

Tech Workshop 1: Intro to Digital Accessibility
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Association of Midwest Museums
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Good morning or good afternoon and a warm welcome to all. You have joined the session introduction to digital accessibility and inclusion. This is the first technical training workshop in Module 1 of the Digital Empowerment Project, which is a nationwide initiative organized by the 6 US regional museum associations that's dedicated to providing free self-paced training resources for small museums. This inaugural series of online trainings and resource toolkits focused on digital media and technology topics is made possible by funding from the Institute of Museum and Library Services.

My name is Zinnia Wiliits and I am the Executive Director of the Southeastern Museum conference. My pronouns are she/her. I am a light-skinned white female with shoulder-length, reddish-brown hair which is curly today due to the spring humidity down in the southeast. I am wearing a peach-colored blouse and I am sitting in front of a backdrop of my home office which is basically a desk and a computer which I attempted to clean up for this session. As the host for today's session, I would like to convey a few things to our attendees before we begin the program.

The digital empowerment leadership team chose Digital accessibility and inclusion as the first module in recognition of the fact that it is often the interaction between persons with impairments or disabilities and attitudinal, environmental, and technological barriers that hinder their full and effective participation in society on an equal basis with others. To prioritize digital accessibility is to actively work to break down those barriers.

This first foundational module will provide training on how to integrate accessibility and inclusion into digital programs, social pages, and websites. Also, in this era of virtual meetings when digital spaces may substitute our physical space, our physical sense of place is important to reflect on the land that we each occupy and honor the indigenous people who have called it home.

I am speaking to you from Charleston, South Carolina the historical homeland of the Natchez-Kusso people. Wherever we are, let us acknowledge all indigenous nations as living communities, their elders both past and present as well as future generations. We the Digital Empowerment Project team recognize that our organizations and those of our members were founded within a colonizing society that perpetuated the exclusion and erasure of many native peoples throughout the United States and beyond. We ask you to reflect on the place where you reside and work. We ask you to respect the diversity of cultures and experiences that form the richness of our world and profession. Thank you.

Now for a few housekeeping notes before we introduce today's presenters and get started. I would like to acknowledge today's ASL interpreter who will be on the left side of your screen.

And of course we have set up an online community forum for raising questions, posting answers and connecting with your fellow museum practitioners on the Museum Learning Hub website which you can find at museum.hub.org. If you're looking for help between programs, please visit this forum, create a login, and post your questions. A member of the community or one of our student technology fellows will get back to you. Finally, to stay connected with us in be aware future programs, please follow us on social media. The links will be posted in the chat.

Now it is my pleasure to introduce today's panelists. Today we will hear from Sina Bahram who is president of Prime Access Consulting which is an inclusive design firm. Sina is an accessibility consultant, computer scientist, researcher, speaker, and entrepreneur. Sina will be joined by Corey Timpson, Principle of Corey Timpson Design. Corey is an active collaborator and thought leader in the museum experience, design ,and inclusive museum discourse within the cultural sector.

You can learn more about our presenters from their full bios which are available on the Museum Learning Hub website. I am so thankful for the time that each has devoted to the session. Now I am pleased to turn the floor over to Sina Bahram and Corey Timpson.

I'm a six-foot-tall male with dark hair and a shortly cropped beard, wearing a polo shirt. I happen to be blind which informs the lens through which I do the work that we are talking about. I am joined here by one of the most awesome humans I have the pleasure of working with, Corey Timpson. I will turn it over to him.

Thank you, Sina. Welcome everyone and thank you for having us. My name is Corey Timpson. I am a designer who has been working in the cultural sector since 2000. Everything I work on in partnership with Sina Bahram, follows our inclusive design and accessibility methodology and we are happy and pleased to be able to present some of these concepts to you today.

I am a white male of Italian descent. Don't let my name fool you. I have very little hair, it seems like decreasing in volume by the minute. I am wearing what of my 24 plain back black crewneck T-shirt, a black hoodie, and a black plastic frame glasses.

With that, thank you again and let's get into our deck because we have a lot to cover today. We will be covering the intro to accessibility and inclusion, the technical workshop 1. We really are going to be looking at digital media and digital technology. We are going to start off with a few concepts to begin with to get us set up, to get us all on the same page. So anything we work on follows this ethos which is an inclusive design methodology. It's a bit different from accessibility.

We mean that rather than design and develop something and then try to figure out how to make it accessible, we tried to consider all vectors of human difference at the outset. That means later down, we do not have to try to figure out how to change what we were thinking about because there's no need to change it because we thought about everyone at the

beginning and all of those vectors of difference. It really means accessibility for us is an output of this methodology. It's not our starting point.

