Blackboard – Web Community Manager
Voluntary Product Accessibility Template
February 2016

§ 1194.22 – Web-based Intranet and Internet Information and Applications
§ 1194.31 – Functional Performance Criteria
§1194.41 – Information, Documentation and Support

Overview

The information contained within this Voluntary Product Accessibility Template (VPAT) is the result of a third-party performing an audit using JAWS 16.0 screen reader software used by people who are blind, Dragon NaturallySpeaking (Dragon) 12.5 voice recognition/speech to text software for users with limited mobility, and the iOS VoiceOver screen reader. The audit tested the compliance of the Blackboard Web Community Manager against the applicable requirements of Section 508 of the Rehabilitation Act of 1973 as Amended 1998[1].

The purpose of the Voluntary Product Accessibility Template is to assist Federal contracting officials in making preliminary assessments regarding the availability of commercial electronic and information technology products and services with features that support accessibility. It is assumed that offerers will provide additional contact information to facilitate more detailed inquiries.

Core issues identified in this VPAT include a lack of textual alternates for custom controls, a lack of keyboard focus and access on several actionable elements, and inconsistent menu navigation.

The first table of the report provides a summary view of the Section 508 Standards. The subsequent tables provide more detailed views of each subsection. There are three columns in each table. Column one of the Summary Table describes the subsections of Subparts B and C of the Standards. The second column describes the supporting features of the product or refers you to the corresponding detailed table, "e.g., equivalent facilitation." The third column contains any additional remarks and explanations regarding the product. In the subsequent tables, the first column contains the lettered paragraphs of the subsections. The second column describes the supporting features of the product with regard to that paragraph. The third column contains any additional remarks and explanations regarding the product.

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[1]§1194.22 – Web-based Intranet and Internet Information and Applications
§1194.31 Functional Performance Criteria
§1194.41 – Information, Documentation and Support

Compliance Summary

Criteria	Supported
[Section 1194.22 Web-based Intranet and Internet Information and Applications](#)	**Does Not Support**
[Section 1194.31 Functional Performance Criteria](#)	**Does Not Support**
[Section 1194.41 Information, Documentation, and Support](#)	**Applicable – Not Tested**

Support Levels

Support Level	Description
Supports	The application fully meets the letter and intent of the Criteria.
Supports with Exceptions/Minor Exceptions	The application does not fully meet the letter and intent of the Criteria, but provides some level of access relative to the Criteria.
Supports through Equivalent Facilitation	The application provides an alternate way to meet the intent of the Criteria.
Supports when Combined with Compatible AT	The application fully meets the letter and intent of the Criteria when used in combination with compatible ATs.
Does Not Support	The application does not meet the letter or intent of the Criteria.
Not Applicable	The Criteria does not apply.
Not Applicable - Fundamental Alteration Exception Applies	A Fundamental Alteration of the application is required to meet the Criteria.
Applicable – Not Tested	The Standard is applicable but was not tested.

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§ 1194.22 Web-based Intranet and Internet Information and Applications

Criteria	Support Level	Remarks and Explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	**Does Not Support**	Most Images, image buttons within Web Community Manager included meaningful alternate text or `title` attribute to describe the non-text element. Most pages include content structured using HTML markup such as headings and list structures. A rating of Does Not Support is assigned for the following reasons: The application's content is structured with CSS background images. The background images are used to structure actionable elements such as stars for ratings, close elements in simulated dialogs, icons to portray attached menus. CSS background images lack alternate text and their presence is not rendered to screen reader users. Several pages include font icons which are not supported by screen readers and the icons lack text equivalents, thus screen reader users are unable to decipher the associated meaning with these fonts. Simulated controls within the applications such as the expand and collapse links and page tabs must provide textual representation of the control via `role` and `state`. Page tabs are structured as links which are accessible with keyboard but lack a textual representation of `role` and `state`. Users are unable to identify the control and are not made aware of how to navigate the simulated control. A few pages include custom checkboxes, custom combo boxes, and other custom elements structured to display a teacher's directory. These custom elements lack textual alternatives

