Accessibility Tips

In this Document:

Gerry Pedraza: OK, so let's get started! This is our webinar in online content accessibility tips.

Why is Accessibility Important?

Let's start by saying what's important. Well, it's important to provide equal access to everyone - to any individual with different abilities. So, at Texas A&M we try to provide that access in everything that we do. That's why it's important. Does anyone at the table want to add something?

Sandra Childers: I think that's good.

Headings

Gerry: OK. All right. So, one of the first things to talk about is headings - headings within eCampus or really any HTML-based document or Word. When doing this, it's important to consider using the appropriate tool to mark the structure of the document. In this case, we're talking about headings.

Headings help users that are using screen reader software to navigate an index-like structure in webpages or documents without having to go through the entire document. They just can skim and look for the information they wanted to access. For this purpose, we need to use "H" tags (<h1>) in HTML.

You cannot simply bold the font to accomplish this function; you need to use the appropriate tags in HTML. In Word, there are Headings you can use for that purpose. And, if you have any questions about how to accomplish this, please look for any of our designers or our web expert, Sandra Childers. We can help you with that. We're going to provide our contact information at

the end so you can send us any requests through there. Any comments on the table about that? No?

OK, it's important to use a logical order with your headings. This structure makes it easier for people to follow, like not skipping numbers.

Sandra: I would say, some screen readers actually get confused if you skip headings, so it may not actually get to the ones that, if you say, go from an H1 to an H3, the H3 might actually be skipped.

Enrico Indiogine: Do you mean without an H2 in between?

Sandra: Right.

Enrico: Oh, good to know.

Contrast and Color Accessibility

Gerry: OK. Our next topic is contrast and color accessibility.

People that have a visual disability may get confused if you don't use this appropriately. So, a **contrast** is a perceived luminance between two colors, and it's expressed in a ratio. Here's an example: 21 to 1 is the black text over a white background.

And, we use the WCAG 2.0...
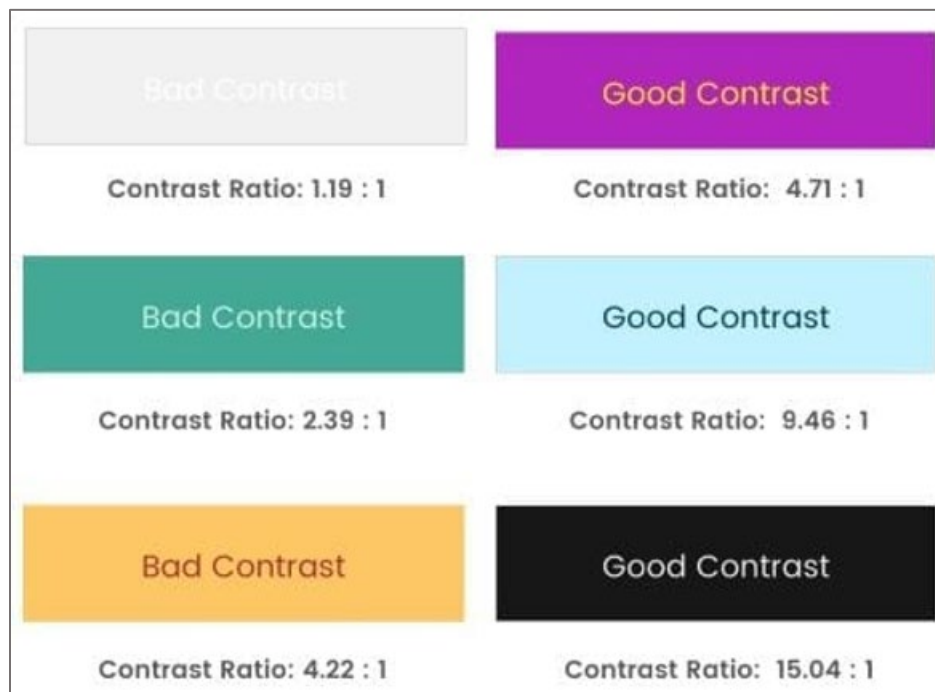
Sandra: "WiCAG" is how they pronounce it.

