What Are Web Content Accessibility Guidelines (WCAG)?

Understanding WCAG and Building Course Content

The Web Content Accessibility Guidelines (WCAG) are guidelines developed by the World Wide Web Consortium (W3C) to make web content more accessible to all learners and users. The mission of W3C is to ensure that the web is for all humanity and that all web content is designed for the good of its users and remains safe, resulting in "one interoperable web" (World Wide Web Consortium, 2024).

To fulfill that mission, the web content accessibility guidelines (WCAG) were developed. This framework is essential for creating an inclusive learning environment, ensuring all users, including those with disabilities, have equal access to educational resources. This is particularly important for university faculty teaching in-person and online classes.

Originally introduced in 1999, the Web Content Accessibility Guidelines (WCAG) have been updated multiple times; the most recent iteration, WCAG version 2.2, was published in 2023 (World Wide Web Consortium, 2024). This new document contains 13 guidelines to follow to make web content (like course materials) accessible to all users. As such, the guidelines are for anyone who develops web content. It may be helpful to review basic accessibility frameworks and components before engaging in the WCAG process.

The guidelines are organized around four main principles including Perceivable, Operable, Understandable, and Robust known by the acronym POUR. The following list provides brief explanations of what components and practices correspond with each principle.

Perceivable: Information and user interface components must be presented in ways that users can perceive. This includes providing text alternatives — such as alt text for images — for non-text content. We must also provide alternatives for time-based media like video and audio. Captions and transcripts should be provided for any video content and transcripts should be provided for audio content. Instructors and designers need to ensure that content is adaptable and can be presented in different ways by using semantic HTML to ensure content is readable by screen readers. Finally, while it may seem like color could be an effective way of highlighting information, it is not for all users. Ensure sufficient color contrast and avoid using color alone to convey information.

Operability: Instructors and designers must ensure that content is designed to be accessible and functional for all users. To begin, all functionality must be available from a keyboard, as this is crucial for users who cannot use a mouse. To promote inclusivity, provide learners with sufficient time to read and use the content. Avoid time limits unless absolutely necessary to the project; note that time extensions can be extended for students with SAS accommodations. Presentations, videos, and other content should utilize best practice design features and avoid items such as flashing or strobe lights known to cause seizures or other reactions. Finally, all content should be designed to be easily navigable by all users. Consistent design and structure should be maintained throughout all materials. Utilize clear headings to establish a consistent structure in documents and other course materials.

Understandable: Information and the operation of the web content (and for designers, the user interface) must be understandable; we should use clear and simple language and define any jargon or technical terms. This principle also calls for making content predictable through consistent behaviors. For example, if one assignment has a due date embedded in

Blackboard, all assignments have a due date in Blackboard. Or, perhaps an instructor opens each new weekly folder on Sunday of each week. Finally, it is helpful to provide clear error messages and instructions throughout the learning materials posted.

Robust: This principle emphasizes the necessity of content to possess sufficient robustness to ensure reliable interpretation by a diverse range of user agents, including assistive technologies. Consequently, it is imperative to maximize compatibility with both current and future user agents, including assistive technologies. For instructors, this entails adhering to web standards, while for designers and coders, it entails ensuring that code is both clean and well-structured.

Getting Started

Implementing WCAG can seem daunting, but there are some practical tips faculty can consider to get started:

1. Ensure materials are accessible with accessibility checking tools: Use accessible templates for your course materials. Microsoft Products like MS Word and PowerPoint have built-in tools to check for any issues related to accessibility and to fix them.
2. Check Color Contrast: Use tools like the WebAIM Contrast Checker to ensure text has sufficient contrast against its background.
3. Provide Captions and Transcripts: Always caption your videos and provide transcripts for audio recordings. Supported tools and applications like YuJa and Zoom offer auto-captioning features that can be edited for accuracy.
4. Use Descriptive Links: Instead of “click here,” use descriptive link text that tells users what to expect, like “Read our accessibility guidelines.”
5. Test with Assistive Technologies: Regularly test your materials with screen readers and other assistive technologies to ensure they are accessible.
6. Seek Feedback: Encourage students to provide feedback on the accessibility of your course materials and be open to making necessary adjustments. Contact the CETL for a course review and request that we focus on accessibility.

References

World Wide Web Consortium. 2024. “Our Mission” https://www.w3.org/mission/