ELISA EDELBERG: Thanks, everyone, for joining this webinar, Developing Accessibility Training Strategies in Higher Education. My name is Elisa Edelberg from 3Play Media, and I'll be moderating today. And I'm joined by Phil Deaton, digital information accessibility coordinator at the University of Michigan. And Jen Ismirle, senior UX researcher, usability and accessibility research and consulting at Michigan State University.

PHILLIP DEATON: Hello, everyone. As Elisa said, my name is Phil Deaton. And today we're going to be talking about developing accessibility training strategies in higher education.

JENNIFER ISMIRLE: And I'm Jen Ismirle. As she said, I am a senior UX researcher here at UARC MSU. I'll explain a little bit more about my role when I talk about the study I did. But I'll let Phil start the intro here.

PHILLIP DEATON: Yeah. So today we're going to be giving kind of a quick overview of looking at MSU as kind of a case study. So we're going to give an overview of what kind of organization Michigan State University is and what our accessibility needs were. I should mention that I used to work as digital accessibility coordinator at Michigan State University before my current role at the University of Michigan.

So we're going to talk about two different studies. So Jen ran a survey and she is going to give a description of that survey, discuss some of the results. And then we're going to talk about some of the considerations to make when you are designing a training strategy. And then we're also going to go through a study, which I ran, surveying digital accessibility professionals who do work in higher education. And then we're going to bring that back to talking about what are some of the considerations that you need to make as you are designing a strategy for training, some of the things to look out for, as well as some advice if you are just getting into this field.

So just a brief description of Michigan State University. Michigan State University is a land grant university. It is a member of the Association of American Universities. So it's a large university. We have over 50,000 students and over 200 academic programs or areas of study. We also have near 13,000 employees and over 550,000 living alumni. There's a lot of different activities which MSU focuses on, and accessibility is something that's very important as we try to reach out to try to reach a broad audience of individuals at the university.

So next, I want to talk about why training is something that Jen and I are very interested in. So

this first bullet point I want to go over is a result from a survey I ran this past February through March. And I'll talk a little bit more about that study after Jen goes into more detail on her study. But most accessibility management programs within higher education are very small. Of the individuals that I surveyed, 55% responded and said that they had one to two individuals on their accessibility management team. This is very challenging because organizations often have a large amount of different technologies.

So we've found that at large and distributed organizations it is very important to be able to provide training organization-wide to get more people involved in digital accessibility work. The more people that are involved in doing this work, the better. This is especially important because if we can get people that are designing processes or policies at our organizations into accessibility work, we are able to more effectively bake accessibility into these processes and policies.

So training is more complicated than buying a vendor training and just giving links to everyone within your organization. It's a very intentional practice, and it should be run differently organization to organization. It's very important to assess the outcomes of training, and to be able to understand if you're meeting the needs of your different users. A challenge that we have at Michigan State is that we have a very diverse range of people who need to be trained given the different academic programs, as well as just the amount of different colleges that there are within Michigan State University.

So a challenge of that training is that we have to meet our constituents where they are. So we have faculty, we have staff, we have communicators and web developers within staff. And we've found that it's very important to be able to meet people where they are with training resources. So this immediately makes custom training a very important thing for large distributed organizations.

And I think that some of the common training challenges which you may encounter if you work for a large distributed organization are the amount of time that individuals have to take your trainings. The different content matter and the diverse amount of content matter that you have to cover with digital accessibility trainings, including providing trainings for making accessible documents or media across a variety of different software applications.

The expertise level of individuals that you need to train. Part of meeting people where they are is about thinking about what types of users or what types of employees you are trying to train,

but also understanding that some of them may have specialized accessibility knowledge, and being able to provide beginner, intermediate, and advanced level training. And it's also important to be able to have trainings which are practical in nature, as well as trainings which are specific to the organizational strategy at large for accessibility.

And so, I'm going to talk a little bit about the current state of training at MSU. Again, I'll give the caveat that I am no longer at Michigan State University in my role as an accessibility coordinator. I'm still fixed term faculty there. But I think that you may recognize some of these different challenges as familiar if you work for a large distributed organization as well.

So because MSU is so massive and has many different technology needs, MSU utilizes a distributed work model for digital accessibility. And because of that, it was necessary to provide custom face-to-face training to meet different needs, as well as to provide and update online resources which could be accessed at the convenience of our users.

