

**Accessible Informational Material & Technology Adoption/Procurement Checklist**

**Requestor**

Dr. Susan Sutton

**Department/Unit**

Center for Teaching Arts & Technology

**AIMT Reviewer**

Bruce Botts & Breanna Wright

**Product Name**

Adobe Connect

**Product Version**

9

**Product Vendor**

Adobe Connect

**Vendor Contact**

Toby Marriott

**Vendor Contact Email**

[tmariott@figleaf.com](mailto:tmariott@figleaf.com)

**Vendor Contact Phone**

1-404-405-3945

**IMT Users**

RSCC faculty and students

**IMT Usage**

RSCC faculty will use to teach online classes

**Cost**

4950

**Step 1 Gather Information for Review**

**Standards Conformance**

Attached Accessibility Statement, Conformance and Remediation Forms and Vendor Documentation  
 Technical standards used (in order of priority)

- Web Content Accessibility Guidelines 2.0 A & AA
- EPUB3 Accessibility Guidelines
- Section 508 & VPAT

**Market Analysis for Standards Conformance**

- All products that meet the applicable requirements are conformant
- One product meets more applicable requirements than the others (attach supporting analysis)
- Product previously purchased and may be conformant (e.g., LMS contract)
- Only one product meets applicable requirements (e.g., sole source)(attach justification)

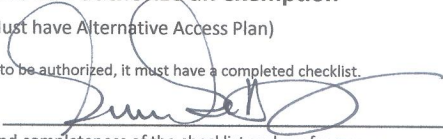
**General Exemptions to Conformance Guidelines**

**Only Administrative Executive can authorize an exemption**

No accessible alternative IMT (Must have Alternative Access Plan)

Note: For an AIMT adoption/procurement to be authorized, it must have a completed checklist.

**Requestor**




Date

4/11/17

Signature required to certify accuracy and completeness of the checklist and conformance.

Initial all appropriate boxes or N/A


49
N/A
59

n/a
n/a
n/a
n/a

**Step 2 Review by Department Accessibility Liaison**

**Accessibility Review Document Completed**

Attached Alternative Access Plan if needed

**AIMT Reviewer**

Accessibility Liaison

  
 Sign here only when ready to forward to step 3

Date

4/11/17

Initial all appropriate boxes or N/A

4/11/17
yes

**Step 3 Adoption or Procurement**

**Adoption Completed**

**Buyer AIMT Procurement Checklist Completed**

**All documentation filed with department liaison and Purchasing (if applicable)**

Accessibility Liaison

**Final Signature**

  
 Appropriate Vice President Approval

Date

4/12/17

Initial all appropriate boxes or N/A

(Initials & Date)
(Initials & Date)
(Initials & Date)

\* applicable requirements are essential/preferred functionality

## Alternate Access Plan

### Purpose of the Alternate Access Plan

In compliance with Section 504 of the Rehabilitation Act of 1973 and ADA as amended in 2008, the TBR shall apply THEC's identified accessibility guidelines to Informational Materials and Technology products and services that it adopts, buys, creates, uses and maintains. When informational materials and technologies do not conform to those guidelines, an alternative access plan will be developed to address the accessibility. This form is used to describe the alternate access plan.

### Instructions

1. Alter the bolded areas in brackets ([ ]) to reflect the titles of the responsible persons for this plan.
2. The requesting department Accessibility Liaison/Accessibility Team is responsible for completing sections 1 through 3 below.
3. The requesting department will obtain the appropriate administrative approvals in section 4.
4. The appropriate administrator will either a) approve the form and return it to the requesting department for processing or b) return the form unsigned. An unsigned form indicates the plan is not approved and must be revised to meet accessibility standards.
5. The **[department executive administrator]** or designee is responsible for returning the approved original document along with all associated AIMT adoption/procurement documents to the department Accessibility Liaison upon signature. The liaison will provide copies to those individuals identified in section 3, number 3 (Responsible Person(s) and upload all AAP documentation to the AIMT Web Form.

### Section 1. Plan Creator Information

Name Susan Sutton	Title Director	Unit CTAT	Date 4/11/2017
Office Phone 865-882-4556	Office Location Harriman	Postal 37748	

### Section 2. Description of the Affected Informational Material and Technology Purchase

Affected product is a:	Meeting software
Product Name:	Adobe Connect
Product Description:	Meeting software for both synchronous and asynchronous use
Product Purpose:	Allow instructors and students to have synchronous meetings outside the classroom, record sessions for students and instructors, hold training between multiple campuses

### Section 3. How will “Alternate Access” (AA) be provided?

<p><b>1. Description of the issue:</b> Summarize what part of the informational material/technology has an accessibility issue and is not accessible per AIMT guidelines.</p>	<p>Video doesn't have a transcription or description.</p>
<p><b>2. Persons or groups affected:</b> List the person(s) or groups who may/will be affected by this issue, including the total number of affected persons. (general public, visitors, students only, employees, etc.).</p>	<p>Students who are visual or hearing impaired</p>
<p><b>3. Responsible person(s):</b> List the name(s) and titles of the employee(s) who will be responsible for implementing equally effective alternate access for the specified accessibility issue as described in Number 1.</p>	<p>CTAT or Disability Services depending on the need</p>
<p><b>4. How will AA be provided:</b> Describe in detail how the responsible unit(s)/person(s) equally effective alternate access will be communicated and what will be provided. Attach a separate sheet – see AAP attachment below and the Accessibility Conformance and Remediation Form.</p>	<p>CTAT or instructor would have to transcribe videos that are already made so there would be a transcript. A transcriptionist can be hired and be used when a recording is live for students who need to attend a synchronous session</p>
<p><b>5. AA Resources Required:</b> List any resources required (including training, equipment, additional staff, etc.) to provide alternate access for the known issue.</p>	<p>Person to be able to transcribe sessions that have already been recorded</p>
<p><b>6. Repair Information:</b> Include the following information in this section: a. Provide a brief description or any relevant information regarding repair of the issue by the vendor or Third Party Service Provider, as well as the completion date. Attach applicable documentation and the Accessibility Conformance and Remediation Form.</p>	<p>Vendor has plug in that would allow a transcriptionist to be able to attend meetings and transcribe</p>
<p><b>7. Timeline for Unforeseen events:</b> A timeline to plan create, implement, and follow up on plans for accommodation for access concerns/issues that are beyond the accessible procurement process and/or outside of the realm of the questions above.</p>	<p>Already in Place</p>

### Section 4. Administrative AAP Approvals

*By signing this request, you affirm that the plan has been reviewed and is an acceptable solution that meets TBR AIMT Accessibility Guidelines.*

<p>Department Head [or other responsible party]</p>		<p>Date:</p>
<p>Executive [or other responsible executive]</p>		<p>Date:</p>



# Adobe® Connect™ 9 (Windows) Voluntary Product Accessibility Template

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.

The first table of the Template 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.

**Date:** 08/17/2012

**Name of Product:** Adobe® Connect™ 9 (Windows)

**Contact for more Information:** [access@adobe.com](mailto:access@adobe.com)

Guideline	Applicable	Compliance
§1194.21 – <a href="#">Software Applications and Operating Systems</a>	Meeting Client: Applicable	Supports with Exceptions
§1194.22 – <a href="#">Web-based Intranet and Internet Information and Systems</a>	Meeting Client: Applicable Administrative Interface: Applicable	Supports with Exceptions
§1194.23 – Telecommunications Products	Not Applicable	-
§1194.24 – <a href="#">Video and Multimedia Products</a>	Meeting Client: Applicable	Supports
§1194.25 – Self-Contained, Closed Products	Not Applicable	-
§1194.26 – Desktop and Portable Computers	Not Applicable	-
§1194.31 – <a href="#">Functional Performance Criteria</a>	Meeting Client: Applicable Administrative Interface: Applicable	Supports
§1194.41 – <a href="#">Information, Documentation, Support</a>	Applicable	Supports

