

Accessibility Considerations for D2L ver. 10.2 Courses

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Agenda

- 1) Overview of Section 508 and Web Accessibility Requirements for Online Courses
- 2) Accessible Course Design and Navigation in Desire2Learn (D2L) ver. 10.2
- 3) Accessible Course Content in Desire2Learn (D2L) ver. 10.2

Section 508 and Online Courses (Webinar from Dec 2011)

How does today's webinar compare? The 2011 webinar was about creating accessible courses in Blackboard Vista. Today's topics are:

- 1) Framework (D2L) is the vendor responsibility
- 2) Accessible Design and Navigation (today customized for D2L course design)
- 3) Accessible Course Content (today customized for creating accessible content in the D2L HTML Editor)

Section 508 and Web Accessibility Requirements for Online Courses

Section 508 Standards

- Section 508 of the Rehabilitation Act Amendments of 1998 states *in part*:
 - “*Electronic and Information Technology (EIT) must be equally accessible to people with and without disabilities.*”
- U.S. Department of Education
 - All states that receive funding through [Assistive Technology Act](#) must also comply
- Board of Regents(BOR) of the University System of Georgia has determined all institutions under BOR fall within scope of Section 508

Accessibility Standards & Web Accessibility Guidelines

- Section 508 (U.S. Federal Law)
- Section 508 *Refresh* (forthcoming)
- Web Content Accessibility Guidelines 2.0 (WCAG)
 - Levels A and AA
- Accessibility Best Practices
- Together, ensure accessible implementation of Electronic and Information Technology (EIT) for individuals with disabilities

USG Accessibility Resources

- For information for USG personnel involved in the design, development and delivery of online courses, please review the [USG Accessibility Resources](#)
- Must Read document on this site: [Higher Education, the Americans with Disabilities Act, and Section 508](#)

Recent Legal Issues in Higher Education

- 2013 Louisiana Tech University
- 2012 University of Montana
- 2011 Florida State University
- 2011 Northwestern and New York University
- 2010 Penn State University
- 2010 9 Law Schools
- For more information, please visit the website of the [National Center on Disability and Access to Education \(NCDAE\)](#) and review the article called:
 - [Review of Recent Legal Issues in Higher Education and Web Accessibility](#)

USG Accessibility Resources, Web Accessibility Guidelines

- [USG Web Accessibility Guidelines](#)
- Lists the Section 508 Standards, section 1194.22

USG Accessibility Tutorial

- [USG Accessibility Tutorial](#)
- Please share this link with anyone who assists in the design, development or delivery of your online courses
- [Training](#) section: link to Dec 2011 webinar Section 508 Compliance and Online Course Content (captioned recording), Handout and the 2011 Distance Education Accessibility Guidelines

Benefits of Compliance

- Accessible for students with disabilities
- U.S. Federal Law (Section 508, Section 504 and the ADA)
- More usable for all learners using a wide variety of technologies
- Accommodate different learning styles
- Assist speakers of English as second language
- Captions
 - Searched, reviewed, and accessed in environments not audio-friendly
 - Increase comprehension and retention for all audiences

- Accessibility compliance benefits all students

Accessible Course Design and Navigation

Assistive Technologies

- Wide variety of hardware and software products
- 4 Major Categories of Disability Types:
 - Visual
 - Hearing
 - Motor
 - Cognitive
- Understanding how students with disabilities access D2L allows those who design, develop and deliver online courses make better design choices to ensure access is possible.

Desire2Learn, Accessibility Resources for Individuals with Disabilities

- Provide this direct link in multiple course locations (ex: Syllabus, News Item, Accessibility Widget)
- [Desire2Learn, Accessibility Resources for Individuals with Disabilities](#)

Course Home: Accessibility Widget

- Creating an Accessibility Widget (at the course level)
- Course Home, Course Administration, Site Setup>Widget
- Include:
 - Section 508 compliance accessibility statement and your contact information
 - Your institution's Disability Resource Center contact information
 - Link to [Desire2Learn, Accessibility Resources for Individuals with Disabilities](#)
 - Link to [Desire2Learn, Accessibility Resources for Instructors](#)
 - Link to 3rd party software Accessibility Information, such as:
 - [Blackboard Collaborate Assistive Technology Resources](#)
 - [Wimba Accessibility Mission and Guide](#)
 - Links to Accessibility information for any other product required for your course