MSU has, in the past, partnered with vendors for trainings. And a practice that was common at the time was subsidizing those training opportunities centrally and encouraging employees from a broad range of areas to attend those trainings. Sometimes those trainings were provided kind of just in time, and other times they were provided at a specific location or a specific time.

I mentioned earlier that we utilize a distributed work model. And really what that means, importantly, is that all employees need to receive some amount of training. That may range from being aware of what digital accessibility is to as far as making sure that web developers have a wide range of expertise with digital accessibility. So MSU utilized a five year plan process for trying to move accessibility forward on the campus. And because of that distributed work model, there were distributed work teams who were able to put together different five year plans.

At MSU, different divisions were required to submit these plans. And the actual management of receiving those plans in assessing and evaluating them was managed by the IT accessibility team, and supported by compliance and legal representatives. This allowed for centralized oversight. And currently, MSU is encouraging annual self-reporting and audits, as well as conducting audits at-will on high priority technology. This distributed work model means that the IT accessibility team needed to be very cognisant of resource constraints, and also responsive to different constituents-- both persons with disabilities and accessibility

professionals-- when it came to the training needs that we had.

So I just wanted to talk a little bit about that five year plan process because that will help kind of set the stage for the study which Jen is going to talk about, which was done within one of the divisions at Michigan State that has generated a five year plan, and has also generated annual self-reviews. So with that, I'm going to turn it over to Jen, I believe.

JENNIFER ISMIRLE: Right. So thank you, Phil. So as I said before, here at MSU I work at UARC, which stands for Usability Accessibility Research and Consulting. So I'm going to talk about a survey that I conducted and how it was useful for developing training strategies within the unit I'm part of, which is University Outreach and Engagement, or UOE, which is a major unit here at MSU. It has 14 departments that focus on university community partnerships with diverse programming and engagement initiatives with external and internal audiences. And UARC is one of those departments that is within UOE.

So as I said, there is a variety of audiences and different roles within all these different departments. These are some examples up here on the screen. So these are some different departments within UOE. So the Center for Student Learning and Civic Engagement has students, community partners, social media. The Center for Community and Economic Development has urban and rural partners, faculty, and students. The Wharton Center for Performing Arts as well as the MSU Museum have the general public, K-12 students, faculty, graduate students, and researchers. And UARC, which I'm a part of, we work with government, academic, and industry partners and clients for the work that we do.

And there's also a variety of content being created across all these different departments. Again, these are just some examples up here on screen. There is community engaged learning courses, service-focused student group websites, a variety of complex reports and PDFs, things like planning sketches or drawings, online surveys, public events with different types of ticketing or third party vendors and social media, also physical and digital collections for the museum. And UOE has *The Engaged Scholarly Magazine* and an e-newsletter. So those are just some examples of the huge variety of content we're dealing with.

So taken together, it's a very challenging environment because of the organizational complexity. So in relation to developing the five year plan for UOE, as Phil was talking about, we need to consider how to implement a practical strategy for accessibility training to meet the needs of UOE across all these different departments and roles. So considering things like

personnel time. There's likely over 200 people needing some kind of training. And considering what kind of training, what they need, related to the actual content that they were creating and not forcing them to do days and days of training that may not even end up being relevant for what they do.

And also financial considerations for options for training and tools and things like Acrobat Pro to use for making accessible documents. And also building buying-in awareness within and across all these different departments. How to help people get a basic working knowledge of accessibility as a first step in this training process, and considering different backgrounds, experiences, roles, and things like student turnover, where people may work for short periods of time.

So overall, it was a lot to consider when developing this five year plan. And overall, we felt like UOE is useful as a case study for considering and developing training strategies as such a large and diverse unit. We are a little bit different, though, than sometimes other units in that we may not have as many faculty who are teaching, maybe, as more strictly academic units, but we still are very diverse.

So now I'm going to talk about specifically our survey here. So around the first year for our five year plan as we're starting to raise awareness about accessibility and training, we decided to do a survey. So Sara Swierenga, who is the director of UARC, is the one who is creating the accessibility plan and yearly progress supports for UOE. So we decided to do this survey with the goal being to understand the state of accessibility awareness and knowledge across UOE personnel. And so, we would analyze the results by role and by overall respondents to understand training needs to help us continue to develop a strategic plan for training as we move forward.

