



## Tips for accessible interactive tools

A project by SHUFFLE (shuffle-projekt.de); Status: February 2025

We present accessible tools that can be integrated as interactive elements into your teaching. Each tool offers specific **advantages**, but also comes with certain **limitations**. Therefore, we show you which **accessibility criteria** the respective tools fulfill - and where possible challenges may arise. This enables you to make an **informed decision** about which tools suit your needs best.

# Accessibility criteria for interactive tools/ Criteria for accessibility in interactive tools:

- · Compatibility with screen readers
- Navigation via keyboard (without mouse)
- Visual customizability (text size, contrasts)
- Language support
- Free accounts available everywhere

### Overview:

- Quiz and learning platforms (for quizzes, learning activities and interactive exercises)
  - a. H5P
  - b. Quizizz
  - c. Kahoot!
  - d. Moodle Quiz-Modul
- 2. **Survey and feedback tools** (for surveys and feedback surveys)
  - a. Qualtrics
  - b. LimeSurvey
- 3. **Interactive presentation tools** (for presentations and real-time interactions, quizzes, surveys)
  - a. Mentimeter
  - b. Microsoft Forms

### 1. Quiz and learning platforms

### a. H5P

### Homepage, Create a H5P-Quiz (German)

H5P is an open source tool that enables the creation of interactive learning content such as videos, presentations, quizzes and games.

Pro	Contra
Users can create quizzes, timelines and memory games	Some interactive content such as quizzes and games do not offer the option to provide alternative formats (e.g. audio) for users who have difficulty with visual content.
Open source tool	By default, H5P does not guarantee high contrast → Colors and layouts must be adjusted manually
Complies with the guidelines for accessible web content (WCAG 2.1)	Some content types use fonts or color designs that may be difficult to read for people with visual impairments
Keyboard navigation support	
Screen reader compatibility	
Scalable texts	
Audiovisual elements such as videos, images and audio recordings that can be supplemented with subtitles, transcripts and descriptions	
Can be integrated into Moodle	
Fonts and font sizes can be customized	
Many of the H5P templates are designed with basic accessibility standards, making it easier to create accessible content.	

### b. Quizizz

### **Homepage**

Quizizz can be used to create interactive quizzes and learning games with a wide variety of question types and game modes.

Pro	Contra
The tool is designed for inclusive learning	No option for an accessible color design, e.g. for people with color blindness
Screen reader support with most common screen readers	Does not offer integrated audio descriptions or alternatives for visual content
Clear fonts and layouts improve readability for users with visual or learning difficulties	Does not offer the option to customize font sizes, which limits readability for users with visual impairments
Simple, clear and well-structured user interface	
Keyboard navigation support	
Quizzes are not time-limited → Users can work at their own pace	
Optimized for different devices (desktop, smartphone, tablet), which offers flexibility for users with different needs	
Images, videos and audio can be easily integrated, enabling multi-sensory access	

### c. Kahoot!

#### **Homepage**

Kahoot! is a learning platform for interactive multiple-choice quiz games that can be used to teach, deepen and test knowledge in a fun way.

Pro	Contra
Flexible tool for interactive quizzes and learning games	Limited usability with screen readers → problematic when selecting answers
Clearly structured user interface that allows easy navigation	The colorful design can cause contrast issues, especially for people with visual impairments such as color blindness (e.g. when differentiating between answer options) → There is no setting to adjust the colors individually
Questions are presented in a clearly visible area and answer options are highlighted in color	Keyboard navigation is limited, especially when navigating through the quiz or answering questions
Sounds and animations provide additional feedback, which can support some users	Font sizes cannot be freely adjusted, which can be a challenge for people with visual impairments
Reading mode offers a simpler presentation of questions and answers, which can be particularly helpful for users with cognitive impairments	Many Kahoot quizzes rely heavily on images and animations, which can make access difficult for users with visual impairments if no alternative texts are provided.
The response times for the questions can be individually extended	

### d. Moodle Quiz-Modul

### Test your learners' knowledge using the quiz feature!

The Moodle Quiz module is part of the Moodle learning platform and enables the creation and implementation of quizzes with various question types such as multiple choice, true/false and short answer.