We also start operating among a premise. And the premise is basically we have intentions, whether we are drafting a policy, whether we are developing an exhibition, whether we are creating a digital product or digital channel or digital system or marketing collateral, so on and so forth. We have these intentions, and we also want to recognize that our audience has intentions.

What we want to do is ensure is that we are living up to our responsibilities, which is that we want our intention to line up as best as possible with the intentions of the audience. When things do not line up, that is when barriers exist and we want to make sure we have as few barriers as possible. We want to know what those intentions are on the part of our audience as we are developing our own.

One of the by-products, we talked about accessibility just a second ago as being an outcome of this methodology and another is innovation. Sina and I have been fortunate to work on a number of projects in Asia, Europe, US, and Canada. Anytime we have been recognized internationally for some kind of innovation, award or so forth, we can directly trace it to the fact that we are following an inclusive design methodology.

Why does this matter? Obviously, this is the right thing to do. As a cultural organization we have responsibilities in terms of preservation of knowledge and cultural heritage, etc. We want to be stewards of those collections and we want to ensure that everyone, everyone period, can access those collections. It is the right thing to do but it's also the law. There is legislation and ADA and legal aspect to being accessible and being inclusive as well.

Let's just chuck those to the side and think about the fact that 1 and 5 people have a disability. That's 1.5 billion people in the world. 1 in 2 people over the age of 35 will experience a disability in their lifetime. When we are thinking about what we spend our time on, why we spend this time doing what we're doing, immersed in our careers and in our practices, let's think about who we're doing this for and understand that we're looking at 50% of the market. Those numbers, we want to highlight to you, they are independent of socioeconomic status, gender, station.

We know incidence of disability are higher among historically marginalized communities and groups. We know that these numbers do not consider temporary situations like the student who arrives on site for programming activity and broke their ankle playing soccer the night before. I am wearing glasses, what happens when I don't have them? There are number of temporary situations that can be accommodated as well.

Rather than getting too detailed into the weeds and breaking things down demographically, let's just consider that there's a really an innumerable amount of reasons why we want to be inclusive and accessible. Let's jump into things.

Digital accessibility. What do we mean when we are talking about digital accessibility? One working definition that we can use is the ability of all people to use a website, an app, digital interactive, kiosk, or any digital product. With or without assistive technologies. What are assistive technologies?

What do we mean by that? Well, I'm using an assistive technology right now. I'm running a screen reader, which is reading my screen and the slides to me as I'm talking to you. I have earbuds in, so I can hear that voice reading the slides to me, because they are accessible. Because we have made them semantically accessible.

But there are other assistive technologies as well. For example, a lot of folks who use a screen reader, they may be blind or low vision, will also use it with an accompanying braille display. This is a device that has a refreshable series of dots, and so you can feel the braille under your fingers. This is especially important to keep in mind for deafblind audiences who may not be able to use speech to access technology but can use braille in order to do so. You have zoom and magnification for low vision folks or anyone who needs the contrast increased as well as things like black and white mode or grayscale or inverted colors.

With respect to physical differences, there is all sorts of assistive technologies built into our devices. Sticky keys is one concept where you can use the keyboard on your computer but with one hand. It is a concept whereby the operating system lets you, if you need to perform a keyboard shortcut, it lets you press the keys individually and let them go. That way you don't have to use both of your hands. You can still operate a keyboard and use keyboard shortcuts. There is a one-handed hardware keyboards.

There is eye tracking if you're unable to use of physical limbs to access technology you can track your eye or head movements and use that to move a cursor on the screen. You can have voice driven interfaces. Many of us are familiar with voice-based assistants like Amazon's devices or Google's or Apple's, and these are great assistive technologies as well.

On the cognitive and verbal side, there is something called augmentative and alternative communication, AAC. These are devices by which folks can communicate by pointing to something on the screen or using a dedicated keypad or any other adaptive way interacting with technology but maybe in a different way than we have all have come to expect. The standard keyboard and mouse and monitor. So we should keep these things in mind.

When we are thinking about web accessibility, we need to keep in mind that if we can code a set of standards and will keep that in mind in a second. We don't have to know how a screen reader works. We don't have to get into the weeds about how somebody might zoom the website to 300% zoom. If we follow best practices and a set of rules, then we can make this content more inclusive and more accessible.

What are the rules? Those are the Web content accessibility guidelines, or WCAG for short. WCAG is versioned, so version 2.1 is what you want to be targeting. The conformance level is broken down into three areas: A, double A, and triple A. So the major takeaway from this is, if you are writing a contract, if you are shopping for a web vendor, if you are looking for a technology to purchase, one of the things that is easy to ask for, sometimes harder to deliver on the behalf of the vendor, but easy to ask for and require in your procurement practices is WCAG 2.1, level AA conformance. This is something you can build into you purchase requirements, your RFPs, and your contracts. We are happy to answer questions about the specifics of those rules but that is the general guidance.

