

Accessibility Features of Plato Courseware & Edmentum Assessments

At Edmentum, we are committed to ensuring that our dynamic learning environment is accessible to all students. For students with disabilities, Edmentum's courseware and assessment programs incorporate a number of features to provide language, cognitive, visual, auditory and physical accommodations. We are taking concrete steps to comply with Section 508 of the U.S. Rehabilitation Act and W3C Web Content Accessibility Guidelines (WCAG 2.0), including:

- Ongoing work of the Edmentum Learning Accessibility Task Force, which manages our process to ensure accessibility in all new development
- Testing current and future products to assess their accessibility and compatibility with popular accessibility tools and software

Our Design Approach

We strive to design products that are easy to use, mobile-optimized, and accessible to all. We begin by listening to our customers to understand their needs and challenges. Next, we create innovative but simple solutions that empower administrators to make informed decisions, provide instructors with time-saving tools to boost student achievement, and engage students with effective, standards-aligned instruction. Finally, we conduct usability tests prior to release to ensure our products deliver the best possible user experience.

Design for Simplicity

We believe our products should work the way our customers work. Rather than forcing our customers to learn and adapt to our technology, we try to design our technology to work the way our customers expect it to, empowering them to find information, make decisions, and take action with as few taps/clicks as possible.

Design for Mobility

We believe in a mobile-first approach to product design, one that untethers teachers and students from their desks and takes full advantage of the latest advances in mobile technology. We employ touch-friendly user interfaces, emphasize direct interaction with content over traditional navigation, and ensure our products conform to contemporary design standards for mobile devices.

Design for Accessibility

We believe that all users, including those with disabilities, should be able to use our products. We incorporate a variety of general accommodations to ensure support for all types of disability. These include:

- Keyboard-only navigation with explicit tab-order sequencing and prominent visual focus indicators
- ALT text for all non-text content
- Flexible options versus strict procedural methods
- Learner-controlled pacing and review of instructional sequences
- Audio and audio tools to support and reinforce text

Language and Cognitive Accommodations

Our programs have accommodations to support the following language and cognitive disabilities:

- General processing difficulties, such as brain injuries or other intellectual disabilities
- Specific deficits, such as short-term memory problems and language delays

- Learning disabilities, such as dyslexia, dyscalculia, dysgraphia, and cognitive disorganization

Though these challenges represent an array of needs, the path to accommodations is through following research-based standards for instructional and user interface design. Our learner experience and courseware provides an intuitive interface and content to support accessibility. The self-paced nature, clean screen layouts, and carefully designed and written instruction make Edmentum products ideal for users requiring language and cognitive accommodations. Design standards include:

- Carefully controlled chunking of material so learners are not overwhelmed with information
- Graphics that support instruction versus present distractions
- Interactions that keep learners engaged
- Informative feedback for all study, practice, and application questions
- Transitions to cue users about what happens next
- Clear, concise instructions
- Connections to previously studied materials

Visual Accommodations

Visual acuity problems include three categories: blindness, colorblindness, and low visual acuity. For totally blind users, Edmentum's products require the support of a sighted assistant. To assist colorblind users, we conduct grayscale testing to verify proper contrasts that can support even monochromatic users. Recently, we expanded testing to include using sophisticated electronic filters that simulate various types of colorblindness. We also only use color coding as a redundant cue. Color-coded user interface elements may also be supplemented with ALT text for use by screen readers.

We will continue testing and evaluating our support tools for users with low visual acuity. Many of our programs include audio support for instructional text, reducing or eliminating the need to read on screen text. Our programs rarely have multiple, time-sensitive screen parts that compete for a learner's attention. Instead, the design allows learners with tunnel vision or related problems to focus on isolated screen parts.

Edmentum courseware and assessments has proven comfortable for learners with low visual acuity who do not require screen readers or screen magnifiers. However, screen magnifiers do help users to follow mouse movements and magnify content. Edmentum provides proper support for screen readers and magnifiers to increase accessibility for visually impaired learners and teachers. We are committed to testing and improving scaling of text using these tools.

Many Edmentum courses require a mouse or equivalent device and cannot be operated exclusively from a keyboard. Thus, learners who require screen readers, screen magnifiers, or who can only use a keyboard and not a mouse may experience difficulty with portions of our library. However, moving forward all new instructional materials are built with keyboard only navigation.

Visual Third-Party Support Recommendations

In addition to read-aloud and text-to-speech options, blind and visually impaired students use a variety of software programs to assist in completing assignments. Edmentum recommends the use of third-party resources, like the following, to supplement our accessibility features. For optimum accessibility and



performance we recommend using Mozilla Firefox as your browser when using the following screen readers.

JAWS is a very common software tool for blind students. It reads the content of the computer screen aloud by using optical character recognition (OCR) and synthesized speech output. JAWS is increasingly compatible with more programs and websites, as more web-designers include accessibility in their design. JAWS can also be configured to work with a refreshable Braille display or braille terminal, a device that delivers and displays braille characters through round-tipped pins raised through holes in a flat surface. Screen readers, like JAWS, gather and convert the content, sending it to the display for reading.

Kurzweil 1000 is widely used by blind and visually impaired students for its invaluable scanning capabilities. It uses OCR to read printed content and display it on screen. Like JAWS, it provides speech output to read content aloud.

For individuals with low or limited vision, Zoomtext magnifies screen content up to 24 times. Combined with the use of a large monitor, Zoomtext can be an invaluable tool for visually impaired students.

Auditory Accommodations

Because auditory disabilities are a matter of degree, they are generally addressed through hardware. For users with total hearing loss, the vast majority of Edmentum learning products provide on-screen text backup and closed captions for instructionally significant audio and video (notable exceptions include Plato Courseware Essential, Fundamental, and Intermediate Reading Strategies, which do not support deaf learners).

Physical Accommodations

Physical disabilities can interfere with a user's ability to manipulate an interface. Most physical disabilities are also addressed through hardware, such as an alternative keyboard and mouse. As noted above, much of our library requires the use of a mouse or equivalent device; however, moving forward, all *new* products will support keyboard-only navigation.

With rare exceptions, our courseware is also designed without restricting the learner's time to enter answers, so users whose physical disabilities limit response time will find an accommodating environment.

Conclusion

Edmentum solutions provide many built-in advantages to assist learners with disabilities. Our activities are self-paced, allowing learners to take the time they need, reviewing materials as often as necessary. Every screen and all instructional sequences are professionally designed, written, and edited for clarity and focus. Audio support provides advantages to all learners.

Finally, the opportunity to personalize the learning environment is extremely motivating for *all* learners, as it provides a level of ownership and self-direction that readily engages students. We encourage instructors with concerns about the viability of using our courseware with certain populations to try courseware samples with those groups. We are confident that the results will be positive for teachers and learners alike.