Desire2Learn Keyboard Accessibility Tips

- Review 2-page document on [Desire2Learn for Keyboard Accessibility Tips](#)

Design Considerations for Keyboard Accessibility

- Facilitate Navigation (minimize number of stops it takes to arrive at course materials)
 - Content Browser: Add Modules to organize content by week/ unit/lesson
 - Include supplemental materials within each Module
 - Avoid long lists of content; consolidate and simplify where possible
 - Provide content in logical order
 - Provide most frequently used content at top of list

- Use unique link names for all unique content in your Modules to facilitate Search capabilities
- Email or Discussion: Include original Text in Reply
- Email: Top-post so most recent response is always on top
- Ensure key information is provided in more than one location (Course Home, Syllabus, etc)
 - Must consider keyboard accessibility for 3rd-party products, and any external websites (University, Departmental, Library, other external web sites)

Desire2Learn Screen Magnifier, Zoom and Color Contrast

- Review Desire2Learn website for [Screen Magnifier, Zoom and Color Contrast Tips](#)

Design Considerations for Screen Magnifier and Zoom

- Navigation and Text Display:
 - Avoid Course design that requires horizontal scrolling
 - Example: Course Home, 2 columns better than 3 column layout
 - Avoid text within images
 - Clearly separate sections of page, use adequate white space around text
 - Use colors consistently without making random changes to color schemes
 - Use a sans-serif font
 - Some of the fonts in the D2L HTML Editor are Serif. Choose: Arial, Comic Sans, Ezra SIL, Tahoma, Trebuchet, or Verdana
- Email and Discussion: include original text in response

Design Considerations for Color Contrast

- Choose colors carefully:
 - Institution or Instructor can select colors
 - Use tools (Color Contrast Checker) to meet WCAG Level AA
- Ensure sufficient contrast between foreground and background colors
 - Includes PowerPoint slides, MS Office and other applications
- Avoid Color Coding
 - Color should not be the sole means of conveying important information

Customize Widget – Color Selections must pass WCAG 2.0 AA

- Course Home>Course Administration>Site Setup>Widgets (select icon for existing Widget to Customize, or select colors from new Widget setup screen)
- D2L built-in color contrast checker for Top Color and Bottom Color
- Must receive a check (meaning Pass) for both colors
- Triangle is a warning one of the colors doesn't pass, must select different color
- X means neither color passes, must select different colors

Course Home: Course Colors

- Edit Course, Course Offering Information
 - Bottom of page, color selectors
 - May not provide the built-in color contrast checker
 - Must manually check these colors to ensure they pass

Colour Contrast Analyser available from The Paciello Group

- Free download, easy to use, for both Mac and Windows
- Download available at [Colour Contrast Analyser](#)
- Can use for color contrast check in documents (MS Office, including PowerPoint)
- Regular Text and Large Text must both Pass minimum of WCAG Level AA

Desire2Learn Screen Reader Tips

- Review 3 page document on [D2L Screen Reader Tips](#)

D2L Screen Reader Tips, YouTube Video

- [YouTube Video, featuring Carin Headrick and her guide dog, Tansy](#)
- To Play Video on Your Local Computer (*not* in Collaborate)
 - Closed Captioned, Autoplay, 8 minute 14 second YouTube Video
 - Video will open in a New Window and Autoplay from beginning to end
 - Select the CC icon on YouTube player for Closed Captions
 - **STOP** next video **or CLOSE YouTube** to prevent the next video from Autoplay

Live Interview with Carin Headrick

- Carin Headrick and her guide dog, Tansy
- Accessibility Tester with Desire2Learn

Design Decisions for Accessible Course Organization

Course Home: News Items to *Introduce Instructors* or *Provide Overview of Course Tools*

- News, New Item. Opens HTML Editor
- Attachments: Add a File or Record Audio*
- All must be accessible!
- Note: *Record Audio screen: USG + 508 Compliance, you *MUST* include Text Transcript (*accessible* document)

Course Home: News Item for *Syllabus*

- News, New Item. Opens HTML Editor
 - Create Syllabus
 - Quick Links to other Course components
 - Attachments: Add a File or Record Audio
- All must be accessible!

Syllabus: *Quick Links to Course Materials*

- Provide Quick Links to other course content
- Helps students relate expectations with course requirements

Course Content: *Overview*

- Content, open Content Browser, Select Overview
- Create in HTML Editor, Add Attachments or Upload File (all must be accessible)

Course Settings: *Enumerations*

- Manage Content, Settings:
 - Use enumerations to establish hierarchy of content

- If Enumerations are turned off at your institution, be sure to label your course Modules Unit 1, Unit 2, etc. Provide the hierarchy in the titles of your Modules.