## Section 1194.21 Software Applications and Operating Systems - Detail

Criteria	Supporting Features	Remarks and explanations
<p>(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.</p>	<p><b>Supports with Exceptions</b></p>	<p>Adobe Connect provides keyboard support for all elements in the meeting interface, but does not provide the ability to resize individual pods without a mouse.</p>
<p>(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.</p>	<p><b>Supports with Exceptions</b></p>	<p>Adobe Connect does not disrupt or disable Windows operating system accessibility features such as filter keys, toggle keys, sticky keys, and the on-screen keyboard, but it does not respond to user-defined operating system color contrast settings in Windows.</p> <p>Adobe Connect depends on Adobe Flash Player, which does not have access to operating-system settings for user-defined color and contrast.</p>
<p>(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.</p>	<p><b>Supports</b></p>	<p>Focus is well-defined visually and exposed to assistive technology via the MSAA interface.</p>
<p>(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.</p>	<p><b>Supports with Exceptions</b></p>	<p>Adobe Connect provides information about user interface elements to assistive technology in the meeting and administrative interface with a few exceptions such as the view selector in the meeting room's Attendee pod and the information in the Engagement Dashboard pod (found only in seminar rooms and only by presenters).</p>

Criteria	Supporting Features	Remarks and explanations
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	<b>Supports</b>	
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	<b>Supports</b>	Textual information is made available to assistive technologies via the MSAA interface.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	<b>Does Not Support</b>	Adobe Connect does not honor user-defined color and contrast settings in Windows.
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	<b>Supports</b>	Adobe Connect does not use animation to convey information. Users sharing animated information during a Connect meeting will need to provide an alternative rendering.
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	<b>Supports</b>	Adobe Connect does not rely on color coding alone to convey information.
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	<b>Not Applicable</b>	Adobe Connect does not have color or contrast adjustment settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	<b>Supports</b>	Flashing and blinking text and objects are not used in the Adobe Connect user interface.
(l) When electronic forms are used, 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.	<b>Not Applicable</b>	Adobe Connect does not use forms.

## Section 1194.22 Web-based Internet information and applications - Detail

Criteria	Supporting Features	Remarks and explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports with Exceptions</b>	Adobe Connect provides equivalents for most images. Exceptions include the administrative interface's Conversion Funnel graphic which lacks a text equivalent, although most of the graphic's information is provided in the adjacent Comma Separated Value (CSV) data download file.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Not Applicable</b>	Adobe Connect provides support for real-time closed captioning using the Adobe Connect captioning extension available at the Adobe Exchange. ( <a href="#">link</a> )
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	<b>Supports</b>	Adobe Connect does not rely on color coding to convey information.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	<b>Not Applicable</b>	Adobe Connect does not use style sheets.
(e) Redundant text links shall be provided for each active region of a server-side image map.	<b>Not Applicable</b>	Adobe Connect does not use 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.	<b>Not Applicable</b>	Adobe Connect does not use client-side image maps.
(g) Row and column headers shall be identified for data tables.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports with Exceptions</b>	The meeting client does not use tables. However, the Administrative interface contains some tables which lack proper identification of table column headings.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	<b>Not Applicable</b>	Adobe Connect does not contain tables with multiple levels of headings.

Criteria	Supporting Features	Remarks and explanations
(i) Frames shall be titled with text that facilitates frame identification and navigation	<b>Meeting Client: Not Applicable</b> <b>Administrative Interface: Supports with Exceptions</b>	HTML iframes used in the Events Management section lack titles.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	<b>Supports</b>	Adobe Connect does not create flickering content.
(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.	<b>Supports</b>	A text-only page cannot be used as a substitute for a live meeting. However, a transcript of the information shared in a meeting is beneficial to some users.
(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.	<b>Supports</b>	Adobe Connect utilizes scripting to provide content and interface items for the meeting client, and this information is provided for assistive technologies via MSAA.
(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).	<b>Supports</b>	Users who do not have the Flash Player installed will be prompted to do so when joining a Connect meeting or interacting with the administrative interface.
(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.	<b>Meeting Client: Not Applicable</b> <b>Administrative Interface: Supports with Exceptions</b>	The Adobe Connect meeting interface does not use forms. The Adobe Connect administrative interface contains some forms which do not provide complete information for form control labeling. The administrative interface provides support for all functionality from the keyboard except for the optional selection of meeting participants during the meeting set-up process, which impacts users of assistive technologies.



Criteria	Supporting Features	Remarks and explanations
(o) A method shall be provided that permits users to skip repetitive navigation links.	<b>Meeting Client: Not Applicable</b> <b>Administrative Interface: Does Not Support</b>	The Adobe Connect Administrative Interface contains a global navigation bar, but no means to skip the navigation links.
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	<b>Not Applicable</b>	

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.

## Section 1194.24 Video and Multi-media Products - Detail

Criteria	Supporting Features	Remarks and explanations
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.	<b>Not Applicable</b>	Adobe Connect does not include any display hardware.
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	<b>Not Applicable</b>	Adobe Connect does not include any television tuner hardware.

Criteria	Supporting Features	Remarks and explanations
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	<b>Supports</b>	Adobe Connect provides support for real-time captioning via the Connect Captioning Extension.
(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.	<b>Supports</b>	Content presented in an Adobe Connect meeting can be described by a participant functioning as a live audio describer.
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	<b>Supports</b>	Display of captions in the Adobe Connect captioning extension is user-selectable.

### Section 1194.31 Functional Performance Criteria - Detail

Criteria	Supporting Features	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.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports with Exceptions</b>	Support for Assistive Technology is provided.
(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.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports</b>	Support for Assistive Technology is provided.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports</b>	Support for closed captioning of Adobe Connect meetings is provided using the Connect captioning extension.

Criteria	Supporting Features	Remarks and explanations
(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.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports</b>	
(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.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports</b>	Adobe Connect does not require speech on the part of users.
(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.	<b>Meeting Client: Supports</b> <b>Administrative Interface: Supports</b>	Adobe Connect provides support for keyboard access to all but a very small number of features.

## Section 1194.41 Information, Documentation, and Support - Detail

Criteria	Supporting Features	Remarks and explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	<b>Supports</b>	Adobe provides electronic versions of all product support documentation.
(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.	<b>Supports</b>	Adobe provides information on accessibility features in the documentation. Electronic versions of all product support documentation are provided.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	<b>Supports</b>	Product support for Adobe products is available in a variety of formats and from a number of online sources available from Adobe Systems.



# Enhancing the accessibility of web conferencing with Adobe® Connect™

## Web conferencing and real-time collaboration technology for people with disabilities

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### Key points:

- Fifty-four million Americans and 650 million people worldwide have some level of disability.
  - U.S. and international initiatives have set guidelines and regulations to help the disabled to access online content.
- Adobe Connect is a leader in providing accessibility features such as:
- Screen readers
  - Menu navigation
  - Keyboard shortcuts
  - Support for closed captioning
  - Customizable displays

Although web technologies have broken down many traditional barriers to communication, not everyone has been able to participate fully in new communication channels. For millions of individuals with disabilities, accessing digital information is still problematic. Government agencies, advocacy groups, and businesses are working to improve accessibility for all web users, including individuals with visual, auditory, or mobility impairments.

For software developers, accessibility constitutes a design challenge because foundational platforms and technologies are not all inherently accessible. User experience designers must create application interfaces that provide shortcuts and alternate access modes for key functions. Additionally, applications must allow content to be properly formatted so that assistive technologies, such as screen readers and screen magnifiers that serve the visually impaired, can accurately interpret it.

### New tools, new challenges

Web conferencing technology is unleashing new possibilities for conducting rich interactions with more people without the cost and hassle of traveling to a meeting location. By its very nature, however, web conferencing poses challenges for accessibility. Real-time collaboration demands immediate interactions between virtual meeting participants. Live streaming of dynamic content makes it difficult to translate multimedia information into text or to provide non-animated alternatives. Additionally, the richness of options and granularity of controls can create navigation complexity.

Adobe Connect is a leading web conferencing solution for meetings, webinars, and eLearning that offers advanced accessibility features to promote a positive and effective experience for all users. It provides shortcuts for many key meeting features, such as attendee management; navigation through pods, menus, and windows; and content sharing. Through these keyboard shortcuts, hosts and attendees with visual, auditory, and mobility disabilities are able to access and use the Adobe Connect solution for real-time collaboration via a combination of voice, video, and data streaming. They can also take advantage of the award-winning solution for on-demand training and learning.

