

Building a Digital Accessibility Service Model

So first we have Jonathan McGlone. He's worked at the intersections of academic libraries, digital publishing, design, and the web since 2007 as a front end developer and senior associate librarian at the University of Michigan library. Jonathan's primary work involves front end web development, user interface design, usability, and accessibility for in Michigan publishing and University of Michigan press web assets, including open access journals, he wants books, and website hosted on a variety of platforms. Most recently, he is actively involved with the development of Fulcrum, a Mellon Foundation digital open source publishing program for scholarly publishers launching in 2017.

Dr. Stephanie S. Rosen is accessibility specialist at the University of Michigan library and promotes equitable access to resources for all users regardless of ability or background. As a librarian scholar with a deep understanding of disability studies and intersections with feminist, queer, and critical case studies, they brings valuable insights into library administration and digital scholarship. She received the PhD in English from the University of Texas at Austin. While there, she served as accessibility specialist in the digital writing and research lab. This UD digital humanities lab has a long investment in accessibility, thanks to its cofounder, John Slaten. During her graduate studies, Dr. Rosen worked on various digital humanities programs and taught courses in feminist and queer studies, history of science in writing and literature at several institutions. So on behalf of all of us at Lyrisis, *, thank you for being here. Stephanie and Jon, appreciate you doing this presentation and if I still don't have hosting, I don't want to waste too much time.

Stephanie and Jon, please go ahead and begin your presentation. Thank you.

>> Stephanie: Thank you so much, Sharla. This is Stephanie speaking. And thanks for having us. Great to be here with you. I'm going to get started with our presentation, but first, I just wanted to let you know that we've reserved time at the end for your questions, but I also want to invite you to put them in the chat at any time so we can keep track as we go.

Before I dive into my introduction, do you want to just also say hello, Jon, real quick?

>> Jonathan: Hi, everyone. Happy to be here and excited to talk with you all about visual accessibility today.

>> Stephanie: Thanks, Jon. So we'll be talking about building a digital accessibility service model and telling you the story of how we did that at our library.

First I'll give you a little bit of background so you can understand the context in which we did this work. So this slide has a little bit of history of accessibility work at the University of Michigan broadly and at the library in particular. There are definitely some ways in which accessibility is well advanced at the University of Michigan, and of course, like everywhere else, there's many places where we have further to go.

Back in 1983, the Council for disability concerns was formed at the University of Michigan, so this is before the ADA, before there was an office that served students with disabilities,

and this group, which still exists, kind of took up the cause of making the campus more accessible.

During the 1980s, the Knox center for adaptive technology was founded. And that site hosts assistive and adaptive tech for users who need them. It still exists. It's based within a library building. So in addition to screen reader software and more typical tools like that, it also has voice command software and specialized equipment.

In 2007, the higher accessibility working group was developed, a community of practice group around digital accessibility. And then in 90 * * -- 2,000 teens, the library made several new hires that focused on accessibility expertise, so during that time, a lot of new staff came on. And we also had some group training around digital accessibility.

And when we had a kind of a critical mass of library employees with digital accessibility expertise, that's when they came together to form this digital accessibility team that we'll tell you about.

So the digital accessibility team consists of five members. And collectively we're based in three library divisions. And we partner with library staff to improve the accessibility of all our citizens. I'd just like to name the folks involved. We have Bridget Burke, who is based in library IT. We have Jon who is based in Michigan publishing. Myself. I'm based in learning and teaching division Ben Howell and Erin Sullivan, both based in library IT.

So if you read our job titles, you'll notice some people have accessibility in their title. Some do not. But we all have some digital accessibility expertise that we've brought to the library before we formed as a group.

And we wanted to form a group really to develop services that would best serve our colleagues to pool our expertise together and support each other in this work. And to standardize our services a little bit, because people would reach out to different colleagues and say, hey, can you look at this and tell me if it's accessible? And depending on who they reached out to, they may not find someone who's available, or they might get a different response. So we wanted to standardize that.