So this survey was conducted first last summer, and then we ran another slightly revised version just a couple of months ago. And so, this was developed within UARC. I developed this with Sarah Swierenga, our director, and Graham Pierce, our assistant director, as well as with assistance from John Schweitzer from the Center for Community and Economic Development. And so, I'm also going to talk about the original survey we ran last year, and then compare the results from the revised version that we ran just a couple of months ago.

So this survey consisted of 10 questions. We wanted to keep it brief to help encourage people to fill it out. So basically, it would take just five minutes to do. We also kept it anonymous to

help avoid any concerns people might have or potential consequences for perceived, like, low knowledge or ability in relation to accessibility, and to reduce bias in over-reporting of knowledge or ability. We did have people indicate their general role, though, at MSU within UOE, whether they were faculty, staff, or student to help us understand if there were any differences across the roles.

So for the survey question themselves, these are the different types of questions that we asked in the survey. So as I mentioned, we asked first for their relationship or role within UOE. Then we asked what types of documents or content they typically create as part of their job. Also their level of expertise with different types of technology to kind of understand a basis across the different roles. Then we had five confidence level questions. So these related for people to rate their confidence level for creating accessible documents. And we asked about five specific types of documents-- Word documents, PowerPoint, PDF, web page text or images, and videos.

And then we also asked if people had completed any accessibility training already, whether that was at MSU or through any external sources. And we also had sort of a quiz question about what is required for MSU's web accessibility policy to see if people knew about that. So if you're interested in the actual questions that we used for these, you can go to the UARC website. We have a page about the survey specifically. So that's at usability.msu.edu/uoesurvey.

And this is an example of one of the conference questions. This is actually from the survey we just ran. This is the revised version. I figured I'd give you the newer version of this. So the question is, are you confident that you create Microsoft Word documents that can be fully used by persons with disabilities? And there are seven options to choose from.

The first two are kind of opt-out options right at the front in case people want to select these first. So the first one is, I don't create these documents or primarily use a different type of software to create documents. And the next, I create these, but I give it to someone else to make accessible. Because sometimes people may have someone in their department that they give documents to who then make it accessible for them. So we had those two options first. And then the next options are all about rating people's level of confidence in creating these documents if they are making them accessible themselves.

So the third option, I create these, but I don't know how to make it accessible. Then fourth, I

can make some parts accessible, but not most parts. Fifth, I can make most parts accessible, but not everything. Sixth, I think I can make it fully accessible. And finally, I know I can make it fully accessible. So then, that helped us see confidence levels that people had for these different types of documents.

OK, so now I'm going to talk about the results from our 2017 survey that we ran. So we used UOE list-serv to distribute the survey. It was an online survey through Qualtrics. And we had a 64% response rate for this, 87 responses, within UOE. In terms of different roles, we had 34% who were faculty, academics specialists, or postdoc. 53% were staff. And 13% were intern, research assistant, or temp hourly.

And we found for the content that most are creating, not really that surprising, but that most people are creating Microsoft Word documents and PDFs as the most common types of content. But for faculty in particular, Microsoft PowerPoint presentations were very common for them to create. So that helped us understand the types of training that were most critical across the roles, and also for a specific role.

OK, so next I'm going to talk about the confidence levels for those three types of content that were most common. So for Microsoft Word documents, 89% of people were creating these for their job role. And then 8% were creating these and then giving them to someone else to make accessible. So for those who were trying to make it accessible themselves, 44% said that they don't know how to make it accessible. And only 14% said, I know I can make it fully accessible. And then 24% said, I think I can make it fully accessible. And 18% said they can make some to most parts accessible. So it was pretty clear from these results that there was a critical need for training for Word documents across the different roles here.

And then for PDFs, pretty similar results here. 82% creating for their job role with 7% creating these documents and then giving them to someone else to make accessible. 47% said they don't know how to make it accessible with only 13% saying that they know they can make it fully accessible. 22% saying, I think I can make it fully accessible. And 18% saying they can make some to most parts accessible. So another indication, a pretty critical need for PDF training from this across the roles.

And then last, Microsoft PowerPoint presentations. So for this, only 56% were creating this for their job role. But for faculty in particular, 80% of them were creating this. So more obvious that it was more common for them. And so, 7% were creating these and then giving them to

someone else to make accessible. And in terms of confidence levels, 52% said they don't know how to make it accessible, with only 6% saying they know they can make it fully accessible. 27% saying, I think I can make it fully accessible. And 15% saying they can make some to most parts accessible. So this helped confirm for us a critical need for faculty, specifically, from these results.