How do we test for web accessibility? We can use tools that are built into browsers. Chrome

has an accessibility checker built right in. It won't find everything, and it will not ensure that your product or website is completely accessible. But it is a good first pass. You can zoom in on your browser to 200% and just try to use your website that way. Or my favorite exercise I always like to have people do is just try to use your favorite website, go through the whole day only using your keyboard. Don't let yourself use the mouse at all and see how far you get. That is a great indication of how accessible something may be.

Also making sure that when we are testing assistive technologies, we involve the communities we are trying to serve. That means native users of the assistive technologies. Blind people who use screen readers, low vision people who use zoom and enlargement. Things of that nature. We have a video coming up. I don't know if the audio will stream on here, but if not we can talk through it. Corey, if you will hit play on that and let's see if the audio will come through. I am not hearing it.

You are not hearing it? Okay, one second. I am going to reshare.

While Corey does that technical machination, what we are about to see is a video that demonstrates a screen reader like the one that I use personally on my computer, interacting with the website just to get a sense of how someone who is blind or low vision may use a piece of assistive technology in order to access the web.

Are you hearing it?

Let's find out. No I'm not.

That's fine what I will do for purposes of demonstration, we can skip that. Really quickly, we can use broadcast audio. I demo this concept on my phone. As I move my finger around the screen, I can swipe, I can perform gestures, and I can navigate the screen. That is really important because what that means is that I am able to access the content on there. But the reason I am able to just like on the website, which we will share the video after the webinar, or on an iPhone app or on a digital kiosk in a museum, it's because the developers and designers have created an interface where a button doesn't just have an icon, it has a textual label. Sometimes that label is visible and sometimes it's not. It's because the designers and developers working together have used a focus outline. So when you are tapping on your keyboard, you know what element you are on. There are more examples in that video that I will share after this talk.

Just to note that the focus highlight is visible on screen right now around the title of the page. That's the red box that is around the title of the post.

That box that Corey is talking about, that will move as your focus moves across the page and that's how as a sighted keyboard user, you know what element you're currently focused on. This is very important.

There's a concept going around right now, and these are called access overlays. They are products from vendors that will happily charge you anywhere from \$30-\$60 per month and offer to install a third-party extension with just one line of code on your website. They claim to make your website accessible. These are completely snake oil, and you should run away if anybody tries to offer you something like this.

To put this in perspective, if something like that existed, I and every other blind person would be injecting that to every website we visited to make the web more accessible. They simply do not work. They use deceptive marketing practices but people want to do the right thing so they say “I should go get that product and use it.” But please stay away from these access overlays. They do absolutely nothing, and in fact, they make your website less not more accessible.

The other thing is timing. Making sure that when you have a website project or digital project, even if your producing documents, do not wait until the end to check the accessibility. Be sure you are incorporating accessibility and inclusive design at the beginning of the product or the process. In terms of process, this is exactly what we are talking about. Not including accessibility considerations and inclusive design during testing and development is where things tend to break down.

Anything that we can do to build in those checks and those requirements and then assess how we are doing. We may not be doing perfect, and we may need to leave things for the next project or an iteration, that's fine. Just consider these things upfront. Consider during the process. Do not rely on automated tools for checking. They are helpful, but they cannot capture everything.

With respect to web accessibility, very quickly from a project management perspective, there is usually a pipeline that should be followed. You do a design evaluation when you are doing wire frames and files that will show how the website looks—do a design evaluation there, check those colors, check focus highlighting, check the link decorations, that sort of thing. Then we flow into working either with yourselves or volunteers or a vendor for example like us on digital accessibility. Checking accessibility of the website markup. Then we flow into content accessibility and really thinking about alt text and visual descriptions of images, the next workshop in the series will talk about visual and audio description in greater detail, followed by a WCAG audit only if it's required because often times if you follow these other steps, the audit is not worth it.

Quickly on recommendations, please avoid Wix and Squarespace if you can, preferring WordPress for website construction. It just tends to lead to a more accessible website. You can use the accessibility ready filter when you are looking for a Wordpress theme to filter those WordPress themes by those that will be more accessible.

This is an easy thing to do. Check the box and look for an accessible theme and you're at least 80% to 90% of the way there to have a more accessible Wordpress website. There is a wave extension, but in deference to time, we will leave the reference on the screen and happy to talk about it during the Q&A. Same for the color contrast checking tool. Corey over to you.

Main point on the last one there is to test, test, test. No one wants to sound like Donald Rumsfeld, but we don't know what we don't know. That is why we are always so adamant about testing. Now, that's the website, and the website is going to present media.

