

Transcript for Accessibility Bites: Assistive Technology
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Accessibility Bites Series: Session 1
Presenter: Josie Gray

JOSIE GRAY:

Before I get started, I wanted to highlight that if you haven't been able to already, you can download the slides for this session from bit.ly/accessbites all in lower case. From there, you'll be able to access a folder where you can download either the PowerPoint version of the slides or a PDF version of the slides. The slides are accessible, and the PowerPoint version includes my full speaking notes. You're welcome to refer back to them at any time as well as adapt them for your own purposes because they are openly licensed.

I'm very grateful to be joining you all today from Moh'kins'tsis, now known as the City of Calgary. The land I live on is part of Treaty 7, which includes the Blackfoot Confederacy, (the Siksika, Piikani, and Kainai Nations), Also the Tsuut'ina Nation, and the Stoney Nakoda (including the Chiniki, Bearspaw, and Wesley Nations). I know that you are all coming from all over, so I want to recognize that land acknowledgments and virtual meetings can be complicated, but as a remote worker, I appreciate the practice of acknowledging land as a way to ground myself and keep front of mind my responsibilities as a settler in this place.

My name is Josie Gray. I use she/her pronouns. And for those who can't see me, I am a white woman in my late '20s with shoulder length blond hair glasses and a septum piercing. I work for BCcampus, and I've been working in digital accessibility and education for seven years, and I have a Masters of Design and Inclusive Design. The things I will be sharing throughout this series have come from my experience in making educational materials more accessible to disabled students. However, it's important to recognize that I am not a disabled person, and that disability is a huge category and there's a huge amount of diversity, even among people with similar disabilities. I say this to just make it clear that I do not know everything of what it is to make something accessible to all people and what may work for one person may not work for someone else. I really want to encourage you all to dig into the topics of this series and then also seek out further learning, especially from people with lived experience with that.

I want to say welcome to the first session of the Accessibility Bites series. This series is going to be looking at different accessibility topics related to teaching and learning in post secondary. Today's topic, we're going to be looking at assistive technologies. So before we can talk about assistive technologies, we need to understand accessibility. For this series, when we talk about accessibility, we are specifically talking about what is needed to ensure people with disabilities can have equitable access to education. To make education accessible, we must design and create resources, experiences, tools, and spaces that allow for and support the diversity of our

bodies and minds. So rather than focusing on what we think of as normal or average, we're going to start from a place where we put the presence of diversity and work to build in flexibility and choice so people can access their education in a way that works for them. And although accessibility can benefit everyone, the needs of disabled people are the priority and the focus of accessibility work. Our topic today is Assistive technology. Assistive Technology is defined by the Assistive Technology Industry Association as, "any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities." What counts as assistive technology is very broad. For example, it can be low tech like a pencil grip or a white cane, or it can be something that's high tech like an audio recorder for note taking. Assistive technologies can also be designed specifically for an individual, like a custom wheelchair or something that's very common, like a laptop. So why are we starting the series with assistive technologies? First, it's being able to understand how assistive technologies work can help understand what is required to make educational materials accessible. Which will help us with the following topics in this series. Also, a lot of students can benefit from assistive technologies, but they might not qualify for accommodations, and they might not know what kind of tools are out there. That's one of the goals for this session is to uncover those kinds of things.

Our focus today is going to be exploring how some assistive technologies work and understand how you and your students can use them. Now I want to be clear that the session is not comprehensive. There are a lot of widely used assistive technologies that I won't be covering today. Today we're going to be talking about assistive technologies that are relevant when engaging with course learning materials or completing assignments, and tools that are high tech and available for free through platforms commonly used in the B.C. post secondary system. For the most part, I'm going to be focusing on Office 365 tools, although I'll be making references to some other ones that are out there as well. Let's get into it.

I want to start by talking about four different types of assistive technologies. And then I will give a demonstration of a few of those tools. And then you will have a chunk of time on your own to try them out and explore for yourself.

