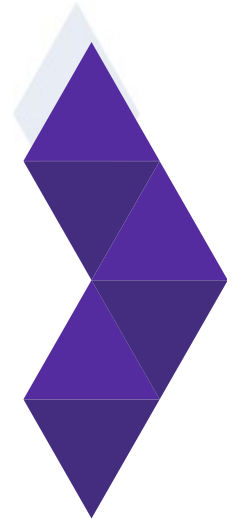




# Blackboard Open LMS WCAG 2.0 Support Statement September 2017



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## Overview

The following Support Statement provides an evaluation of accessibility support levels for the Blackboard Open LMS web application based on the [W3C Web Content Accessibility Guidelines \(WCAG\) 2.0](#). The information contained within this Support Statement is the result of a third-party performing an independent audit. The report does not assert [conformance as per the WCAG](#), rather an indication of *support levels* per checkpoint (i.e., Supports, Supports with Exceptions, or Does Not Support). The assessed levels are explained in the remarks column which indicates the specific features of the system that impacted the score, where applicable.

## Executive Summary

The Blackboard Open LMS web application has an overall rating of “Supports with Exceptions” for the WCAG 2.0 requirements. It “Supports with Exceptions” the most important technical and functional accessibility needs of most disability and assistive technology types.

The problems of highest severity and frequency are: several ARIA roles, states, and properties that are not used in a valid manner; custom controls that are not identified correctly to users; and functions that are not accessible via the keyboard.

## Testing Methodology

A variety of manual testing methods, object inspection, keyboard-only testing, and testing with the leading screen reader were utilized to perform this audit.

Testing Configurations for Blackboard

Platform	Assistive Technology	Browser
Mac OS X	VoiceOver	Safari
Windows 7	JAWS 17.0	Firefox



## Support Information for WCAG 2.0 Checkpoints

**Principle 1: Perceivable - Information and user interface components must be presentable to users in ways they can perceive**

Guideline 1.1 Text Alternatives: Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, Braille, speech, symbols or simpler language

Checkpoint	Support Level	Comments
<p><b>1.1.1 Non-text Content:</b> All non-text content that is presented to the user has a text alternative that serves the equivalent purpose, except for the situations listed below. (Level A)</p> <ul style="list-style-type: none"> <li>• <b>Controls Input:</b> If non-text content is a control or accepts user input, then it has a name that describes its purpose. (Refer to Guideline 4.1 for additional requirements for components and content that accepts user input.)</li> <li>• <b>Time-Based Media:</b> If non-text content is time-based media, then text alternatives at least provide descriptive identification of the non-text content. (Refer to Guideline 1.2 for additional requirements for media.)</li> <li>• <b>Test:</b> If non-text content is a test or exercise that would be invalid if presented in text, then text alternatives at least provide descriptive identification of the non-text content.</li> <li>• <b>Sensory:</b> If non-text content is primarily intended to create a specific sensory experience, then text alternatives at least provide descriptive identification of the non-text content.</li> </ul>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application generally provides text equivalents for most non-text elements.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On the Review Quiz Results page, the image of the coordinate system in question 14 has been given a blank <code>alt</code> attribute. It is most likely that when the author of this quiz added the image to question 14, they mistakenly checked the box which specifies that this image is decorative.</p> <p>On the Graded Assignment page, the "View Full/View Summary" switch control for "Online Text" has not been assigned a <code>role</code>.</p>



Checkpoint	Support Level	Comments
<ul style="list-style-type: none"> <li>• <b>CAPTCHA:</b> If the purpose non-text content is to confirm that content is being accessed by a person rather than a computer, then text alternatives that identify and describe the purpose of the non-text content are provided, and alternative forms of CAPTCHA using output modes for different types of sensory perception are provided to accommodate different disabilities.</li> <li>• <b>Decoration, Formatting, Invisible:</b> If non-text content is pure decoration, is used only for visual formatting, or is not presented to users, then it is implemented in a way that it can be ignored by assistive technology.</li> </ul>		

