Access for everyone, breaking down digital barriers for people with disabilities. Topic two how some people with disabilities use technology. David. Imagine if you unplugged your computer's mouse or turned off the touchpad. Would you still be able to navigate to the play button on this screen? Now we'll turn off the sound on the computer on which this video is playing. A man singing passionately. Can you understand what the speaker said? These are some of the barriers that inaccessible technology can pose to people with disabilities, including students and others with disabilities, who are trying to learn and communicate using digital platforms. This video is designed for school administrators and leaders who want to better understand how technology is accessed by people with disabilities, including those who are blind or have low vision, those with mobility disabilities that impact hand control and coordination, those who are deaf or hard of hearing, those with seizure disorders, and many others. First, we'll introduce you to a couple of students so you can see how they use technology. Fix you. You're right. I shouldn't have tried. Meet Nadia. Nadia is blind and uses keyboard controls, along with screen reader software that reads on screen text out loud. 11:45 a.m.. In addition to invisible information specially coded into the web page that was included to reduce barriers to access for people who cannot see the screen. Here's another student, Kai. Sometimes Kai uses Refreshable Braille display. The braille display takes what's on the screen and then translates it into braille. The braille display is an electronic device with pins that move up and down to translate text into Braille characters, allowing

him to read rather than listen to words on the page. But it's not just students who rely on good accessibility. Parents and guardians are impacted as well. Lisa Maria, who is blind, loves staying involved with her children's schools. One of the tools she uses is magnification with the help of her phone. For example, a smartphone will allow blind people to magnify the words and images on the screen so that they can read web pages more easily. This works well when everything resizes without losing content. In addition, Lisa Maria uses tools like screen readers and Braille to keep her informed and involved in her children's education. I need that non-visual access because for me as a parent, I want to be involved in my children's education. I want to be the parent that helps their kid with their homework. There are also people who have low vision which can impact how they see colors on a screen. Julia has 9% of her vision and has difficulty with color contrast in certain circumstances. Within determining the different colors. How different are those colors, right? So because you can have white and black, right. And that's, you know, a very easy difference to tell. But when you have more similar colors like black and navy, that is much more difficult to tell, especially for me. As you can tell, color contrast is different person to person. Some people have mobility disabilities. They can't use a computer, mouse, or standard keyboard. Instead, they rely on keyboard controls or other kinds of tools like sticky keys, foot pedals, mouth sticks, eye tracking or pointing devices, and speech recognition software. There's a lot that you can do with a keyboard, as long as the website, app or learning management system is

set up properly. With a keyboard, you can navigate to links, buttons and search boxes. But if the website, app or learning management system isn't fully accessible, a student with a mobility impairment might not be able to. For example, take a quiz that requires using a mouse to drag and drop the correct multiple choice answers to the right location. Next, let's talk about how people who are deaf or hard of hearing access information online. When people who are deaf or hard of hearing watch videos like this one, they need captions or a transcript so that they can understand the content. Captions generally are shown alongside the video track and synced with it to appear on the screen. At the same time. Transcripts tend to be separate documents that are not synced with the on screen video. Some technology automatically generates captions, but your school should always check the accuracy of the captioning to make sure it's meaningful and effectively communicates the audio tracks. We often get questions about whether captioning is needed or if a transcript is good enough. Here's a trick if you can listen to the video without watching your monitor or screen and still understand what you should from the experience, a transcript is likely fine. But if you need to watch the video while listening to the audio track to make sense of the experience, then it's better to provide captioning so that you can ensure you're communicating what you want to communicate. For example, if you were watching a chemistry experiment where the color of a liquid changes when another substance is added and the narration is best understood while watching the color change, then captioning may be required for effective

communication. We met several people who use additional tools to help them use technology. As you think about digital accessibility for your institution, think about your students and parents, along with caregivers and others, and consider effective ways you can help them gain the content and information they need to access your programs. This video was produced by the US Department of Education Office for Civil Rights. You can find us at ed.gov or email us at ed.gov.