

Investigating Mobile Accessibility Guidance for People with Aphasia

The W3C Mobile Guidelines

The W3C guidelines are a widely accepted standard for accessibility evaluation. These have also been recently published for mobile devices.

Aphasia?

Aphasia is a speech and language impairment which affects one in three people who have had a stroke. It:

- affects 2 million in the US alone;
- causes issues with reading, writing speaking and/or understanding.

Aim: Understand the barriers people with aphasia face when using digital technologies and whether current mobile usability guidance covers them

Accessibility Audit

Using current mobile guidance, accessibility audit was conducted for Facebook, Twitter, Pinterest and Tumblr. Five elements were explored:

- Three user journeys: (e.g., adding a friend);
- Two pages (profile and home feed)



Usability Testing

Usability testing was conducted with four people with aphasia on Facebook, Twitter, Pinterest and Tumblr to complete tasks similar to those in the audit, such as adding a friend or 'liking' a post.



Comparison of Findings and Recommendations for Design

- Some accessibility barriers surfaced through the usability testing were also covered by the guidelines, e.g., the use of complex gestures and insufficient styling to ensure elements are perceived as actionable.
- More often than not, however, the barriers surfaced were not covered by current mobile guidelines. E.g., there were a number of major issues around the ambiguity of icons. We recommend the following:

Accompany icons with text: icons in the user testing were often novel and unfamiliar.



Limit the number of steps: hidden features within menus, for example, were problematic in user testing.



Keep text short and simple: concise and simple language is vital.



Keep feedback prominent and persistent: message timeouts were problematic.