What do we mean by media? We mean the text, the images, the videos, the audios, everything that is going to be presented through that website, through that digital channel. So we want to be sure those things are accessible as well.

On the next session, we will get into media around video and in a quick summary here or preview, let's be sure we have alt text and visual descriptions filled out for anything that is graphic or image-based. Let's ensure that we have captions for audio and video. If we have transcripts, nothing is being developed on a typewriter these days, it's all born digital. Let's ensure those transcripts are made accessible, particularly on web and mobile experiences and platforms, and sign language interpretation which we are seeing right now for this video feed, and let's assure that that's available as well. If we have collaboration materials such as when we are developing a workshop or an activity, let's have guidelines for how we want those things developed. Just putting something into a PDF does not mean it's accessible, let's be sure we follow proper document semantics and styles.

When you're using Word rather than creating your own visual hierarchy that has no semantic structure behind it. What do we mean? We mean making the title the largest thing by bumping up the font size, make it bold and change the color. That's all great but let's actually do that in a styles pane and apply the styles to the text on screen so there is a semantic structure and somebody with a screen reader is actually able to tap across the page and navigate the page the same as a visual user would. Also please do not take photos of text. This is extremely common on twitter. Let's include text as text not as a photo.

In terms of alt text, let's make sure that it's not just for photos but it's for all kinds of visual presentations. Let's make sure it's included. Make sure as a test, if you're reading the alt text back as a review of it, let's make sure it makes sense. If the image was not there and the alt text within its place, does it make sense?

That's a really good simple check. Let's be sure the descriptions length match the visual complexity of the visual information being presented. Let's not have our descriptions be super long or have them super short but let's have them match up with the visual information being presented as well.

Thinking specifically about mobile, we like to say there are tens of thousands of dollars of assistive technology that's built into every iPhone right now. It is right there and let's use it when we can and not prevent people from being able to use it. This is one of my favorite screenshots now. This is the index page of the accessibility features that come with Apple operating system.

I had my son take this picture of my phone because the index page itself is so long we cannot do one screenshot anymore, we have to do 2. That's how many features are built into the phone. There are tons of opportunities online to figure out how to customize and use these features. And at least be sure that we are not preventing others from being able to use the features. There's an enormous amount of technology that we can take advantage of.

That includes everything from screen reading and screen enlargement and switching colors to one-handed usage to replacing the icons with labels like on or off instead of a slider. There are so many things that are built into the iPhone hearing aid compatibility. All of that is built in. If we make the content accessible, it will be compatible with assistive technology.

In terms of social media considerations there are limitations put on us by the platform. Obviously, we want to use these platforms because they are quote, unquote free in many cases. Obviously we're giving a lot of data information, so they do come at a cost, but in the

cultural sector let's be aware of the fact that these are third-party platforms, that we may inadvertently be unaware we're giving third party perpetual licenses to any information we are posting. However, that is where people are spending their time and we want to always we get our content and services out to where people are already spending their time. Beware of the limitations.

You do not control the platform. They could push an update tomorrow and it may change what your intentions were on how things would be presented and representing of your organization. So let's just be aware that we don't control these platforms, but you do control the content.

If we want to ensure that we present our primary asset via text, image, audio, or video as well as the child and support assets in some of those things we went through earlier. Let's make sure we include those as much as possible because then irrespective of how the platform may change, we know we are at least protected in the fact that we have surfaced those affordances. You can control the metadata in a lot of these cases, so let's be aware that metadata goes a long way as well into serving all audiences.

Some social media dos: let's describe images when possible and include captions and transcripts when possible. Use the title case in hashtags. That means where the first letter of every word is uppercase and the rest of the word is lowercase. You can see the hashtag inclusive design here. There is an uppercase "I" and uppercase "D" that helps ensures that not only is it easy to consume visually but that a screen reader will read out "inclusive design", not "inclusivedesign". Use hashtags like A 11 Y to engage with the community. This is a numeronym, so 11 is the number of characters and letters between the A and the Y in accessibility, so if you see #A11Y, that means people are engaging in the accessibility community using that numeronym.

That the wonderful hashtag to reach out with. If you have questions around disability and inclusive design, it's a wonderful tribe of people around the world that are passionate and caring about inclusion and excess ability. It's a nice way to plug into that community.

Social media dos. Wait no, we just said that, sorry. Wait a second, there's a glitch in the matrix.

Social media don'ts. Don't post images of text. We covered that already. Do not front load posts with mentions. There are some limitations around this such as when you reply to a tweet that have a lot of mentions. But Sina and I are in a great community called tweeters which is basically a Twitter social media Cheers when you're having a beverage. And unfortunately or fortunately, there's about 48 different people who are mentioned on the thread now.

