

Inclusive Research for Screen Reader Users

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Intro

“How many times have I come across a website that just didn’t work?” Wherever you work, screen reader users need a voice.

Working in government, you’ll generally have a higher percentage of users with disabilities than in other industries. (Especially at the VA.)

“Don’t let any unfamiliarity you have with screen readers keep you from doing research with screen reader users.” There are conversation guides and other resources available that can help you. And “the more you do it, the easier it will get.”

Conversation guide

Pretty similar to a guide for non-SR users. Difference is how we tell them to use the technology. Can’t tell them to “click on the blue triangle” to share their screen - use keyboard shortcuts instead.

In general, tell them WHERE THEY’RE GOING instead of HOW TO GET THERE.

“Go to the home button.” “Go to the combo box and select [X].” “Click a link that gets you to the Benefits page.”

Can I use “see” and “look”?

Angela did an informal study of her network.

- Most preferred that folks use standard language - ‘look’ at the website, ‘see’ the problem.
- A strong majority said it was more awkward when folks try to avoid those words.
- A couple noted that for people who are losing their sight, it might sting, but Angela hasn’t seen that in practice.

So **use language you’d ordinarily use** unless the participant says otherwise. And asking the participant what they prefer on an intake form “emphasizes [their] difference”; can be more casual about it if you’re chatting with the participant.

“Most blind people, most of the time, want to educate.”

About screen readers

Screen reader: a piece of software that takes what’s on the screen and translates it into spoken text.

Majority of SR users navigate by keyboard, at least to some extent. SOME use a mouse, but not the majority.

A **blind** SR user looks at a website in a linear way, as opposed to seeing the whole picture at once.

But there are a lot of **sighted** SR users! Or partially sighted. And some of those folks would use a mouse.

How to share screen in Zoom

JAWS:

- Focus on the window by hitting Alt+Tab (this takes you between applications)
- Then to share screen, hit Alt+S

Other tech:

- Tab to “More controls”
- (note from Jamie: I’m pretty sure that Alt+S is a general Zoom screen-share shortcut, not just in JAWS. Try it out!)

It’ll focus on the “share sound” checkbox. Hit SPACE to check that. Then tab 3 times to “Share screen” button.

The screen share should track JAWS focus, so you can see it visually. (Note from Jamie: Pretty much every screen reader has a visual tracker, but they vary in how they appear. And in NVDA you need to turn on the visual tracker.)

Shortcuts

If the chat window is in the way, the user could put focus on the chat window, hit Alt+H, and choose to minimize the chat window.

Alt+F4 closes the current window.

If “Save password” comes up, they can use Shift+F6 to close the window. (Shift+F6 moves to a pane from another pane in the program window (counterclockwise direction).)

Ctrl+ and Ctrl- are keyboard shortcuts to zoom in and out.

Prototypes

Visual-only prototypes don't work with screen readers. (Like Sketch!) (Note from Jamie: Figma has 'accessible prototypes' but they don't work very well, there's a lot you need to do with it to make it come close to a real experience. Angela: "It's a work in progress.")

Recommendation: use CodePen to make a coded prototype. This will offer a rich experience to SR users and save time in the development phase.

How to read a page on JAWS

1. Read the full page out loud
2. Use tab to navigate between interactive elements (links, buttons)
3. Navigate by headings by hitting "H" (or SHIFT+H to go backwards on the page)
4. Navigate to a form field by hitting "E", which takes you to an edit box (or SHIFT+E to go backwards on the page)

About Zoom chat

When someone posts something to Zoom chat, the screen reader will voice the message (unless, using JAWS, you turn off notifications). That can be really distracting for the SR user.

But when you're sharing a link, the participant may prefer that you do it right in the Zoom chat, because focus is in the same window. Less experienced SR users may prefer email links instead. (Note from Jamie: That's been my experience, most SR folks I've observed testing with have preferred email or dictated links.) **Ask what they prefer.**

About iOS Voiceover

JAWS users see a page in a linear fashion. But iOS and Android users can get a more holistic view via the touch screen. They can touch - drag a finger across the screen or tap a spot and hear something read out - then double-tap to select an item; they can swipe through items in a menu to select the item they're interested in, then double-tap.

If you want an iOS user to share their screen, it's visible on screen in the menu; tell them to navigate to the menu on the bottom and swipe until they get to the Share button.

Things that require typing take longer on iOS than on a keyboard - they only have two fingers and it's largely 'hunt-and-peck' to find the correct keys.

What to look for

- Does it make sense when you tab through it? In linear fashion?
- Does the layout make sense?
- Is there a bunch of extraneous stuff on the page?
- Is the design system?
- Do link purposes make sense on their own? (i.e., a link that just says “Click here”)
- Appropriate alt text on images? Does it convey what you want it to? (i.e., for image links, the LINK is the important part; “VA logo” is enough)
- Does the screen change w/o notifying the user? That’s a big issue if it does.

When to stop trying to screen share

Sometimes it’s just hard to get an SR user to share the screen and have time to actually go through with a study. And sometimes screen share is just wonky and isn’t working!

One option is to scrap the screen share, and have the participant verbally describe what they’re doing.

Another is to turn it into more of an interview session.

Either way, make sure they stay long enough to get compensated for their time.