Guideline 1.2 Time-based Media: Provide alternatives for time-based media

Checkpoint	Support Level	Comments
<p><b>1.2.1 Audio-only and Video-only (Prerecorded):</b> For prerecorded audio-only and prerecorded video-only media, the following are true, except when the audio or video is a media alternative for text and is clearly labeled as such: (Level A)</p> <ul style="list-style-type: none"> <li>• <b>Prerecorded Audio-only:</b> An alternative for time-based media is provided that presents equivalent information for prerecorded audio-only content.</li> <li>• <b>Prerecorded Video-only:</b> Either an alternative for time-based media or an audio track is provided that</li> </ul>	<p><b>Not Applicable</b></p>	<p>The Blackboard Open LMS web application does not natively contain any prerecorded audio or video content.</p>



Checkpoint	Support Level	Comments
presents equivalent information for prerecorded video-only content.		
<b>1.2.2 Captions (Pre-recorded):</b> Captions are provided for all prerecorded audio content in synchronized media, except when the media is a media alternative for text and is clearly labeled as such. (Level A)	<b>Not Applicable</b>	The Blackboard Open LMS web application does not natively contain prerecorded audio or video content.
<b>1.2.3 Audio Description or Media Alternative (Prerecorded):</b> An alternative for time-based media or audio description of the prerecorded video content is provided for synchronized media, except when the media is a media alternative for text and is clearly labeled as such. (Level A)	<b>Not Applicable</b>	The Blackboard Open LMS web application does not natively contain prerecorded audio or video content.
<b>1.2.4 Captions (Live):</b> Captions are provided for all live audio content in synchronized media. (Level AA)	<b>Not Applicable</b>	The Blackboard Open LMS web application does not natively contain live multimedia content.
<b>1.2.5 Audio Description (Prerecorded):</b> Audio description is provided for all prerecorded video content in synchronized media. (Level AA)	<b>Not Applicable</b>	The Blackboard Open LMS web application does not natively contain prerecorded audio or video content.

*Guideline 1.3 Adaptable: Create content that can be presented in different ways (for example simpler layout) without losing information or structure*

Checkpoint	Support Level	Comments
<b>1.3.1 Info and Relationships:</b> Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.	<b>Supports with Exceptions</b>	The Blackboard Open LMS web application provides support of information, structure, and relationships programmatically.



Checkpoint	Support Level	Comments
(Level A)		<p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On the Survey Example page, the "In this online unit" column header, which spans multiple columns, is only given a <code>scope</code> attribute of <code>col</code> which specifies that it only spans one column.</p> <p>On the Graded Assignment page, there are two tables of two columns each. The leftmost column of each of these tables identifies the contents of the cells in the rightmost column, however, they are not programmatically associated. Assistive technology users will not explicitly be made aware that the info in the leftmost column identifies the rightmost column.</p> <p>On the File Types page, the <code>li</code> elements which wrap the contents of course sections (visible and invisible) are given valid <code>roles of article</code>, but they are contained within an <code>ul</code> element which does not have a valid <code>role</code>.</p>
<p><b>1.3.2 Meaningful Sequence:</b> When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined. (Level A)</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application content is presented in a meaningful sequence.</p> <p>A rating of Supports with Exceptions has been given for the following reason:</p> <p>On the File Types page, the lightboxes which appear when a link for a video or audio item are opened appear at the</p>
		<p>bottom of page content. Focus is drawn to</p>



Checkpoint	Support Level	Comments
		them automatically, however, keyboard-only and screen reader users who use Shift+Tab and Tab keys to navigate the page will exit the lightbox and re-enter page content at the very bottom.
<p><b>1.3.3 Sensory Characteristics:</b> Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. (Level A)</p> <p>Note: For requirements related to color, refer to Guideline 1.4.</p>	<b>Supports</b>	The Blackboard Open LMS web application does not rely on sensory characteristics alone to provide understanding of content.

*Guideline 1.4 Distinguishable: Make it easier for users to see and hear content, including separating foreground from background*

Checkpoint	Support Level	Comments
<p><b>1.4.1 Use of Color:</b> Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Level A)</p> <p>Note: This success criterion addresses color perception specifically. Other forms of perception are covered in Guideline 1.3 including programmatic access to color and other visual presentation coding.</p>	<b>Supports with Exceptions</b>	The Blackboard Open LMS web application does not use color to convey information for most controls and content.
<p><b>1.4.2 Audio Control:</b> If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume</p>	<b>Supports</b>	The Blackboard Open LMS web application does not natively contain audio.