For example, for Sina, every time he gets a tweet that mentions him, he sits through the screen reader reading out 48 different people before he actually gets to read what the content of the tweet is. That is something called semantic prioritization. So, we want to prioritize the message above the mentions in this case. Don't use animated GIFs as a surrogate for videos. There's way more affordances that are available with videos than with animated GIFs. They seem to be making a strong comeback of late. Let's try to ensure we are thinking inclusively around how we are presenting media. Don't use automated generated captioning without editing. It's just not going to get everything correct. It is improving all the time, this

type of technology, but obviously has a long way to go.

These are some screenshots we will go through really quickly. These are screenshots of Twitter showing the interface and where you can add alts within the Twitter interface design. They have changed this a lot recently because there was a real issue up to a few months ago about being able to add alt text to images. It is there as of today. Tomorrow, who knows. But the functionality is there. We just need to know about it and work that into our workflow.

If there are people at the museum who are responsible for social media be sure they understand if they want to reach a larger audience, they want to include alt text on their images being used on twitter. One of the worst instances sadly is on Instagram. What you can see on the left screenshot is all the great things you can do and then this tiny text in grey at the bottom that says advanced settings.

If you click on that you get the next screen and you scroll to the bottom of that screen you can see write alt text. That is where you would add alt text to an image in what is effectively an image sharing platform. That's very disappointing and it's something Sina and I are taking on as a challenge to try to get Facebook to change this. As you can see on the left screenshot on the left, there's more than enough space to tag people, add location, to add alt text. No reason for it to be buried that far into the platform itself.

And then YouTube has a number of options. One trick is being able to upload a transcript and having it automatically be time coded to the video. Then you can download it. You don't even have to present your video on YouTube to take advantage of the service. It's just to say this is the screen where that happens. This screenshot right here.

The important thing there is to understand that YouTube offers automatic captions. Some of that has been in flux because they are revisiting their captioning policy. But be very careful not to use those automated captions in production. Because of those pitfalls that Corey just warned about. However the time sinking capability is super powerful and a free feature.

In terms of the website and web presence, we really want to ensure that we are managing expectations before people arrive on site. One of the things that Sina and I deliberately harp on is the idea of managing expectations. The website is a great tool where we can publish all kinds of information. There are a lot of websites for museums right now that are letting people know what the COVID protocols are before people arrive onsite. That is fantastic. There's no reason we cannot take advantage of that exact same concept for everything we are doing in the future.

What are the more sensory stimulating locations of the museum? Where are the quiet spaces? Which restrooms have changed tables? Are there gender-neutral restrooms onsite? What material is containing things that are not hypoallergenic? There are number of things that we can surface on the website for before people ever arrive onsite, and this is something frankly we can all do a lot of better job on. It is quite easy.

This is an example from the Royal Alberta Museum website. They are saying at this time they don't have wheelchairs and strollers available for public use. We hate this, that this is the stance, not to put too fine a point on it. I feel we can say this quite admittedly because we just did a keynote for the Alberta Museum Association. The good thing is they are servicing this

information before people come onsite, are needing that accommodation or affordance and are expecting it, and finding out it's not available. I think with that we can open of the Q&A.

Yay, I'm back. Thank you both for that. I know I was taking many notes and will be watching this presentation again as a leader of an association with social media channels and website content and lots of really great practical takeaways for our attendees today. We have a few questions that have come in and are continuing to come in.

I will start with the first one. Sina mentioned a bit in the beginning, but can somebody talk about accessibility settings on iPhone and iPad? Specifically, voiceover? The questioner, Joseph B., said "I'm working on an app and I want to do the best I can to make it accessible for those with disabilities."

Sure, so there's a couple of things there. So you're asking about the accessibility affordances that you can build in. Apple has accessibility guidelines that you can follow. So that would be something because you are developing an app, I am assuming you are familiar with. If not, on Apple's development website there is an entire series of pages around accessibility and what you can do. A few things to keep in mind there.

Take advantage of the fact that you can put programmatic labels on buttons as you build the app so they read out correctly with voiceover using standard controls whenever you can. Also making sure that the swipe order is logical. What we mean by that is if you have an app and let's say you have a table component that you are displaying a grid of information in, you may think I want to make all the notes in that table accessible. So you would go do that. I won't dive into the code right now, but happy to talk offline about it. That actually may not be the approach you want.

The approach you may want is to make each row of the table accessible. Because then you can expose the actions on that row to other methods. These are the kinds of considerations that are documented on Apple's website, and I'm happy to talk to you about it. Feel free to reach out as well.

