

# Digital Accessibility Starts with the Tools We Use

**JENA FAHLBUSH:** So I want to welcome everyone to Digital Accessibility Starts with the Tools We Use. My name is Jena Fahlbush. I am a passionate accessibility advocate and a technical assistance specialist with NCADEMI. Thank you for choosing to spend some time with us today to learn how digital accessibility shows up across the materials you're purchasing, creating, and using.

My teammates will be sharing some practical strategies you can start using right away to improve access for students with disabilities. To support your webinar experience today. Our wonderful program assistant, Natalie Cardenas is here. Please reach out to her with any technical difficulties you may have. You will find captions and a transcript provided by 3Play Media available to turn on in the options of your Zoom toolbar.

Today's slides and additional resources can be found at a shortened bitly, and that's [bit.ly/tools-we-use](https://bit.ly/tools-we-use). And we've got that link shared for you in the chat. As with all of our webinars, a recording will be posted to that same resources page within the next 24 to 48 business hours. And you can also scan the QR code on the right side of the screen to get to that page if you'd like to open it on another device.

If you have any questions, please use the Zoom chat throughout our session today, or you can use the React button to raise your hand, letting us know that you have a question. What we'd like to do is take questions that fit naturally into the discussion along the way, and then return to the rest of the questions at the end during our Q&A, at which point we will stop the recording to allow for a more open conversation.

I will introduce you now to the rest of my teammates that are here, and these teammates today will be our content experts. So again, I'm Jena Fahlbush, here with Christopher Phillips, a Technical Assistance specialist, with Rob Carr, one of our Digital Accessibility Specialists, and Lyssa Prince, another Digital Accessibility Specialist, who just joined our team last week. So please give a warm welcome to Lyssa.

All right. So they've put together a great session for you today that is designed to ensure that we meet some objectives and that you can identify at least one way to embed accessibility into procurement processes, that you can apply at least one strategy to improve the accessibility of educator created content, and that you can use a practical

tool to evaluate the accessibility of websites. And now I will hand it over to Rob to talk about accessibility and procurement.

**ROB CARR:** Thanks, Jena, very much. I appreciate it. I want to put this into context for everybody. When I talk about procurement, what I'm talking about is when you have a larger procurement and this usually happens over a set dollar amount, sometimes that is based on State statutes, sometimes it's an internal thing, but I'm talking about a more formal process where you have more governance, more processes.

There's usually dedicated procurement staff, who will be coming in and being a part of that process as well. They might be in the finance shop. There might be a procurement office. At the same time, other folks also contribute to these conversations, and I think that that's where some of you all might come in, right?

You might be called in to be on a team who's making a decision about an educational technology product. And that suggests that even if you're not directly involved with the procurement piece, I would encourage you to share some of these ideas and resources horses with other people who are regularly part of those purchasing decisions or do directly contribute to that work.

And that's because this is unique. It's up to us. Under the Americans with Disabilities Act, and for as long as I've been doing accessibility work, 15-16 years, the Department of Education and the Department of Justice have both maintained that, it's up to us as the purchasing entity to account for accessibility.

They recognize that we can't go in and fix the products that have inaccessible elements, but it is up to us to account for accessibility and then to put pressure on the market, to put pressure by demanding accessibility from our vendor partners on them to then make the products more accessible. So a little bit of level setting as I get into this section.

This is based on a framework that we've established. I'm going to go through each of these pieces in more detail over the next few minutes. But we look at this as two buckets. So you have places where you have existing paperwork, you have existing forms and processes and governance, and that's where we need to embed accessibility into those existing things. And in order to really account for accessibility effectively, we also have another bucket where we need to add some new tools and processes ourselves.

So on the embed side, I'm going to talk about making sure accessibility is in things like requests for proposals in any up scoring we do, comparative scoring and in contract language. On the addition side, thinking about tools and processes, I'm going to talk

about some of the vendor documentation that we need to request in the form of a specific product conformance report, that gets a little bit more technical, and also asking the vendor for some information about the way they handle accessibility more in general.

