

Introduction to Screen Readers Transcript

The text in italics was generated by the screen reader.

I'm Neal Ewers. I work with the Trace Research and Development Center here in Madison, and one of my jobs is to look at all applications, web browsers, word processors, etcetera, to see how well they work with screen readers.

A screen reader is a piece of software that allows the user to hear via a speech synthesizer or touch via a braille display the information on the screen. The screen reader will follow along and say exactly what I am doing.

Synthesizer test.doc

Synthesizer test.doc, that's the one we want.

This is the eloquent speech synthesizer. Most synthesizers are able to speak at a variety of speech rates and a variety of vocal pitches. Many speak with different voices and some even speak in different languages.

I can ask the screen reader to tell me various things about what I am reading, for example if I am on a title, and I press Insert F, it's going to tell me some information about the text.

Character formatting, Times New Roman, 16 point, bolded style heading one line spacing single Paragraph formatting, aligned left outline level one

That's a whole bunch of text but what I discern from that is it's a title, it's a certain style level in word, and I know that it's a font size bigger than what I've been dealing with, but I only did that because I thought I was on a title. The point is it takes an awful long time for a screen reader user to get a layout even of a simple page.

One of the things I can't do is move a mouse. I can move it along on the mousepad, and I have no clue where the mouse pointer on the screen is. What screen readers have done to help get around this is to allow the user to use the number pad keys to actually move the mouse pointer. The screen reader gives me an ability to read by sentence by using Alt down-arrow.

This is the eloquent speech synthesizer

Or I can read by word *pitches*. *Many speak with*, or by letter *space W I T H space*. Once again, I am using the keystrokes that you can use in Word. I am only reading a word at a time. If I were able to see the screen, I would know that there were a couple of titles on the screen that are in bold letters , they are

centered and they are in larger text. I can't see that, so the problem a blind user has is that one begins to read, not knowing anything about the layout of the page. The only way you know what's on the page is when you get to it. Greg Vanderheiden, our Director, has often referred to it as the soda straw approach. You are looking through this small hole. You're reading one word at a time, and that's all you see, and that's all I hear, until I get to the next word. I have no clue that down half way down the page is a bold heading.

Just the other day I was reading something that made no sense to me whatsoever until I got to about what I assume the middle of the page was, and then what was on the middle of the page said "Read the text below and use these instructions to fill out the top part of the page." Well geeze, you know if I had seen, I would have gone right there. But my problem as a screen reader user is I can't.

Another application that is used a lot by people who use screen readers is the World Wide Web. Let's say I wanted to go to the Trace Page. I type it in *T R A C E . W I S C . E D U*

And hit enter.

Page has 40 links, Trace Research and Development Center, graphic Trace Center, College of Engineering, University of Wisconsin-Madison.

What you heard it say, is, it told me how many links were on the page, the title of the page. *Graphic*. Now that said graphic, because if the graphics had been on in the browser there would have been a picture there of that text, and because graphics were off, we use the

Alt-text which tells me what the graphic would have been. One of the things the screen reader allows me to do is bring up a list of links so I can get an overview of just the links on the page. If I do Insert F7, *links list dialog, links list view, frequently asked questions*. So I can arrow down now, and I know that everything I get to is a link.. *What's new at the Trace Center, Help using this site List information and archives*.

Screen readers allow me to basically have access to the printed page, which I've had before, but it's mostly been in the form of people reading books to me on tape. There's a lot less time taken now for me to do things. There's a lot less work involved. There's a lot less dependence on others for reading stuff to me.

I have done this often enough that I get used to reading pretty rapidly, so one of the things I can do is actually speed up the way in which the screen reader reads. 53. The higher the numbers go, the faster it goes. 64, 75, 86, 97, 108, 119. This about the speed at which I read, so if I tab back to the O.K. button, and

then we read the document <the screen reader reads rapidly, unintelligible to the non-screen reader user>

You understood that, right?