Broaden your audience

Learn how to improve your accessibility guidance

ISTC

Communicator

The Institute of Scientific and Technical Communicators

Autumn 2018

Have the people involved in your meetings changed?

Build a hybrid mobile app using Cordova

Communicator is 50!

Manage terminology with the TechScribe term checker

Use SCHEMA ST4 content for augmented reality applications

Broaden your audience with accessibility

Aedín Collins explains how improved accessibility guidance can help technical communicators to reach a broader audience.

As a mother to a child with Down syndrome and the sister of a deaf man, I am always interested in learning what new accessibility trends are coming on stream to ensure everyone has a level playing field when it comes to accessing help documentation.

According to the WHO, approximately 15% of the world's aging population lives with some form of disability. Accessibility involves a wide range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities.

The role of the W3C in accessibility

The World Wide Web Consortium (W3C) aims to ensure that the web operates to its full potential and is open and accessible to all. In June 2018, it launched new accessibility guidelines. Web Content Accessibility Guidelines (WCAG) 2.1 expands provisions for mobile, low vision, and cognitive and learning disabilities, and details how to make web content more accessible to people with disabilities. WCAG 2.1 was created with the goal of improving accessibility guidance for three major groups: users with cognitive or learning disabilities, users with low vision, and users with disabilities on mobile devices.

The new guidelines are a continuation of the work completed by WCAG 2.0, which outlines five areas to work on in terms of accessibility:

1. **Perceivable:** Information and user interface components must be presentable to users in ways they can perceive.
2. **Operable:** User interface components and navigation must be operable.
3. **Understandable:** Information and the operation of user interfaces must be understandable.
4. **Robust:** Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies.
5. **Conformance:** Requirements for conformance to WCAG 2.1

New guidelines from WCAG 2.1

These are some of the new guidelines:
- There should be no restriction of view and operation to a single display orientation such as portrait or landscape, unless a specific display orientation is essential to the content.
- Content should be presented without either loss of information or functionality, and without the requirement for scrolling in two dimensions for:
  - Vertical scrolling content at a width equivalent to 320 CSS pixels
  - Horizontal scrolling content at a height equivalent to 256 CSS pixels
- The size of the target for pointer inputs should be at least 44 by 44 CSS pixels.
- For user interface components with labels that include text or images of text, the name must also contain the text that is presented visually.
- In content implemented using markup languages, status messages should be programmatically determined through roles or properties so that they can be presented to the user by assistive technologies.
- In content implemented using markup languages, no loss of content or functionality should occur by using the following style settings:
  - Line height (line spacing) to at least 1.5 times the font size
  - Spacing following paragraphs to at least 2 times the font size
  - Letter spacing (tracking) to at least 0.12 times the font size
  - Word spacing to at least 0.16 times the font size

Difficulties in implementation

In an ideal world, all these guidelines would be implemented; however, challenges exist to such a scenario. As well as adhering to over 80 standards, there are some which would be significantly more difficult to apply than others. For example, guideline 1.2.6 advocates for sign language interpreters to be included in all videos. This would significantly add to production costs. It is also worth pointing out that US sign language is different from British sign language. Each sign language has evolved as a visual method of communication that has developed from cultural rather than linguistic roots.

There are, however, certain things that technical communicators can ensure they are

Figure 1. BBC_MyWebMyWay

doing for their web users. In many industries now, there is a movement towards making content as simplified as possible. The idea of eliminating complexity can benefit all users, not specifically those with additional needs. These are not new ideas, but it is always worth bearing them in mind when creating content:

- Break information into small, simple chunks and illustrate them visually wherever possible.
- Remember to provide an obvious way for users to get back to simpler content if they find themselves on a page above their reading level.
- Avoid using abstractions and describe the links, rather than using 'click here'.
- Give the clickable item a wider range so that the user can click on it within the item's general area.

The future of personalised help documentation

In terms of personalised help for those with various disabilities, the BBC's My Web, My Way offers an interesting initiative. Here, the organisation strives to provide a tailored web experience for all users. Visitors to the site are presented with a list of topics to help them navigate through the BBC websites and find modified content that is easier to access.

Could such a diverse thought stream be applied to technical documentation? In the same way that we now have tailored viewing and auditory experiences through streaming services like Netflix and Spotify, could we have a world where web content and help documentation can be tailored for the user's

experience? Such an initiative incorporating all the WCAG 2.1 guidelines would be the very model of accessibility. **C**

References and further reading

BBC Accessibility www.bbc.co.uk/accessibility (accessed July 2018)

Desta, Y. (2014), '9 Simple Tips for Making Your Website Disability-Friendly', Mashable UK, available: https://mashable.com/2014/04/22/website-disability-friendly/?europe=true#2taesYbqNPqN (accessed July 2018)

Hodgkinson, R (2006) 'Document processing for accessibility' *Communicator*, Spring 2006: 48

Hodgkinson R (2007) 'Software documentation accessibility' *Communicator*, Summer 2007: 46

Mardahl, K (2011) 'Learning about accessibility - and why' *Communicator*, Spring 2011: 24-25

Peck, A (2013) 'What's all the fuss about?' *Communicator*, Summer 2013 special supplement: 3

Web Content Accessibility Guidelines (WCAG) 2.1 www.w3.org/TR/WCAG21 (accessed July 2018)

WHO, 'World Report on Disability' www.who.int/disabilities/world_report/2011/report/en/ (accessed July 2018)
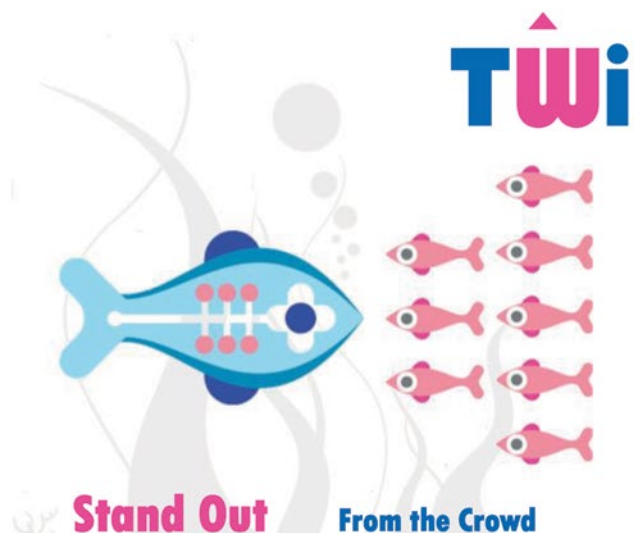
Aedín Collins has been working as a technical communicator in the IT industry since 2016. She is currently an Information Developer with TWi.
E: aedin.collins3@gmail.com
W: www.technicallywriteit.com