And I'm also going to talk a bit about having an accessibility focused demonstration. And all of that is the vetting side trying to make a determination about what the accessibility is like when we're comparing the different products that might be in a procurement.

So when we think about embedding, I want to talk a bit more about the request for proposal. It's an instrument that's common in procurement, but if you're not really involved with that, then it might not be something you're terribly familiar with.

With a request for proposal, the goal is to put out all of your requirements. When I say requirements, I mean things like if you're looking for a learning management system, there's a privacy and security concern there because you want to be sure that grade data isn't just available to anybody, right? So that's going to be a requirement. Maybe there's a requirement where you need to have teachers and instructional designers upload a video and not link out to YouTube.

Right alongside those requirements, we need to make sure that we emphasize accessibility as a fundamental requirement, a thing that we absolutely need from the product, and we need the vendor to support. And there's also an opportunity and a need within a request for proposal to really specifically the requirements we need, the information we need to be able to vet the product.

And I'll get into these more. I mentioned the conformance report, a demonstration, maybe getting a testing environment, things like that. The point here is that we want to talk about accessibility and stress its importance from the outset, from the very, very beginning.

Some other common things that are built into procurement processes are product scoring, where you literally set up a point scale. And for each of the requirements that you document, you score how well or how poorly the product meets those requirements. This is something you may or may not have formally. It depends on, in some cases, the size of your organization. If you're at the state level, it might be more common. If you're in a larger district, it might be more common.

It's a really helpful thing because it takes out the subjectivity of determining whether or not something is accessible, and it also helps to take out the ability, or at least lessen the ability for somebody to just push accessibility off to the side in the decision making.

It keeps it so that it is really in there with all of the other things that you've documented as needs.

And the final place to consider embedding is in your contracts or a purchase order that everyone signs off on, or a memorandum of understanding, any place where you can hold a vendor to account needs to include accessibility language.

When it's not there, it's pretty typical if you discover an accessibility barrier, even if you got paperwork upfront where in a conformance report, they reported out that it was in really good shape, and you find out that it's not, if you don't have language in a contract, it can be very difficult to get them to fix it without billing you more.

Now, a lot of the time, the RFP essentially goes in as part of the contract, and it handles itself. But you want to be sure that you're following through and putting yourself in a strong position as the purchasing group to be able to force the issue a little bit if needed. And then with this, some addition of tools. This is when we start thinking about actually vetting and comparing the tools from or among and between one and another. The place I like to start with this, and this isn't necessarily a typical practice, I don't think, but I always like to ask the vendor about wireframes that here's their accessibility practice. I alluded to it before.

I really want to know how a vendor, quote unquote, "does accessibility." Do they have training for the people who are designing and building the product? Do they have some of internal governance to be sure that they're checking for functional and visual accessibility before they ship new stuff out?

Because if, even if the product currently looks really good, I want some insight and assurance that when they add new features, when maybe they redo pieces of it, I feel more confident about that new stuff being accessible if I feel like the vendor is doing a pretty good job with accessibility in general.

So I will ask maybe in the RFP for the vendor to speak to that a bit. I think, again, it's a good idea to mention stuff like that early on to set high expectations for what the vendor needs to provide.

One of the things that is unique in the k-12 EdTech space is that the new Title II rule that is very, very specific and very broad, it's, I think, going to lead to more SEAs and LEAs, asking for accessibility with vendors who might not have really heard much about it before.

So some of these things, you might not necessarily get much of a response, if any, but at the very least, hopefully vendors are going to be ready to provide an accessibility conformance report. It's commonly referred to as a VPAT.

This is a document that provides a lot of information about conformance to accessibility standards. It's a very common and widely accepted tool. Again, with some of the vendor partners that you work with if they don't work with maybe higher Ed, some will, some might not. And so an ask for this might be something new.

Since this is demand driven, the more people and the more SEAs and LEAs asking for this documentation, the more likely we're going to be to just get it without having to wait for a vendor to put it together, if that makes sense. If the demand starts to go up and the expectations start to go up, then the market will start to shift.