Gerry: Oh, "WiCAG," thank you. So, one of the most important things about color, besides making things easier for people to see is to not present crucial information in color alone. Like, don't say, "the red text is what you need to send," or don't refer to things directly by color. Do you have any more info on that, Sandra, that you want to add?

Sandra: One example is links because you've got the blue color, typically, but you've also got an underline underneath it. Just in case someone can't see that color, you've got that next indicator to say, "this is a link."

Gerry: So, then it would be appropriate to say, let's not use underline just because we want to because people might get confused?

Sandra: Right, they might think that it's a link.

Gerry: OK, gotcha. So that's useful advice. OK, so here are some good examples. Do you want to go over them, please?

Bad Contrast	Good Contrast
Contrast Ratio: 1.19 : 1	Contrast Ratio: 4.71 : 1
Bad Contrast	Good Contrast
Contrast Ratio: 2.39 : 1	Contrast Ratio: 9.46 : 1
Bad Contrast	Good Contrast
Contrast Ratio: 4.22 : 1	Contrast Ratio: 15.04 : 1

Contrast Ratio – Good and Bad Examples

Sandra: Basically, the left column is some examples of bad contrast ratio. You want to get that 4.5 to 1. So, for instance, the blue-green, in there, that actually might be really hard for some people to read. Obviously, the top one is almost impossible to read. (White on [off-]white is not a good idea.)

So, the right column shows good contrast examples, showing those 4.71 to 1.

Gerry: I like the captions. [laughing]

Sandra: I'm not paying attention to that, so. [laughing] The white on black, or the opposite, the black on white, are obviously good examples of contrast.

Gerry: Awesome.

Enrico: I wonder how these are measured, these numbers?

Sandra: There is a website that's linked within this presentation, and we can send it out.

Enrico: And it gives you the numbers?

Sandra: You put the Hex value of the foreground, which is the text, and then you give the Hex number of the background, and it will show you if you're meeting or failing contrast rules.

Enrico: Nice.

Sandra: And it will show you AA or AAA, which as a university, we have to do AA. AAA is like above and beyond.

Enrico: It's nothing to do with batteries.

Sandra: No. [laughing]

Images and "Alt" Text

Gerry: All right. So, images are also a very popular topic in accessibility, and it's something that is relatively easy to accomplish, and it will help a lot of users. Using the "alt" tag in, whether in eCampus, any HTML document, or any Word document that's going to be transformed into a PDF.

It's really useful to put alt tags, but alt tags are not like just, "image of blah blah blah." So, you want to talk about that some, Sandra? What would be the advice?

Sandra: The next couple of slides might have that in there.

What to do with Decorative Images

Gerry: All right, so what about the decorative images that are used that have no instructional meaning?

Sandra: So, sometimes we have, for instance, on these slides, we have that logo in the bottom right corner (eSAIL logo). We probably don't want to have an alt tag in there because it'll repeat itself every time we go to the next slide for someone using a screen reader.

So that's a great example of something - that's a decorative image that you don't want to repeat over and over again. So, you would have a blank alt text so screen readers will ignore, and just move on to the next thing.

Dr. Michael Moore: So one thing you can also do in Word with decorative images is to place them into the background as part of the template.

Gerry: OK.

Sandra: That's a good idea.

Michael: And those images won't be read off by the screen reader.

Gerry: Good, good. Thanks for the tip.

Sandra: Yeah, good to know.

Lani Draper: And I will say one more thing too, with eCampus, they do have a button that lets you choose "decorative image," so that it'll automatically not put that alt tag for you, and lets you move on.

Sandra: That's awesome, because Word 2016 and before, they don't have that option. But, the newer version, what is it 365, does have that, just a checkbox to say, "this is a decorative image, don't say anything about it."

Gerry: What about the advice to put just like a space?