Pro	Contra
Complies with the guidelines for accessible web content (WCAG 2.1)	Does not provide standard and automatic support for subtitles in custom videos

Pro	Contra
Screen reader support	Default colors and contrasts may not be optimal for all user groups
Keyboard navigation	Some advanced question types and layouts may be difficult to navigate for screen reader users or people with motor impairments
Accessible design template	No comprehensive possibility to fully customize the user interface of the quiz module to the individual needs of users with different disabilities (e.g. enlarged buttons or simplified displays)
Texts can be customized in different fonts and sizes to improve readability	
Flexible time limits for answering quiz questions can be set	
Allows the addition of audio, video and images	
Supports multiple languages	
Enables the use of high contrasts	

### 2. Survey and feedback tools

### a. Qualtrics

### How to Build Your Own Interactive Quiz

Qualtrics is a platform for creating and managing complex and professional surveys and feedback analyses. Qualtrics enables the collection of student opinions, learning outcomes and satisfaction.

Pro	Contra
Complies with the guidelines for accessible web content (WCAG 2.1)	Does not provide standard support for subtitles in custom videos
Offers accessible templates	User interface can be overwhelming due to its wide range of options
Screen reader support	Default color schemes not ideal for people with color vision deficiencies → Offers options for customization, but it is not always easy to achieve a high-contrast and accessible design
Keyboard navigation	Does not support audio quizzes
Standard designs provide acceptable contrast between text and background, which can be important for people with visual impairments. However, when creating surveys, users must take care to optimize contrasts and use high contrast colors	
Texts can be customized in different fonts and sizes to improve readability	
Allows the insertion of audio, video and images (these can be supplemented by subtitles, transcripts)	
Supports multiple languages	
Accessible on different devices (PC, tablet, smartphone) and adapts to the screen size	

### b. LimeSurvey

### <u>Homepage</u>

LimeSurvey is an open-source tool for creating and managing online surveys and feedback, allowing users to design and conduct customized questionnaires.

Pro	Contra
Open source tool for creating surveys	Does not provide standard support for subtitles and audio transcripts for embedded media.
Screen reader support	Standard color schemes often not optimal for people with color vision deficiencies
Keyboard navigation	For multilingual surveys, translations must be done manually
Text can be customized in different fonts and sizes to improve readability and make the surveys more accessible	
Supports multiple languages, including the ability to add text in different languages	
Accessible on various devices and screen sizes	
Allows the insertion of audio, video and images (these can be supplemented with subtitles, transcripts)	
Surveys can be customized and simple, clear layouts can be chosen	

### 3. Interactive presentation tools

### a. Microsoft Forms

#### Easily create custom surveys, polls, and quizzes

Microsoft Forms is an online tool that allows users to create surveys, quizzes and polls. It enables the simple recording of answers, automatic evaluation of results and a user-friendly graphical display.

Pro	Contra
Screen reader support (clear and structured forms make it easier for screen readers to read out the content)	When images or other visual content are embedded, it is not possible to add custom descriptions (audio transcription) that screen readers would read to users
Keyboard navigation	The default color schemes that creators select could be problematic for people with color vision deficiencies as they are not fully customizable.
Automatic adjustment to the system setting for high contrasts	
Clear layouts	
Adapts to different screens, making it more accessible for mobile devices	

### b. Mentimeter

### <u>Homepage</u>

Mentimeter is an interactive online tool that makes it possible to create and conduct surveys, quizzes, polls and feedback. The results can be displayed graphically.

Pro	Contra
Simple user interface	Limited screen reader usability
Accessible on multiple devices	Does not offer comprehensive customization of color schemes and contrasts
Supports multiple languages	No special options for simplified structured layouts
	Does not provide standard support for subtitles and audio transcripts for embedded media.

Pro	Contra
	Limited keyboard navigation

More complex interactive features can be harder to access for screen readers across all tools.