Now, obviously there's going to be a lag, but it does actually work. We have seen in higher education where this has been, I think, a focus point for the student environment in particular for longer, for the last 15 to 16 years, we've seen the market shift, and we're starting to see that with k-12 EdTech. So we just need to keep asking for these things.

It can be helpful to get an accessibility focused demonstration where you're actually on a Zoom or something with the vendor, and they're going through and demonstrating, and maybe you have a script of things to ask for, for them to actually show functionally what accessibility support is like.

It can be a pretty efficient way to get that insight. If you have more technical people, if you have an accessibility specialist, they can probe a little bit deeper, but having something like that can be a really good way to get a fair amount of information in a relatively short amount of time.

And one of the things that I think in the public sector we've seen over the years is that a lot of purchasing entities, who are in the public sector, do a lot of direct testing, because maybe they don't trust the VPAT, maybe they haven't gotten the information from a demonstration, or they can't get all the vendors to agree to one. So they end up doing some direct testing of a product.

I feel like it would be great if we could move the market to where that's not required. There are times, though, when maybe you have a relatively small set of vendors, or a relatively small set of tools to choose from, when there might be a need for that. Again, something in a formal procurement that I think it makes sense to document early on in the RFP, like I talked a little bit about.

To get a little bit deeper into these, we do have some resources that we've created. There's a procurement guide that starts at a little bit higher elevation, if you will. We have an article about understanding the VPAT and ACR, that gets a little bit more specific. And then one about using ACRs to inform those edtech decisions.

The last two, we just published, could be some edits on those over the next couple of weeks, but this will give you a little bit more information about what I've just buzzed through. Christopher, I'll turn it over to you to talk about the EdTech Directory.

**CHRISTOPHER PHILLIPS:** Thank you so much, Rob. And so sometimes this work of procurement can feel a little bit overwhelming, and there's a lot of information you have to look up. And so many different schools are doing this same information. So we're just going to take a couple of minutes to share this fairly new resource from NCADEMI. We haven't done a lot to publicize it just yet. We're still building it out, but it's an EdTech Directory that you can see here on my screen. Thank you, Jena, for putting that link into the chat. That we share some of these resources, we'll be adding those new resources that Rob shared today. But we're looking at some of the top EdTech products in the digital learning space.

And you can see here you can either search for a product or see some of the recent ones, come here and see all of the products. And we're adding new ones fairly regularly here, but if you go to any one of these product pages, our goal is to do some of this foundational work for you to go out.

Here's for the Canvas learning management system, for example. And here's the email that you can use to reach out to them and ask about accessibility. Here's a link to their most recent accessibility conformance report, based on the VPAT that Rob mentioned, with some information about when it was published or what version they're using, and then just a number of other accessibility resources that will give you a little bit of a sense of some of the things that particular product or platform is doing to support accessibility. We're not going to tell you if it's accessible or not, but it's a great resource to get started and appreciate any feedback you might have on that. Take a look, share any feedback. Let us know about products that are missing. And then stay tuned for another webinar coming in the next month or two, that will go a little bit more into depth on that. Just wanted to share that as a resource as you do that product accessibility work.

Jena, if you can bring up the slides again. So as mentioned, we're talking about a few different bigger areas today. So we're just going to go at a base level. And we want to talk a little bit to talk about accessible content creation.

Obviously, so much of the classroom-- I'm reviewing my kids homework and in Canvas with them a lot. And a lot of that material is created by the teachers themselves, or maybe by the district or State level materials. And so thinking about not just materials

from other sources, but how can we make sure the content we're creating is also accessible.

Now, we're not going to go in depth on a lot of these topics, but we just want to demonstrate how a couple of basic accessibility things can be done in some different tools with and then share a couple of these resources here where you can go and learn more information.

We have an accessibility basics page that just goes over a few high level accessibility concepts, but there's also that free accessibility fundamentals course, anybody's welcome to sign up for that, go through and learn a little bit more about how some of these resources work.