First is automatic live captioning. This is used during live sessions, and we'll take the words that someone is saying and display them on the screen. You might see automatic live captioning in virtual meeting rooms like Microsoft Teams or Zoom. These platforms allow attendees to enable that captioning for themselves. This feature is also available in PowerPoint and Google Slides, where the captions will appear at the bottom of the slide, which is a great option for in-person gatherings. Automatic live captioning can be helpful for people who are deaf or have audio processing disorders. It can also be helpful to language learners or when you're in a loud environment.

The next type of assistive technology is speech to text. This is a tool that will allow you to speak aloud and have the software type out what you're saying. This feature is available in Microsoft Office tools like Microsoft Word and Outlook. Microsoft calls it "Dictate", and I'll show you how to enable that tool in a few minutes. It's also available in Google Docs. If you're using the Chrome browser, where it's called "Voice Typing". Speech-to-text can be helpful for someone with a disability that affects their writing, like dyslexia. Someone who can maybe say their ideas really clearly but may have trouble putting them into writing. It can also be helpful for someone who's a slow typer or someone who has a disability that's affecting their fine motor skills or their hand function.

Text-to-speech is a tool that will read the content of a page out to you. These tools are available in most browsers. In addition, it is available in Microsoft Office products like Outlook and Microsoft Word, as well as Adobe Reader. Text-to-speech can be helpful for someone with a disability that affects their reading or attention, like dyslexia or ADHD. And it can also be useful for someone trying to multitask where they don't have to look at the screen while they're doing something else.

The final topic to cover today is the ability to adjust display of digital text. This can include changing font, changing the text size, or the spacing, and changing the color of font to be able to make content easier to read. The ability to adjust the flow of digital text is only possible on platforms that have been designed to be reflowable. That means that the content on the page will adjust to fit the screen size, which ensures content is as easy to read on a phone as it is to on a computer screen. For example, PDFs are not reflowable. In a PDF, you can zoom in as much as you want, but once you get to a certain point, the lines will start to flow off the screen. And you'll have to scroll back and forth, left to right to be able to read all of the content. With reflowable text, the text would move around so all of the text is always on the screen. It's not stretching off left to right. This functionality to adjust text and the display is generally available in browsers as long as the website has been designed to be reflowable. It's also available in Microsoft Word by enabling something called Immersive Reader. So being able to adjust text, and that thing, can be helpful for someone with a reading disability like dyslexia, someone who has issues with attention, as well as someone who is low vision that needs content to be high contrast and big to be able to read it clearly.

Now that I've gone through those four different examples, I want to give a demo so I can show you what some of these different tools look like in some platforms that you likely use quite regularly. I'm just going to turn off my slides and switch over to... let's start with Microsoft Word.

In Microsoft Word, first, we're going to go over the dictate tool. So in Microsoft Word, under that home tab, in Microsoft Word, there is a button there called Dictate. It's over on the right side of that top menu. With Dictate, once I turn that on, it'll start typing out the words that I'm

saying. I'll just give you a demonstration. Hello? Hello, period. My name is Jose Gray. I work at BCcampus. I am using a tool called Dictate in Microsoft Word. Next line. With this tool, I can speak in some of the punctuation and instructions that I want to insert, and it will do that for me. As you can see, it's also interpreting what things should be capitalized and where punctuation should go without me having to tell it to. I'll turn dictate off. That's something that can be very helpful. This is also a tool that's available in Outlook, so you know you could use this to write emails as well.

Now what I want to show you in Microsoft Word is something called Immersive Reader. I just have to move the Zoom tool bar out of the way, so it doesn't block my view. To find Immersive Reader and Microsoft in those top tabs in Microsoft Word, you're going to go over to the View tab, then more on the left-hand side, there is a button labeled Immersive Reader. I'm going to click that button. It'll automatically change my Word Document into something that is reflowable. The text got a lot bigger, the contrast changed; now it's like a light tan color with black text. All of that changed automatically. With Immersive Reader, you have the ability to change the display of text as well as to have that text read aloud to you. In that top menu, I can change the page color. I can change it to black background on white text, or a white background on black text, or a colored background with black text. I can customize that. I can change the text spacing that puts more spaces between all of the letters and all of the words. I can also change the line focus. That allows me to only see a certain amount of the page at a time. Here, it's only showing me one line at a time. And then I can scroll down line to line that can sometimes help with focus and attention.