Built on the Adobe Flash® Platform, Adobe Connect offers end users the ability to easily launch the interface and take advantage of accessibility support in Adobe Flash Player—two key benefits that competing web conferencing solutions do not offer. Because Flash Player software is installed on virtually all Internet-enabled computers worldwide, participants can access Adobe Connect meetings from any PC or Mac, without downloading proprietary client software—a cumbersome process for users with disabilities.

By offering several advanced accessibility features—including keyboard navigation, support for screen readers such as JAWS, NVDA, and others that support Flash technology, as well as closed-captioning support—Adobe Connect can help organizations realize their business productivity objectives while also helping to ensure that their electronic communication is accessible to the largest possible community of users.

## Accessibility standards and regulations

Today, more and more organizations are seriously considering how to better enable individuals with disabilities and to comply with evolving regulations around accessibility. Accessibility defines a set of standards to make information technology and software applications more usable by everyone, including users who are visually impaired, who have difficulty hearing, or whose mobility is reduced.

According to data released by the U.S. Census Bureau in 2010, approximately 54 million Americans, or 19% of the population, have some level of disability, and 16.1 million Americans, or 7% of the U.S. population, have disabilities that interfere with daily activities.

According to the International Labour Organization (ILO), one out of every ten people in the world has a disability—some 650 million worldwide. Approximately 470 million of these individuals are of working age.

### U.S. federal regulations

Accessibility has been widely promoted and mandated by federal agencies in the United States. The Rehabilitation Act is a civil rights law that was passed in 1973 to protect individuals with disabilities. The act barred federal agencies and programs funded with federal money from discriminating against qualified individuals with disabilities in their hiring practices. The law defines "disability" broadly as "a physical or mental impairment that substantially limits a major life activity."

In 2001, Section 508 of the Rehabilitation Act was created to require federal agencies to make electronic information and technology accessible to workers with disabilities. Section 508 leverages the government's buying power to help ensure equitable treatment for disabled workers by requiring that all information technology products purchased by the federal government meet certain accessibility standards.

The World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) developed a set of guidelines for making web content—information in a web page or application—accessible to those with disabilities. The Web Content Accessibility Guidelines (WCAG) version 1.0 were adopted as the basis for the web accessibility standards in Section 508 but have since been superseded by WCAG version 2.0, which improves testability of the guidelines and is written in a technology-independent manner.

Recently, the Telework Enhancement Act of 2010 was passed to provide a framework for agencies to better leverage technology and to maximize the use of flexible work arrangements. As a result, finding online collaboration solutions that are compliant with Section 508 has become a greater priority.

### International directives

Many other international public and private organizations are placing a stronger emphasis on the usability of collaboration technologies by disabled users.

The ILO is promoting employment opportunities for persons with disabilities based on the principles of equal opportunity and equal treatment. Over the past 25 years, it has enacted multiple conventions, including the Vocational Rehabilitation and Employment (Disabled Persons) Convention in 1983. Adopted at the start of the United Nations Decade of Persons with Disabilities, the convention requires member states—in accordance with national conditions, practice, and possibilities—to formulate, implement, and periodically review a national policy on vocational rehabilitation and employment of disabled persons. The convention has been ratified by 82 countries as of February 2011. Supplemental recommendations and a code of practice, "Managing Disability in the Workplace," adopted in 2001, extend the reach of this convention. Although these documents are nonbinding, they reflect recent changes in the understanding of disability. Since 1983, there have been significant shifts in legislation, policies, and services concerning people with disabilities.

Another initiative, the Convention on the Rights of Persons with Disabilities and its Optional Protocol, marks a milestone in viewing persons with disabilities as "subjects" with rights and recognizing them as active members of society. Signatories to it agree to enact legislation addressing accessibility needs, including electronic information and applications. Adopted at the United Nations in December 2006, this convention defines a broad categorization of persons with disabilities and identifies areas where adaptations must be made by the 139 signatories to enable persons with disabilities to effectively exercise their rights and participate in society on an equal basis.

## Disabilities and web conferencing

In the context of the web conferencing user experience, three categories of disability call for specific attention: visual, auditory, and mobility.

### Visual

There are three major types of visual disabilities: blindness, low vision, and color blindness.

- Blindness is the condition of lacking visual perception due to physiological or neurological factors.
- Low vision is a visual impairment—not corrected by standard glasses, contact lenses, medicine, or surgery—that interferes with the ability to perform everyday activities. A related term is "legally blind," which is defined as visual acuity of 20/200 or less or a visual field of less than 20 degrees (the norm being 180 degrees).
- Color blindness is a color-vision deficiency resulting in the inability to perceive differences between some colors that others can distinguish. It ranges from total color blindness, in which the world is perceived in shades of gray, to partial color blindness, a more common condition in which the difference between red and green or yellow and blue cannot be perceived.

A person who is blind is usually precluded from using a mouse or pointing device because of the hand-eye coordination required for effective operation. A person who is blind is also likely to use a screen reader. People with low vision might use a screen magnifier to enlarge text.

### Auditory

There are two major auditory disabilities: deafness and hard of hearing.

- Deafness is the inability to understand speech or recognize environmental sounds. People who are deaf generally communicate using sign language. According to data from the National Health and Nutrition Examination Survey in 2004, an estimated 16.1% of adults (29 million people) in the United States had speech-frequency hearing loss.

Access to interpreting services, closed captioning on television, instant messaging, and text messaging (SMS) has broadened the entertainment and communication options for those who are deaf. Some of these text-based channels, such as chat, are common features in web conferencing applications.

- Hard of hearing or hearing loss is categorized as a continuous spectrum of loss. There are several levels of severity: mild, moderate, severe, and profound. On average, people with mild hearing loss are able to hear sounds of 25 to 40 decibels with their better ear. For those with profound hearing loss, the quietest sound they might hear is 90 decibels. People who suffer from profound hearing loss are very hard of hearing and rely mostly on reading text, lip reading and sign language.

Hearing impairments make it difficult or impossible for individuals to respond to audible cues, such as sound alerts or audible indicators. Visual representations of auditory information and translation of audio information into a visual format are required for people affected by hearing impairments.

### Mobility

Impaired mobility can arise from neurological disorders, repetitive stress or other physical injury, or degenerative diseases.

- Neurological disorders, caused either by birth or accident, can result in partial or full paralysis when nerves fail to control the muscles of the body.
- Repetitive stress injuries are a result of repeating motions over a long period of time. Common manifestations include wrist tendonitis and backache.
- Degenerative diseases and conditions such as arthritis may be associated with aging. According to the Centers for Disease Control and Prevention, an estimated 46 million U.S. adults (about 1 in 5) report doctor-diagnosed arthritis.

Mobility or dexterity impairments often limit a person's movement or fine-motor skills. They can affect the ability to type and to use a mouse or pointing device. People suffering from mobility impairments might use alternate input devices for interacting with their computer, such as voice-dictation software.

## Adobe Connect usability

Adobe Connect includes many accessibility features to facilitate navigation, enable new key workflows for disabled persons attending meetings or delivering presentations, support closed captioning, and provide flexibility in customization. To understand the benefits of Adobe Connect for accessibility over other offerings in the space, it is important to understand how users access and navigate the Adobe Connect application.

In Adobe Connect, interactions among users occur in the context of meeting rooms. Each room is a virtual space identified by a unique web address. The properties and contents attached to each room can persist across meeting sessions. The same concept applies to eLearning use, although the meeting rooms are referred to as "virtual classrooms," which are rooms enhanced by additional training features.

Hosts, presenters, and participants can join a meeting room by entering the room URL in a browser, such as Internet Explorer, Firefox, or Safari. Rooms are launched from Flash Player. Each room exhibits a variable number of screens, referred to as "pods." Pods are independent, shareable mini applications that fulfill specific functions in the meeting, such as attendee management, text-based messaging, or sharing. Users navigate across these pods during a meeting session. A main toolbar and a set of menus complete the navigation framework.

## Facilitated navigation

The Adobe Connect navigation framework provides noteworthy accessibility support. Key accessibility navigation features include screen readers, menu navigation, keyboard shortcuts, and tab navigation.