Our team formed in 2017, and our mission is based around three areas. The first is expertise. They want to provide expertise on digital accessibility standards that WCAG, 508, and others, and on accessible design best practices. We wanted to do evaluations for those who need them to provide consistent, understandable, and actionable web accessibility evaluations library and I staff. And we wanted to change the culture by providing consultations library and I IT staff and by creating, maintaining, and contributing to resources that promote a culture of incorporating accessibility into all development. The next, Jon will tell you about the services we developed to carry out this mission.

>> Jonathan: Yeah. When we first formed, we talked about times of services we could offer collectively with only -- with each of us only offering a small percentage of our time to the team and to the work that we would do as a collective group, and so for each service, which we'll go over and discuss shortly here, we worked through a service design blueprint and I'm not going to talk about service design blueprinting, but for folks who aren't aware of what it is, service blueprinting -- our service blueprint is a DINO Graham or map that visualizes a service offering, mapping each step in the process so you have a clear picture

of the service process from both an internal and external perspective. So internal perspective is someone on the team and external person is someone who has requested the service. And the goal is to really understand that process from the customer's perspective. And so for each service that we're going to talk about, and Stephanie, you can advance the slide, we went through this process.

So evaluations or accessibility evaluations is really the core service that we began offering to library staff, and in the blueprinting process, it became clear that we would need to be flexible with our evaluations, that not everyone that would request this service would really need or want, and we wouldn't have the time as a team to do full, you know, evaluations of every single point in the web content accessibility guideline standards. So we offer a mix of evaluations. We offer light, full, and custom evaluations. Light evaluations are really intended to take really no more than four hours, where a custom or fully value base can take anywhere from beyond four hours to eight or depending on the product or the request that came in.

We also realized that we couldn't just limit our evaluations to internal projects that we have control over, so not just websites or an complications or things that people are building internally, but we needed to be able to offer -- to reach the whole library, we needed to be able to offer evaluations of existing or potential third-party products that the library would purchase, so we do those evaluations as well.

So the way this works is that evaluations are requested through a web form. It asks the requester information about a product or service to be evaluated and their relationship with the product, the amount of chrome they have over remediating the product, their timelines, and why they're requesting the evaluation.

Our team, we get an e-mail and when the request arrives and someone on the digital accessibility team is designated to monitor these incoming requests and they coordinate who is responsible for the evaluation.

For each evaluation, two members of the team volunteer to conduct the evaluation. There's a lead and then kind of like a work checker is the second person. The lead is responsible for generating the port, insuring test pages and the scenarios we're going to test and evaluation are clear and that they'll be effective for what the requester is looking for, and also does the communicating with the requester.

So once the lead completes the request, the second team member checks their work and oftentimes we'll help with any difficult points or questions that the lead had. So the benefit of having two people do the work is that often accessibility evaluations, while there are standards and criteria that we can follow for web accessibility, oftentimes interpretation of those is subjective. So having multiple viewpoints help to tease out any issues that might not be clear in the reporting or when conducting the evaluation. So one reviewer might see issues with use of multiple heading, you know, H1 heading elements on the page, where another might interpret that totally differently. And so we can have a conversation about that, and part of it having two people do it, each time we do a review, we also learn more from each other and learn together and learn different techniques and different tools that we each use.

So after each evaluation is concluded, we do a consultation with the requester and we review the report with them and discuss next steps. And this is our chance to not only discuss issues that came up, but also teach them about web accessibility, some techniques that we maybe used in the process, as well as potentially how to remediate if they have control over that or how to follow up with a vendor in beer or third-party to share the report and information to hope that that third-party can act on that.

Go ahead and advances the slide, please, Stephanie. So yeah. I've included lots of links in here if you'd like to take a look at some of our examples. So there's temperature plates that we have that we created, a light template and a full template. I'm not going to go into too much detail with what's inside of those, but just to give you an example of how these evaluations work in the real world and to give you a scope of the type of requests that come in. For example, one review we did was looking at four or five different open source image viewers that were being used in the library of digital collections or planned to be used in library digital collections and evaluate each one for, like, their main functions of zooming, downloading the image, reading metadata about the image, et cetera. And this allowed the requesters to sort of compare accessibility of each open source tool, and they did this in preparation for a big redesign project of our library digital collection application so that they could choose an image viewer that would be most accessible for image viewing.