And then I'm going to just share a couple of slides with an overview, and then we're going to jump in and do some live demo showing how this works in a couple of these different tools. And again, we're not going to go a lot in depth about-- for example, headings here are an important way to make sure your documents are accessible, help people navigate through those.

If you want to learn more in this slide, you can link directly and find more information about why they're important, but we'll just go through and show-- so we're going to look at accessible headings in Google Docs, a tool I know that many teachers are using. Then we're going to jump over to Microsoft Word and talk a little bit about Alt text and making images accessible in Microsoft Word. And then lastly, we'll go over to Canvas and take a quick look at making sure that the contrast is accessible with our colors in Canvas.

And again, really the idea here, hopefully you learned a couple things about accessibility, but really to show that a lot of this work isn't overly technical or too complicated, and it just takes a little bit of time to learn and understand what those accessibility principles are and why they're important. And as soon as you have that, it's often can just be incorporated in into the work as teachers go through and create those materials.

So I am going to share my screen again, and let's start by looking at Google Docs, obviously, very common in k-12 space. And so here, I have a document on screen. Let me blow that up just a little bit where we can see the water cycle.

And one thing to note just, again, as Jena mentioned at the beginning, if you have questions as we go through the presentation, feel free to throw them in the chat. We're happy to look at those. And turn off. OK.

And so here on this Google document, we have a title or the top heading for the document. Headings are just going to be used to organize our content on a page. When I open up a newspaper, I don't just read from the top and go all the way down. I look for the headings that are interesting to me, and then I find a heading that I'm interested in, and then I start reading.

And headings is a very important purpose for accessibility to allow users who may be using a screen reader that reads the text out to them, or other assistive technology to browse and navigate that content in a similar way. And so you can see here already in a document I have water cycle is my heading one.

And then a nice feature that Google Docs has built in-- there's something similar in Microsoft Word. I can click on here and see the outline of some of these headings, which is nice. And just another benefit of using them, I can, especially on longer documents, use that to quickly navigate to the section I'm interested in.

And if I click on this, for example, I can see this right here, this styles selector is where you create those to be headings. And just a couple of things to be aware of. So I have my cursor in there. I can see that's a heading 1.

And then you want to have these organized to reflect the organization of the document. So here I have an introduction heading. I put my cursor in there, and it indicates it's a heading two. I was going to actually-- there we go.

Let's say, though I have now stages of the water cycle is a heading two as well, but then underneath that I have evaporation. Now I want that to be a Heading 3. And so I can either select that text or just put my cursor anywhere in there. And you'll notice as well, like since that's not a heading, it's not showing up over here in my outline.

And again, so we want to make sure that that's organized and reflects the organization of the content. So I'll put that in there. And just quickly come here and select heading three. And that's going to change it to heading three. And that will show up over here as well.

And just one last an important thing on heading specifically, as we go down here, you can see that I have four different stages of the water cycle here, but only three are showing up over here. Now they all look like headings.

And this is just to demonstrate the point that I can take just any regular text and format it to look like a heading. But the really important thing about headings is, is not just how they look visually, but making sure that they have that meaning or are marked up and indicated as a heading. That's what's going to make them accessible.

And so if I've just made this text big and bold, that maybe looks like a heading, but it doesn't have the meaning or doesn't act like a heading, and it's not going to show up here. It's also not going to show up for some users of assistive technologies.

And so again, I can come in here though and easily fix that, just mark it as a heading three. Now, both is looking like a heading and acting like a heading. And this same functionality for headings is going to be available in Microsoft Word and your learning management system, almost anywhere that you're creating content. So that's a quick example in Google Docs.

Let's jump over for just a minute to Microsoft Word. Again, another tool that is commonly used. And we're going to look at alternative text on images. And so when we use images in our content in our instruction, we're often using them to create some of a meaning or to share a message of some or to teach something.

And so if someone's not able to visually perceive those images, we need to add some text or what's called alternative text that's going to describe that image or what the purpose of the image is. Now in Microsoft Word, there's some great tools that can help us with this.

