



## Benefits of Digital Accessibility

### How Digital Accessibility Benefits Your Institution

“The Web is increasingly an essential resource for many aspects of life: education, employment, government, commerce, health care, recreation, social interaction, and more” (n.p.).<sup>1</sup> Ensuring that these web-based services and resources are inclusive to all users, including those with disabilities, is critical and required under federal and state law,<sup>2</sup> and highlighted in Article 9 of the United Nations Convention on the Rights of Persons with Disabilities.<sup>3</sup> Accessible web-based functionality, however, extends beyond compliance to include benefits, such as improvement in student learning, improvement in user experience, greater search engine optimization (SEO), and direct cost savings.<sup>4</sup>

### Improves student learning

Though accessibility is both a state and federal legal obligation, it also is a moral and ethical obligation that goes to the heart of an educator’s mission to support learning for all their students. Inaccessible learning materials put up unnecessary roadblocks for your students on their path to deeper understanding and content knowledge. Inaccessible content is of limited usefulness for students with disabilities, and the time spent by them (and support staff) finding solutions, asking for help, and requesting accessible materials is time not spent on learning. Accessibility features can help place your students with disabilities on an equal footing with their peers and focus their energies on learning, creating, and engaging with high-quality

#### **Vanessa Robinson, Portland Community College student**

Vanessa, a student with a hearing disability, depends on captions to understand video content. Without captions, she must digest the content by aligning a transcript (if available) of the audio with the video, arranging time to consult with an interpreter, working with her instructor to find a comparable video, or completing a different assignment than her classmates, greatly impeding her ability to learn independently. Captions, provide Vanessa with a simple solution.

This brief video, produced by Portland Community College, describes the impact of accessible features for three students with disabilities:  
<https://youtu.be/eks3r-nE9IU>.

<sup>1</sup> Henry, S. L., & Arch, A., eds. (2012). *Developing a web accessibility business case for your organization*. Cambridge, MA: W3C. Retrieved from <https://www.w3.org/WAI/bcase/Overview.html>

<sup>2</sup> See Legal Requirements for Digital Accessibility section.

<sup>3</sup> United Nations Convention on the Rights of Persons With Disabilities. (2008). New York, NY: United Nations. Retrieved from <http://www.un.org/disabilities/convention/conventionfull.shtml>

<sup>4</sup> Henry, S. L., & Arch, A., eds. (2012). *Developing a web accessibility business case for your organization*. Cambridge, MA: W3C. Retrieved from <https://www.w3.org/WAI/bcase/Overview.html>

content. Designing for accessibility isn't just about compliance, you're also empowering your students to succeed.

## Improves user experience

In addition to supporting people with disabilities, accessibility features on smart mobile devices, tablets, and computers help all people every day. These features improve our ability to search, retrieve, and engage with content. Here are some examples of accessible features that we use every day at school, work, and home:

- **Dictation (e.g., speech-to-text, or virtual personal assistants)**
- **Font size and style adjustments**
- **Speech screens**
- **Touch screens and touch accommodations**
- **Zoom and magnification**
- **Visual and vibrating alerts and notifications**
- **Voice control and voice input**

Accessible features, like the examples just listed, benefit everyone by improving the user experience. Because the web provides a fast, easy, and efficient platform to share and collect information, learn, connect people, and provide work opportunities, accessible websites are crucial. Accessibility features (for example, alternative text, font style and color, captions, contrast between background and foreground colors, mobile compatibility) on a website improve the user experience by:<sup>5</sup>

- **Reducing barriers to use.** Including alternative text to describe images and graphics, and developing a site that does not require the use of a mouse, greatly improves usability and accessibility.
- **Ensuring mobile device compatibility.** For many users, a mobile phone is the primary device used to access information from the web.
- **Improving access for older people.** Older people may find it difficult to view content on webpages, navigate a mouse, or hear audio from a video or podcast. Many of the accessibility features that enhance the web experience for people with disabilities would also improve the user experience for older users.

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<sup>5</sup> Ibid.

Let's consider another accessible feature, like **captioning** (or subtitles), which was intended to support people with hearing disabilities, but it enhances the user experience for all users. Captioning offers convenient, educational, and functional benefits. Here are examples of how captioning improves the user experience for all users:

- **Communicates content in settings where sound is unavailable.** Captions enable the user to comprehend what is happening in a noisy environment, or if the audio is too low or unavailable.
- **Improves literacy for struggling readers or English language learners (ELLs).** Captions promote comprehension and language development for struggling readers or ELLs by reading the words on the screen and hearing the words spoken aloud.
- **Increases engagement with content.** Captions help increase focus and retention of information.
- **Supports understanding if speaker or audio is difficult to understand.** Captions clearly show what is being communicated by a speaker who speaks fast, with an accent, or is challenging to understand.

**Steve Langford, Chief Information Officer, Beaverton School District**

"We must provide materials, tools, and content that supports all student learners. While there are many benefits of designing with accessibility, one of the most compelling reasons is the potential instructional impact on the learning for all students."

## Expands website visibility

In addition to the legal requirements websites must adhere to, accessibility features improve the visibility of your institution's web presence.<sup>6</sup> In fact, "Web accessibility can make it easier for people to find a website, access it, and use it successfully, thus resulting in increased audience (more users) and increased effectiveness (more use)" (n.p.).<sup>7</sup> Here are some benefits of accessibility features on websites:<sup>8</sup>

- **Increases potential use by more people.** Accessible websites can be used by more people, including people with disabilities, people using mobile devices, people not fluent in the language of the website, older and younger people, people with older technology devices, and those with low bandwidth Internet connections.
- **Increases findability with SEO.** Search engines are able to identify content within a website and across the web when accessibility features are used. For example, including alternative text to describe graphics and images and incorporating headings, increase website content exposure to search engines.