### Screen readers

Users who are blind or visually impaired are able to participate effectively in online meetings thanks to Adobe Connect's support for screen readers, which was developed and tested using JAWS 11 as a benchmark. Other assistive technologies that support Flash technology should be compatible with Adobe Connect as well.

### Menu navigation

Users can navigate through the Adobe Connect interface using the on-screen menu. This is important for users with mobility impairments because it can reduce reliance on traditional—and more challenging—input devices such as a mouse.

When using the Adobe Connect meeting client window, users can press Ctrl+space to place the focus in the top-level menu and then use the Arrow keys to browse through the menu options. They can navigate horizontally and vertically and within each menu.

For example, to change bandwidth settings for their meeting room, hosts can go to Meeting and then navigate the pull-down menu. There they can select Room Performance and Appearance and then Optimize Room Bandwidth to change the settings from DSL to LAN. Using the keyboard, the hosts can select LAN and then press the spacebar. The menu is dimmed after their selection.

### Keyboard shortcuts

Users with disabilities can use keyboard shortcuts to manage key meeting functions. Those with mobility challenges can use keyboard shortcuts to ease screen navigation by bypassing more physically challenging input devices. Shortcuts allow users to quickly activate program accessibility functions, including navigation among pods. For example, pressing Ctrl+. (period) toggles to full-screen display, expanding the size of an active pod for easier viewing.

Users who rely on the keyboard, including users who are blind, should familiarize themselves with important keystrokes and ensure that a reference list is handy during a meeting.

The following keyboard shortcuts provide improved accessibility so that the Adobe Connect Meeting client can be used as much as possible.

**Useful tips for navigation**

At meeting start:

- Press Ctrl+space to start menu navigation.

During the meeting session:

- Open the Help menu and select Keyboard Shortcuts to view all current shortcuts.
- For sharing functions, place the input focus in the Share pod by using the Tab key. Sharing shortcuts are active only when the application focus is in the Share pod.
- Use menu navigation to the Pods menu to manage the pods in the meeting room.
- Use a combination of tab navigation and keyboard shortcuts to actively manage key meeting functions.

Shortcuts for navigating pods, menus, and windows		
Result	Windows	Mac OS
Toggle between notification window and meeting room	F8	F8
Display application menu for keyboard navigation	Ctrl+space	Command+F2
Move focus to next/previous pod	Ctrl+F6/Ctrl+Shift+F6	Command+F6/ Command+Shift+F6
Display pod menu for keyboard navigation	Ctrl+F8	Command+F8
Retitle pod	F2	F2

If pods are hidden by overlapping ones in Windows, press Ctrl+F9 to show them.

Shortcuts for attendee management		
Result	Windows	Mac OS
Toggle Raise-Hand status	Ctrl+E	Command+E
Promote to host—requires selected items in Attendees pod	Ctrl+'	Command+'
Demote to participant—requires selected user in Attendees pod	Ctrl+]	Command+]
Promote to presenter—requires selected user in Attendees pod	Ctrl+/	Command+/
End meeting	Ctrl+\	Command+\

These shortcuts are available in Adobe Connect from a PC or a Mac. Limitations may apply to certain international keyboards, such as French or German, because the arrangement of keys differs.

The list of shortcuts is available from the meeting room via the Keyboard Shortcuts option in the Help menu.

For example, presenters or hosts can decide to record the session by pressing Ctrl+, (comma). After this option is selected, the Start Recording dialog box opens. The user can press the Tab key to move from one field to another for editing. When finished, the user presses Enter to start the recording. Recording is indicated by the notifier in the upper right corner of the meeting window. To stop recording, the user can use the same keystrokes or, alternately, press Ctrl+space and navigate to the Meeting menu to select Stop Recording.

**Tab navigation**

Users can navigate the options of the client interface, particularly the pods by using keystrokes to navigate between pods, and then using the Tab key to move between the focusable items within the pod. A colored line wraps the object currently selected. Administrators can customize the color for optimal contrast. See the "Customizable display, contrast, and color scheme" section of this document.

Tab navigation has proven useful to users with mobility challenges because it reduces the more physically demanding movements required by navigation devices such as the mouse to steer through screen pods during meetings or training sessions.

For example, to easily share an application, hosts and presenters can place the input focus on the Applications option displayed under the label "What do you want to share?" in the Share pod. When users want to share an item on their computer, they press the spacebar to select this option. The list of applications currently running on the computer is displayed, which can be navigated by tabbing. Users can go back to select Desktop if they want to share their complete view. With Desktop selected, a user can tab to the Share button and press Enter to start sharing the desktop with all attendees.

To stop sharing, the user goes back to the Adobe Connect window by pressing Alt+Tab. From there, the user presses Ctrl+[ (opening bracket) to stop streaming the desktop view. Other workflows are possible with tabbing and keystrokes, such as navigating the attendee list and promoting and demoting users, muting and unmuting the phone line, or using full-screen mode.



## Enabled workflows

Critical workflows of web conferencing, such as managing attendees, sharing a desktop or presentation, and sending or managing chats are easily accessible with Adobe Connect.

### Managing attendees

Users with disabilities can quickly and easily manage attendees using sophisticated, yet simple, keyboard shortcuts. Hosts can promote a participant to host by choosing the user in the Attendees pod and selecting Ctrl+'. To promote a participant to presenter, the host can select the desired user in the Attendees pod and press Ctrl+/. To demote a host or presenter to participant, the meeting host can select the user in the Attendees pod and press Ctrl+].

Shortcuts for attendee management		
Result	Windows	Mac OS
Toggle Raise-Hand status	Ctrl+E	Command+E
Promote to host—requires selected items in Attendees pod	Ctrl+'	Command+'
Demote to participant—requires selected user in Attendees pod	Ctrl+]	Command+]
Promote to Presenter—requires selected user in Attendees pod	Ctrl+/'	Command+/'
End meeting	Ctrl+\	Command+\

### Sharing a desktop

To share a desktop, a user must place the focus on the Share pod. A colored line frames the pod on which the focus is placed. When the focus is on the Share pod, the user presses Ctrl+[ (opening bracket) to start sharing or can tab to and activate the button to initiate sharing. The Share dialog box appears.

### Sharing a presentation

Users can access the main menu via keystrokes by pressing Ctrl+space. From there, they can browse to the Pods menu, choose Select From My Computer, and navigate to the folder where their file is stored. When the user selects a target file (such as a PPT file) and clicks Open, the upload and conversion process begins. For instance, a Microsoft PowerPoint presentation can be converted into a richer, Flash technology-based presentation using Adobe Presenter authoring technology.

When the document is open, it is possible to use additional keyboard functions, such as the Left or Right Arrow key to go from slide to slide or, alternately, the Page Up and Page Down keys. The following keyboard shortcuts are also supported in the context of shared presentations that have been created or converted using Adobe Presenter. Screen reader users can access the content of a shared PowerPoint presentation when using a browser-based Adobe Connect meeting room. However, if using the standalone Adobe Connect add-in, the content of PowerPoint presentations is not available. PowerPoint files can also be provided via a Files pod for downloading and viewing locally.

Shortcuts for presenter content in the Share pod	
Result	Windows and Mac OS
Start/stop desktop sharing	Ctrl+[ (Windows) or Command+[ (Mac OS)
Go to next page/slide	Page Up or Right Arrow
Go to previous page/slide	Page Down or Left Arrow
Play/pause	P
Stop	S
Mute	M
Change view	F

## Saving input on a whiteboard

Whiteboarding can be challenging for many disabled users, especially those with visual and mobility impairments. However, keyboard shortcuts enable users to contribute or print the output.

Shortcuts for the whiteboard		
Result	Windows	Mac OS
Clear	Ctrl+D	Command+D
Print	Ctrl+P	Command+P
Undo	Ctrl+Z	Command+Z
Redo	Ctrl+Y	Command+Y
Delete selected items	Del	Delete
Move selected items in a specific direction	Arrow keys	Arrow keys

## Sending and managing chats

Chatting can be difficult for some users with disabilities; however, some quick keyboard shortcuts can make chatting easier.

To place focus on the Chat pod, a user activates the cursor in the new message field and presses Ctrl+;. When the cursor is in the new message field, pressing Enter sends the message. Screen reader users will find that when viewing chat messages in a browser-based Adobe Connect meeting room it is possible to use the arrow keys to read previous chat messages. Users of the standalone Adobe Connect add-in will need to tab or shift-tab to the chat message area, enabling the screen reader to read all messages.

