

Accessibility in Blackboard Learn 9.1

Continuing the work that started in Blackboard Learn 9.0, significant additional improvements were made in Blackboard Learn 9.1 that further enhance the usability and accessibility of many workflows.

While the changes introduced in Release 9.0 do impose initial challenges for the blind and visually impaired users Release 9.1 continues to build upon the changes introduced in Release 9.0 and has resolved some of the remaining challenges from earlier releases. There are still some known challenges for users with disabilities in Release 9.1 and these will be noted in the [Remaining Challenges](#) section of this document.

Improved Features and Workflows

The following list of features provides an overview of improvements made in Release 9.1. Some are resolutions to challenges identified in Release 9.0, some are new features that were added to improve the overall experience and others are additional improvements to the overall structure and navigation within Blackboard Learn.

Dynamic Content Awareness

The interaction between the system and the assistive technology tools when dynamic content, such as inline forms and modal dialog boxes (dialog boxes that appear bright while the background becomes darker) are opened has been improved. Users are not sent to a new page without navigating the user to a new page or refreshing the current page. The user is made aware of the change and focus is sent to the appropriate section of the page. When the user submits the form or closes the dialog they are returned to the location where they accessed it.

Keyboard Navigation and Focus

The logical order of headings and content elements that allow for consistent navigation throughout the product using only the keyboard has been improved. Keyboard focus is highlighted so a sighted keyboard only user knows where they are within the structure of the page. Standard and consistent navigation is used to move between menus, open menus and select items within a menu.

Taking a Test

Significant improvements were made to the structure of a test and the interaction of elements on the page. Students have the ability to clearly locate and identify questions and respond quickly. Students can save test responses as they go and receive feedback from the test to ensure their answers are stored.

Upload Content Using New Content Types

Multiple content types provide Instructors with extended flexibility when building and structuring content within a course. Instructors can add different types of content to a course, including videos and images as well as packaged content, such as IMS and SCORM. Instructors also have numerous options for organizing this content, such as Content Folders, Lesson Plans, and Learning Modules.

Several content types for uploading content to an area within a course have been changed or added:

- Audio files uploaded to Blackboard Learn 9.1 include fields for controlling looping and autostart.
- Image files uploaded to Blackboard 9.1 include accessibility fields for Alt Text, Long Description, and the ability to open the image in a new window.

- Video files uploaded to Blackboard 9.1 include fields for controlling the player dimensions, looping and autostart.

Multimedia Controls

Keyboard and screen reader accessible media controls are available for all embedded video files. Including the ability to play and pause the video, as well as control the sound volume.

Form Interaction

The under the covers layout and organization of form elements was significantly improved. This makes creating content faster and more efficient.

Remaining Challenges

The following list of features still poses some challenges for accessibility in Blackboard Learn 9.1. We are working in partnership with our clients, the Blackboard Usability Group and our vendors to constantly improve accessibility and overall user experience in Blackboard.

Discussion Boards

The complexity of the messages page in the Discussion Board still requires significant improvement to work with assistive technology tools. Viewing collections of messages (For example, all messages from a specific user or all unread messages) can somewhat improve the experience for users but it is likely that training will be required for users to be successful.

Intermittent JAWS lock-ups can occur when users post to the Discussion Board. A reported work-around is to refresh the focus. Hold down the Insert key and it the JAWS cursor. Next, tap the left mouse key (the second one to the left on the top row of the number pad), and then tap the computer cursor.

Some browser issues have been reported with Safari and creating new threads in the Discussion Board. The link reads a “menu bar” and is not interactive. A recommended work around is to try alternative browser.

Context Menus in IE8

Support for the ARIA (Accessible Rich Internet Applications) markup and keyboard navigation model used for opening and navigating contextual menus in Internet Explorer 8 is not as advanced as the support in Firefox. Users will encounter difficulties interacting with these menus in IE8 until ARIA support is increased within the browser.

Multi-file Upload

The multi-file upload function within Course Files and the Content System uses a Java Applet that does not interact well with various assistive technology tools. While it can be used with a keyboard, it is cumbersome and takes significantly longer to locate and upload files. There is an option to upload files one at a time using the “Single File Upload” function so users can still attach multiple files to content items. The process just takes much longer.

Text Editor

There are still significant challenges for a keyboard user or screen reader user to interact with the Text Editor. Java Applets (used for math equation editing tools) can steal the page focus and cause the entire page to appear to be broken for a screen reader user. There are no keyboard shortcuts for common formatting actions and users need to navigate through a significant number of buttons to get to the text area if they are not aware of the option to skip them.

Grade Center

The Interactive View of the Grade Center provides a way for users to input data directly into the grade center table. This view uses technology to dynamically display the columns in the grade center and does not allow a screen reader user to get a complete overview of the information in the table or to directly enter content into the spreadsheet. An alternative view that does not contain any dynamic or interactive content is provided for screen reader users. This view shows all data in the Grade Center table and provides links to the Grade Details pages where changes can be made.

Activity Reports

Screen readers do not announce the headings in Activity Reports when they are generated as HTML. This is due to a bug in the way all headings are generated for BIRT (Business Intelligence and Reporting Tools) HTML reports. BIRT does not use standard heading tags. Instead BIRT uses CSS to style the headings.

Virtual Classroom

Although the Accessible Chat alternative is provided, this is not considered “equal access” to all users.

JavaScript Requirement

The requirement of JavaScript to use Blackboard is sometimes considered not accessible. However, the login page of Blackboard recognizes if the user does not have JavaScript enabled and informs the user of the requirement. This means that for all users whether they are sighted, not sighted, understand browsers, or do not understand them, Blackboard responds in the same way – by informing all users of what needs to be done.