Other things like a third-party example here would be the lean library extension, that hopefully many of you are familiar with. A web browser extension. So this was a third-party tool that the library had contributed to use and it was going to be widely advertised to faculty and students. And normally, we like to be able to do the evaluations before the purchase, which is something we're working on. In this case, it was after the -- the tool had already been decided, but in this cases, it was a way to evaluate something that was going to be heavily used by the entire campus and promoted across the library and share that feedback back to the vendor.

Other examples that might be a web text. So this is something create completely outside of the library and the university so they create a website that was their look. Because the press tries to follow the tests they need, the standards needed to be reviewed and the team provided the service to review that and provide accessibility feedback to authors directly. And then finally the library website was redesigned. We did two evaluations, one at the beginning that found all of the issues, and even though we didn't necessarily remediate those, we knew what the problems were going into the redesign and then after the library website was redesigned, we found very few issues, and I'll talk about that later, but those that is sort of an example of this is something we had complete control of over from the library perspective, and the report becomes a living document that everyone on the library development team and design team has access to and we can comment to on and make improvements when they can do that.

Next slide. I think it's over to you, Stephanie.

>> Stephanie: Okay. So John mentioned our primary service are accessibility evaluations. Another big area of service is consultation. We do that by following up with people after

they request an evaluation and we also do it by making our team members available. And we had some success using open office hours as a format. They can be 30 to 50 minute meetings to provide ongoing support and training for project leads and teams who want to build accessibility best practices into their project or their services. Before the pandemic related shut downs, we accomplished this by going to a space and setting there for two hours, every two weeks, and we actually achieved a lot of awareness through this, because we constantly advertised in in our newsletter. The team could get together, even if no one showed up. We would work on things, and when people did show up, the conversation could go wherever it needed to. It also allowed for synergy working with teams in that same

shared workplace. Now, of course, it's different. We offer consultation with the team, appointment only, no reasonable doubt to make it most convenient to our colleagues rather than expecting them to show up at a predetermined time. So it's just different than it was before. I don't think we have quite the same level of awareness. That's true in general working remotely from each other. We try to remind people that we're available for questions big and small. Anything related to accessibility. And often those questions lead to collaborations or towards conversations that we couldn't have predicted. So we continue to offer that over Zoom.

>> Jonathan: So having -- now that you have a sense of the two sore services that we provide, having our services in action on the last few years, we've been able to help others in the library aid accessibility in their projects in various ways to educate library staff and use tools in their daily work. By being a small team of only five people and relatively autonomous, we take advantage to spread accessibility knowledge, so we wanted to share this next Section with you, three or four stories of how this plays out, has played out over the last few years. As an example of how we've create a more accessible culture at the library, one thing we've done is to make accessible tools that get used by staff every single day it's a good example of our service model in action. In this case, we were approached by library HR to review their annual performance review document in office hour consultation. They came to our office hours and we looked at the document ahead of time and met with them and talk a little bit about issues and how the document was structured and generated that were accessibility barriers.

After the review, we decided that instead of just fixing their HRs performance review document, what was also probably needed, this probably was in a situation, a oneoff situation and probably folks all over the library making documents that aren't necessarily completely accessible and shared widely. We thought instead of just fixing this one thing or waiting until consultation with someone else who is going to be widely sharing a document, what we needed to do was create a template that was accessible. We created a Google document template, and there's a link there if you'd like to take a look at it with instructions how to make the document accessible and it's sort of structure in that way. Similarly, we sort of jumped on the success of that to create a slide template, which we're using today, and this is used widely across the library now for accessible presentations and it includes things like, you know, how to -- being sure to include all text and captioning

when you have images in your slides and structures that the slide document itself in a way that could be friendly with screen reader devices.

Next slide. And I think it's to you now, Stephanie.