OK, so next I mentioned we had sort of a quiz question about MSU's web accessibility policy. So this question had a list of 10 items. Of those items, four are ones that are required by his policy where six are not required. And so, we asked participants to select which of the items were required. Or they could select an option, I have no idea what is required. So from these results, it was pretty obvious that there was confusion about this policy, with only 6% answering this question correctly and 68% answered it incorrectly and 26% saying they have no idea what is required for this policy.

And finally, we also asked about accessibility training experience. So any training people had completed or any resources that they use. So nearly half of people selected none for whether they had completed any accessibility training. 24% said they were taught by a colleague. And 21% said they were self-taught. For the rest of the options, they were all below 15% whether participants had done those. So that's for MSU web accessibility tutorials, MSU classes or workshops, external tutorials, external classes or workshops, and we also had an other option, which was basically where people mentioned conferences or other types of presentations that they had been to.

OK, so finally, this is a comparison across the two surveys that I conducted. So in terms of response rate, we got a little bit more response for the survey this year. Last year was 64% response rate, and this year it was 73%. In terms of content that people typically create, we found the same results. Word documents and PDFs were the most common, with faculty creating PowerPoints more commonly.

It was useful to see for the confidence levels in terms of creating accessible Word, PDF, or PowerPoints. We did see a change there. For the first survey, for the don't know how option was around 48% across these different documents on average. And then for the survey we ran this year, for the don't know how option was only around 15%. So that was a really good thing to see.

And we did see a little bit of increase, too, in whether people were giving it to someone else to

make it accessible. So we want to take a further look at that to see how much that's going on, where maybe someone is becoming kind of the accessibility expert within their department and helping people make things accessible if they may not have had done the training themselves.

So for accessibility training, we also saw some good things there. So for the option of none was almost half when we first ran the survey. For this year, it was 30% for selecting none. We also saw about the same percentages for taught by colleague and self-taught. But there was a big increase for classes or workshops that people took through MSU IT, which is what Phil used to be part of.

And I should mention, between these two surveys, there were some face-to-face Word training sessions that were offered by MSU IT for UOE. And so a lot of people took advantage of that, so that was good to see. And also we saw a little bit of an increase for tutorials and classes from other sources that people were using. So even just running the survey itself last year helped get conversations going, and helped make people aware of different offerings through MSU and external sources that they might not have been aware of before.

It was helpful to see this increase in accessibility knowledge and awareness. However, we did see for the web accessibility policy quiz that we had, not much changed there in terms of whether people understood that policy. So that did help us see, also, there that confusion still exists for what is required for that. So that's what we learned from doing this survey. So now I'm going to turn it back to Phil to talk about his survey and some overall change strategies for higher ed.

PHILLIP DEATON: Thanks, Jen. So I actually ran a separate, distinct survey where my goal was to survey higher education accessibility professionals. So this survey was distributed to higher education accessibility list-servs. One thing to note is that multiple respondents per institution were allowed, but that what I was interested in gauging was the individual perception of the institution as opposed to the institutional perspective. I was interested in studying how people that do accessibility work in higher education, what types of activities they're doing, what they're prioritizing, and kind of what they're spending their time on. So as I mentioned, that was kind of my goal.

And some of the outcomes which I gleaned from the research was increased understanding of work practices, including some of the barriers and opportunities that we, as accessibility

professionals, encounter in our daily interactions. The number of respondents I had was approximately 100 people, but not everyone answered every question, which is important to note. So if you can go to the next slide here, Jen. Right.

So as I mentioned earlier, most accessibility management programs within higher education are very small, either one to two people. Some of the respondents indicated that on the sur-- [AUDIO OUT] earlier. Also [INAUDIBLE] at their institution.

But two other interesting things I wanted to bring up from the survey were that 71.43% of respondents indicated that institutional support doesn't match the need for accessibility. I think that this really underscores the importance of why having a developed training strategy for your organization is necessary. Because in order to do more of the accessibility work that we have, we need to make sure that more people have accessibility skills.

Also from the survey, 60.59% of individual respondents indicated that they either strongly disagreed or disagreed with the statement, my institution provides sufficient support to individuals who work on digital/EIT/web accessibility. And that was about 30% in the strongly disagree and 30% in the disagree category. So we need to think comprehensively about how to provide support for content creators. Accessibility is growing. But like most spaces within digital and e-business or in higher education, it is oftentimes under-resourced. And so, it's important to bring more people into our conversations.