Sandra: In Word, that actually doesn't work. I've seen people say, "put a blank space there," or, "put some quotations," and that doesn't actually work.

Gerry: Really? Because I have heard that advice before.

Sandra: Yeah, I've tried it. It doesn't do the function.

Michael: Yeah. Well, what they recommended for Word: University of Washington's website has some really good resources for accessible documents. Like in Word, even if you put a blank there, it would still kind of read it and say that there was some missing information. So, in those cases, in the older versions, they actually recommended just putting the word "decorative" as your alt text so that in Word, it wasn't perceived as being - the person using the screen reader would not perceive themselves being slighted for missing information.

Sandra: Right. That's actually a great idea. I've heard that before too and just forgot, so thank you for bringing that up.

Gerry: And, through the chat, I'm sharing the link to this presentation, just for people to access it. I don't know if the recording would work and will show this.

Oh, on PowerPoint. Does this tip work in PowerPoint, Sandra, do you know?

Sandra: I'm not sure, actually. I've not done enough in PowerPoint to know if they've got the same thing. I would assume it's very similar to Word. Also, if you can do something in the background, I'm not sure, but doing the alt="decorative" would be very similar. I think that would work as well.

Gerry: Oh, the idea of putting "decorative" there.

Sandra: Yes. Yes, I think that's right. I think "decorative" would...

Gerry: Oh, yeah, I think that should work as well.

Sandra: Because it at least tells people using a screen reader that they can ignore it because it would say, "graphic," and then "decorative."

Gerry: Yes. Just plain "decorative," right?

Sandra: Mmhmm.

Gerry: Because the word "graphic" or "image" will be spoken out by default.

Sandra: Right, right, right.

Dr. Sunay Palsole: Yeah, you know, because in PowerPoint, you can mark things as decorative?

Gerry: Uh-huh.

Sunay: I'm unsure if that actually works. So, when I've run it through screen checkers, they seem to be OK, because I like to make all of my presentations highly accessible, but I like this idea of doubling up to make sure that they don't, you know, to guarantee they know that it's decorative. That's a great idea.

Gerry: Awesome.

Sandra: Are you using the latest version, like 365, of PowerPoint?

Sunay: Now I am, yes.

Sandra: OK, so yeah, 365 versions have the checkbox to be able to say "decorative," so it will be ignored by screen readers. In the earlier versions, you can put "decorative" in there in the alt text to ensure that people know that it's just decorative.

Sunay: All right.

Sandra: They've finally figured it out, it seems, in the 365 versions.

How to Write Alt Text:

- [Alt Text Online](#)
- [Alt Text in Word](#)
- [Alt Texts: The Ultimate Guide](#)

What "Alt" Text Should Look Like

Gerry: OK, so next we have some descriptions of what the alt text should look like. It should be **accurate and equivalent,** so present the same content or function as the image.

Be succinct. Yes, small phrases are best, but also a short sentence or paragraph. OK, this one I didn't know. **Adding a period.**

Enrico: Hmm.

Sandra: Yeah, I learned that one recently.

Gerry: OK, good, so you need to add a period. That's a good tip. And also, **don't be redundant**.

Sandra: If, for instance, if there's an image of a professor, and their name is right next to the image, there's really no point in putting the name of the professor in the alt text, and then having it (again) right next to it, because it's just going to duplicate the information that someone's going to hear.

Enrico: You mean in the label? Because it's going to read the label again?

Sandra: Right. So, really at that point, it is a decorative image.

Enrico: Yes.

Gerry: Yeah, and it's also good to explain what's going on in the image, just not tell, "It's an image of the water cycle," or whatever. You need to describe it a little bit so that users get the same type of information that students that would see it visually will get.

And also, what we already discussed, **don't say, "image of" or "graphic of,"** because screen readers already [give] out that information.

Sandra: Yes, they're going to announce it's a graphic before it reads the alt text, so it would be redundant to say "graphic, graphic of."

Enrico: Yes.