Flexible Time Limits

- Use Discussions instead of required Chat
 - Chat tool technology has accessibility features
 - Difficult to utilize real-time Chat accessibly in a course
 - Same for Instant Messaging, Wimba Text Chat, Collaborate Chat, etc.
- Wimba, Collaborate
 - Indicate in more than one location (Syllabus, Course News, Content Overview, Accessibility Widget, etc.) that you will be using live online classroom component, and describe the requirements for attending the sessions.
 - [Web Accessibility Group \(WAG\)](#), select Resources, then under Training select the document: *Accessibility Matters in Education (Conducting Accessible Webinars), Collaborate NOW 2013*

Accessible Course Content

Conduct Accessibility Checks!

- It's important to conduct Accessibility Checks on your course design and content.
- Legacy content (created before Accessibility Training), conduct reviews and update content based on accessibility guidelines
- New course designs and content should be created with Accessibility in mind
- Use this handout as a Checklist for getting started

Resources for Creating Accessible Online Course Content

- *Reminder:*
 - Resources are available in the [USG Accessibility Tutorial](#) and the previous webinar (*Section 508 Compliance and Online Course Content*) for creating accessible Word, PowerPoint, PDF, Multimedia, etc.
 - The Dec 2011 webinar contains a live demo for creating accessible Word and PDF files.
 - The Accessibility Tutorial also contains checklists for creating accessible course content.
 - Today will cover creating accessible content using the D2L built-in HTML Editor. Note: these are the same guidelines to follow for all types of content, but the How-to information only applies to the D2L HTML Editor.

Design Decisions for Creating Accessible Course Content

- Reminder: Course Content (or documents) added to Content Modules in D2L are called Topics
- Create HTML Topics whenever possible, Most widely accessible file format
- If you use other applications (Word, etc.) to create course content and upload directly to your Content Module, accessibility principles apply

- Important to conduct Accessibility checks on your course design and content, and make

3 Ways to Create HTML Topics using D2L HTML Editor

1) *Copy/Paste text from another application, like Word (edits required)*

- Open HTML Editor: Content, New, Create a File to open HTML Editor
 - Toolbar, select ... icon to expand the toolbar
 - Provide Unique Title for All Documents
 - Paste Plain Text (no formatting) or Word (retains some formatting)
 - Must check your content: Preview button
 - View Source button to make HTML corrections
 - Request assistance from your local IT

2) Use D2L Accessible HTML Templates (edits required)

- Instructions on website how to use the templates
- 4 (visual) Styles of Accessible Templates
- In the HTML Editor: Select a Document Template
 - Enter your own unique Title
 - Edit Template with your own content, per instructions provided with the Template download files
 - Change Path so your new file resides in same location as Template
- HTML Editor: View Source, may need to know some HTML to make corrections; request assistance from your local IT

3) *Create basic HTML files*

- 3) Create Basic HTML File
 - Add Unique, Descriptive Title
 - HTML Editor select:
 - Font Family
 - Font Size
 - Headings and Paragraph Text
 - Bold, Italics (will code properly as Strong and Emphasis)
 - Unordered, Ordered Lists
 - Color, must check WCAG Pass
 - WCAG Warning (triangle), change colors
 - WCAG Fail (X), change colors
 - Add Image
 - Provide ALT Text
 - Insert Quick Link
 - Unique and Descriptive Link Title
 - Insert Stuff
 - YouTube, Search for YouTube Video, then click to select and Next
 - May need to Preview to refresh your screen

