

## Artificial Intelligence and Accessibility

AI tools can support learning but only if they are accessible to all students. Many digital platforms still contain barriers that exclude students with disabilities. By applying the Web Content Accessibility Guidelines (WCAG)<sup>1</sup> and Universal Design for Learning (UDL)<sup>2</sup>, educators can better evaluate and select AI tools that aim to be inclusive, equitable, and effective for every learner.

The Web Content Accessibility Guidelines (WCAG) are a set of rules that help make websites and digital tools easier for everyone to see, hear, understand, and use—especially people with disabilities.

### Perceivable

Every learner should be able to use at least one of their senses—like seeing, hearing, or touching—to access the content in a way that works for them.

- ☐ Can all visual content (images, graphs, videos, etc.) be understood without seeing it?
- ☐ Can a screen reader access and interpret the tool's content accurately?
- ☐ Is audio or video content accessible to users who are deaf or hard of hearing?
- ☐ Does the tool rely on color, sound, or animation alone to convey meaning?

### Operable

Every learner must be able to navigate and interact with the tool using various input methods.

- ☐ Can all features be accessed and used with just a keyboard (not a mouse)?
- ☐ Does the tool provide clear and consistent navigation mechanisms?
- ☐ Does the tool give users sufficient time to read and respond?
- ☐ Are interactive elements labeled clearly?
- ☐ Does the tool support error prevention and recovery?

### Understandable

The tool should look and work the same way throughout, be easy to follow, and use language that makes sense for your audience. This helps every learner understand and use it more easily.

- ☐ Is the language of the content and interface clearly defined and appropriate for the intended users?
- ☐ Are instructions, labels, and error messages clear and unambiguous?
- ☐ Does the tool operate in a predictable way?
- ☐ Are users notified before any context changes automatically?

### Robust

The tool should work well with different tools and devices—like screen readers, browsers, or phones—so every learner can use whatever technology works best for them.

- ☐ Is the tool compatible with a wide range of assistive technologies?
- ☐ Does the tool function properly across different devices and browsers?
- ☐ Does the tool continue to be accessible after updates or changes?
- ☐ Has the tool been tested or reviewed for accessibility by people with disabilities or experts?

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<sup>1</sup> [Web Content Accessibility Guidelines \(WCAG\) 2.2](#)

<sup>2</sup> [The UDL Guidelines | CAST](#)

Universal Design for Learning is a framework that helps educators create lessons and tools that work for all students by offering different ways to learn, show what they know, and stay engaged.

Multiple Means of Engagement	Multiple Means of Representation
<ul style="list-style-type: none"> <li><input type="checkbox"/> The tool allows for personalization based on student interests, strengths, or learning needs.</li> <li><input type="checkbox"/> The tool offers meaningful choices in how students engage with tasks and content.</li> <li><input type="checkbox"/> Feedback is timely, constructive, and supports student persistence.</li> <li><input type="checkbox"/> Students can set goals, monitor their progress, and reflect on their learning within the tool.</li> <li><input type="checkbox"/> The tool minimizes distractions and supports focus through a calming, clutter-free interface.</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Content is available in varied formats, including text, audio, visuals, and/or video.</li> <li><input type="checkbox"/> The appearance of content (e.g., font size, color contrast, layout) can be adjusted for readability.</li> <li><input type="checkbox"/> Language supports are built in, such as translation, simplified text, or multilingual options.</li> <li><input type="checkbox"/> Vocabulary, symbols, and complex concepts are clarified through built-in scaffolds or supports.</li> <li><input type="checkbox"/> The tool is compatible with screen readers and follows accessible layout and structure practices.</li> </ul>
Multiple Means of Action and Expression	
<ul style="list-style-type: none"> <li><input type="checkbox"/> Students can interact with the tool using different input methods (e.g., typing, voice, touch, switch access).</li> <li><input type="checkbox"/> The tool accepts varied forms of student work, such as writing, speaking, drawing, or multimedia responses.</li> <li><input type="checkbox"/> Supports like spell-check, speech-to-text, or graphic organizers are built into the tool.</li> <li><input type="checkbox"/> The tool works with assistive technologies already used by students (e.g., screen readers, AAC devices).</li> <li><input type="checkbox"/> Students can control the pace of their learning and revisit instructions or tasks, as needed.</li> </ul>	