Gerry: All right.

Michael: So...

Gerry: Yes, go ahead.

Michael: I was just going to say that I think you'll get into some of this later, but you really want to think about what is the purpose of the image in your document or presentation and make sure that's conveyed.

Something people don't think about: some people do their presentations, and they use background images that are supposed to evoke certain feelings or emotions that are in-line with their presentation, and you should kind of convey that in your alt text as well. Not only what it is, but why it's there, and with really complex images, just what's the point? What's the information the person should get out of it?

Sandra: Right.

Gerry: All right. OK, so next we're going to have some alt text examples. You want to go over this, Sandra?

Image Used for Subsequent Alt Text Examples

Sandra: Sure. These are several different versions of what the correct alt text could be for this image.

"Woman who is blind smiles at something to her left."

"Janet smiles because she can hear her bus pulling up in front of her."

"Woman who is blind waits for the walk signal to sound so she can cross the street."

"Janet is wearing sunglasses, a professional khaki-colored jacket over a striped shirt, and has her walking stick at the ready."

This text really depends on the context of the content that's surrounding this image. Any of these could be useful, although the last one is fairly long, so I would prefer it to be a little shorter. But, if we're describing what she's wearing, that could be for some type of website that's talking about fashion or something like that.

Gerry: So, relevancy is needed, like Michael just mentioned, right? This is kind of summarizing what you just said, right?

Michael: Yeah, I think this is a good example where it depends on what you're doing. So, like the last one, I agree it is probably the least useful for most purposes, but, if you're doing an article about fashion, in general, it would be appropriate to talk about the details of the dress.

Whereas, if you're talking about transportation issues with people who have visual disabilities, "smiling because she can hear the bus pulling up in front of her," could be part of a narrative on how people with visual disabilities get around and know what's going on in their environment. So, very much the context.

Sandra: Yes.

Creating Descriptive Links on the Web and in Documents

Gerry: Next, we have some advice about how links should look like, or what they should include. They just need to be descriptive and meaningful, even out of context. And we have some examples here.

Links should be descriptive and meaningful even out of context:

- **Bad**: For additional information, visit the website at http://aggiehonor.tamu.edu/.

- **Good**: Students are expected to understand and abide by the Aggie Honor Code…

Just like not having to repeat the whole thing, and we have the good one just giving information about the honor code, and what's underlined actually sends you to the pertinent link instead of adding the full thing, because [screen] readers will read the whole thing "H T T P colon slash slash Aggie Honor Code..."

For imagining these for like a really long link, it will take the reader forever, and it would be super annoying.

Sandra: And they may not understand or remember what it said, so it's hard to follow.

Lani: And also, the screen readers can jump to just the links, and if they remembered that there was a link, and they're trying to jump to it, the actual link itself, the address isn't going to be as helpful as, "Oh, here's the link to the Aggie Honor Code."

Michael: So to add on to that, I've worked with other colleagues who really want that URL on the page, because the people who are not using screen readers may print out their slides, and they might need to have what that URL is. So, if they have a printed copy, they could type it in. But what you can also do is take the descriptive, here, "Aggie Honor Code," and make part of the link also in parentheses after it, the full URL.

Sandra: Right. I've seen that a lot for print. My suggestion with that is to have as you said, parentheses, have the URL, but have it not hyperlinked so that it's not included in the screen reader going through all the links.

Michael: I had not thought of that.

Sandra: Yeah.

Gerry: I have heard about also using it as a footnote or something like that.

Sandra: Sure, you can do that too. [Though this is not as accessible as the next suggestion of putting the URLs on the last page.]

Gerry: ...because that would stay with the page. Or, have in the document the last page with all the links, so that way, you can have the links still, but not be intrusive for people with disabilities.

Sandra: Right, and by links, you mean URLs. [laughing]

Gerry: Correct. Yes.
Lani: Yes.

Gerry: Yes, sorry. URLs. I thought about something, but I forgot. Oh, OK, yeah, if I remember, I'll bring it up. Any other comments about links? All right.