Checkpoint	Support Level	Comments
<p>independently from the overall system volume level. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether or not it is used to meet other success criteria) must meet this success criterion. See Conformance Requirement 5: Non-Interference.</p>		
<p><b>1.4.3 Contrast (Minimum):</b> The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: (Level AA)</p> <ul style="list-style-type: none"> <li>• Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;</li> <li>• Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement.</li> <li>• Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement.</li> </ul>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application generally presents content that has a color contrast ratio with a minimum of 4.5:1.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On the Review Quiz Results page, all comment boxes are utilizing a non-compliant color contrast ratio. The dark orange foreground color on a light orange background has a contrast ratio of 2.0:1.</p> <p>On Multiple pages, all orange colored actionable links on either a white or off-white background are utilizing a non-compliant color contrast ratio.</p> <p>*When the orange links are on a white background, the contrast ratio is 2.6:1.</p> <p>*When the orange links are on an off-white background, the contrast ratio is 2.3:1.</p> <p>The "Submit" and "Refresh" buttons are utilizing a non-compliant color contrast ratio. The orange</p>





Checkpoint	Support Level	Comments
		<p>foreground color on a white background has a contrast ratio of 2.6:1.</p> <p>The four course links (Accessibility Testing Course, English 101, Math 201, and Science) are utilizing a non-compliant color contrast ratio. The orange foreground color on the white background has a contrast ratio of 2.6:1.</p> <p>The Skip to Main Content link is utilizing a non-compliant color contrast ratio. The white foreground color on the orange background has a contrast ratio of 2.6:1.</p> <p>The sub-links below Deadlines, Feedback, Messages, and Forum posts (and their associated View my calendar links) are utilizing a non-compliant color contrast ratio. The orange foreground color on a gray background has a contrast ratio of 2.2:1.</p>
<p><b>1.4.4 Resize Text:</b> Text (but not images of text) can be resized without assistive technology up to 200 percent without loss of content or functionality. (Level AA)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application can be resized without assistive technology up to 200% without loss of content or functionality.</p>
<p><b>1.4.5 Images of Text:</b> If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text except for the following: (Level AA)</p> <ul style="list-style-type: none"> <li>• Customizable: The image of text can be visually customized to the user's requirements;</li> <li>• Essential: A particular presentation of text is</li> </ul>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not contain images of text.</p>



Checkpoint	Support Level	Comments
<p>essential to the information being conveyed.</p> <p>Note: Logotypes (text that is part of a logo or brand name) are considered essential.</p>		

**Principle 2: Operable - User interface components and navigation must be operable**

Guideline 2.1 Keyboard Accessible: Make all functionality available from a keyboard

Checkpoint	Support Level	Comments
<p><b>2.1.1 Keyboard:</b> All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. (Level A)</p> <p>Note 1: This exception relates to the underlying function, not the input technique. For example, if using handwriting to enter text, the input technique (handwriting) requires path dependent input but the underlying function (text input) does not.</p> <p>Note 2: This does not forbid and should not discourage providing mouse input or other input methods in addition to keyboard operation.</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application provides keyboard access to most functions in the application.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On Multiple Pages, for each sub-question below Question 7, there is additional information about each answer that is accessible to mouse users, but not keyboard-only users. This additional information, if the current answer is incorrect, provides the correct answer, which is critical information and needs to be accessible to both mouse and keyboard users alike.</p> <p>The "View Full/View Summary" switch for "Online Text" can only be activated by the mouse. Keyboard-only users will not be able to activate this icon, and screen reader users may have difficulty doing so.</p> <p>After a user toggles the state of the button which controls the</p>

'complete' state for a course item,



Checkpoint	Support Level	Comments
		<p>focus shifts either to the <code>body</code> element of the page, the previous element in the tab focus or to the Course Search dropdown field.</p> <p>On the Review Quiz Results Page, every "Answer" field that required the tester to input a value receives keyboard focus, even though it is not actionable. Inactive elements such as this should not be included in the focus order, as it gives the impression to assistive technology users that the elements are interactive.</p>
<p><b>2.1.2 No Keyboard Trap:</b> If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not contain any keyboard traps.</p>