Criteria	Support Level	Remarks and Explanations
		nor do they describe a role for the element. Screen reader users are unable to interact with these elements. The Select a School drop down, viewed across most of the pages, lacks a role and description. Navigation menus in the content for various schools can be navigated with keyboard. However, the parent menu links lack a textual indication, which must be provided to screen reader users to inform them of the function of navigational links, including attached menus. Menu links include an icon that indicates the presence of an attached submenu link. The icon is not in the tab order. Screen reader users are not made aware of the attached menu link when they tab through the menu items. In responsive mode, the hamburger menu appears without a role and screen reader users are not aware of the menu structure. In responsive mode, icons such as + displayed next to menu items such as home and community lack a label and role. Screen reader users are not made aware of how to interact with the element. Carousels are displayed on some of the school's main page provides controls for advancing the slideshow forward, back, and pausing it complete, but those controls do not provide any textual role or description and screen reader users are unable to determine their purpose.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	**Supports**	While the Web Community Manager framework does not natively include embedded video content.

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Criteria	Support Level	Remarks and Explanations
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	**Supports with Exceptions**	Most pages are structured such that content does not rely solely on color coding to convey information. A rating of Supports with Exceptions is assigned for the following reasons: Several navigation links use color on an active link to visually indicate a reference to the active content on the page. Several form fields such as text boxes use color alone to indicate if a form field is required. Page tabs structured within pages and in Gadgets use color alone to display the active state of a page tab. Calendar apps within use color alone to display the state of the current or selected date. In the Add Gadget dialog, when a gadget is selected, the background is changed slightly in color to indicate selection.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	**Does Not Support**	Some pages within the Web Community Manager can be accessed without associated style sheets. The reading order of content is logical and content is organized in an order such that it is readable without an associated style sheet. However, a rating of Does Not Support is assigned due to the following reasons: CSS background images are structured as actionable elements in most pages. These actionable elements are not visible when colors are removed from the browser's accessibility settings. Reading order of content within some pages is not rendered to screen reader users in a logical order. The responsive menu structure displays a + icon to indicate an addition to the menu item. This icon that appears is rendered before the menu item.

Criteria	Support Level	Remarks and Explanations
		In desktop view, when screen reader users tab to the menu items, the menu items are not rendered with meaningful text.

In the Terms of Use and Privacy Policy pages, the content in the header is rendered at the end of the page, after the footer content.

A few pages are structured with implicit headings. In these instances, CSS is used to format text visually to emphasize section headings. |
| (e) Redundant text links shall be provided for each active region of a server-side image map. | **Not Applicable** | Web Community Manager pages do not contain any server side image maps. |
| (f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape. | **Not Applicable** | K-12 web pages do not contain any server side image maps. |
| (g) Row and column headers shall be identified for data tables. | **Supports with Minor Exceptions** | On pages within Web Community Manager that include data tables, those tables are displayed within well-defined data table structures where table headers are associated with their corresponding data cells.

A rating of Supports with Minor Exceptions is due to the issues found within the calendar app in

Content structured within the table lacks table header structure. Column headers lack identification because they are not structured with the `<TH>` attribute and because they lack `scope` attributes to associate them with the header cells.

Calendar apps lack well-structured data tables. The app is structured with multiple tables where each row within the calendar is structured as a table. |
| (h) Markup shall be used to associate data cells and header cells for data tables that have two or | **Supports** | Web Community Manager includes pages where content is structured with data table structure. |

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Vienna, VA 22182

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114 Sansome Street, Suite 950
San Francisco, CA 94104

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250 Commercial Street, Suite 3007A
Manchester, NH 03101