Accessibility in general needs to be built into organizations. And organizations in general to provide better support to the individuals who do accessibility within the organizations. A core way to do that is to get more people involved by providing high quality training opportunities, and also by defining a training strategy. So if you can go to the next slide here, Jen.

And just kind of to reiterate what we've been saying, training is definitely very important. So one of the last pieces that I want to share from the survey is that when given five options and asked to rank these from least important to most important-- so those options were consultations/training, conferences/workshops, web development, user research with persons with disabilities, and communication from executive leaders who represent accessibility. 50.62% of individuals indicated that consultation/training was that they thought was most important for organizations to provide.

So as Jen's study suggests, it's very important to do training. Jen had mentioned that between the two versions of the study that she ran, MSU IT actually delivered trainings to her unit.

Those trainings were face-to-face, but they also followed my colleague at the time, James Bender's, vision. And they were face-to-face, as well as just in time.

So how we structured that was by doing the face-to-face training. And participants who registered for the training were also added into a community course within our learning management system. And the vision behind that was that we wanted to sustain accessibility progress and training. Sometimes when we would do these trainings, individuals would forget some of the materials that we taught, and would have some of the same types of questions.

Another thing that Jen mentioned, that was kind of an interesting statistic, was that some individuals ended up giving the actual work related to accessibility to someone that they knew that had skills in accessibility. And I think that this is quite interesting because it means that there are individuals who are kind of developing more of that reputation and pool of expertise to do accessibility work. And they can kind of be ambassadors within their teams and within their divisions.

Another interesting thing which Jen brought up is how people had learned accessibility. And a lot of it was social, it was from their peers. And after we did these trainings and University Outreach and Engagement, we had a lot of follow-up from people who wanted to schedule more technical trainings in a face-to-face format. And we're pretty confident that individuals from UOE, University Outreach and Engagement, as well as other units on campus who are kind of really clicking with this stuff, will be able to train their colleagues that they work with.

So I think that it's important that we recognize that training is a communication practice which leads to increased engagement. Digital accessibility is really something which benefits from awareness, broad understanding, and a few individuals who have deep pools of technical expertise. If you're doing face-to-face trainings and also providing just in time training, it's easy through these methods to provide training about awareness and trying to give a broad understanding about the challenges that persons with disabilities face when they try to interface with our organizations.

And it's good to do multiple different formats for trainings. So the just in time training was great for when individuals don't necessarily have a lot of time, which, as I discussed earlier, was one of the challenges which we were noting and receiving feedback on. And so, if we provide a resource which they can access at any time, then they're able to leverage those resources then. But we also really valued face-to-face training opportunities where networking could

occur because a lot of how people developed more into being intermediate with accessibility skills was by leveraging their peer networks and learning more from their colleagues.

So I should mention that using vendors is definitely fine. I didn't want to come across as saying earlier that that's not a good idea. But you should always have a strategy before you engage with vendors for how you want to do digital accessibility training within your organization. I mean, you could work on that strategy together with a vendor, but it's a good job to have ownership and accountability over that piece.

A key job of accessibility leaders and organizations should be to meet with the different constituents who both have accessibility needs because of their disabilities and also those who are employees within the organization. So it's very important to focus on training which meets people where they are-- I've been saying like beginner, intermediate, and advanced training-- and that's something which I really can't stress enough as I'm moving through this slide. And also being responsive to change.

So now I just kind of want to talk about a couple different things to keep in mind as you're developing an accessibility strategy. Gaining executive support for training and for a training strategy is very important to make sure that you're aligning your accessibility goals with organizational goals, but you should also be wary of some challenges.

Some of the things which we've heard as pieces of feedback from people who have received accessibility training is that it's very nice to have different modes of training. We've received feedback that text-based resources don't work and that video-based resources don't work. But if you're making both of those types of trainings or if your partnering with a vendor who provides both of those types of trainings, you're probably going to be able to meet more needs.

I kind of already mentioned this, but make sure to structure your accessibility training strategy around your organizational needs and how your organization works. So at MSU, when I worked for Michigan State University, we had a quick tips sheet on accessibility, which was something that was widely circulated in paper form as well as digital form on the campus. And we tried to connect a lot of the different resources which we developed to that accessibility quick tips sheet so that people would be familiar with that holistic strategy related to accessibility.