And I'll just mention briefly, this is something that's not available in Google Docs yet. We hope it will be at some point. But in Microsoft Office, I can click on the Review tab and click Check Accessibility. And that's going to go through my document and do a check for a few things to see is this document accessible or not? And then if it's not, it's going to tell me, what some of the issues are.

So for example, it can tell me on these two images that are missing that alternative text. And so it's not going to be accessible for some users. I can click on that, and they'll walk me through the process of how to add that alternative text in there.

And there's another feature if you're on a newer version of Microsoft Word called the Accessibility Assistant, you can turn on. It'll just even as you add content, show up and tell you, oh, something you need to look at here. And I can click on that as well to add Alt text. So there's a couple different ways to do that.

But the most universal, and I think going back for a number of versions of Word, is if I just right click on that image, or I can select it, click on Picture Format and there's Alt text right here, or right click, View Alt text right there. And then I can take a minute just to go through and describe that image.

Now in this case, again, one other quick note on images is, is it's not just describing what the image looks like, but is what is the teacher trying to teach with that image, right? And so there's a couple of different examples we'll have here.

This first one is just saying this is a demonstration of kinetic energy for physics for physics class. And so I might come in here, and I won't take a lot of time here, but it might be something like, roller coaster with the cars going down a big hill, something like that. I'm not a physics teacher, so I probably wouldn't do a great job at that. But to make sure that whatever the visual intent or purpose of that image, you're going to make sure that's available to all, all students.

Now, that exact same image, let's say, it's used on an announcement for a trip to an amusement park. In that case, it's going to be a different Alt text on that because I'm using it in a different way, and I'm trying to communicate something differently. And so I'll click on here.

I'll mention real briefly, there is this feature that can generate Alt text for you. And that's something we used to discourage, but it's gotten better and better to where it can provide a good starting place, but it's never something you want to just count on or rely on.

And so it has some text in here that says line drawing of a roller coaster with multiple loops, steep drops, pretty descriptive, but in that case, like I don't need that much description, especially for this announcement. And so if you ever do use that, you want to review that and update it to what you're intending it to be, and then you can either approve it.

But in this case, the other option is if there's just like an image that's not sharing a lot of communication, it's not intended to teach anything, the other option in here, you can come in and mark something as decorative and then somebody just would skip over it if they're reading it with a screen reader. And so just there's a couple things. And again, lots more resources and information about Alt text if you want to dig into that in some of those resources that we shared.

Lastly, let's jump over and take a look at one more example in Canvas. Now, whatever learning management system you're using, whether that's Google Classroom or Schoology or Canvas, there's often going to be some similar tools, but they're going to look different.

But again, the key idea here is things like headings, images, and Alt text or color contrast, these features are going to just be able to be applied across almost any tool that you're using in different ways, and sometimes maybe with some limitations.

But in this case, we have a Canvas page-- let me actually go back, and you can tell here there's some text on here that just is hard to read right. It's a light pink or brown

against a white background. And maybe a teacher wanted to get creative or make things match a class theme or something.

And that's fine to do. There's a lot of colors you can use, but we want to make sure that they're always going to be accessible so that everybody can read them.

So the last example we would look at here. I can edit a Canvas page. And it has something similar to Microsoft Word where there's a built-in accessibility checker, that I'm going to take advantage of here. If I click on that, it's going to tell me, oh-oh, you've got some text that doesn't have the minimum contrast.

We won't go into all those numbers and what they mean, but there's some great guidelines and tools available to help you know if your text has enough contrast or not. And in this case, it highlights that text over there. I can just come over here and say, oh, yep, let's move that to be something different.

And then click Apply, and it'll say, tada, I get balloons. There's no more accessibility issues. And it shows that text is going to be a lot more readable for all of our students. You could also do that by changing the colors here a-- if you wanted a lighter color, you could, for example, go in and add a darker background here. And it's just making sure there's enough difference between the two of those.