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more logical levels of row or column headers.		
(i) Frames shall be titled with text that facilitates frame identification and navigation	**Supports**	Web Community Manager has some pages that include frames. The frames include meaningful titles that provide frame identification and facilitate navigation.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	**Supports**	The pages within the Web Community Manager do not display blinking or flashing elements.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	**Not Applicable**	The pages within the Web Community Manager do not utilize a text-only alternative page.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	**Does Not Support**	Pages within Web Community Manager utilize JavaScript to display content. Page structure includes some actionable elements that receive a well-defined keyboard focus, are in the tab order, and can be accessed with keyboard. A rating of Does Not Support is assigned due to the following issues: Several pages include custom elements such as stars displayed for ratings, custom form fields such as a dropdown, simulated controls such as carousel in home pages of a school, or apps within the school such as add a gadget or Teacher directory. These custom elements utilize JavaScript to display the content, including functionality that keyboard-only users cannot manipulate. Furthermore, these elements lack programmatic focus, which prevents users from accessing the content. Several actionable elements such as buttons or image links lack well-defined keyboard focus and can only be activated with the mouse.

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Criteria	Support Level	Remarks and Explanations
		Menu and sub-menu structures within various school pages can be accessed exclusively with the keyboard, but they are not accessible with the keyboard when screen readers are enabled. Programmatic focus is not set to the menu items in responsive mode. Users are unable to navigate to the menu items and interact with the sub-menu items. When a simulated dialog is invoked, programmatic focus is neither set to the beginning of the dialog, nor does programmatic focus remain on the dialog until the dialog is closed. Users who are blind are not made aware of the boundaries of the simulated dialog. Simulated dialogs include actionable elements such as buttons and image links cannot be activated with keyboard. When the dialog is closed, programmatic focus is not set to the element that invoked the dialog. Pages where content is structured as page tabs do not set programmatic focus to the tab panel that displays dynamically displayed content when a page tab is activated. Users must navigate through other page tabs with the Tab key to access the dynamically displayed content Navigation region within the page and links within Privacy Policy page display content which includes simulated controls that can be expanded to view additional content or collapsed to hide the content. These controls lack a textual alternative for the state of the control (i.e., whether it is expanded or collapsed). The User Account and Register pages include the password field within Change Password section. The password field

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		has a strength meter which does not convey password strength updates to users who are blind as they enter a new password. Most pages include the search icon in the header. When activated, the search edit box appears; however, programmatic focus does not move to the edit box. Keyboard-only users cannot navigate to or activate content within data cells in the calendar app The calendar includes a series of controls for selecting Week, Month, or Agenda, all of which lack keyboard access. Embedded Flash content is not accessible to screen reader users. The translate icon is not in the tab order and cannot be activated via keyboard. Applications within the PassKeys lack visual focus and cannot be activated with keyboard.
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).	**Does Not Support**	Assignment pages include PDF files but lack a link to download Adobe's Acrobat Reader.
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	**Supports with Exceptions**	Most form fields structured within the Web Community Manager include labels that are programmatically associated with their form fields. A majority of form fields are explicitly labeled (i.e., the `label` element includes the `for` attribute value that matches the `id` value of the corresponding form field). A rating of Supports with Exceptions is assigned due to the following issues:

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Criteria	Support Level	Remarks and Explanations
		Error messages related to forms are not properly located above the form for assistive technology users to access them easily. Instructive text on some pages is not displayed in an optimal location above each form. Form fields within some pages (i.e., , Site Map, Privacy Policy, Terms of Use, User Account Information, Register User) lack an explicit label.
(o) A method shall be provided that permits users to skip repetitive navigation links.	**Supports with Exceptions**	Skip navigation links within the Web Community Manager are provided before the top repetitive navigation controls in all pages. However, a rating of Supports with Exceptions is assigned because the skip link is broken on some pages.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	**Not Applicable**	The pages within the Web Community Manager do not utilize a timed response.

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

§ 1194.31 Functional Performance Criteria

Criteria	Support Level	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	**Does Not Support**	Most pages within the Web Community Manager lack accessibility information such as name, state, and role for most of their controls. The pages' lack keyboard access to most active elements. A rating of Does Not Support is assigned due to the following issues: As stated in §1194.22 (a), (d), (l), (m) and (n), when textual information about user interface elements is not available to assistive technologies, screen reader users may not be able to interact appropriately with the controls.