Shortcuts for the Chat pod		
Result	Windows	Mac OS
Place focus on Chat pod, activate cursor in new message field	Ctrl+;	Command+;
When cursor is in new message field, send message	Enter	Return

## Support for closed captioning

Aimed at promoting full participation in online Adobe Connect meetings, the real-time closed captioning pod helps ensure that users who are deaf or hard of hearing can follow the progress of a session.

Closed captioning is a Section 508 accessibility requirement designed to accommodate hearing-impaired users. It allows connection to professional captioning providers such as Caption Colorado, the Media Access Group at WGBH, and CaptionFirst.

The pod is provided as an SWF file that can be uploaded directly to the Adobe Connect meeting room environment for use. Hosts can configure it to connect to their captioning server and start displaying the caption feeds. The pod provides individual control over caption font size and contrast, the ability for participants to rewind and fast-forward, and options for subscribing to captioning systems.

The closed captioning pod is available free of charge, and can be downloaded at [http://www.adobe.com/go/adobeconnect\\_accessibility\\_ccpod](http://www.adobe.com/go/adobeconnect_accessibility_ccpod), along with instructions on how to use it.

## Customizable display, contrast, and color scheme

In the Adobe Connect meeting room, hosts can manage the display and appearance of pods through keystrokes. By using the on-menu navigation and browsing to the Pods option, they can select pods to open or close at their discretion.

For example, if hosts want to hide the Chat pod during a meeting session, they can navigate to Pods and deselect the Chat pod using the spacebar. To restore it, they can go back to the Pods menu and reselect the Chat pod, still using the spacebar.

Administrators can further customize these functionalities, such as changing a pod's border to a higher contrast color. Administrators can change this color by logging on to the Adobe Connect Central web-based management interface and going to the Administration tab. Under Customization > Meeting Customization, select Button Rollover, and then set the preferred color. The new setting applies to new meeting sessions.

From the palette of colors, Adobe recommends using blue (RGB 0,0,192/#0000CC) for better contrast (5.6:1 ratio) when using default meeting templates.

## Other features and considerations

### Customizable text-based messaging

Adobe Connect offers a chat tool with functionality comparable to a text telephone for the deaf or for users with speech impairment. With the chat tool, deaf and speech-impaired users can communicate with their colleagues in real time at live meetings. The size of the font is customizable in the chat tool.

### Audio

Audio capabilities in Adobe Connect are compatible with hearing aids, cochlear implants, and other listening devices so that hearing-impaired users can listen in real time at live meetings without any further assistance.

### Video

For clear and readable screen images, all bitmap images are displayed in a consistent fashion throughout Adobe Connect. Screen elements are designed to avoid flicker in the 2 to 55 hertz frequency range. Additionally, the flexibility of the Adobe Connect pods allows hosts to expand the size of video pods to fit the needs of all users.

### Tooltips

Adobe Connect supports tooltips for each function or option represented in the meeting user interface. Tooltips appear as boxes of text, rendered on a yellow background for contrast, and appear when the cursor hovers over an item.

### Access to help and documentation

Accessible documentation is available for all Adobe products.

### Coexistence with other assistive technologies

Adobe Connect is compatible with accessibility features in Microsoft® Windows, such as filter keys, toggle keys, and sticky keys, which are used by blind and visually impaired users as well as those with mobility challenges to locate active screen elements and navigate between pods. Adobe Connect works seamlessly with Windows without any disruption to the operating system's accessibility features.

## Adobe Connect vs. other web conferencing providers

While it is highly unlikely for any vendor to claim 100% Section 508 compliance due to the graphical nature of web conferencing, Adobe Connect offers nearly complete compliance, called "compliant with exceptions." Adobe Connect rises above other web conferencing solutions on the market today, providing advanced accessibility features such as:

- Robust keyboard shortcuts (for both Windows and Mac users)
- Room customization features, including font size and color enhancement
- Extensive closed captioning, including a real-time closed captioning pod and integrated video created with Flash technology.

## Recommendation for optimal use

Adobe recommends the Adobe Connect Meeting Add-in for users wishing to take advantage of accessibility enhancements. The Meeting Add-in is based on Flash technology and is used for sharing functions by presenters and hosts. Disabled participants are advised to use it for all their meetings because it provides a more consistent experience and avoids disparate rendition due to browser discrepancies.

In addition to the Adobe Connect Meeting application, which is based on Flash technology and is used to attend or deliver a live meeting, Adobe Connect also supports a web-based application—Adobe Connect Central. This interface offers a more limited level of compliance with accessibility standards.

## Adobe's commitment to democratize access

Adobe is committed to providing tools that help organizations optimize their digital content and collaboration environments for accessibility. The company is dedicating resources to help ensure its technologies and commercial software are usable by those with special needs, so all users can access digital files with ease and participate fully in the digital age. An industry leader in network publishing, electronic document creation, and real-time digital experience, Adobe has taken an active role in developing accessibility standards for digital content.

Adobe participates in various Web Accessibility Initiative (WAI) working groups. WAI, which has a mission to promote accessible web content, is part of the World Wide Web Consortium (W3C). It also participates in the W3C's Web Content Accessibility Guidelines (WCAG) working group and was involved with the Section 508 Telecommunications and Electronic and Information Technology Advisory Committee to review current Section 508 standards. Adobe has been offering accessibility solutions since 1997, when it introduced the *Access.adobe.com* website offering free services that convert Adobe PDF files into HTML or plain text for easy interpretation by assistive technologies. Increased accessibility support has also been incorporated into Adobe's foundational technologies, such as Flash and Flex.

## Summary

For Adobe, accessibility is not just a requirement mandated by national and international organizations. It is a process of making software more available to all the communities that want to use it. Adobe has its own in-house accessibility team, composed of world-class experts in the design and implementation of enterprise software. The accessibility team provides a continuous liaison between customers and product development teams.

While existing accessibility features in Adobe Connect take this web conferencing solution a step ahead of competing offerings, Adobe is committed to working on further improvements and implementing best practices for accessibility in future versions. The goal is not only to make Adobe Connect the best training and meeting platform for absolutely all users, but also to remain true to Adobe's mission to revolutionize how the world engages with ideas and information.

## Accessibility partners

### Caption Colorado

Caption Colorado was founded in 1991 and is now America's largest provider of real-time closed-captioning services. From traditional news and television captioning to real-time streaming media captioning services, Caption Colorado is the nation's premier provider of captioning services. Caption Colorado develops the technology to empower the deaf and hard of hearing and provides ADA and Section 508 compliant solutions.

### NCAM (National Center for Accessible Media)

The Carl and Ruth Shapiro Family National Center for Accessible Media at WGBH (NCAM) is a research and development facility dedicated to expanding access to media and information technology for people with disabilities in their homes, schools, workplaces, and communities.

NCAM is involved in technology and policy and program development to ensure that the nation's media and technologies are fully accessible to people with disabilities. For more details about NCAM, visit <http://ncam.wgbh.org>.

NCAM acts as the research and development arm of WGBH's Media Access Group. WGBH is America's preeminent public broadcaster, producing such celebrated national PBS series as *Masterpiece Theatre*, *Antiques Roadshow*, *Frontline*, *Nova*, *American Experience*, and more than a dozen other award-winning primetime, lifestyle, and children's series. Boston's last remaining independent TV station, WGBH produces local TV productions (among them, *Greater Boston*, *Basic Black*, and *María Hinojosa: One-on-One*) that focus on the region's diverse community, while WGBH 89.7 FM is Boston's NPR Arts & Culture station, offering a rich menu of classical, jazz, blues, news programming, and more. WGBH is the leading producer of online content for *Pbs.org*—one of the most visited dot org sites on the Internet—a major producer for public radio and a pioneer in developing educational multimedia and new technologies that make media accessible for people with disabilities. For its efforts, WGBH has been recognized with numerous honors, including an Academy Award nomination, Emmy Awards, Peabody Awards, and a duPont-Columbia Award. Visit WGBH at [www.wgbh.org](http://www.wgbh.org).

