- [Wes] Hello everyone. My name is Wes Majerus and I am a rehab technology specialist with Iowa Department for the Blind. I'm here to present this webinar on making documents accessible and why it should be done.

So we'll go through our PowerPoint here. Why should we make documents accessible? In many cases your accessibility changes that you make make the document more readable and easy to read for everybody. You can find the text in a more straightforward manner and the documents are a lot cleaner. The students that you have in your OneStop center and elsewhere will appreciate being able to get access to the documents independently, no matter which tools they're using. Also, it is the law for documents created by state and federal partners to be accessible.

So there are some common document elements that are involved that can be made accessible. These include images, tables, form controls, headings, links, and data conveyed by color alone. We're going to take some time here to discuss each one of these in turn. Images are everywhere in the world. They can either be decorative or informative. If you have images in your document they should be described by alternative text. This alternative text can be added in a lot of the different authoring tools that you're going to use. Many of these platforms have the capability to create alternative text. If you're writing in HTML it's an attribute that goes inside the image, but would seem that a lot of people are using authoring tools these days. So what is a meaningful alternative text tag? So if an image is decorative, like maybe it's a border around something or ribbon or some sort of a separating divider you might not want an alternative tag. So what you might do is put a space in the alternative text box or leave it blank. Sometimes if an image doesn't have an alternative text, the screen reader can read the file name of the image and it sounds really weird, it sounds like images slash ribbon underscore separator dot PNG. Many times when you're describing images, less is more. You don't need to write the great American novel when trying to describe images. If they have some meaningful aspect to the document that you're conveying, then you want to describe. Maybe you have a brochure, you want to convey the fact that someone is working on the computer because you're conveying that your job center has a computer bank, so you might say person working on a computer, man working on a computer, woman working on a computer. The thing you don't want to do is you do not want to add the words picture of, image of, graphic of any of that into the text for your alternative text. This is the screen reader, by nature of the fact that it's grabbing that text and seeing the picture, it says image or graphic, and so then it will say graphic, man using computer. If the image is actionable, that is to say it's a button or something that's going to cause something to happen when you click or activate it, the alternative text tag needs to be telling us what that image will do. In other words, if you have a house that goes back to your home page, then say homepage. Sometimes companies will have their logo be the home page. And many people are used to the fact that if they hear the company logo as a graphic at the top of the page, home page, but if you want to be more thorough you could just say home page or company name home page.

Tables are a very interesting case. Many times when people create tables they do so by just putting the text in and using tab characters to break the line up. And this is not a proper way to create tabular data. Others use table creation in the offering tool. Many of the tools that are out there have an insert table function that lets you go through and tell it how many columns and rows the table should have. By doing this, it will then create a table in the structure of your document so that then screen readers or other things that are using that document will actually see that you have a table. The other important thing to do with table is to not use them to lay out content, so if you have pictures or parts of the page, putting those in different table cells and then hiding the borders to make it lay out a certain way is not helpful because screen readers have a way of being able to navigate through tables and access that table and see the data. Those tables and when they just see text. If you will list out data, that is what it is to be used for, and not for anything else. When you're using a data table, you want to use the first row and the first column if needed for your headers. So for example, if you have a TV schedule, across the top you have the times of day, down the left side you have the channel name, and then each cell has the program that is airing at that time. If you have something like an inventory feed where you have the item number, the item name, and the cost, then you wouldn't need, you might not need a header in the first column. It might be helpful but it really depends on the table, but the first row and the first column use those items.

Form controls are another important element. The most common types of form controls that are used are radio buttons, check boxes, edit fields, and dropdown lists. When you design forms in an authoring tool, you want to use the labeling functions that are available to create the labels for the forms. This is not only the name of the control that's used when you program the form, but there are also ways to give the control a meaningful name that displays on the screen and this will be helpful when the screen reader user is trying to access it. There are two types of controls that you often find in groups easier, the radio button and the check box. In these cases you want to make sure that each control, that is to say each radio button, each check box has a label that tells us what it is, and that you also can tell what the question is. Sometimes you have to get creative when you put the questions into the document because if you want it to read aloud sometimes you have to play with where the question text is on the group of controls and on the control itself. You want to really try not to have the questions repeated several times as a person tabs through, maybe on the first one and the last one, just as little as possible.

Headings. Heading is an important way for people to break up sections of documents. In lots of cases what will happen is that headings will be created by changing just the look of the text, the font, the boldness or what have you. These should be done through heading styles. Lots of authoring tools have heading styles. These styles will allow the structure of the document to be known because screen readers have the ability to read headings and also to navigate eye headings. And so using the actual styles will allow the screen reader to pick up on what's underneath. It may also aid in some other things, like maybe you are going to create a brochure and you want to send it to Amazon Kindle or iBooks. Those headings actually would then be used to break it apart and what have you because it can tell where the sections are. Some of the etiquette things with headings are that when you want to reserve the lower numbered headings, the heading level one, the heading level two for the more important sections of the document. You might have your chapters at heading two, sections at heading three and subsections at heading four. A lot of times people will reserve the heading level one for the main title of the document. If you don't do that, you definitely want to reserve the heading level ones for the main chapters and then decrease the heading levels when you're going through. This helps navigate documents. Links, we've already talked a little bit about links. The image based links as we said should be descriptive with its alternative text in telling us where we're going to end up. Another thing with links is that click here is not a meaningful link name. There are functions inside of a screen reader. Many screen readers use insert F7 to bring up a list of all the elements on the page in a list that is a separate document. So if you're testing with a screen reader, if you bring up this elements list you'll understand what your links look like if a person is just tabbing through them or accessing them in this list because they will just hear things like click here or the word this or here, and it's not as meaningful.