It's important to be responsive to users. At MSU, we had ways for people to submit

suggestions for new technology training. And it's important that those are easy to use. And as an accessibility leader within an organization, we have to really focus on being responsive to that feedback about what users who are doing accessibility work need rather than reactive or being defensive, which is something that's easy to be because accessibility is a complex issue. Connecting accessibility training strategies to support structures within the organization is important. And showing individuals where or how the support structure works for accessibility at your institution is also important.

One thing which I want to touch on next is that it's very important to assess the value related to different accessibility trainings as you're doing accessibility training. So being able to evaluate progress over time is important. The types of studies which Jen has run are things which you should definitely explore doing at your institution. And because she provided a link to her questions, I think that that should be very helpful as a resource.

So one thing which we focused on at MSU was tracking participation versus simple registration. So when we had higher registration than participation, that would indicate a passive interest or a lack of time from the people that are being asked to do these accessibility trainings. So we would try to track the participation numbers as well.

One thing, which is great, is to support different versions or operating systems depending on what is recommended at your organization. And another thing I want to reiterate is that it's really important to link to these resources which software applications make to help users use their technologies. Adobe, Microsoft, and others provide resources related to training, telling people how to make accessible documents in Word. And it's great to link to those. And I also wouldn't shy away from letting Microsoft and Adobe and other software or application creators know that you're using these resources because this reminds these organizations that we value them.

And if you are partnering with vendors, again, just recognize that you are accountable for assessing the effectiveness of training materials over time, and that any vendor which you partner with, you should make sure that they're in line with your overall strategy for accessibility and your overall training strategy. So I know I just talked over that slide for quite a little bit of time, but those are some key points which I just wanted to bring up to help you as you are developing your accessibility training strategy.

So I think that next we're moving into Q&A here. Oh, here's our contact information. So thank

you, everyone, for listening to what we had to share.

ELISA EDELBERG: Great. Thank you, Jen and Phil. So the first question that we have is, what sort of vendors generally are you working with?

PHILLIP DEATON: So I think I can start to take this question. Because I've shifted from working at Michigan State to working at University of Michigan, it's a little bit difficult to answer this question. But what I will say is that, while I obviously can't mention specific vendors, I think that it's very important to work with vendors who provide both specialized expert level training as well as some of those just in time resources to individuals who may be more at the beginner or intermediate level.

So in the past when I worked at MSU IT, one thing which we did was we brought some of that more expert level training face-to-face on campus. Part of the reason for that was because we learned that the people that were most invested in accessibility kind of had the time to attend face-to-face training, and really wanted to be able to learn from experts external to the university. But also, that just in time training was great for getting people up to beginner and intermediate levels.

As you're partnering with vendors, just know that you're never going to find like a fully, 100% perfect fit, but that it may make sense to do so for your accessibility training strategy, particularly if you're stretched for time. But I would invest that time up front in thinking about what you want to accomplish with your strategy. I would also recommend pointing to, again, as I said earlier, specific software providers, whether that's for document creation or media production, linking to the tutorials which those content providers provide.

I think that there's some sense in focusing on awareness materials internally based on your overall institutional strategy related to accessibility because some of that's hard to separate from the institution. But definitely as you're moving forward with vendor related training, receive feedback from your constituents. And you're always going to get kind of a mixed bag of feedback. But just keep that in mind as you look for another solution or as you get feedback to your vendors. Hopefully that helps.

ELISA EDELBERG: Great. Thank you so much, Phil. The next question that we have is regarding training model and accessibility model. And the person is asking, does this accessibility model take into account both adaptive and assistive technology?

PHILLIP DEATON: I guess I'm not 100% fully understanding the question, but I would say that when I worked at MSU and in my role at UMich, the University of Michigan, we definitely take into account assistive technology. And we would use resources also to understand what some of the most widely used assistive technologies on our campuses were, as well as just in general were.

So we would oftentimes show people how to do basic testing with screenreaders, but we find sometimes that different user groups would have a lot of trouble getting into that space. Using a screenreader, it's a very jarring experience if you've never done so. Or using some other assistive technology may be similar. But yeah, from my perspective, I would say that they did take into account assistive technology. And we would try to encourage people to do accessibility such that it would link up with the assistive technology which our actual users were using.

ELISA EDELBERG: Great, thank you. Someone else is asking, I noticed you did not mention training on video closed captioning. Is that advanced tier training?