And so there's just a few quick accessibility tips, things that you can take in mind and consider as you create content or work with teachers on creating content that's going to make your teaching materials more accessible and just also more usable for all of the students in the classroom. And with that, I'm going to hand it over to Lyssa.

**LYSSA PRINCE:** Thank you. All right. So now we'll we've covered procurement. We've covered some things to do in a few tools. And so now this relates a little bit more back to procurement in a way.

But I think Rob mentioned sometimes with an ACR you get that in and you may find that they weren't exactly, not necessarily honest, but they were missing a few things. So this gives you some tools to help you evaluate a product for yourself or something you're trying to use in the classroom, whether it's like a Kahoot or a Slido or something like that. So I'm going to give you a quick introduction here.

All right. So we're going to use WAVE. And we're going to go over about five checks. WAVE, it is an acronym. It stands for the Web Accessibility Evaluation Tool. Hopefully, all of you or at least some of you are familiar with this tool already.

But it is an automated tool that helps expose accessibility barriers. It's definitely not going to be able to catch everything, so there is some work you're going to have to put

in more manually to make sure that all of the things on this-- or to catch everything that you possibly can on the tool that you're looking at. But it can give you a really good idea for how accessible this tool may be.

I also love that WAVE educates users about the barriers found. So if it's something that you're not familiar with, it's an error or an alert that you've never seen before, you have some information there to help you along with that.

And it can be used two ways. It can be used either as an extension. So you can get that in Chrome, Firefox, or Edge or just paste in the web address, which is what we'll do when I show you the demo here in a bit.

And we're going to go over five accessibility checks. And again, this isn't a comprehensive audit, but it's just a series of checks you can use with WAVE to help you get that bird's eye view of the accessibility of what you're checking.

So the first one is just very general-- how many errors and alerts are there? So we'll cover the difference in errors and alerts as we get to that part.

There we go, is for the keyboard. And this is really important for people who are using assistive technology devices that maybe mimic the keyboard. It's also really important for people who are using screen readers, who don't necessarily are not able to use a mouse or something like that, but we're asking two questions here. So I snuck in maybe a sixth check for you all. But is everything in the Order tab of WAVE? And is it in the right order?

We're going to look at headings as well. So Chris just covered that over in his portion. But we're basically going to just check what's in the Structure tab. So is what's there correctly representing the page?

We're going to look at color contrast. So are there any color contrast errors that we can automatically find? And Alt text, do images have correct Alt text? And with that, we're going to move out to a demo. So I know we're going to pop this into the chat. And I'm going to share my screen now.

This is the [wave.webaim.org](http://wave.webaim.org) page. And what I've done is just taken the length of the page that we're going to check. It's just a testing page that's able to show you some different accessibility issues, something that you're welcome to check out on your own as well. I can pop that link in the chat. I forgot to put this one in there separately.

But when we hit this button it will run WAVE on that single page. So this is that version that doesn't have to use it-- you don't have to use it as an extension. So there's a lot of stuff that pops up. We have some information on the page itself, and we also have a pane on the left that's popped up.

So we're not going to cover everything in this tool because there is quite a bit, but the resources should help you with some tutorials and things like that if you'd like to check those out later. I'm also going to go down here to the bottom. You can deactivate things. And now I'm going to want this deactivated later, so I'm just going to do so now. But if you don't want some things on the page, you can actually hide them. They can help you or this can help you get a more clear version of what's on the page, so you can do a little bit more easy testing-- or do the testing a little bit more easily.

So in our Details tab, this is where we're going to get the overview of what wave has found on this page. We have 16 errors, 4 of those being contrast errors and then 11 alerts. So that's where we're going to focus on at this point.

So the errors are things that WAVE can, with pretty high certainty, assume our accessibility barriers. Alerts, on the other hand, are things that it's taking a guess at. It's trying to say, hey, you may want to check this out manually and see if it's an actual accessibility barrier. So that's the difference.