Now I'm going to show the Read Aloud feature in the Immersive Reader. On the right side, there is an option called Dictation. And I'm going to click, oh, that's not what I'm looking for. I'm looking for, oh yes, in the top, there is a Read Aloud button. I'm going to click Read Aloud. And an option is going to pop up on the right side for you to enable read aloud.

READ ALOUD VOICE:

Hello, my name is Josie Gray. I work at BCcampus. I am using a tool called Dictate in Microsoft Word.

JOSIE:

There it is, reading aloud the text I had just added to this Word document. With the Read Aloud option, you can adjust the reading speed if you want it to be read faster or slower. That's a setting you can change. You can also change the voice. Right now, it's giving me the options between a female voice and a male voice. If I switch to female and I bump up the reading speed, I'll just show you what that's like.

FAST READ ALOUD VOICE:

Hello, hello. My name is Josie Gray. I work at BCcampus. I'm using a tool called Dictate in

Microsoft Word. With this tool, I can speak in some of the punctuation and instructions that I want to insert. It will do that for me. As you can see, it's also interpreting what things should be capitalized and punctuation.

JOSIE:

So that just gives you an example of some of the customization features that are in Microsoft Word. If you're sharing educational materials with your students and show them how they can use this tool in Microsoft Word, that can be a really great option.

The next one I wanted to show is a browser tool. So this is, in the demonstration I'm showing you right now, I'm using the Firefox browser. In Firefox, there is a built-in tool called Reader View. And to enable reader view, if you're in the browser, and you're looking at that box where you put in your web address, on the right side of that box, there's going to be something that looks like a little page. That's what the icon looks like. Or it's labeled as Toggle Reader View. If I enable that on a web page, it's going to change the display of that web page to really simplify the content. Then I have options here to change the text type, to change the size of text, change the spacing, and change the contrast of text. There's a bunch of customization options I can apply here. What I can also do here is enable another read aloud option. This will have the browser read out the text on the page to me. Again, here I can adjust the voice. I can adjust the speed. All of that is customizable. I'm going to click Play.

FIREFOX VOICE READER:

Everyone faces challenges in learning at different times and to different degrees. There are many factors that will affect people's ability to learn.

JOSIE:

If you're sharing any educational materials that are web-based, this is a way that students can customize how they are interacting with that content and have it read aloud to them. For people that use the Chrome browser, Chrome doesn't have built in tools, but there are a number of plugins that you can download that do very similar things, you know, adjust the display, have it read aloud, and all of that. Then the last thing I wanted to show was Automatic Captioning in PowerPoint. I'm just going to share my slides again. Give me a moment.

Okay, in PowerPoint, if you can see, I've got my slides shared on the screen. In the bottom left corner, there are a bunch of buttons. And one of the buttons looks like a square with little lines at the bottom of the square. It's trying to represent captions. If I click that button, a black box will appear at the bottom of the screen. Then everything that my mic is picking up will be transcribed into that black box. Being able to use this tool is a great option if you're teaching in person because you don't have to have everyone in zoom to be able to use those zoom captions. It'll just appear with your screen share at the bottom of the screen. This is something

that can be turned on and off at any time. There is a similar feature available in Google slides. If you use Google Slides, you just have to Google how to enable that in Google Slides.

Okay, those are all the things I wanted to demonstrate. Now I would like to move into an activity. This is an opportunity to try some of these tools out for yourself. How this is going to work is everyone on Zoom is going to stay muted so that people have time to experiment without distraction. Pick one of the tools I talked about and give it a try.

Just as a reminder of some of the tools you can try, there is Dictation in either Outlook or Microsoft Word, which will allow you to do that speech-to-text. You can also try out the Immersive Reader in Microsoft Word and maybe a Word document that you already have. If you've got some web resources you want to explore, you can use Reader View in Firefox. If you are a Chrome or a Google user, instead, you could try voice typing that's available in Google Docs. Or you can try to find an extension to install in your computer to be able to adjust the display of web content. One tool that I've used on Google Chrome is called Reader Mode. You can try installing that extension and doing that. I'm going to mute myself. Everyone, take 5 minutes to try out one of these tools.