Accessibility is More Than a Checklist

Real Accessibility Requires Real People: Tips for Developers and Designers

Accessibility guidelines, checklists, and standards (such as the Web Content Accessibility Guidelines or WCAG 2.0) can be useful tools when developing accessible content, but accessibility is more than just a checklist for compliance. Understanding your end users and the ways they use web and digital content can help you move beyond technical components of accessibility to developing a truly *usable* accessible user experience.

> *Combining accessibility standards and usability processes with real people ensures that web design is technically and functionally usable by people with disabilities.*
> *This is referred to as usable accessibility or accessible user experience (UX):*
> *https://www.w3.org/WAI/intro/usable.*

Why Does Accessibility Matter?

First, digital accessibility is the law—regulations at both the state and federal levels mandate that digital materials used in the classroom and content on school, district and state education agency websites be made accessible to users with disabilities. Using the principles of universal design (UD) can help improve your content for all users, including those with disabilities. At its most basic, UD proposes that all products and the built environment should be designed to be usable by everyone, regardless of ability, age, or status.

> *User-focused universal design can help make your content more accessible to all. If you aren't familiar with the principles of universal design, start with* Universal Design: Process, Principles, and Applications: *http://www.washington.edu/doit/universal-design-process-principles-and-applications.*

We all depend upon common accessibility features every day to make our lives easier, including:

- Zooming in on websites, documents, and images, especially on mobile devices
- Touchscreens on smartphones and at kiosks
- Visual support for auditory information
- Closed captioning on live television in the doctor's office or airport
- Text-to-speech capability
- Voice recognition

In addition, many of the best practices for accessibility overlap with best practices for search engine optimization (SEO): improving your site and making your content more findable online. For example, the following features that make websites more accessible for users with disabilities also make your content more easily searchable:

- Transcripts and interactive captions for video content
- Alternative text (alt text) for non-text elements

- Use of consistent headers (Header 1, Header 2)
- Clear content structure and organization
- Meaningful links ("Learn more about accessibility in this webinar" versus "Click here")

The Web Accessibility Perspectives *video series is a great resource to learn more about how web accessibility benefits everyone:* https://www.w3.org/WAI/perspectives/.

Go Beyond the Checklist

Designing for accessibility is a legal obligation, but it also is essential for designing high-quality digital content for the engagement of all users.

Accessible content is information or materials that:

- People with disabilities can navigate, perceive, understand, and interact with
- Considers physical, visual, speech, auditory, neurological, and cognitive disabilities

Although accessibility checklists and online tools can help you develop more accessible content, they are not a substitute for the input of real users in your design process, whenever possible. Here are some key points to keep in mind:

- Involve users with disabilities in your design and development process.
- Ask users with disabilities to review content on your site as part of an accessibility audit.
- Solicit ongoing feedback on site content through a simple form or point of contact so that users can report barriers and accessibility issues.
- Ensure that everyone on your design and development teams understands accessibility, and how people with disabilities use the web and digital content.

Understand How Users With Disabilities Access Digital Content

Disability	Examples	Potential Barriers
Auditory	- Hard of hearing - Deafness - Deaf-blindness	- Audio content that lacks captions or a transcript - Audio content that lacks the ability to control the volume
Visual	- Low vision - Blindness - Deaf-blindness - Color blindness	- Color used as the sole means of conveying information - Images and charts that lack meaningful text alternatives (alt text) - Lack of a clear and consistent navigational structure - Site does not allow full keyboard navigation - Images or text that cannot be resized
Cognitive and Neurological	- Seizure disorders - Learning disabilities - Autism spectrum disorders - Memory disorders	- Long and overly complex sentences and paragraphs of text - Websites or digital content with moving, flashing, or blinking elements that cannot be turned off - Sites with difficult or confusing navigation - Insufficient time to respond to tasks and prompts

Disability	Examples	Potential Barriers
Speech	• Apraxia • Aphasia • Disorders or injuries that can affect speech (e.g., brain injury, oral cancer, Huntington's disease)	• Applications or websites that require speech to interact • Contact information on website is telephone only
Physical	• Arthritis • Cerebral palsy • Head injury • Spinal cord injury • Repetitive stress injuries	• Websites without full keyboard access • Insufficient time to respond to tasks and prompts • Confusing or overly complex navigation

What Can I Do as a Developer or Designer?

Moving toward more accessible design is a process. As technologies continue to change, we'll be faced with new challenges for ensuring that none of our users are digitally excluded by inaccessible content. Incorporating accessibility into your design and development process saves you time and money, and ensures that your content is usable by everyone.

1. If you're new to accessibility, begin by planting the accessibility seed. Learn about why it matters, and what your role is as a developer or designer

    a. *Planting the Accessibility Seed*
        http://www.interactiveaccessibility.com/blog/planting-accessibility-seed#.WC3XLC0rLIV

2. Educate yourself about state and federal accessibility laws and accepted accessibility standards

    a. *Digital Accessibility Toolkit: What Education Leaders Need to Know*
        http://www.ctdinstitute.org/library/2016-10-11/digital-accessibility-toolkit-what-education-leaders-need-know

3. Familiarize yourself with checklists, guidelines, and techniques for creating accessible content

    a. *CAST Figuration*
        http://figuration.org/

    b. *WebAIM WCAG 2.0 Checklist*
        http://webaim.org/standards/wcag/checklist

4. Learn more about your users with disabilities and how they currently use your content, the barriers they experience, and the assistive technology tools they use

    a. *Future Ready Assistive Technology*
        http://ctdinstitute.org/sites/default/files/file_attachments/CTD-AIR_FutReadyAssistTech.pdf

    b. *Stories of Web Users: How People with Disabilities Use the Web*
        https://www.w3.org/WAI/intro/people-use-web/stories

5. Incorporate the principles of universal design into your design and development process

    a. *Web Accessibility Techniques*
   http://universaldesign.ie/Technology-ICT/Web-accessibility-techniques/

    b. *World Wide Access: Accessible Web Design*
   http://www.washington.edu/doit/world-wide-access-accessible-web-design

6. If you use personas as part of your development process, make sure that disability and accessibility considerations are woven into your personas.

    a. *Accessibility in User-Centered Design: Personas*
   http://www.uiaccess.com/accessucd/personas.html

    b. *Personas for Accessible UX*
   http://www.slideshare.net/whitneyq/personas-for-accessible-ux

7. Advocate for accessibility on your team and within your organization.

    a. *Developing a Web Accessibility Business Case for Your Organization*
   https://www.w3.org/WAI/bcase/

    b. *Office of Educational Technology: Ed Tech Developer's Guide*
   https://tech.ed.gov/files/2015/04/Developer-Toolkit.pdf