<sup>6</sup> WebAIM. (n.d.). *Web accessibility and SEO* (Blog). Retrieved from <http://webaim.org/blog/web-accessibility-and-seo/>

<sup>7</sup> Henry, S. L., & Arch, A., eds. (2012). *Developing a web accessibility business case for your organization*. Cambridge, MA: W3C. Retrieved from <https://www.w3.org/WAI/bcase/Overview.html>

<sup>8</sup> Ibid.

- **Increases usability and return visits to website.** In general, accessible websites are more functional for all users. For instance, by incorporating simple language and supplemental illustrations with clear and consistent design and navigation features, users are able to easily and efficiently search for content and navigate the site. Positive experiences typically produce return visits.
- **Increases potential use in more situations.** As exemplified with the use of captions in the previous section, a website featuring accessible functionality can be accessed in more situations: noisy and quiet environments, and places with low bandwidth.

## Saves valuable time and money

Finally, by choosing to incorporate accessible features from the beginning, institutions may benefit by avoiding costly and time-consuming:

- **Compliance lawsuits.** Accessibility is the law, ensuring websites are accessible reduces the danger of paying legal costs for not complying with Web accessibility requirements.
- **Replacement and retrofitted devices.** Purchase technology devices with design and accessibility features in mind.
- **Website redesign.** If necessary, spend more money up front to ensure accessibility.
- **Unnecessary accommodations.** Staff time spent providing an accommodation to meet user needs.

Additionally, some strategies to reduce accessibility implementation costs, include:<sup>9</sup>

- **Incorporating accessibility from the start.** Educate yourself, or hire an expert, on website accessibility so you are prepared to make informed decisions and properly train your team.
- **Sharing accessibility resources.** Many costs related to ensuring Web accessibility are made at an organization level, rather than at a project level. Share initial costs among multiple projects, instead of repeating for multiple projects.
- **Addressing accessibility and mobile devices concurrently.** Be mindful of users accessing content through mobile devices. Develop websites for desktop and laptop computers and mobile devices simultaneously, instead of one at a time.

## Additional resources

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

*Everything You Need to Transcribe Videos and Create Closed Captions In-House*  
<http://www.3playmedia.com/2015/07/06/everything-you-need-to-know-to-transcribe-video-create-closed-captions/>

*Financial Factors in Developing a Web Accessibility Business Case for Your Organization*  
<https://www.w3.org/WAI/bcase/fin>

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<sup>9</sup> Ibid.

Henry, S. L., & Arch, A., eds. (2012). *Developing a Web Accessibility Business Case for Your Organization: Overview*. Cambridge, MA: W3C. Retrieved from <https://www.w3.org/WAI/bcase/Overview.html>

*How Does Accessible Web Design Benefit All Web Users?*  
<http://www.washington.edu/doiit/how-does-accessible-web-design-benefit-all-web-users>

*Reap SEO Bonuses by Making Your Website Accessible*  
<http://siteimprove.com/blog/overlaps-between-seo-and-web-accessibility/>

*7 Ways Video Transcripts and Captions Improve SEO*  
<http://www.3playmedia.com/2016/06/14/7-ways-video-transcripts-captions-improve-seo/>

*Simply Said: Understanding Accessibility in Digital Learning Materials*  
<https://www.youtube.com/watch?v=HzE5dj1WTS0>

*What Are AEM?*  
<http://aem.cast.org/about/what-are-aem.html#.V6IN1vkrKUK>

*Benefits of Digital Accessibility* is Part III of the four-part *Digital Accessibility Toolkit: What Education Leaders Need to Know*. Be sure to view the other three parts of the toolkit and its supplementary infographics, using the links below. See the complete Toolkit [here](#).

- **Part I: What Is Accessibility?**
- **Part II: Procuring Accessible Technology**
- **Part VI: Legal Requirements of Digital Accessibility**
- **Infographic: Getting Started with Accessibility**
- **Infographic: 5 Things to Know About Your Role in Ensuring Accessibility**

## About CoSN

CoSN is the premier voice and resource for K-12 education technology leaders nationwide. Serving more than 11 million students in America's school systems, CoSN provides education leaders with the tools and relationships to leverage technology and advance modern, engaging learning environments. Visit [cosn.org](http://cosn.org) to find out more about CoSN's [focus areas](#), [annual conference and events](#), [advocacy and policy](#), [membership](#), and the [CETL certification exam](#).

## About CTD

The Center on Technology and Disability (CTD) is a user-centered learning and technical assistance website designed to increase the capacity of families, school systems, technical assistance providers, SEA and LEA leaders, and other key stakeholders to understand, assess, acquire, and implement appropriate assistive and instructional technology strategies and tools. CTD is administered by FHI 360, American Institutes for Research, PACER Center, and Adirondack Accessibility. Learn more: [www.ctdinstitute.org](http://www.ctdinstitute.org).

## About AIR

American Institutes for Research, in partnership with FHI360 on CTD, provides technical assistance to state and district leaders to support their efforts to integrate assistive and instructional technology strategies and tools. Established in 1946, with headquarters in Washington, D.C., the American Institutes for Research (AIR) is a nonpartisan, not-for-profit organization that conducts behavioral and social science research and delivers technical assistance both domestically and internationally in the areas of health, education, and workforce productivity. For more information, visit [www.air.org](http://www.air.org).