>> Stephanie: Yeah, this is Stephanie. So another place where we've had success is in giving feedback to vendors and getting them to improve accessibility. So our clients, the people who ask us for evaluation, are our library colleagues, so the first goal is to give them the information they need to make decisions, to make a purchase, to implement a tool. But our secondary goal is to figure out how to take our findings, communicate it back to the vendor and get change that results in a more accessible product that we, and others, can use. In order to do that successfully, we rely on the relationships that our colleagues have with the vendors. So the folks in this digital accessibility team, we're not the ones licensing E resources or serving as a product lead for a major IT tool, but our colleagues are, so we work closely with them and kind of let them lead in terms of how best to communicate in order to ultimately zoo a vendor and make some changes.

So a few examples of success in this area on the slide. The first is working with live Cal you, a product created by Spring share, created in 2018 and 2019. We evaluated their booking tool for several cofencal uses -- potential uses in the library. We found a lot of things to be improved relatively easily, and through our colleagues, we communicated that back to the vendor. The vendor was very happy to get this feedback and made a bunch of changes. So some examples, they improve the button labels within the interfaces of the tool. They improve the contrast of heading text. They fixed the focus order of some of the elements within I want face pages. They added some foreign control labels where they were missing. And they added a visual indicator where people are to focus, which was previously lacking. This is what we love to see. We found all of these issues. We knew they could be improved relatively easily. The vendor listened, cared, changed it, and very proudly reported back to us all the changes they made, so that's a real story of success.

Currently, our library is migrating to a library service platform by ex-Lilris called Alma. You may know it. Gentlemen just did a pretty in-depth evaluation of that. Our colleague at the library passed on feedback to the vendor. Although the changes haven't yet been made, we got a very positive response that they intend to incorporate those changes in the flexion cycles of work that are already underway.

So that's successful we love to see that. We've also kind of run into cases where the vendor may not be ready in terms of their own accessibility capacity, within their staff. Or they may not be ready in terms of prioritizing accessibility within their organization or their clients may not be, like, continually advocating for them, so we may seem like one of the only clients speaking about this, and they may not see it as important as it truly is. So air table and Qualtrics are two clients we've had some relationship with over the years. I'd say those are examples where our first communications with those vendors were at a time whether they were not ready to put the resources towards improving the accessibility or really, in some cases, understanding the accessibility of their product.

But I would say with both of those, we've seen a lot of change over the years. We'll take what we spoke with first around 2015. Qualtrics first around 2016. A lot of time has passed.

So I think we're seeing a good trend towards change there.

And one other story of success I just wanted to mention grew out of some conversations with your colleagues. We're currently developing training for library selectors. This grew out of a conversation, a request from our electronic resources officer. We want to train our colleagues so we can empower the selector librarians to independently assess and advocate for more accessible vendor products. Colleagues know it's important and go into negotiations with key resource vendors, but they don't know what to say other than hey, accessibility is important. What are you doing? So we wanted to give them the training so that they could actually say, I've tested your product. I've noticed these problems. What are you doing about this?

So this is underway. We're putting all the training resources onto a Canvas course and once that's up and ready, we're going to make a public service and share it to anyone who would like to use it over this library accessibility alliance tool bit. The library accessibility alliance is a library consortium group we participate in to improve accessibility of libraries and are sort of an -- and our sort of adjacent fields and resources. So I look forward to sharing that this summer.

And now back to Jon on culture change.

>> Jonathan: Yeah. So the success of the digital accessibility team, when we first got off the ground, it was kind of a lot at once, but it really did empower members of the team, of the digital accessibility team, in their own units and divisions in the library, and especially in library IT, to consider, you know, how can we make sure accessibility is consistently built into our projects? Is it library IT had struggled with always doing accessibility work after the fact, conducting accessibility audit and some of those would linger. How can we build it into the product from the beginning or into those sort of regular development cycles? The last roots nature helped each of us feel we could tackle something like this. And in the case of library IT, and the members of the team that are in library IT, they did this by building the design system for the library website. And so if you aren't familiar with the design system, a design system is kind of like a collection of reusable components. So maybe a button or a form, a little help tool icon or something like that. Each system has a whole is kind of guided by clear standards that can be assembled. Components can be assembled together to build any kind of application. So the library design system is guided by accessibility and usability stage cars and user research and conducting regular user testing, and so the design system first got built for redesign with the library search tools and the questionings of the design system and its focus on standards and user research and accessibility in each project serve as a real example of this design system really work, and it kind of translated into ultimately leading to growth in the library IT itself where they hire even more accessibility focus staff and staff doing user research and design and user experience design. So most recently this design was at the center of the library's design website and as I mentioned, the previous library website was pretty brittle and average old site littered with accessibility issues. By using this new design system on the website and actually building more components on the way, the website launched with nearly no issues at all. So this is really an example of how the team of