- Preview does not provide CC button on media player
 - Must provide 508 compliance: Closed Captions, Text Transcript and Descriptive Video
 - Embedded YouTube with Closed Captions should play properly when Publish file
 - Problems? Contact local IT or USG Desire2Learn Help Desk
- Tables: Table icon to Create a new table or Edit Table Properties; or use the drop-down arrow to Edit Table Rows and Cells
- Table icon, General set properties, select Table Caption (places space at top of table to type a brief description indicating contents of table)
- Table, click in first cell of first column, select drop-down arrow on Toolbar (next to Table icon) to Edit Table Cell Properties. Cell Type: Header, Scope: Column. To create more than one Column Header select “Update all cells in Row”
- Table, click cell for first cell in second row (because first row is Column Header), select Table drop-down arrow and Table Cell Properties. Cell Type: Header, Scope: Row. To create more than one Row Header, select “Update all cells in column”
- Equation Editor, equations can be entered:
 - Graphical Equation
 - Copy/Paste from MathML
 - Copy/Paste from LaTeX
 - D2L 10.2 uses MathJax (runs and does all the hard work)
 - Equations can be rendered correctly in any browser
 - Accessible using Math Player and Internet Explorer
 - Screen reader user would need to [download Math Player](#), provide the link in your Syllabus, Accessibility Widget, News Item, etc.
 - Visit Desire2Learn website and download whitepaper: [Accessible Math in Desire2Learn](#)

Action Items from Today’s Training

Visit website for USG Accessibility Resources

Read: Higher Education, the Americans with Disabilities Act and Section 508

Review: Web Content Accessibility Guidelines (Section 508, 1104.22) for any topics not covered today that apply to content in your online course

Review: USG Accessibility Tutorial, including Training section for previous 508 webinar, Handout, and link to 2011 Distance Education Accessibility Guidelines

Visit website for: National Center on Disability and Access to Education

Review: Review of Recent Legal Issues in Higher Education and Web Accessibility

Visit Desire2Learn Website

Review: Accessibility Resources for Individuals with Disabilities

Review: Accessibility Resources for Instructors

Create Accessibility Widget for each of your courses

Locate Accessibility information for any 3rd party vendors and include as link(s) in your Accessibility Widget

Check Account Settings for Email and Discussions: Include Original Text in Reply

Content Browser: Add Modules for Content

Organize content by unit/week/lesson

Consolidate and simplify lists

Provide most frequently used information at top of list

Ensure unique link names for all unique content in Modules

Ensure Modules provide proper enumerations (Unit 1, Unit 2, etc.)

Add Overview to Content Browser (button located above Modules and Table of Contents)

Ensure Content in Course Modules follow Accessibility Guidelines (Review USG Accessibility Tutorial, Tools and Checkers for Accessibility Checklists for Word, PowerPoint, Excel, HTML, Multimedia, etc.)

Ensure use of sans-serif fonts

Ensure adequate whitespace around text and between paragraphs

Download the free Colour Contrast Analyser and check PowerPoint, Word, Excel, HTML, and any other color schemes to ensure pass WCAG 2.0 Level AA

Ensure course materials do not use “color coding” to convey important information, unless an additional alternate means of designating colors is provided

Ensure all Audio/Video files are fully accessible

Audio: provide Text Transcript

Video: provide audio Text Transcript, Video Description, and Closed Captions

Consider creating your Syllabus in D2L HTML Editor

Add Quick Links in your Syllabus for Course Tools required to complete tasks

Ensure all link text is unique, descriptive and describes destination

Conduct an Accessibility Check of content created in the D2L HTML Editor

Follow list provided in main handout under “3 Ways to Create HTML Topics using D2L HTML Editor – specifically item 3) Create basic HTML files)
For HTML Files uploaded to the D2L HTML Editor, use the HTML Checklist available from the USG Accessibility Tutorial, Tools and Checkers, Documents.

Ensure key course information is provided in more than one location (ex: Course Home, Syllabus, Content Modules, Calendar, etc.)

Ensure course layout avoids horizontal scrolling

Replace images used to provide text with true text

Ensure use of color consistently; avoid making random color changes

Course Home: ensure colors provide sufficient contrast and pass WCAG 2.0 Level AA

Widgets: ensure color scheme pass for WCAG 2.0 Level AA

Create News Item

- Introduce Instructor(s), TA, to students, provide contact information

- Ensure Audio introductions provide Text Transcripts

Create News Item

- Listing Course Tools used in your course

- Include any specialty products or software used in course

- Locate Accessibility information for these products and add link here and in Accessibility Widget

Check News Items

- Ensure any Attached files are also accessible

- Follow guidelines in Dec 2011 Webinar for creating accessible documents, if needed

- Reminder: This information is in the USG Accessibility Tutorial

This document accompanies the USG Faculty Development Webinar called Accessibility Considerations for D2L ver. 10.2 Courses, provided February 4, 2014 by Janet Sylvia, Web Accessibility Group Leader. It is not intended as a stand-alone or complete resource for the accessibility of online courses.