***Guideline 2.2 Enough Time: Provide users enough time to read and use content***

Checkpoint	Support Level	Comments
<p><b>2.2.1 Timing Adjustable:</b> For each time limit that is set by the content,</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not natively contain content that must be completed within a set time limit.</p>



Checkpoint	Support Level	Comments
<p>at least one of the following is true: (Level A)</p> <ul style="list-style-type: none"> <li>• Turn off: The user is allowed to turn off the time limit before encountering it; or</li> <li>• Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or</li> <li>• Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or</li> <li>• Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or</li> <li>• Essential Exception: The time limit is essential and extending it would invalidate the activity; or</li> <li>• 20 Hour Exception: The time limit is longer than 20 hours.</li> </ul> <p>Note 1: This success criterion helps ensure that users can complete tasks without unexpected changes in content or context that are a result of a time limit. This success criterion should be considered in conjunction with Success Criterion 3.2.1 which puts limits on changes of content or context as a result of user action.</p>		



Checkpoint	Support Level	Comments
<p><b>2.2.2 Pause, Stop, Hide:</b> For moving, blinking, scrolling, or auto-updating information, all of the following are true: (Level A)</p> <ul style="list-style-type: none"> <li>• Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and</li> <li>• Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential.</li> </ul> <p>Note 1: For requirements related to flickering or flashing content, refer to Guideline 2.3.</p> <p>Note 2: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not natively contain moving, blinking, scrolling, or auto-updating information.</p>



Checkpoint	Support Level	Comments
<p>Note 3: Content that is updated periodically by software, or that is streamed to the user agent is not required to preserve or present information that is generated or received between the initiation of the pause and resuming presentation, as this may not be technically possible, and in many situations could be misleading to do so.</p> <p>Note 4: An animation that occurs as part of a preload phase or similar situation can be considered essential if interaction cannot occur during that phase for all users and if not indicating progress could confuse users or cause them to think that content was frozen or broken.</p>		

***Guideline 2.3 Seizures: Do not design content in a way that is known to cause seizures***

Checkpoint	Supports Level	Comments
<p><b>2.3.1 Three Flashes or Below Threshold:</b> Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Level A)</p> <p>Note: Since any content that does not meet this success criterion can interfere with a user's ability to use the whole page, all content on the Web page (whether it is used to meet other success criteria or not) must meet this success criterion. See Conformance Requirement 5: Non-Interference.</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not natively contain content that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds.</p>



Guideline 2.4 Navigable: Provide ways to help users navigate, find content and determine where they are

Checkpoint	Supports Level	Comments
<p><b>2.4.1 Bypass Blocks:</b> A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. (Level A)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application contains a skip navigation function.</p>
<p><b>2.4.2 Page Titled:</b> Web pages have titles that describe topic or purpose. (Level A)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application contains pages with titles that describe the topic or purpose of the page.</p>
<p><b>2.4.3 Focus Order:</b> If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Level A)</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application is navigable in a sequential manner.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On Multiple Pages, the focus order in the header does not follow logical order. Currently, the focus order is: Skip to main content, My Courses, Blackboard Open LMS.</p> <p>On the File Types page, the lightboxes which appear when a link for a video or audio item are opened (such as "Example MP4 movie, Example MP3 audio file") appear at the bottom of page content. Focus is drawn to them automatically, however keyboard-only and screen reader users who use Shift+Tab and Tab keys to navigate the page will exit the lightbox and re-enter page content at the very bottom.</p>
<p><b>2.4.4 Link Purpose (In Context):</b> The purpose of each link can be determined from the link text alone, or from the link text together with its programmatically determined link</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application contains links whose purposes can be determined from the link text alone.</p>



Checkpoint	Supports Level	Comments
context, except where the purpose of the link would be ambiguous to users in general. (Level A)		<p>A rating of Supports with Exceptions has been given for the following reason:</p> <p>On the Review Quiz Results page, the link text for the "Skip Quiz Navigation" link includes HTML code, which makes it difficult to understand by users whom it is intended to aid.</p>
<p><b>2.4.5 Multiple Ways:</b> More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. (Level AA)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application provides multiple ways to locate a web page within the application.</p>
<p><b>2.4.6 Headings and Labels:</b> Headings and labels describe topic or purpose. (Level AA)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application provides headings and labels that are unique.</p>
<p><b>2.4.7 Focus Visible:</b> Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Level AA)</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application has a visible cue on elements that receive keyboard focus.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On Multiple Pages, the visual focus indication for the link to open the student's profile (e.g., "Jack Colins") has insufficient contrast. The contrast between the visual keyboard focus outline and background color of the link is 1.0:1, which makes it difficult for keyboard-only users to identify this link as actionable.</p> <p>There is no indication of visual focus when keyboard focus is set on the Mark as complete: e.g., the [Assignment name] icon.</p>





Checkpoint	Supports Level	Comments
		There is no indication of visual focus when keyboard focus is set on the Show only new checkbox.