accessibility, my colleagues regularly meet in the DAT team and talk about web accessibility issues and bounce ideas off each other. It is a way to put our services in action and see incremental change across various projects and across the library and helped to empower the DAT members themselves to become leaders in their own divisions and departments and make accessibility part of web development culture.

I think that wraps up our presentation and looks like there are some questions here from folks.

>> Sharla: Jon, if you could hold on one second before that, we want to make sure we stop the recording so that folks can feel like they can speak freely. You can type questions in the chat, but also, you can unmute, so you can maybe raise your hand or let us know if you want to talk. We always welcome real voices. Let me stop recording, and Stephanie more land, I need to you do that. Looks like you already did. Thank you, Stephanie.

One other thing is ignore the clock in the corner. The countdown clock, they did tell us that will just go away. It should not go an way. She have any Moore land, I believe you could manage the chat. Go ahead, Steph.

>> There is a question in from Monica McCormick. At my lab area, a team of five focus on this would be really big. I assume that all five of you have other work. Can you speak about balancing this work with other needs?

>> Jonathan: That's a good question. Stephanie Rosen, we can maybe share this one. We probably both have something to add to this. So yeah, time is a concern that always comes up in our digital accessibility team retrospective at the end of each year. We just wish we had more time. More things with this formation of the service was it kind of was too successful at the beginning and, you know, we had budgeted maybe 5 to 10% each of our time, with all the other things we have doing. It would be dedicated to the digital accessibility team, so it was key that these things be at least, if they're not written into a job description, that they would -- it would be -- our managers, senior managers would give us the time, you know, to have 10% dedicated to working on these projects. And so even at that point, you believe, the University of Michigan library is a very big library and really, 10% probably wasn't enough. We either wanted more members or we wanted more of our time dedicated to working on the digital accessibility team.

Stephanie, do you have anything to add?

>> Stephanie: Sure. This is Stephanie. Yeah. I would just 'em pa at that size, also -- emphasize that a small portion of many people's time, certainly not all of our time for any of us, and among our group members, I think we are quite flexible in terms of trading off who's taking on more when they can, who's taking on less when they have to. Jon mentioned that for evaluations, we have a first and a seconds reviewer. So you know, there may be a period of six months where I do a lot of that work and then a period of 12 months where I don't. So I think having more people on our team allows us to better respond to each other's needs and communicate amongst ourselves so we can do the group's work, in addition to our individual work.

>> There was another question by Sharla actually. You mentioned a lot of area accessibility alliance. Are there other groups, associations, or listserves that one can join to stay in the

know about how to provide equitable service and access at our institutions?

>> Stephanie: Yeah. This is Stephanie. I can start on that one. Yes, there are lists and groups, and some of them are sort of listservs that you can just possibly consume information and some of them are working groups where you can get involved.

There's been a lot of work within digital library federation around accessibility. So they're having accessibility working group with the mailing list and they have this WCAG with lots of mailing lists, and I can put this in the chat when I have a second.

There's also a list, I think it's managed by ALA. But it's focused on accessibility. So that's a good general one. And then there's quite a few mailing lists that are focused on accessibility and higher Ed. Digital accessibility and higher Ed. A little more than libraries, but I follow them as well. So there is ahead, like AHB e.g., the Association for higher Ed and vision ability. AHEVA. And then E other cause has a -- Educause has a list around accessibility. Those are a few I follow along with. And I think that's a great place to get started. Jon, feel free to add if something comes to find for you.

