States: Twentieth Century Fox.

The impact of the ADA, 21 years later: June 26 marks the anniversary of the ADA's passage. (2011). *Exceptional Parent*, 41(8), 20-21.

Imrie, R. (2004). From universal to inclusive design in the built environment. In J. Swain, S. French, C. Barnes, & C. Thomas (Eds.), *Disabling barriers – Enabling environments* (pp. 279-284) 2nd Ed. London: Safe.

Joseph Merrick. (2016) *Encyclopedia of World Biography* (vol. 36). *Biography in Context*. Retrieved from ic.galegroup.com/ic/bic1/BiographiesDetailsPage/BiographiesDetailsWindow? disableHighlighting=false&displayGroupName=Biographies&currPage=&scanId=&query=&prodId=BIC1&search_within_results=&p=BIC1&mode=view&catId=&limiter=&displayquery=&displayGroups=&contentModules=&actio

n=e&sortBy=&documentId=GALE%7CK1631010502&windowstate=normal&
activityType=&failOverType=&commentary=&source=Bookmark&u=uiuc_uc
&jsid=6f9cab4e8a502f56820dbb0c1fb2f0ab.

Kelvey, J. (2015). The blind deserve tech support, too. Slate.com. Retrieved from
http://www.slate.com/articles/technology/future_tense/2015/10/tech_companie
s_should_care_more_about_customers_with_disabilities.html

Mental Health First Aid. (2013). About. Retrieved from
http://www.mentalhealthfirstaid.org/cs/about/

Murray, J.S. (2009). Library psychiatry: Is there a place for the mentally ill in your
law library? *AALL Spectrum*, 14(2), 10-13.
http://www.aallnet.org/mm/Publications/spectrum/archives/Vol-14/No-2/pub-
sp0911-psych.pdf

Nielsen, J. (1994). Heuristic evaluation. In J. Nielsen, & R. L. Mack, (Eds.),
Usability inspection methods (25-62). New York, NY: John Wiley & Sons.

Null, R. (2014). *Universal design: Principles and models*. Boca Raton: CRC Press.

Oliver, M. (2004). If I had a hammer: The social model in action. In J. Swain, S.
French, C. Barnes, & C. Thomas (Eds.), *Disabling barriers – Enabling
environments* (pp. 7-12) 2nd Ed. London: Safe.

Palacios, A. & Romañach, J. (2007). "Diversity approach: a new view on bioethics
from the functionally diverse (disabled) people." Available from
http://diversocracia.org/docs/Diversity_approach_overview.doc

Pelka, F. (2012). *What we have done: An oral history of the disability rights
movement*. Amherst, MA.: University of Massachusetts Press.

Pionke, J. (2015). [Unpublished data set].

Prizeman, O. (2013). Function and decoration, tradition and invention: Carnegie
libraries and their architectural messages. *Library & Information History*,
29(4), 239-257.

Project ENABLE. (2015). About us. Retrieved from http://projectenable.syr.edu/Our-
Vision

Reisch, M. (2014). *Routledge international handbook of social justice*. London:
Routledge.

Scheimann, A. (1994). *ADA compliance: What are we doing?* [Unpublished master thesis]. Kent State University, Kent, Ohio.

Steinfeld, E. & Maisel, J.L. (2012). *Universal design: Creating inclusive environments*. Hoboken, N.J.: John Wiley and Sons, Inc.

Web Accessibility In Mind. (2016). Introduction to web accessibility. Retrieved from http://webaim.org/intro/

Web Accessibility in Mind. (2011). Rocket surgery and accessibility user testing. Retrieved from http://webaim.org/blog/accessibility-user-testing/

Whiteman, H. (2015, January 6). "Who is 'Blade Runner' Oscar Pistorius?" *CNN*. Retrieved from http://www.cnn.com/2015/01/06/world/oscar-pistorius-blade-runner-profile/

World Health Organization. (2014). Disability and health (fact sheet no. 352). Retrieved from http://www.who.int/mediacentre/factsheets/fs352/en/

Yoon, K., Hulscher, L., & Dols, R. (2016). Accessibility and diversity in library and information science: Inclusive information architecture for library websites. *The Library Quarterly,* 86(2), 213-229.