Going back to Corey's point, test, test, test. Voiceover is built right in. Turn it on, You can assign it to triple click of your power or your home button depending on the phone or iPad you have. You can turn it on, test with it, and turn it off if it's not the technology you need to use daily.

Even with Siri, I think you can just say turn on the voice button.

You're trying not to say it so you don't trigger it on your device.

Correct.

Thank you both for that. I am now going to switch to a few questions about alt text. The first one came in from Yvonne Miller. Is using the alt text feature on Instagram better than writing an image description in the caption?

It depends. We need to talk about serviceability of alt text. Because alternative text, the visual description of an image, has traditionally been relegated to something that is only useful for

blind and low vision folk. This is not true. Many, many people benefit from visual descriptions. It is a good idea to visually surface them.

However, because Instagram as an app takes that alt text that you write and exposes it to assistive technology in the correct way, when you use that field that Corey was talking about, we would say yes, put your visual description in the alt text field. There's nothing preventing you from also surfacing them in the body of the post.

There will be a bit of redundancy there, but you may get some advantages about that depending on the communities that you are participating in. But when the alt text field is available in an app, Twitter or Instagram, do use it because it exposes correctly to assistive technology.

Thank you. That next question a somewhat related. Is their problem with posting images of text if you also post that text as alt text or in the description?

That is a great question. It can be. The reason is, think about zooming in. Let's not worry about somebody like myself using a screen reader that would benefit from alt text like you are saying in your questions. Let's talk about somebody who is low vision. They have their zoom at 250%. Now that text is going to start getting it pixelated. It's going to start not looking correctly. It won't be able to have its background flip automatically by the computer.

It won't support things like word tracking or line tracking that certain enlargement software offers. So whenever you possibly can avoid doing so, whenever you humanly can conceivably can avoid posting or using images of text, you absolutely should. However, if you have no other choice because of a certain technical limitation, at least the other part of your question kicks in, please make sure that the text in its entirety is in the alt text.

Remember even that's not an equivalent. If you are displaying an image of a website, there's not only text on there, there are components and headings and navigational elements. None of that gets exposed in alt text. It is all flattened to just a text block.

I just want to follow up by saying, Sina said flipping the background. Using some assistive technologies and with different color blindnesses, there is an ability to have white on black and flip into black on white. You can change into yellow on black, etc. There's a number of different color combinations that can be used to ensure it's as high contrast as possible. If it's an image or pixel based, it won't do that like if it's true text.

The other thing is, we are not saying also, like if you want to post a photo of a sign by the side of the road because of whatever, please include the text that is on the sign in the alt. But don't not post the photo of the sign because of that.

That exactly right.

It's just simple in just thinking through one more step or two more steps or whatever it may be and training ourselves to go further with that image.

Corey gave a great heuristic for that. Imagine the image is not there. Now is the text that you wrote for the alt text sufficient to totally understand what's going on? If the answer is yes,

then you have done a good job with your alt text. That's why it's called alternative text. It is an alternative to the image.

That is a great way to think about it. The next question comes in from Amelia Giordano. Can you give examples of accessibility overlays so we know exactly what programs to avoid?

I have no problem naming names. Accessibe and Useaway is one, and there are other products as well. These are usually \$40-\$50 a month and they offer extensions for your website. Developers love them because it's one click and one line of code that takes five seconds to install. And it's the worst thing you can possibly do.

Corey?

No I don't have anything.

Those were the questions that have come in for the time being. We still have about 10 minutes left in the session if there are any other topics that you want to expand upon that maybe you want to spend a few more minutes on that were in your presentation.

We glossed over the wave toolbar because we were worried about time a bit but the wave extension is a good one to install. It's good to put in your browser. Again it will not catch everything. But it does highlight a few accessibility errors like color contrast, missing alt text on images, buttons that do not have a label associated with them or form fields like username, password the do not have the right attributes. Things like that. So the wave extension is a good one to install.

Then when we mentioned the accessibility tools in Chrome, we did not say how to access them. If you bring up the deaf tools, which is usually F12 and there are ways to do it with your mouse as well, you can go to audits and accessibility. And that is the lighthouse tools that they are using there to actually do the accessibility check of a website. Again it will only in its most perfect state, catch about 25% of errors, but it will at least tell you about the low hanging fruit when it comes to accessibility on the page.

Thank you, Sina. Corey?

I'm trying to share my screen again so I can show the chrome wave extension. If you manage your extensions on chrome and a lot of extensions are now available for Safari as well, have been available for Firefox forever. Here is the wave extension. Just click wave and you can see on this page, I could have probably chosen a more error prone website, but there are zero errors. There is one contrast issue and 11 alerts. You can go into the details and see what they are. We have one redundant link on this page. We have one piece that has low contrast. The point being, its good insight but not something we would want to rely upon. We could certainly start to surface some insights for further exploration.