## For more information

[www.adobe.com/  
products/  
adobecconnect](http://www.adobe.com/products/adobecconnect)



**Adobe Systems Incorporated**  
345 Park Avenue  
San Jose, CA 95110-2704  
USA  
[www.adobe.com](http://www.adobe.com)

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*Bruce [Signature]* *Breanna Whight*

Accessibility Rubric			Support Links	Real-world explanation (Note: Keep this simple and concrete, practical. Good faith as baseline. Recommendation on how to be "totally safe".)	Common example	
Tennessee House Bill 1857 (Senate Bill 1692) established the need for minimum <b>Perceivable</b> : Content is made available to the senses - sight, hearing, and/or touch.						
<b>Guideline 1.1 Text Alternatives: Provide text alternatives for any</b> The Text Alternative section relates to images, form image buttons, image maps,			<a href="#">WebAIM Alternate Text</a> <a href="#">WCAG Understanding Guideline 1.1</a>			
N/A	Pass	Fail	1.1.1 - All images, form image buttons, and image map hot spots have appropriate, equivalent alternative text. <i>missing form labels, text beside form field does exist</i>	<a href="#">WCAG 1.1.1 Non-text Content</a>	Always use alt attributes on images. Use 125 characters or less. Do not introduce the text as "This is an image of" or the like.	
N/A	Pass	Fail	1.1.1 - Images that do not convey content, are decorative, or contain content that is already conveyed in text are given null alt text (alt="") or implemented as CSS backgrounds. All linked images have descriptive alternative text.		Always use alt attributes on images. If the image is not important to the content, use alt="".	
N/A	Pass	Fail	1.1.1 - Equivalent alternatives to complex images are provided in context or on a separate (linked and/or referenced via longdesc) page.		If the image is very complicated, directly below the image, have a paragraph of text explaining the image. If there's too much text, or if the purpose of the image is to analyze it, and the text may defeat that, add a link to a secondary page.	A painting from an art appreciation class could require a paragraph or more to explain the complexity. For sighted users, the paragraph may be the equivalent of cheating, so a link to a second page may be needed.
N/A	Pass	Fail	1.1.1 - Form buttons have a descriptive value. <i>missing form labels, buttons say text next to them</i>		A button's text should describe its action.	Search button should say "search".
N/A	Pass	Fail	1.1.1 - Form inputs have associated text labels or, if labels cannot be used, a descriptive title attribute.		For every input field (ie. text field, checkbox, etc.), there should be a matching label tag.	There is a checkbox next to text of "Please contact me with more information". The text is wrapped in a label tag, linked to the checkbox's id attribute.
N/A	Pass	Fail	1.1.1 - Embedded multimedia is identified via accessible text.		Embedded multimedia should be introduced with headings or text.	A group of YouTube videos is introduced by a heading or text.
N/A	Pass	Fail	1.1.1 - Frames are appropriately titled.		All iframe tags should have a title attribute.	A YouTube video embed code uses an iframe, which needs a title attribute added. <iframe title="Class Field Trip 2016">
<b>Guideline 1.2 Timed-based Media: Provide alternatives for time-based media</b> The Time-based Media section relates to audio files, video files, links to audio files,			<a href="#">WebAIM Captions, Transcripts, and Audio Descriptions</a> <a href="#">WCAG Understanding Guideline 1.2</a>			

N/A	Pass	Fail	1.2.1 - Prerecorded Audio-only and Video-only (Level A) - A descriptive text transcript (including all relevant visual and auditory clues and indicators) is provided for non-live, web-based audio (audio podcasts, MP3 files, etc.). <i>transcription can be manually added.</i>	<a href="#">WCAG 1.2.1 Prerecorded Audio-only and Video-only</a>	Podcasts and audio need transcripts, including indications of laughter and notes when another person is speaking.	An audio recording of a chemistry lecture has a full text transcript noting the sound of a breaking beaker.
N/A	Pass	Fail	1.2.1 - Prerecorded Audio-only and Video-only (Level A) - A text or audio description is provided for non-live, web-based video-only (e.g., video that has no audio track).		For video media without audio, a full text description is needed.	An animation of the heart beating has text describing the flow of blood through the heart.
N/A	Pass	Fail	1.2.2 - Captions (Prerecorded) (Level A) - Synchronized captions are provided for non-live, web-based video (YouTube videos, etc.)	<a href="#">WCAG 1.2.2 Captions (Prerecorded)</a>	All speech in prerecorded video is captioned.	A campus tour video has captions of all that the narrator says as he says it.
N/A	Pass	Fail	1.2.3 Audio Description or Media Alternative (Prerecorded) (Level AA) - A descriptive text transcript OR audio description audio track is provided for non-live, web-based video <i>can be transcribed</i>	<a href="#">WCAG 1.2.3 Audio Description or Media Alternative (Prerecorded)</a>	A secondary caption track has speech captioning along with notes about sound cues. If this cannot be included in the video, the transcript is available as a link from the page.	During a baseball video, the narrator is being captioned, and all the individual sounds from the baseball field are also noted, such as "bat loudly hits a ball".
N/A	Pass	Fail	1.2.4 Captions (Live) (Level AA) - Synchronized captions are provided for all live multimedia that contains audio (audio-only broadcasts, web casts, video conferences, Flash animations, etc.) <i>can have transcriptionist</i>	<a href="#">WCAG 1.2.4 Captions (Live)</a>	For live content, there has to be live captioning.	During commencement, there is live captioning on the stream.
N/A	Pass	Fail	1.2.5 Audio Description (Prerecorded) (Level AA) - Audio descriptions are provided for all video content NOTE: Only required if the video conveys content visually that is not available in the default audio track	<a href="#">WCAG 1.2.5 Audio Description (Prerecorded)</a>	Audio descriptions are needed for things a visually impaired individual can't see.	In a video, an audio track identifies when an instructor gestures to identify something on a board.
<b>Guideline 1.3 Adaptable: Create content that can be presented in</b>						
The Adaptable section relates to web pages and how HTML code should be written.				<a href="#">WCAG Understanding Guideline 1.3</a>		
N/A	Pass	Fail	1.3.1 Info and Relationships (Level A) - Semantic markup is used to designate headings (<h1>), lists (<ul>, <ol>, and <dl>), emphasized or special text (<strong>, <code>, <abbr>, <blockquote>, for example), etc. Semantic markup is used appropriately.	<a href="#">WebAIM Semantic markup</a>	Use heading tags and organizational tags, like ordered or unordered lists. A long page of text is broken into chunks using headings so that the user may skip entire sections. Do not use text size or bolding to create headings.	A long page of text is broken into chunks using headings so that the user may skip entire sections.
N/A	Pass	Fail	1.3.1 Info and Relationships (Level A) - Tables are used for tabular data. Where necessary, data cells are associated with their headers. Data table captions and summaries are used where appropriate. <i>not able tab through table</i>	<a href="#">WebAIM Tables</a>	Tables are only for data; never use tables to format a page to look prettier or create columns. All tables should have column headers that are tagged correctly with the TH tag, not simply bolded. If your data is too complex for a table with a single header row, seek a different way to present your data.	xxx
N/A	Pass	Fail	1.3.1 Info and Relationships (Level A) - Text labels are associated with form input elements. Related form elements are grouped with fieldset/legend.		Advanced	