**Principle 3: Understandable - Information and the operation of user interface must be understandable**

Guideline 3.1 Readable: Make text content readable and understandable

Checkpoint	Support Level	Comments
<b>3.1.1 Language of Page:</b> The default human language of each Web page can be programmatically determined. (Level A)	<b>Supports</b>	The Blackboard Open LMS web application defaults to a human language that can be programmatically determined.
<b>3.1.2 Language of Parts:</b> The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. (Level AA)	<b>Supports</b>	The Blackboard Open LMS web application content is understandable.

Guideline 3.2 Predictable: Make Web pages appear and operate in predictable ways

Checkpoint	Support Level	Comments
<b>3.2.1 On Focus:</b> When any component receives focus, it does not initiate a change of context. (Level A)	<b>Supports</b>	In The Blackboard Open LMS web application, changes of context do not occur when most elements receive keyboard focus.
<b>3.2.2 On Input:</b> Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component. (Level A)	<b>Supports with Exceptions</b>	The Blackboard Open LMS web application does not automatically change the setting of user interface components without advising users.



Checkpoint	Support Level	Comments
		<p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On Multiple pages, after a user toggles the state of the button which controls the 'complete' state for a course item, focus shifts either to the <code>body</code> element of the page, the previous element in the tab focus or to the Course Search dropdown field.</p>
<p><b>3.2.3 Consistent Navigation:</b>            Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. (Level AA)</p>	<b>Supports</b>	<p>The Blackboard Open LMS web application provides a consistent navigation structure throughout the page.</p>
<p><b>3.2.4 Consistent Identification:</b>            Components that have the same functionality within a set of Web pages are identified consistently. (Level AA)</p>	<b>Supports</b>	<p>The Blackboard Open LMS web application components that have the same functionality are identified consistently throughout the application.</p>

*Guideline 3.3 Input Assistance: Help users avoid and correct mistakes*

Checkpoint	Support Level	Comments
<p><b>3.3.1 Error Identification:</b> If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. (Level A)</p>	<b>Supports</b>	<p>The Blackboard Open LMS web application inline errors are identified and described to users in text.</p>
<p><b>3.3.2 Labels or Instructions:</b>            Labels or instructions are provided when content requires user input. (Level A)</p>	<b>Supports</b>	<p>The Blackboard Open LMS web application provides labels and instructions for most content requiring user input.</p>



Checkpoint	Support Level	Comments
<p><b>3.3.3 Error Suggestion:</b> If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. (Level AA)</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not provide in-line validation of user errors.</p>
<p><b>3.3.4 Error Prevention (Legal, Financial, Data):</b> For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true: (Level AA)</p> <ul style="list-style-type: none"> <li>• Reversible: Submissions are reversible.</li> <li>• Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them.</li> <li>• Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.</li> </ul>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application does not contain legal or financial data.</p>

***Principle 4: Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies***

***Guideline 4.1 Compatible: Maximize compatibility with current and future user agents, including assistive technologies***

Checkpoint	Support Level	Comments
<p><b>4.1.1 Parsing:</b> In content implemented using markup languages, elements have</p>	<p><b>Supports</b></p>	<p>The Blackboard Open LMS web application contains properly marked-up languages.</p>