It's also easy. Corey you brought that up in a few seconds. It is something easy that you can do when you receive a webpage when you're on a website that may not be yours just in case you are curious to see how accessible it is. If you send out a website, you want to be sure you're sending out an accessible resource. That is the power of it. It's one click or keystroke away to just run as a habit when you're thinking about accessibility of web content.

Thank you for that follow up. We still have some more time so let's keep going.

I think we talked a lot about the web and there's an increasing number of digital media being presented in galleries on site. I want to say that everything we have discussed in terms of the web principles here are certainly applicable when developing a kiosk in gallery.

When you think about things that have been happening during COVID and the reticence to touch things. If in gallery we are using a web approach to digital presentation, then it means you are one short step away from making it available on an Internet or excuse me on an internal Wi-Fi system to any of the people that come in to be able to use their own devices and not just use the kiosks.

There are other tools like free-touch which is a mobile app that can be used by museums that get away from the touchscreen and allow people to use their own mobile device like a mouse on the touchscreens that are in gallery. If we think about the in gallery digital presentations in a web way of thinking about things and design development processes, we know we are in a good and scalable position for basically anything that comes along next.

As we have experienced during the pandemic, we want to assure that our content balance remains consistent. That we don't just shut down and create barriers for accessibility while we are trying to deal with full transmission or whatever happens to be the case. The whole approach to in gallery digital, we are a big proponent of following the same processes as we do for the web.

Take advantage of the built-in assistive technology. If you're able to have the website full-screen that has your content and put that on an iPad, then you can put a program in place whether it's a docent or visitor services staff or anybody that can turn on a screen reader or enable assistive technology devices on the iPad. It is built right in and you don't have to necessarily use a specific piece of hardware that may not be as accessible and you are able to display your content.

If it's not able to be done in gallery as Corey is saying, making anything available on your website whether it is the label text or the images with extended visual descriptions or the sensory map as Corey discussed, these are the hot and cold areas of the museum, these are the bright and dark areas of the museum, that kind of information the more you can surface it for people upfront and on the web where you can ensure that it's pretty accessible, it's a really great way of thinking about it.

The other thing worth thinking through with respect to in person experiences is that people are going to be in different places. Some people like myself technically advanced and very comfortable using an iPhone. I'm happy to just get a URL or web address and go somewhere and read it on my phone. Others may prefer something more classic like the material in braille or the material as an audio file or audio stop in an app or physical hardware audio tour.

So just think about your audience and the makeup that you happen to know is there. Adjust these affordances we are talking about so you are providing the information in a variety of ways—print, large print, high contrast, braille, etc. but do it in a way that is cost-effective for

yourself and achievable to be sustainable over the long run so it is easy to be built into your process.

Then listen to your visitors. As they complain about something, we love that. We are people that really love it when people complain because every single complaint is an opportunity for enhancement and improvement.

One follow up point to earlier about using the web approach in gallery are on-site is there might be concerns around copyright and rights management around content. Let's say there is one 30 second video clip that is licensed from the Getty Museum and is super expensive to put on social media but it's not expensive to run in the gallery.

Well, we can geofence these things. If people using internal Wi-Fi or we set up a geo-fence within certain coordinates or geolocation, people can access that content which means if they are on-site, they can use their mobile device and access the content. If they're not on-site, they can go to access the content but they can't. That is just one way of managing some of those rights restrictions which are probably pretty practical concerns for most museums. I noticed there are a few more questions.

Yes I apologize I had a bit of a lag in updating the questions. We do have plenty more to deal with. For websites about places with no physical location, should we note accessibility components of the website on an opening screen? Is that helpful? I am building a new website for my museum evaluation firm.

Not on opening screen per se, unless you have a need to display that for everyone. It is not necessarily the place that most people would come to expect it. However, there are 2 things that most people come to expect on websites about surfacing accessibility information.

Quickly. Not for your evaluation firm, but for a museum that does have a physical location, under visit there's almost always an accessibility page. This is standard practice in museums now. Putting accessibility under the visit category of a website for physical locations is the best place to put wheelchair affordances, rentals like that, calling ahead for interpretation and all those things we have come to expect about accommodation.

Then number 2, and this does apply to your specific use case, in the footer of your website where you usually have terms of service or privacy policy or something like that, put an accessibility link there. On that page you can put all of the considerations that you have taken and that your website supports for accessibility. If you want an example of a page that you're totally welcome to copy and paste from and steal from as long as it is true, I will caveat it with that. If you go to pac.bz, p-a-c-dot-bz is the URL and you click on accessibility, there is an accessibility page that models that behavior for you. It simply talks about best coding practices and what we strive to do and most critically, it invites any visitor to the website to contact us in case they have any questions around the accessibility.