But we already know from the number of alerts we have that we have a fair number of accessibility barriers that are likely to be on this page. We're going to go over a couple of those as we go through the rest of our checks, but I think for our first check, we can say that this one is pretty much a fail, right? We have a lot of accessibility errors and alerts on this page.

Now, if we go over to our Order tab-- I go back and forth between saying pane and tab, and I probably shouldn't do that. If we go to our Order tab, we can now look at that keyboard testing idea.

Now, there is a resource that I've listed in my resources section to go over a full keyboard test, because it is something I think is really important to do on just about every product that you're looking at, but this tool here can help you just get a bird's eye view.

So what it's doing is showing you if there's a number by it, that means it's something it's identified as being interactive. Like I can click it, or I can enter some information into it or something like that. And then the arrows are showing you the order in which those things are reached. So we would be looking in this case to see is everything that's interactive, does it all have a number?

So one thing I'll point out is this is a slideshow, right? So we can actually use our mouse and go through these things. And we can click through these on the bottom. So those should be interactive right.

Well, unfortunately, this is not something that the WAVE order tool picked up. So if we were to actually go do a full keyboard test on this, we'd likely find that this is not actually a keyboard accessible, so the slide show would not be usable by someone using a keyboard.

So those are the kinds of things we might be checking for with this tool. But again, doing a full keyboard test is a really great idea. That's about what I do just first on every single thing I test if I get a request in.

OK, we'll move over to the Structure tab now. And we will see this is going to be the part that shows you what heading structure is on the page. It's also got a few other things in the pane. So we have something called navigation and something called footer.

So these are some HTML things that group stuff on a page that help people who are using assistive technologies easily get to those sections of the content. But we may not notice or we may notice here that there aren't actually any headings. And I wanted to show you what that looks like if it were to have headings. So I'm going to move over to this other tab.

So this is actually the same page, I'm just using the extension on this version. So here's my extension over here. And we do have headings that are actually existing on this better version of this page. So they have two versions of Accessible University, one before, one after and tries to teach you some differences there.

So this first heading is identified on the page. And this is what it should look like. So we automatically know this check is failing as well because we have no heading structure on this page. And there are things on the page like apply now and security test and desired majors, welcome, some of those things, those should actually be headings right. So we know this is a failure. And we can effectively say that one is not going to pass. Move over to the Contrast tab now, and we're going to look at-- I'll show you a couple of different ways to look at this. This does isolate the contrast error, so now everything else on the page has an error is not going to show up.

But we can click on these. And this applies to any of the errors that we look at. But it'll show you a description of the error that you're on, and it'll also give you reference and code. And I didn't show you this before, but I want to while I'm here.

If you click Reference, that's actually the piece of WAVE that can really show you or educate you a little bit on what these errors mean. So if it's not something you're familiar with, always click that Reference tab when you're on an error and it will show you exactly what we mean by this and how to fix it.

All right. Now I'm going to go back to my Contrast tab. And WAVE, again, is an automated tool. So there may be some folks in the room who are already seeing that there may be some color contrast issues that are not identified. Those also happen to be in the slideshow. There's some low contrast with this image in the text.

We'd have to test that manually to know that. But this is showing you just a slight limitation. Anything that's got a gradient or a picture behind it, WAVE is unfortunately not able to test or any other automated tool out there. That's just not something they're able to do just yet.

But anyway we are going to look at these four errors. They are all on this menu here. So it's like a light gray with slightly darker gray color for the text. If we click on one of those, it will show you a sample, and that's how you're able to make sure that the two colors you're checking are correct.

And if that sample shows up like it shows up on the actual page, then you know that that does in fact fail contrast. So we have four failing contrast issues here, and there likely are some more throughout the page that we would have to test manually.

And the last thing we're going to check is back in the Details tab, and we'll go over to our missing alternative text errors. So we have five of these. And you may notice that some of these look a little bit grayed out and have a little gray box around them. Those means that they're hidden currently.

So I'll go ahead and give you a hint. These are actually the three pictures in the slideshow that are not visible currently. But that is what that means. One thing that's really great-- let me go ahead, turned off ARIA, and now it's back. OK.