Checkpoint	Support Level	Comments
<p>complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Level A)</p> <p>Note: Start and end tags that are missing a critical character in their formation, such as a closing angle bracket or a mismatched attribute value quotation mark are not complete.</p>		
<p><b>4.1.2 Name, Role, Value:</b> For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Level A)</p> <p>Note: This success criterion is primarily for Web developers who develop or script their own user interface components. For example, standard HTML components already meet this success criterion when used according to specification.</p>	<p><b>Supports with Exceptions</b></p>	<p>The Blackboard Open LMS web application provides very limited appropriate information about custom controls.</p> <p>A rating of Supports with Exceptions has been given for the following reasons:</p> <p>On the Graded Assignment page, the "View Full/View Summary" switch control for "Online Text" has not been assigned a <code>role</code>.</p> <p>Each of the <code>options</code> in the list box of auto-suggested search results are <code>a</code> elements which gives them an implicit <code>role</code> of <code>link</code>. These links are each contained within <code>li</code> elements which have a <code>role</code> of <code>option</code>.</p> <p>The <code>li</code> elements which contain the name and description of each course content item on this page have been given an <code>aria-expanded</code> attribute of <code>false</code>.</p> <p>The <code>input</code> element of the search widget has an <code>aria-</code></p>

`activedescendant` attribute



Checkpoint	Support Level	Comments
		<p>which is associated to the list of auto-suggested search results, even when no auto-suggestions are available.</p> <p>The <code>input</code> element is also missing an <code>aria-expanded</code> attribute, and thus does not indicate whether search results are available to a screen-reader users.</p> <p>No <code>aria-controls</code> attribute is assigned to the <code>input</code> component of the search widget.</p> <p>Post-activating the Search button, the Search edit fields populate. This edit field is solely using a placeholder value to explain input. There are no visual labels for each edit field, and the placeholder value is the only indication of what the user should input into these edit fields. When any value is entered into the edit field, this placeholder disappears.</p>



## Appendix A - Conformance Requirements

In order for a Web page to conform to WCAG 2.0, all of the following conformance requirements must be satisfied:

**1. Conformance Level:** One of the following levels of conformance is met in full.

- **Level A:** For Level A conformance (the minimum level of conformance), the [Web page satisfies](#) all the Level A Success Criteria, or a [conforming alternate version](#) is provided.
- **Level AA:** For Level AA conformance, the Web page satisfies all the Level A and Level AA Success Criteria, or a Level AA conforming alternate version is provided.
- **Level AAA:** For Level AAA conformance, the Web page satisfies all the Level A, Level AA and Level AAA Success Criteria, or a Level AAA conforming alternate version is provided.

*Note 1:* Although conformance can only be achieved at the stated levels, authors are encouraged to report (in their claim) any progress toward meeting success criteria from all levels beyond the achieved level of conformance.

*Note 2:* It is not recommended that Level AAA conformance be required as a general policy for entire sites because it is not possible to satisfy all Level AAA Success Criteria for some content.

**2. Full pages:** [Conformance](#) (and conformance level) is for full [Web page\(s\)](#) only, and cannot be achieved if part of a Web page is excluded.

*Note 1:* For the purpose of determining conformance, alternatives to part of a page's content are considered part of the page when the alternatives can be obtained directly from the page, e.g., a long description or an alternative presentation of a video.

*Note 2:* Authors of Web pages that cannot conform due to content outside of the author's control may consider a [Statement of Partial Conformance](#).

**3. Complete processes:** When a [Web page](#) is one of a series of Web pages presenting a [process](#) (i.e., a sequence of steps that need to be completed in order to accomplish an activity), all Web pages in the process conform at the specified level or better. (Conformance is not possible at a particular level if any page in the process does not conform at that level or better.)

*Example:* An online store has a series of pages that are used to select and purchase products. All pages in the series from start to finish (checkout) conform in order for any page that is part of the process to conform.

**4. Only Accessibility-Supported Ways of Using Technologies:** Only [accessibility-supported](#) ways of using [technologies](#) are [relied upon](#) to satisfy the success criteria. Any information or functionality that is provided in a way that is not accessibility supported is also available in a way that is accessibility supported. (See [Understanding accessibility support](#).)

**5. Non-Interference:** If [technologies](#) are used in a way that is not [accessibility supported](#), or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the page. In addition, the [Web page](#) as a whole continues to meet the conformance requirements under each of the following conditions:

1. when any technology that is not [relied upon](#) is turned on in a user agent,

2. when any technology that is not relied upon is turned off in a user agent, and
3. when any technology that is not relied upon is not supported by a user agent

In addition, the following success criteria apply to all content on the page, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the page:

- **1.4.2 - Audio Control,**
- **2.1.2 - No Keyboard Trap,**
- **2.3.1 - Three Flashes or Below Threshold, and**
- **2.2.2 - Pause, Stop, Hide.**

*Note:* If a page cannot conform (for example, a conformance test page or an example page), it cannot be included in the scope of conformance or in a conformance claim.