N/A	Pass	Fail	1.3.2 Meaningful Sequence (Level A) - The reading and navigation order (determined by code order) is logical and intuitive.	<a href="#">WebAIM reading and navigation order</a>	Advanced	
N/A	Pass	Fail	1.3.3 Sensory Characteristics (Level A) - Instructions do not rely upon shape, size, or visual location (e.g., "Click the square icon to continue" or "Instructions are in the right-hand column").	<a href="#">WCAG 1.3.3 Sensory Characteristics</a>	Never reference another element on the page by shape, size, location or color.	Never say, "Click Raidernet at the top of the page." Instead provide link to Raidernet.
N/A	Pass	Fail	1.3.3 Sensory Characteristics (Level A) - Instructions do not rely upon sound (e.g., "A beeping sound indicates you may continue.").		Do not use sounds for instructions.	Do not use "a beeping sound means you can continue" or "you will hear a gong if this is wrong."
			<b>Guideline 1.4 Distinguishable: Make it easier for users to see and</b>			
			The Distinguishable section relates to web page design including the use of color, images, font size, and media controls. The use of color can enhance comprehension, but do not use color alone to convey information. That information may not be available to a person who is colorblind and will be unavailable to screen reader users. Text should have relative sizing for magnification of the page, no absolute values (i.e. 18pt).	<a href="#">WCAG Understanding Guideline 1.4</a>		
N/A	Pass	Fail	1.4.1 Use of Color (Level A) - Color is not used as the sole method of conveying content or distinguishing visual elements.	<a href="#">WCAG 1.4.1 Use of Color</a>	Don't use color alone to identify importance.	On a map, don't just say "Follow the red route."
N/A	Pass	Fail	1.4.1 Use of Color (Level A) - Color alone is not used to distinguish links from surrounding text unless the luminance contrast between the link and the surrounding text is at least 3:1 and an additional differentiation (e.g., it becomes underlined) is provided when the link is hovered over or receives focus.		Links may not be represented by color alone. Links appear underlined. Do not underline text if it is not a link.	In a sentence, the link to "Financial Aid Forms" is underlined.
N/A	Pass	Fail	1.4.2 Audio Control (Level A) - A mechanism is provided to stop, pause, mute, or adjust volume for audio that automatically plays on a page for more than 3 seconds.	<a href="#">WCAG 1.4.2 Audio Control</a>	Do not autoplay audio or video content unless it is the only content on the page.	A Financial Aid video on a page does not start playing until a user clicks play.
N/A	Pass	Fail	1.4.3 Contrast (Minimum) (Level AA) - Text and images of text have a contrast ratio of at least 4.5:1.	<a href="#">WCAG 1.4.3 Contrast (Minimum)</a>	Text should strongly contrast with whatever is behind it.	Black text, white background.
N/A	Pass	Fail	1.4.3 Contrast (Minimum) (Level AA) - Large text (over 18 point or 14 point bold) has a contrast ratio of at least 3:1		Text should strongly contrast with whatever is behind it. For larger text, it can be closer to the background color.	Large gray text, white background.
N/A	Pass	Fail	1.4.4 Resize Text (Level AA) - The page is readable and functional when the text size is doubled.	<a href="#">WCAG 1.4.4 Resize text</a>	Test resizing the text on the page. If parts of the text hide behind elements or is pushed off the page, the page must be fixed.	As text size is increased, floating items move, and text wraps correctly.
N/A	Pass	Fail	1.4.5 Images of Text (Level AA) - If the same visual presentation can be made using text alone, an image is not used to present that text.	<a href="#">WCAG 1.4.5 Images of Text</a>	Never make images of text, even if it looks prettier. Leave text as text. Logos are an allowed exception.	xxx
			<b>Operable:</b> Interface forms, controls, and navigation are operable.			
			<b>Guideline 2.1 Keyboard Accessible: Make all functionality</b>			
			The Keyboard Accessible section relates to the users ability to perform all tasks	<a href="#">WCAG Understanding Guideline 2.1</a>		



N/A	Pass	Fail	<b>2.1.1 Keyboard (Level A) - All page functionality is available using the keyboard, unless the functionality cannot be accomplished in any known way using a keyboard (e.g., free hand drawing).</b>	<a href="#">WCAG 2.1.1 Keyboard</a>	Be sure you can navigate the page using keyboard only.	User can navigate to all links using keyboard tab function and follow links using enter function.
N/A	Pass	Fail	<b>2.1.1 Keyboard (Level A) - Page-specified shortcut keys and accesskeys (accesskey should typically be avoided) do not conflict with existing browser and screen reader shortcuts.</b>		Advanced	
N/A	Pass	Fail	<b>2.1.2 No Keyboard Trap (Level A) - Keyboard focus is never locked or trapped at one particular page element. The user can navigate to and from all navigable page elements using only a keyboard.</b>	<a href="#">WCAG 2.1.2 No Keyboard Trap</a>	Be sure you can navigate the page using keyboard only.	User can navigate to all links using keyboard tab function and follow links using enter function.
			<b>Guideline 2.2 Enough Time: Provide users enough time to read</b>			
			The Enough Time section relates to time limits and the ability to pause or stop media	<a href="#">WCAG Understanding Guideline 2.2</a>		
N/A	Pass	Fail	<b>2.2.1 Timing Adjustable (Level A) - If a page or application has a time limit, the user is given options to turn off, adjust, or extend that time limit. This is not a requirement for real-time events (e.g., an auction), where the time limit is absolutely required, or if the time limit is longer than 20 hours.</b>	<a href="#">WCAG 2.2.1 Timing Adjustable</a>	When using automatic logout timers, be sure user can opt to remain on page.	Automatic logouts should warn user and allow opportunity to extend session.
N/A	Pass	Fail	<b>2.2.2 Pause, Stop, Hide (Level A) - Automatically moving, blinking, or scrolling content that lasts longer than 5 seconds can be paused, stopped, or hidden by the user. Moving, blinking, or scrolling can be used to draw attention to or highlight content as long as it lasts less than 5 seconds.</b>	<a href="#">WCAG 2.2.2 Pause, Stop, Hide</a>	Use moving, scrolling, blinking content sparingly and allow user to stop content from doing so.	News items are listed on the page and do not move. User should be able to control advance of carousel content.
N/A	Pass	Fail	<b>2.2.2 Pause, Stop, Hide (Level A) - Automatically updating content (e.g., automatically redirecting or refreshing a page, a news ticker, AJAX updated field, a notification alert, etc.) can be paused, stopped, or hidden by the user or the user can manually control the timing of the updates.</b>		Advanced	
			<b>Guideline 2.3 Seizures: Do not design content in a way that is</b>			
			The Seizures section relates to the flashing of page content. JUST Don't Do It.	<a href="#">WCAG Understanding Guideline 2.3</a>		
N/A	Pass	Fail	<b>2.3.1 Three Flashes or Below Threshold (Level A) - No page content flashes more than 3 times per second unless that flashing content is sufficiently small and the flashes are of low contrast and do not contain too much red.</b>	<a href="#">WebAIM Seizure Disorders</a>	Do not use flashing items on the page.	The page doesn't flash.
			<b>Guideline 2.4 Navigable: Provide ways to help users navigate, find</b>			
			The Navigable section relates to web page elements. Navigation is logical, pages	<a href="#">WCAG Understanding Guideline 2.4</a>		

N/A	Pass	Fail	<b>2.4.1 Bypass Blocks (Level A) - A link is provided to skip navigation and other page elements that are repeated across web pages.</b>	<a href="#">WCAG 2.4.1 Bypass Blocks</a>	A link at the top of the page links to the page content, bypassing the navigation and contact information that is at the top of the page. This can be hidden from view but accessible to screen reader.	Roane State homepage contains a hidden "skip to content" link that appears upon tab press.
N/A	Pass	Fail	<b>2.4.1 Bypass Blocks (Level A) - If a page has a proper heading structure, this may be considered a sufficient technique instead of a "Skip to main content" link. Note that navigating by headings is not yet supported in all browsers.</b>		If headings are correctly used, a screen reader can opt to jump to the first subheading. If so, a link to "Page Content" at the beginning of the page isn't needed.	The screenreader can jump to Heading 1
N/A	Pass	Fail	<b>2.4.1 Bypass Blocks (Level A) - If a page uses frames and the frames are appropriately titled, this is a sufficient technique for bypassing individual frames.</b>		Frames should have descriptive title attributes so that frame can be skipped by screen reader if necessary.	A frame containing menu items for a page should say "Menu items"
N/A	Pass	Fail	<b>2.4.2 Page Titled (Level A) - The web page has a descriptive and informative page title.</b>	<a href="#">WCAG 2.4.2 Page Titled</a>	Title the page.	"Lesson 45 - MATH1010 - Roane State." Do not leave title as "Untitled", "Page", "Roane State", etc.
N/A	Pass	Fail	<b>2.4.3 Focus Order (Level A) - The navigation order of links, form elements, etc. is logical and intuitive.</b>	<a href="#">WCAG 2.4.3 Focus Order</a>	Put links in either alphabetical or chronological order. Do not just put new items at the top or bottom.	Alphabetical: Admissions, Contact Us, Forms, Underwriters.
N/A	Pass	Fail	<b>2.4.4 Link Purpose (In Context) (Level A) - The purpose of each link (or form image button or image map hotspot) can be determined from the link text alone, or from the link text and it's context (e.g., surrounding paragraph, list item, table cell, or table headers).</b>	<a href="#">WCAG 2.4.4 Link Purpose (In Context)</a>	The text of the link should be a description of where it goes in human language. Do not use "click here" as a link. Avoid unnecessary display of actual URL when possible.	Proper use example: "If you would like to find out more, please see the Library of Congress' website." In this example "Library of Congress' website" would be the link is to "http://www.loc.gov". Do not use "click here". Do not use "For more information, please see http://ww.loc.gov."
N/A	Pass	Fail	<b>2.4.4 Link Purpose (In Context) (Level A) - Links (or form image buttons) with the same text that go to different locations are readily distinguishable.</b>		The text of the link should be unique on the page unless the link desintations are the same.	A page has a link to "Form 3" and another link to "Form 48". There are not two links named "Form".
N/A	Pass	Fail	<b>2.4.5 Multiple Ways (Level AA) - Multiple ways are available to find other web pages on the site - at least two of: a list of related pages, table of contents, site map, site search, or list of all available web pages.</b>	<a href="#">WCAG 2.4.5 Multiple Ways</a>	In addition to main navigation, every page should be found using an alternate method, such as search or site map.	The counseling webpage is found by standard navigation as well as the site map.
N/A	Pass	Fail	<b>2.4.6 Headings and Labels (Level AA) - Page headings and labels for form and interactive controls are informative. Avoid duplicating heading (e.g., "More Details") or label text (e.g., "First Name") unless the structure provides adequate differentiation between them</b>	<a href="#">WCAG 2.4.6 Headings and Labels</a>	Use unique heading and label text.	There are not two "More Information" headings or two "First Name" labels.