Here is another quick one. Did you talk about, does Facebook have a place to add alt text?

They do in images. It is different and they keep changing the interface for galleries versus specific images. I don't want to steer you wrong on exactly what the field is called. But be aware that they used to call it captions which is a little confusing because a caption for an

image is that thing that we all see. That is the text that is not the visual description but simply may describe who's in the photo or the location or have the rights management string there. They may refer to it as caption but yes Facebook does have the ability to write in a description for your photos and images as you upload them and post. So does LinkedIn I believe.

Thank you. I'm going to do 2 more questions as we are running short on time.

Lightening Round.

Can you give an example of two of well-designed accessible websites. I would be interested to hear from each of you on that.

We always feel nervous about this question because we don't necessarily want to put people on the spot, and it sounds self-aggrandizing to point to our own websites. But [m4c.space](#) or [mozaic](#) is a microblog that Corey and I used to run in the before time when there way a lot more travel, and its pretty well accessible. It's a good example of minimal effort for maximum accessibility. It's a Wordpress theme, we picked an accessible theme, touched up a few more things and made it accessible. So that was the website you say demoed in the video that we tried to play earlier.

Also that [pac.bz](#) website I mentioned earlier also tries to be as WCAG conformant as possible. We will be happy to share some other links. But again, we try to be careful about the question because what the reaction tends to be is to do what that website is doing. That is exactly the wrong thing to do. You should not copy an accessible website even remotely. But there are some good examples that different websites do really well, and we can provide some links after this webcast.

Maybe just the [Mozaic](#) microblog. We haven't been keeping up on the blogging since the whole idea was highlighting things that we find in our travels. However, we do keep the inclusive design glossary and the reading lists both up-to-date. Almost weekly. We update those, and the reading list does contain a number of different resources one of which is case studies and examples and tools, etc. It is broken down into different sections. So its [M4C](#), its another numeronym for [Mozaic](#), [m4c dot space](#). And if you go to the reading list, there are a number of examples and tools and all kinds of things you can access.

Thank you. This will be our final question, and it's basically a final thought from each of you. What is the best way to train or explain accessibility tools, settings, and practices to those in my organization who are already having trouble with basic settings with technology when creating content and programming?

Corey, you want to take that first?

Sure. It is a tough one. It's almost like a specialized field that we all hope that at some point everybody is digitally literate to a certain level, and it becomes part of the day today and not a specialized knowledge center. The same thing goes for inclusive design and accessibility. I think the main thing will be more at the high level. It would be about considering again what are our intentions and who are we doing this for? What are those people's intentions? Then making deliberate decisions around something.

Are we going to do 0 to 100 and just have it be inaccessible or can we do 0 to 50 and have it be accessible and spend some time chipping away at the remaining 50? I think that would be our preferred approach, and you may find some of these other outcomes of this approach are things like changeability and operability, etc.

When we make deliberate decisions around technology and we think about what is the immediate task but with one eye on the horizon of what's coming next. If we follow an inclusive design methodology and we are considerate about these things, we will realize the next time we have to update the website like a grand update, it will be a lot less work. Everything that is in place will facilitate changeability while it's been facilitating accessibility.

Do it slowly. If you have difficulty or have people have difficulty with certain technical concepts that is a problem to solve. Right? If somebody is having difficulty using word correctly, we need to solve that problem. We should not just accept that as being okay. How can we empower and help that person to understand there are many free resources out there for learning office.

It sounds like a trivial thing but it is not because when you use Microsoft word correctly you have just enabled your institution not only to create accessible documents but to create accessible PDFs as well. Because the save as feature going from Word to PDF is one of the most accessible ways to create a PDF. That is even something large institution struggle with on a daily basis. So take small steps at first and don't let the perfect be the enemy of the good.

Thank you Sina and thank you Corey. That was awesome. I appreciate your time and all the great questions from our attendees. And adding nuts and bolts to the topic as well as practical takeaways. We really appreciate it. I will do a few closing remarks to close out the program for the day.

A few final reminders to our attendees. Visit the forum on our website on museum-hub.org and ask any questions. I'm sorry I could not get to all the questions. They all came in at a bunch at the end. We will do better at that next time. But that is what this forum is for to continue the conversation and get your questions answered. Also please follow us on social media.

The next workshop will focus on ways that small museums can ensure that livestream and video programming are accessible to and inclusive to individuals of all abilities.

The instructors will address the pros and cons of different video platforms. Also how to incorporate live captioning and American Sign Language and image descriptions and other services that we touched on somewhat today. I will be with you again next week and I hope you will join us. I just want to say huge thanks to all for attending today's session. Have a great rest of your day.