Links should help people know where they're going:

- **Bad:** Click here if you believe you have a disability requiring an accommodation.

- **Good:** If you believe you have a disability requiring an accommodation, please contact Disability Serivces.

So, we have more, OK. Here are more examples, so that people know where they're going. We have a bad link that says, "click here," which doesn't mean a lot, right? So, we can have like 10 "click here's," and then how would people recognize where those links are going? So, it's better just to have the right contact, in this case, Disability Services, right?

Enrico: Yeah.

Links should be a maximum of 3 to 4 words:

- **Bad:** [If you believe you have a disability requiring an accommodation, please contact Disability Services.](#)

- **Good:** If you believe you have a disability requiring an accommodation, please [contact Disability Services](#).

Gerry: So, some more advice about links, making them short, like having not the whole sentence underlined, like in here. We have a bad example and a good example. Just "contact Disability Services" is what needs to be underlined [hyperlinked].

Accessibility Resources

- [Intro to Web Accessibility](#)

- [Constructing a POUR Website](#)

- [Contrast Checker](#)

- [Creating Accessible Word Documents](#)

- [Creating Accessible PowerPoint Presentations](#)

- [IT Accessibility](#) (TAMU)

And, we have some good information about accessibility resources that people can make use of, and at any time people watching this webinar can access this presentation and click on those links for more information.

We have that [contrast checker](#) that Sandra was talking about. Really useful to know if you're hitting the right contrast. Because it's difficult just to do it by watching because of some of the things that are not very good at contrast, I thought they were not that bad, but apparently...

Sandra: Yeah, for some people that might be colorblind...

Gerry: Correct.

Sandra: ...there's no chance for them to be able to see.

Michael: I was going to say earlier: I made some notes because I didn't know what all your presentation had in it, but color blindness is definitely something that can impact, because I wasn't sure on the earlier image, the one on the right that had the dark blue on a light blue

background, how that would work with a person who might be colorblind in certain ways, though.

You have to kind of be aware of, and I'm not sure. It may be fine; I'm just; the color blindness sometimes can really make things hard to see, but we think it is perfectly clear.

Sandra: Right.

Michael: But when that comes into play…

There is another thing about headings and whatnot. As you said, a lot of people will skip the headings, and the real reason I think that they're skipping the headings is because they're too big. They're trying to use a smaller heading, and so if you're doing HTML, you can always update the CSS.

Gerry: Mmmhmm.

Michael: It does it for that page. And in Word, if you're not happy with the heading sizes, you can actually change the size of a heading, and then apply that to all of the headings. And you basically can control the looks of your document while using the header.

Gerry: That's actually a really good tip that we haven't shared. That's another advantage of using those headers. You can just restyle the general header, and that would be updated across the document.

Sandra: I'm not sure if that's common knowledge for people that are using Word. I had that in my workshop, but I didn't put it into this one.

Michael: And then another thing, we talked a little bit about PowerPoint. You had mentioned earlier the logical ordering structure, and in PowerPoint, since we tend to put in objects that are not linear, you have to be aware of the tab order. I believe PowerPoint gives you a way to go in and edit the tab order of the objects on your pages.

Enrico: Hmm.

Gerry: Yeah.

Sandra: Yes.

Lani: I think if you view the outline...

Sandra: Right, you can see the reading order. And it's backward. It actually starts with the one that's at the bottom and goes up.

Michael: Oh, OK.

Sandra: Yeah.

Gerry: All right, so right on the spot, 10:30. This is the email address (EngrLearnTech@tamu.edu) for our team. So, if there are any questions or you want to know more about accessibility and how to implement it in your course, please reach out to us, and someone in our team will get back to you.

And I want to thank Michael Moore for joining us in this webinar. Thank you, Michael.

We appreciate your input and your time, and thank you all for being here, Lani, Sandra, Christine, Enrico.

Thank you all, and thanks for Dr. Palsole for joining us online as well.