# **Delivering accessible online courses: an educator’s guide**

Online course accessibility presents an incredible opportunity to expand course engagement, not just for people with disabilities, but for all course participants. The benefits of accessibility practices in the online space expand beyond course access and engagement and can improve the performance and management and systems.

Most importantly, we know course accessibility is a difficult outcome to reach. That’s not because it’s particularly expensive, challenging, or unattainable. On the contrary, it’s never been easier. But the processes to get there are not well understood.

This guide unpacks those processes succinctly, supporting you, the educator, in having direct and fruitful conversations with the technologists you work with or may hire to ensure they’re taking the steps necessary and, together, you’re able to deliver the best learning outcomes through more accessible online courses.

## **Guide highlights**

* **Understanding the value and importance of web accessibility**
* **A standard of practice for achieving and validating online course accessibility**
* **Understanding the steps necessary to coordinate with your technical support or course development team to confirm accessibility**

# **The value of accessibility**

Following accessibility practices allow us to increase course access and engagement while improving learning outcomes for all. Let’s look at the many benefits of ensuring accessibility for the courses you develop. An accessible online course:

* opens up access for all potential course participants by reducing barriers to accessing your course
* improves content engagement by providing multiple means of engagement with course content
* reduces overall effort by following a shared and documented set of [web standards](https://sayyeah.com/glossary/#web-standards) that avoid costly and time-consuming accessibility auditing and course retrofitting
* grows market share by setting ourselves apart from the competition and leading in access and engagement for all

So, how do we get there? First of all, it’s important to understand that accessibility is a collaborative effort across the course development team, including those people responsible for content, design, and code, or technical development.

# **Accessibility is collaborative**

Accessibility objectives are reached through shared responsibilities across multi-disciplinary teams. When considering an online course system, accessibility is achieved across a collaborative mix of:

* **Content** and course development and input into the course system
* **Design** of the course and course system interface
* **Code** and setup of the technology system, learning management system (LMS), and course elements, including interactions

While design and code help enable content teams by providing tools to support their work, the content teams ensure access and engagement with every new piece of content they publish.

This mix of foundational and ongoing work is necessary to ensure accessibility is achieved and retained.

## **The best practices gap**

Accessibility is achieved through a collaborative combination of content, design, and code that most organizations are not set up to follow.

Accessibility is supported by [web standards](https://sayyeah.com/glossary/#web-standards) that most developers do not fully understand.

Checklists and automated tools are seen as the solution, but [automated tools are not enough](https://sayyeah.com/digital-insights/automated-accessibility-checkers-not-accessible/).

Accessibility cannot be achieved without manual testing.

Automated tests can help point out the most glaring or obvious issues, but accessibility is more than a checklist of technical issues: it’s a user experience consideration.

User experience is measured by understanding how course participants will interact with your course.

Course participants may use screen readers, a keyboard only, zooming, and other assistive technology, in addition to mouse/touch and multiple screen sizes (such as a desktop, phone, or tablet).

Testing must be done to ensure that when users engage with an interface and content, it both works for users and, ideally, is enjoyable.

None of this can effectively be achieved without content, design, and code teams working together to set this foundation from the start.

Let’s look at how you can take next steps with your next course by having the information you need to hold your technology provider accountable.

# **Holding your technology provider accountable**

Technology is an enabler. Online learning can bring increased equity for participants, improving course access and engagement.

However, how technology is used in online learning can create barriers. Standards-of-practice must be followed by technologists, and understood by course creators—including SMEs, educators, and instructional designers—to ensure technology is implemented and used effectively.

The following phases of course development must be practiced by your technology team, including:

* Establishing a standard of practice from the start
* Manual testing
* Automated tools & testing

In addition, you can participate in the accessibility validation process so you know your course is as open, accessible, and engaging as possible.

Let’s expand on these best practices so you can address these with your technology support and development teams.