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Criteria	Support Level	Remarks and Explanations
		JAWS 16 users are unable to consistently navigate through the menu and sub-menu items in desktop and responsive mode. As stated in §1194.22 (m), JAWS 16 screen reader users are unable to access content within embedded Flash objects. Screen reader users cannot activate some of the active elements within the embedded video. As stated in §1194.22 (a), some non-text elements in the application(s) are missing text equivalents. Images and image links lack alternative text. JAWS 16 announces the image source paths or filenames for icons lacking alternative text, but this information is not useful to screen reader users. Custom HTML controls and simulated controls lack a role. As stated in §1194.22 (c), JAWS 16 users cannot verify required form fields. Additionally, users with visual impairments cannot validate active menu or page tab links. JAWS 16 users could not decipher the required field indicators on form fields. As stated in §1194.22(d), pages include CSS background images as background images and several icons on the page lack alternative text. As stated in §1194.22(g), simple data tables lack scope attributes necessary to associate table headers with associated data cells or to allow users to determine the purpose of a row. As stated in §1194.22(l), keyboard accessibility issues affect people who are blind or visually impaired because these users navigate through the application exclusively via the keyboard.

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1593 Spring Hill Road, Suite 720
Vienna, VA 22182

Silicon Valley Office
114 Sansome Street, Suite 950
San Francisco, CA 94104

New England Office
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Criteria	Support Level	Remarks and Explanations
		Simulated controls lack keyboard access, and the state of several simulated controls such as page tabs and navigation controls to expand and collapse information is not rendered to screen readers. As stated in §1194.22(n), users with no or limited vision may miss the error messages and instructive text to enter form field information that is displayed in non-optimal locations. Screen reader users find it difficult to activate form field elements because they are not labelled adequately.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	**Supports with Exceptions**	The Web Community Manager provides some support that does not require a visual acuity of greater than 20/70. A rating of Supports with Exceptions is assigned due to the following issues: As stated in §1194.22 (c), color is used to indicate the active state of elements in page tabs or active menu links. Users with low vision may not be able to decipher the required field indicators on form fields. As stated in §1194.22(d), users with low vision cannot access some actionable elements when CSS and background images are disabled. As stated in §1194.22(l), users with low vision have difficulty locating several actionable elements as there was limited visual keyboard focus. Users with low vision have difficulty visually tracking error, alert, and instructional messages. As stated in §1194.22(n), users with low vision may accidentally skip over error messages or instructive text when they are displayed in a non-optimal location.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be	**Supports with Exceptions**	Most content within the Web Community Manager does not use content that relies on hearing for information retrieval.

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Criteria	Support Level	Remarks and Explanations
provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided.		A rating of Supports with Exceptions is assigned because clients can upload video and podcast content which lacks accessible closed captions, textual alternatives or transcripts.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	**Supports with Exceptions**	Most content within Web Community Manager website does not communicate information in an auditory fashion. A rating of Supports with Exceptions is assigned because clients can embed flash video content and podcasts that lack close caption controls and textual alternatives.
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	**Supports**	Content within the Web Community Manager does not require speech for operation and information retrieval.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	**Supports with Exceptions**	Content within Web Community Manager provides access to multiple user interface controls for users with mobility impairments. However, a rating of Supports with Exceptions is assigned due to the following issues: Custom or simulated controls lack keyboard focus and access as mentioned in §1194.22(l). On some pages, Dragon users are unable to access actionable elements with direct voice or keyboard commands and have to resort to voicing mouse-grid commands. When form fields and user interface controls lack information such as explicit labels and accessible `role, state,` or `name` information as stated in §1194.22(n), voice recognition software users cannot access these controls by voicing these labels. However, Dragon users can access unlabeled fields through voiced keyboard commands and other global Dragon features without a loss of focus or content.

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§ 1194.41 Information, Documentation and Support

Criteria	Support Level	Remarks and Explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	**Applicable – Not Tested**	
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	**Applicable – Not Tested**	
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	**Applicable – Not Tested**	

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