N/A	Pass	Fail	<b>2.4.7 Focus Visible (Level AA) - It is visually apparent which page element has the current keyboard focus (i.e., as you tab through the page, you can see where you are).</b>	<a href="#">WCAG 2.4.7 Focus Visible</a>	As you tab through the page, it is obvious where keyboard focus is.	Tabbing through a set of bulleted links shows a standard browser tab focus.
			<b>Understandable:</b> Content and interface are understandable.			
			<b>Guideline 3.1 Readable: Make text content readable and</b>			
			The Readable section relates to the language of a web page. The default and foreign	<a href="#">WCAG Understanding Guideline 3.1</a>		
N/A	Pass	Fail	<b>3.1.1 Language of Page (Level A) - The language of the page is identified using the HTML lang attribute (&lt;html lang="en"&gt;, for example).</b>	<a href="#">WCAG 3.1.1 Language of Page</a>	The page's html tag has a lang attribute of "en"	<html lang="en">
N/A	Pass	Fail	<b>3.1.2 Language of Parts (Level AA) - The language of page content that is in a different language is identified using the lang attribute (e.g., &lt;blockquote lang="es"&gt;).</b>	<a href="#">WCAG 3.1.2 Language of Parts</a>	Parts of the page that are not in English need to be marked with the lang attribute so that screenreaders read them in the correct language.	A German sentence is wrapped in a blockquote tag with the lang attribute of "de".
			<b>Guideline 3.2 Predictable: Make Web pages appear and operate in</b>			
			The Predictable section relates to web page elements and navigation. Note: this	<a href="#">WCAG Understanding Guideline 3.2</a>		
N/A	Pass	Fail	<b>3.2.1 On Focus (Level A) - When a page element receives focus, it does not result in a substantial change to the page, the spawning of a pop-up window, an additional change of keyboard focus, or any other change that could confuse or disorient the user.</b>	<a href="#">WCAG 3.2.1 On Focus</a>	When tabbing through the page, no element's focus triggers drastic changes in page or navigation focus.	Tabbing through the navigation menu does not open a pop-up window.
N/A	Pass	Fail	<b>3.2.2 On Input (Level A) - When a user inputs information or interacts with a control, it does not result in a substantial change to the page, the spawning of a pop-up window, an additional change of keyboard focus, or any other change that could confuse or disorient the user unless the user is informed of the change ahead of time.</b>	<a href="#">WCAG 3.2.2 On Input</a>	Typing in a text box or clicking on a checkbox does not trigger drastic changes in page or navigation focus.	Clicking on a checkbox does not open a pop-up window.
N/A	Pass	Fail	<b>3.2.3 Consistent Navigation (Level AA) - Navigation links that are repeated on web pages do not change order when navigating through the site.</b>	<a href="#">WCAG 3.2.3 Consistent Navigation</a>	Navigation links/menus that are on multiple pages do not change order.	Navigation on set of pages is always: Home, About Us, Contact Us, Forms, Publications
N/A	Pass	Fail	<b>3.2.4 Consistent Identification (Level AA) - Elements that have the same functionality across multiple web pages are consistently identified. For example, a search box at the top of the site should always be labeled the same way.</b>	<a href="#">WCAG 3.2.4 Consistent Identification</a>	Identical links and interactive items that are on multiple pages always do the same thing.	The department logo in the top left always links to the homepage.
			<b>Guideline 3.3 Input Assistance: Help users avoid and correct</b>			
			The Input Assistance section relates to web page forms, errors, instructions, and	<a href="#">WCAG Understanding Guideline 3.3</a>		
N/A	Pass	Fail	<b>3.3.1 Error Identification (Level A) - Required form elements or form elements that require a specific format, value, or length provide this information within the element's label (or if a label is not provided, within the element's title attribute).</b>	<a href="#">WCAG 3.3.1 Error Identification</a>	Asterisks alone are not sufficient for denoting required form elements. Specific format requirements such be indicated.	Date field's label says "enter date in format YYYYMMDD."

N/A	Pass	Fail	3.3.1 Error Identification (Level A) - If utilized, form validation errors are presented in an efficient, intuitive, and accessible manner. The error is clearly identified, quick access to the problematic element is provided, and user is allowed to easily fix the error and resubmit the form.	<a href="#">WebAIM form validation</a>	Advanced	
N/A	Pass	Fail	3.3.2 Labels or Instructions (Level A) - Sufficient labels, cues, and instructions for required interactive elements are provided via instructions, examples, properly positioned form labels, and/or fieldsets/legends.	<a href="#">WCAG 3.3.2 Labels or Instructions</a>	Forms have instructions for what a user needs to do. All input items are clearly and uniquely marked.	A form for requesting more information makes it clear the purpose of the form. Each input is marked with labels such as "First Name", "Last Name". There are "Phone" and "Email" fields instead of an ambiguous "Contact" input.
N/A	Pass	Fail	3.3.3 Error Suggestion (Level AA) - If an input error is detected (via client-side or server-side validation), provide suggestions for fixing the input in a timely and accessible manner.	<a href="#">WCAG 3.3.3 Error Suggestion</a>	Advanced	
N/A	Pass	Fail	3.3.4 Error Prevention (Legal, Financial, Data) (Level AA) - If the user can change or delete legal, financial, or test data, the changes/deletions can be reversed, verified, or confirmed.	<a href="#">WCAG 3.3.4 Error Prevention (Legal, Financial, Data)</a>	If form input affects legal, financial or test data, the user should be prompted to confirm submitted changes.	User checks a confirmation statement before canceling a class.
<b>Robust:</b> Content can be used reliably by a wide variety of user agents, including						
<b>Guideline 4.1 Compatible: Maximize compatibility with current</b>						
The Compatible section relates to HTML/XHTML errors and markups. Note: this			<a href="#">WCAG Understanding Guideline 4.1</a>			
N/A	Pass	Fail	4.1.1 Parsing (Level A) - Significant HTML/XHTML validation/parsing errors are avoided. Check at <a href="http://validator.w3.org/">http://validator.w3.org/</a>	<a href="#">WCAG 4.1.1 Parsing</a>	Check for source code errors using W3C validator.	
N/A	Pass	Fail	4.1.2 Name, Role, Value (Level A) - Markup is used in a way that facilitates accessibility. This includes following the HTML/XHTML specifications and using forms, form labels, frame titles, etc. appropriately.	<a href="#">WCAG 4.1.2 Name, Role, Value</a>	Advanced	