>> Jonathan: No. Those were the ones -- I'm more involved in publishing groups, so I'm not sure if folks would be as interested in higher education publishing, accessibility groups, but there are several that sort of have coalesced around a days I consortium -- Daisy consortium that is trying to promote epub use, epub in higher education listserv. You can probably find it through the Casey consortium -- Daisy consortium website. That's to introduce e pub as a more accessible format than PDF and trying to encourage remediation office and disability services offices across campuses in North America and they should try working with e pub instead of PDF when providing accessible formats.

>> I notice that folks are putting lots of links into the chat. If you report looking at your chat, go ahead and take a peak. This is great. And I don't see any other questions. Stephanie Moreland, if you finds something, please go ahead, but I'm going to interject here and just ask a question out loud. How are students and faculty who use these -- who are using these services? Are you feeling more free to come up and ask? Are you seeing a shift of how folks who are -- two need these services for the blind, for what have you, do them like they are actually being included? Do you get that feeling?

>> This is Stephanie. I can start. Yes. So I think there's lots of different ways that we engage with disability communities at our university. I'm involved in a lot of disability advocacy on the campus that goes beyond the library. And just in order to do my job at the library, it's important to cultivate the relationships and stay in touch with people most impacted by various access. So that's one area.

Another, through my job as a librarian, I also am the point person or the liaison for those with print disabilities, and so I work to get an accessible copy from any library for someone who can't use it in its original format. And so making sure that the people who need that service are aware of it and aware of me is kind of a constant process of outreach. And also, constant advocacy at the university, because although those services are pretty centralized for students, they're not centralized at all for faculty and staff. It can be quite confusing to navigate. And within our group, some use a lot of user testing for designs of library web products, and do outreach to users with a range of disabilities and who use a range of

assistive technologies as a kind of proactive measure to make sure that we're understanding how our web presence works for everybody. So that describes, like, the relationships we have.

As to whether I've noticed a change, I think there is a rising profile of library accessibility on campus, and I hope that it's seen as a place where people can get their needs met. And I'd say that is my opinion. But it's never over, also. Still working on that, too.

Is there anything you could add there, Jon?

>> Jonathan: I mean, the sort of -- I would add that the emphasis that we've put on accessibility and its sort of people are aware the library is focused on accessibility.

Definitely from the work that we've done and other people are doing and have been doing in the librarians for web accessibility led to campus partnerships for things like the office for institutional equity and their IT team. They look to us as someone, you know, and the folks that do access twitter there, the central IT as a partner or a colleague really, and we will often share feedback from them. They've been working on standard guide practice policy, web accessibility policy, and we would trial that or pilot that with them to see how they work in the library. We'll use them to test things, because we're further along than in other parts of the university is supporting web accessibility.

In terms of hearing directly from users, I wish we'd hear more from folks impacted by us or the team has made a surface better, more accessible. Sadly, we don't hear -- we only hear when things don't work most of the time, sadly, or aren't working for someone. So it would be great, but I'm certain we are making a difference for people out there, but we just don't hear it at times.

>> Sharla: Do you see any other questions, Stephanie Moreland?

>> No. No other questions. Just --

>> Sharla: Right. We're still adding those links. We have two more minutes if anyone wants to unmute and ask any questions or make any comments. You all have definitely done a lot, and I think a lot, especially smaller institutions, but you know, talking about IT and that this kind of, forgive me, it kind of takes a village approach. It's not just the library. Right? And I'm sure there are a lot of folks who have, you know, accessibility offices on campus or what have you. I guess if libraries are wanting to start, just start somewhere, do you recommend just reach out across the community of their own campuses? What do you recommend as, like, a first step? And briefly, sorry. I said that at 1:04.

>> Jonathan: Yeah. I definitely would say every higher he had on you indication institution or other institutions should have disability services office and starting there is always a good start or their central IT is a great start. Place to begin.

I do see a question about training and resources, and I would just say with that is also another place to start. You know, just doing -- walking through your own -- we provided the tech plat, looking that over and walking through your own evaluation and downloading some tools into your browser. There's some built-in tools in the Fire Fox browser that do accessibility evaluations, and the Deque has a great resource in terms of helping you learn how to do evaluations. I think that's just a key place to begin is just doing it and learning by doing.

>> Sharla: Great. We're about to get kicked out. Thank you very much.

(breakout session covers.)

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