For more information including examples, see [Understanding Conformance Requirements](#).

### ***Conformance Claims (Optional)***

Conformance is defined only for [Web pages](#). However, a conformance claim may be made to cover one page, a series of pages, or multiple related Web pages.

#### ***Required Components of a Conformance Claim***

Conformance claims are **not required**. Authors can conform to WCAG 2.0 without making a claim. However, if a conformance claim is made, then the conformance claim **must** include the following information:

1. **Date** of the claim
2. **Guidelines title, version and URI** "Web Content Accessibility Guidelines 2.0 at <http://www.w3.org/TR/2008/REC-WCAG20-20081211/>"
3. **Conformance level** satisfied: (Level A, AA or AAA)
4. **A concise description of the Web pages**, such as a list of URIs for which the claim is made, includes whether subdomains are included in the claim.

*Note 1:* The Web pages may be described by list or by an expression that describes all of the URIs included in the claim.

*Note 2:* Web-based products that do not have a URI prior to installation on the customer's Web site may have a statement that the product would conform when installed.

5. A list of the **Web content technologies relied upon**.

*Note:* If a conformance logo is used, it would constitute a claim and must be accompanied by the required components of a conformance claim listed above.

#### ***Optional Components of a Conformance Claim***



In addition to the required components of a conformance claim above, consider providing additional information to assist users. Recommended additional information includes:

- A list of success criteria beyond the level of conformance claimed that have been met. This information should be provided in a form that users can use preferably machine-readable metadata.
- A list of the specific technologies that are "*used but not [relied upon](#)*."
- A list of user agents, including assistive technologies that were used to test the content.
- Information about any additional steps taken that go beyond the success criteria to enhance accessibility.
- A machine-readable metadata version of the list of specific technologies that are [relied upon](#).
- A machine-readable metadata version of the conformance claim.

*Note 1:* Refer to [Understanding Conformance Claims](#) for more information and example conformance claims.

*Note 2:* Refer to [Understanding Metadata](#) for more information about the use of metadata in conformance claims.



### Statement of Partial Conformance - Third Party Content

Sometimes, Web pages are created that will later have additional content added to them. For example, an email programs, a blog, an article that allows users to add comments, or applications supporting user-contributed content. Another example would be a page, such as a portal or news site, composed of content aggregated from multiple contributors, or sites that automatically insert content from other sources over time, such as when advertisements are inserted dynamically.

In these cases, it is not possible to know at the time of original posting what the uncontrolled content of the pages will be. It is important to note that the uncontrolled content can affect the accessibility of the controlled content as well. Two options are available:

1. A determination of conformance can be made based on best knowledge. If a page of this type is monitored and repaired (non-conforming content is removed or brought into conformance) within two business days, then a determination or claim of conformance can be made since, except for errors in externally contributed content which are corrected or removed when encountered, the page conforms. No conformance claim can be made if it is not possible to monitor or correct non-conforming content;

**OR**

2. A "statement of partial conformance" may be made that the page does not conform, but could conform if certain parts were removed. The form of that statement would be, "This page does not conform, but would conform to WCAG 2.0 at level X if the following parts from uncontrolled sources were removed." In addition, the following would also be true of uncontrolled content that is described in the statement of partial conformance:
  - a. It is not content that is under the author's control.
  - b. It is described in a way that users can identify (e.g., they cannot be described as "all parts that we do not control" unless they are clearly marked as such.)

A "statement of partial conformance due to language" may be made when the page does not conform, but would conform if [accessibility support](#) existed for (all of) the language(s) used on the page. The form of that statement would be, "This page does not conform, but would conform to WCAG 2.0 at level X if accessibility support existed for the following language(s)."

*Web Content Accessibility Guidelines 2.0,  
W3C World Wide Web Consortium Recommendation  
(<http://www.w3.org/TR/200X/REC-WCAG20-20081211/>,  
Latest version at <http://www.w3.org/TR/WCAG20/>)*