One thing that WAVE does really well is actually show you what the alternative text is for an image if there is some. So you can actually go very easily check to see if the Alt text that's listed or added to the picture is accurate for what the picture represents on the page.

So in this case, we have the Accessible University logo, and it's actually using a file name. So WAVE is using an alert here and saying, hey, I think this may be an issue because it's using a file name. So we know already that this alert is accurately flagging a barrier for us, so we automatically know that this check is failing as well.

If we get further down and look at those slideshow images, these errors are meaning that they're completely missing alternative text. So somebody coming in with a screen reader or other assistive technology is not going to hear these at all. And we do know that is an issue as well.

So you may be asking at this point, if I have done these checks and I've gone through these procurement ideas and whatnot, like how do I decide if it's accessible enough? And this isn't necessarily something that's really easy to give a concrete answer on, but some things that you can check out or think about, consider, are the number of our five checks that fail.

So in this case all five failed. And we would say that this-- pretend this was an actual product we were checking out versus just a website, but that's a pretty good indication that this isn't accessible, and we should not use it or buy it.

Then we also may think about the impact for the user. So are the things that we found in our little test roadblocks? Are they smaller issues, or are they somewhere in between? And things are like that are roadblocks or things that will prevent them from getting information, period. It will take away the independence of someone. Those are the kinds of things we want to think about when we think about impact for users.

Then we also may want to think about the likelihood of the vendor fixing the issues. Chris obviously showed that EdTech tool list, and I think that's a really great resource. Say you are you're looking at a tool that's in that resource, and they have a ton of accessibility, resources.

They seem like they have a good process for fixing things. And you just found something they may not have gotten to yet, they may actually indicate that it's OK to proceed with this product. Using it, you just need to turn in a bug or something like that. So that's another thing you could consider.

And unfortunately, at this point in time, not everything is accessible, and it's unlikely to ever really get to 100% accessible in the first place for so many reasons, but it may be that you just have to see if it's the best product available.

Now, if there are roadblocks in the thing that you're trying to use, then that's likely an indication you shouldn't use it. Still, you should just try to find another way to do whatever it is you're trying to do. But it also good to consider that it may just be that you have to choose the best product available for the thing you're trying to do.

All right. Now, at this point, we've gotten through most of our content, and we would love for you to fill out our survey. So I know they'll post that link in the chat. It's anonymous. It takes less than five minutes. Even if you just want to get that tab opened up ready to go for when we finish this webinar, we would love that feedback. We really use that to help us guide future webinar series, and we would appreciate the feedback.

Now my last bit of content, those resources I mentioned, that WAVE home page. And then there's also that keyboard testing guide in there, and then the WebAIM evaluation

guide. If you want to get more into a full evaluation process that's still relatively easy to understand and manageable, and it doesn't get too long, that guide is really great for that purpose. And I'll pass it off to Jena.

**JENA FAHLBUSH:** This has been really great. And we hope that you all have found this session insightful with some practical takeaways. I know I always learn something new, or I'm reminded about something, like with the WAVE tool each time I hear about it. So we know that each of these topics really could have been a standalone webinar. So we again hope that we made it really digestible for you.

If we don't get to all of your questions before the end of this session here around 250, please know that you can check out the resources shared today and more on our website at [ncademi.org](http://ncademi.org) or you can email us at [ncademi@usu.edu](mailto:ncademi@usu.edu). You can also always call or text us at 435-554-8213.

And we'd love for you to follow us on LinkedIn and sign up for our newsletter to stay up to date on any of our new resources and opportunities and content that we share. We'll drop those links, have actually already been dropped in the chat, thanks, Natalie, or you can scan the QR code on the right side of your screen to sign up for the newsletter. And if you haven't already completed that survey or opened that tab, again, please take a moment to do so because, as Lyssa said, it is really important to us. Our project evaluator actually summarizes all that data for us, and we always take time to discuss what worked well and where we can improve to best meet your needs. It's quick and anonymous. Now, we will stop recording.