Tools that prioritize equity are designed with diverse learners in mind, protect student data, and provide the necessary support for educators to use them effectively and ethically. Use the criteria below to evaluate whether the tool centers inclusion, accessibility, and responsible implementation:

- ☐ The tool has been developed or reviewed with input from students with disabilities and diverse backgrounds.
- ☐ AI-generated content is inclusive, culturally responsive, and free from harmful bias.
- ☐ The tool complies with privacy laws (FERPA, COPPA) and protects student data.
- ☐ Accessibility documentation (e.g., VPAT, WCAG conformance) is available and transparent.
- ☐ Training, onboarding, and ongoing support are available for educators and students.
- ☐ The tool is financially accessible and offers equitable implementation options for schools.

## Artificial Intelligence Tool Decision Tree

### Will this AI tool help all my students learn, connect, and succeed?

This decision tree is designed to help K–12 and higher education educators evaluate whether an AI tool shows key indicators of accessibility and universal design. It supports consideration for a wide range of learners, including students with disabilities, multilingual learners, and other marginalized populations. The tool is grounded in the POUR principles of accessibility (Perceivable, Operable, Understandable, Robust) and Universal Design for Learning (UDL) standards. Educators should also consider how well the tool aligns with the Web Content Accessibility Guidelines (WCAG) to ensure digital equity and inclusion in the learning environment.

#### **START: Can Students Access It? (Perceivable)**

Make sure every learner can **see, hear, or understand** the content.

- ☐ Can students use a screen reader or hear text read out loud?
- ☐ Are videos captioned? Are images explained (with alt text or voice)?
- ☐ Can students change font size, color, or background?
- ☐ Is the screen calm and not too busy or distracting?
- ☐ Are instructions clear and free of jargon?

**If not:** Add supports or pick another tool.

#### **If yes: Can Students Use It? (Operable)**

Make sure every student can **navigate and control** the tool.

- ☐ Can students use it without a mouse (with just a keyboard or switch)?
- ☐ Can students use voice, touch, or typing to interact?
- ☐ Can students pause or go back, if needed?
- ☐ Are buttons and links easy to find and labeled clearly?

**If not:** Adjust settings or offer an alternate version.

#### **If yes: Can Students Understand It? (Understandable)**

Make sure it's **easy to follow** and **helps students stay focused**.

- ☐ Is the language age-appropriate?
- ☐ Are directions simple and easy to find?
- ☐ Is feedback kind, helpful, and specific?
- ☐ Can students set goals, track progress, or get encouragement?

**If not:** Rethink the tool.

#### **If yes: Will It Work for Everyone, Every Time? (Robust)**

Make sure the tool is **safe, fair, and works on different devices**.

- ☐ Has it been tested with students who have disabilities?
- ☐ Does it work on phones, tablets, and laptops?

- ☐ Does it protect student data (like FERPA)?
- ☐ Is it free or affordable for your school?
- ☐ Are there educator guides or tutorials available?

**If not:** Ask for help or find a more inclusive tool.

**15–18 “Yes” answers = Strong Accessibility**

The tool demonstrates strong indicators of universal design and may be a good starting point for supporting diverse learners, including students with disabilities. Don’t forget to work with your school- or district-based technology representative to consider the WCAG2.2 standards.<sup>3</sup>

**10–14 “Yes” answers = Moderate Fit**

The tool shows good potential but may need targeted adjustments within the classroom to better serve all students. Consider how it could be improved to reduce barriers and support student variability.

**0–9 “Yes” answers = Limited Fit**

The tool may present barriers for many students. Reconsider use or explore ways to significantly adapt the tool.

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<sup>3</sup> [WCAG 2 Overview](#) | [Web Accessibility Initiative \(WAI\)](#) | [W3C](#)