PHILLIP DEATON: I think that it would probably depend on what types of trainings you're referring to. I think that there are definitely training which different captioning providers provide as resources on their websites, as well as content hosting platforms provide for like, how to do basic captioning. But in terms of how to do more advanced-- or I guess how I would phrase this is how to actually write captions instead of just using the technologies to do captions, some of that can definitely tread into intermediate or advanced territory. What do you think about that one, Jen?

JENNIFER ISMIRLE: I guess I'm not as familiar with the options that there are just because for our particular survey, not many people were doing videos. But I know when we did revise the question for the second round of our survey, we included some options to try and see if people who were creating videos were using external sources to create captions for them, or they were just using something like YouTube that was just auto-generating captions, which is not very useful, usually.

For our side, we were trying to see what sources people were using. And we also had an option of whether they were actually creating captions themselves to understand how that was working. But just for our side, there wasn't as many people doing that, necessarily.

PHILLIP DEATON: Yeah. I guess another thing I can mention is that if you have any preferred vendors for captioning on your campus, it can definitely be important for both beginner and intermediate training to demonstrate how to work with those vendors, especially if they have any tools

baked into their captioning resources. So I guess that would be another area of training. But I do think that actually writing accurate and well-representative closed captions would maybe be more intermediate or advanced.

ELISA EDELBERG: Great. Thank you so much. Someone else is asking, would you be able to share descriptions on what is covered in the various levels of training? For instance, beginner, intermediate, advanced. I am wondering how far each level reaches in your workshops.

PHILLIP DEATON: So this is Phil again. I would say that if you are looking for the ones that we used at Michigan State, I would point you over to my colleagues who are still doing great work over there. And if you're looking for names for that, just please shoot me an email at pdeaton@umich.edu. But if you want to have a more general conversation about that, I would actually still encourage you to do the same thing and just shoot me an email.

But I think that as you're thinking about that, you really need to think about, as Jen was saying, kind of what technologies your different units, groups, or universities, or colleges are using commonly. And I do think the most beginner level thing you can do is talk about awareness training, and that that's a really important thing to do organization-wide. And then after that, you may get into more specific technologies, how to do accessibility such that it meets the needs of users who are using assistive technology. But I could provide a little write up for you, but I would just encourage you to email me.

ELISA EDELBERG: Great. Thank you. Someone else is wondering if it's possible for you to provide all of your survey questions that were used.

JENNIFER ISMIRLE: Right. So if you go to the UARC website, I mentioned a little earlier we have a page about our surveys that we've run. You can go to usability.msu.edu/uoesurvey. And that will go directly to the page on the UARC website. And that has two documents that you can download, one for each of the surveys that we ran, if you're interested in those specific questions we used.

PHILLIP DEATON: And for me, I do not currently have a web resource to post mine to. Just shoot me an email and I can send you a Word doc version of the questions which I used. More than happy to do that.

ELISA EDELBERG: Great. Thank you so much. And that seems to be all of the questions that we have. We have another minute or so of if anyone has any additional questions. And just a reminder for everyone that we will be sending out the recording, and we can certainly send out some of

those links that were mentioned as well. And Phil and Jen were kind enough to post their email addresses here. So definitely, if you have more specific questions, feel free to copy those down.

So someone else is asking if you have a site license for Acrobat Pro or DC for remediating existing PDFs. And approximately how many users do you have?

PHILLIP DEATON: So at Michigan State, we did not have a site license. We had a partnership in which we were able to provide Acrobat Pro DC at a reasonable cost to individuals within units. I think that might be why some of Jen's research showed that there were kind of like ambassadors or champions who were kind of being given those resources. I don't know, would you think that that might be a reason why, too, Jen?

JENNIFER ISMIRLE: Yeah. I mean, that's something that came up a little bit in our survey. I don't have specific numbers across our departments, but it seems to vary across the departments in UOE whether people have access to Pro or not. So that is definitely an issue that we're still trying to consider how to deal with.

PHILLIP DEATON: Yeah, I really agree with you. There is a person in the chat who's mentioning that it can be difficult to provide that. Yeah.

ELISA EDELBERG: Great. Thank you, Phil and Jen. We are about at the end of our time. Thank you, everyone, for joining us. And thank you again, Phil and Jen, for a wonderful presentation. I hope that everyone has a great rest of the day.