Another important area is the content that is conveyed by color alone. This should be avoided at all costs. Users who are color blind and more importantly users who are using a screen reader will not automatically know what is different. A great example of this, a few years back I was looking at a schedule for my local hockey team on their website. So I went to the link that said view schedule, and right prominently at the top or bottom of the page it said all home games are highlighted in red. Not very useable. Now many screen readers will allow you, and it's more the high end screen readers to press a keystroke that will allow the color of the text to be read, but imagine if you were looking at an 81 game hockey schedule, going through all 81 of those and then pressing that keystroke. It's a lot of different keystrokes. When you're describing text for charts and things, being able to figure out that the, an area that you might have only conveyed as being shaded in blue, finding some other way to denote what that means and how it's significant.

Now we'll talk a little bit about some of the implementation strategies. So in Adobe Reader, the most important thing to do with Adobe and it doesn't apply as much to your other document implementations is to ensure that the PDF is searchable. The best way to describe this is that a lot of people will take paper documents from the photocopier and they will run them through the Adobe, they will run them through the scanner on their copier and it will come back as an image and the PDF will not contain any text. In the PDF industry, a lot of things will say that they will create a searchable PDF. In most cases if your PDF is searchable, that will allow the screen reader to pick up on the data inside. If you're creating a PDF from a document that was already accessible such as a Word document and a Google document, a PowerPoint, lots of times those accessibility features will carry over, the document will be readable with the screen reader in Adobe Reader. When you're using, you're offering in Adobe or other tools that are going to create a PDF, you want to, as we mentioned, use the style functions to create headings in the document. This will translate then to headings that are usable. A lot of your offering tools that create PDFs will allow you to right click on a photo that you've added, and one of the options is to create the alternative text. Then you press enter on that, or you choose alternative text or sometimes it's under image properties and you can then type in your label that you want. I'm going to have a resources slide at the end of this, Adobe has some document pages that are important for creating images. I'm sorry, for creating accessible documents including forms. You'll also want to make sure that you use your authoring tools table functions. This will then translate again over to the PDF.

Now we turn our attention to Google Docs. In Google Docs you can create headings for your document by highlighting whatever text you want to be the heading and then in the bar where the style is, it's currently set to normal or whatever style you have, if you then click on that you can change the style to either heading one, heading two, what have you. You can also use the functionality that Google has for inserting tables, you then denote the column and row, how many columns it'll have, how many rows it'll have. Google allows us to right click on photos that are inserted into the document and you can insert the alt text. When creating Google Forms, you can label the form controls that are on that form so that they can be made accessible, all the options and the controls.

Final implementation is in Microsoft Office. One of the unique things that Microsoft Office has is an accessibility checker. You can go through and have it run, it would be a lot like spelling and grammar checker and that would allow you to be able to find any outlying accessibility issues. I'll have a link to that at the end of the presentation, and it is in the ribbons that you can find that. Microsoft Office allows for the addition of headings. You can do it through the styles menu in Word. One of the neat things about Word is at least for the first three levels of headings, you can do Control + Alt + 1, Control + Alt + 2, and Control + Alt + 3 after you highlight the text and it puts the headings styles in on that highlighted text. Word also has an insert table function that lets you tell it how many rows and columns. As you're creating the table, if you decide that you need more rows, if you keep tabbing down through the table, it will keep adding rows as long as you keep typing. There may be ways to do that with the mouse as well, or you can go in and right click on the table and change it. When you're making Word forms, it's important to use the legacy controls because they have the best chance of being made accessible. When you're making images in Word, you can right click on them and add alternative text in the image properties. As was mentioned previously, if you save your document as a PDF from Word, a lot of these things will go ahead and carry over and then they will be in the PDF. I'll allow you to look at this slide for a time, as I forgot to advance the slide on that last one there.

We have some resources here, a bunch of web links that might be of benefit in trying to make documents accessible. So they tell you how to make documents accessible in Office, Google Docs, and in Adobe. If you're looking for these out on the web, we have a document entitled Making Documents Accessible in Acrobat Pro. We also have making documents accessible in Google Docs. And using the Office accessibility checker.

That concludes this presentation. I thank you for watching, and I hope that this has been informative in thinking about and creating accessible documents. Again, my name is Wes Majerus and it was my pleasure to bring you the presentation.