## **Establishing a standard of practice from the start**

Whether you’re using an off-the-shelf LMS or working on custom development, you should expect and be able to confirm the following:

* Web interfaces must be designed and developed using semantic HTML structuring and, when necessary for novel interactions, HTML’s ARIA functionality
* Mechanisms that allow content creators to add accessible content features such as image alt tags, page titles, video captions and transcripts must be provided
* Advice and feedback from disabled users, other developers, and industry professionals is essential when approaching novel interactive concepts to gain insight into how others have or may approach the problem based on their experience and best practices
* Interfaces must be tested internally and by external users to validate usability, accessibility, and inclusion across all methods of engagement, including:
  + mouse/touch
  + using only a keyboard
  + while zooming the interface
  + across different screen sizes
  + using a screen reader

## **Manual testing**

Manual testing must ensure access by mouse/touch, keyboard, screen reader, and zoom across multiple screen sizes. Here’s what your technologist should be doing:

* Using a mobile phone to test touch interactions and smaller screen sizes
* Using a desktop computer with a mouse and/or trackpad
* Using only a keyboard to ensure a user can navigate and access functionality available on the website without using touch screens or a mouse
* Using a screen reader (desktop and smartphone) to ensure the site can be navigated and understood and that interactions function correctly (or have a suitable alternative) in a speech-only context
* Ensuring the site can be zoomed in and that the course and page layouts respond in a way that ensures content is visible and readable at a large scale

## **Automated tools & testing**

The following automated practices and tools augment manual test processes and validate ongoing coding practices. Your technologist should confirm these practices and be able to share the results of any tests conducted, including:

* Code linting during the development process to identify syntax and typos that could introduce bugs
* Validating the output HTML with a validator to ensure it is properly formatted
* Testing the code with a combination of tools, which can include:
  + Deque’s AXE
  + TPGI’s Arc
  + IBM Equal Access Accessibility Checker
  + Lighthouse from Google
  + Others

## **Accessibility validation**

Your technology team is responsible for the above steps leading to effective outcomes. This means their confirmation that users can effectively navigate your course:

* by mouse/touch
* using only their keyboard
* while zooming the interface
* across different screen sizes
* using a screen reader

You, too, can confirm the following methods of interacting with the course work well. Here are 5 steps you can take to verify an open and accessible course experience:

1. Try using the course with a mouse/touch
2. Try using the course with only your keyboard (no mouse or touch device)
3. Try using the course while zooming (increase the size of the course in your web browser)
4. Try using the course on different screen sizes (try on a phone and on a desktop, laptop, or tablet)
5. Try using the course with a screen reader (you can use [Voiceover](https://support.apple.com/en-ca/guide/voiceover/welcome/mac) on macOS or [NVDA](https://www.nvaccess.org/download/) on Windows)

### **Going a step further**

The best way to verify accessibility is by asking a range of users to try the course to learn more about their experience. If you can plan or budget for some usability testing with a mix of users who typically interact with the web and courses differently, you’ll learn how to improve the course for everyone.

Connect with users who interact with the course across mouse/touch, keyboard, screen reader, while zooming, and across different screen sizes. Learn about their experiences, preferences, and perspective on your course. And further confirm how accessible your course is to everyday users.

### **Share what you know with an accessibility statement**

When you’ve reviewed and confirmed the above yourself, or with the support of an experience technologist, developing an accessibility statement will help guide course participants who will interact with your course in different ways.

Let them know what works, how, and what you may know is missing, difficult, or could be improved. Give those users an option to contact you for support or to answer any other questions.

This accessibility statement is a great course resource that can be included as part of a course introduction, and can be provided ahead of starting the course and in course promotional material to signal your efforts to ensure your course works well for everyone.

# **Accessibility is a shared responsibility**

It is essential to choose the right technologist that embeds accessibility from the onset of online learning planning and all throughout the course development process. The role of this technologist is to support the collaborative, proactive, and solution-focused approach this guide helps you deliver. With this approach, you can be part of revolutionizing the education industry by providing accessible and equitable access to online learning with every course you work on.

Collaboration among these three stakeholders: technologists, SMEs, and educators/instructional designers is key to achieving learning outcomes in online learning. Ultimately, leveraging the strengths of each of these experts to ensure no learner is prevented from engaging with course content and all are set up for a more equitable learning experience.

<aside> 👉🏼 **Tip: a quick content accessibility check**

1. **For your course videos**, did you include both subtitles and a transcript?
2. **For your course images** that include critical information or context, did you include alt tags that write out this important information? </aside>

## **Looking to collaborate with online learning and accessibility specialists for your next course?**

At Say Yeah, we have developed a comprehensive process for bridging educational and technology best practices that improve learning outcomes.

Get in touch if you’d like to improve collaboration, insights, and outcomes across your course development processes, ultimately delivering more effective, accessible, and equitable online courses.

**Get in touch**

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