Accessibility Best Practices for Moodle

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# Accessibility Best Practices for Moodle

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Accessibility Best Practices for Moodle

Disclaimer
Concepts for this document were generated from the 2017 Accessibility MOOC sponsored by Blackboard.

Text Editors
Atto
- Default text editor built for Moodle
- Can drag and drop images into the editor
- Resize images using ‘Size’ on image properties
- Contains an equation editor
- Simple table builder
- Table offers ‘Caption’ and ‘Header’ information
- Contains accessibility tools (accessibility checker and screen reader helper)
- Can clear formatting from previous programs in this editor
- Includes an autosave feature

Layout of the editor’s buttons.

TinyMCE
- Previous default text editor no longer supported by Moodle
- Cannot drag and drop images into the editor
- Resize images by dragging
- Does not contain an equation editor
- Complex table builder
- Table offers ‘Caption’ information
- Does not contain accessibility tools
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Layout of the editor’s buttons.

Please note that the default, and recommended, editor is the Atto editor. If you are still using the TinyMCE editor, it is strongly recommended that you switch to the Atto editor. To switch editors, log in to Moodle and select “Preferences” from the drop-down bar.

Then, under User Account, select “Editor Preferences”.

Preferences
Then, select “Atto HTML editor” from the drop-down bar.

**Editor preferences**

<table>
<thead>
<tr>
<th>Text editor</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="dropdown.png" alt="Dropdown menu" /></td>
<td></td>
</tr>
<tr>
<td>Default editor</td>
<td></td>
</tr>
<tr>
<td>Atto HTML editor</td>
<td></td>
</tr>
<tr>
<td>TinyMCE HTML editor</td>
<td></td>
</tr>
<tr>
<td>Plain text area</td>
<td></td>
</tr>
</tbody>
</table>

**Formatting Recommendation in the Moodle LMS**

- All documents, web pages, and large sections of text should use headings so that students using a screen reader or using voice navigation can better understand and navigate through the content.
- Moodle automatically generates these heading categories which differ by text box editor.

<table>
<thead>
<tr>
<th>Content Type</th>
<th>Heading Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Title</td>
<td>Heading 1</td>
</tr>
<tr>
<td>Topic Outline / Page Content (not visible in the course)</td>
<td>Heading 2</td>
</tr>
<tr>
<td>Block Titles (sections)</td>
<td>Heading 2</td>
</tr>
<tr>
<td>Activity/Resource Titles</td>
<td>Heading 2</td>
</tr>
<tr>
<td>Topic Titles (subsections)</td>
<td>Heading 3</td>
</tr>
</tbody>
</table>

- When adding text from the **Atto editor**, use the ‘Paragraph’ option to define the header level.

<table>
<thead>
<tr>
<th>Choice</th>
<th>Heading Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading (large)</td>
<td>Heading 3</td>
</tr>
<tr>
<td>Heading (medium)</td>
<td>Heading 4</td>
</tr>
<tr>
<td>Heading (small)</td>
<td>Heading 5</td>
</tr>
<tr>
<td>Pre-formatted</td>
<td>None</td>
</tr>
<tr>
<td>Paragraph</td>
<td>None</td>
</tr>
</tbody>
</table>
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- Do not create headings by **BOLDING** and/or **ENLARGING** text size as this is not accessible/readable by most screenreaders.

**Font Selection**

- The best font to use is one from the San Serif family.
  - Atto editor uses Trebuchet in this font family with the exception of the Pre-formatted paragraph option which is in Consolas and is also in the San Serif family.

**Image Based**

- Avoid image-based text as it will distort and pixelate with screen magnification. Any images that do contain text must be included as alternative text or within a text description.

No screen magnification

Screen magnification
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Styling

- Emphasize important information as a separate paragraph with a blank line above and below and begin the sentence with ‘Important:’.
  
  Example:
  
  Check the course syllabus frequently to ensure you are meeting all course requirements by the deadline stated. Grades for assignments will be posted within one week from the due date.

  Important: No makeup assignments/quizzes or late submissions will be accepted without approval.

- The course syllabus should inform students how symbols will be used. Use the symbols consistently throughout the course.
  
  Example:
  
  Course Assignment Syllabus

  Legend | Meaning
  -------|--------
  -      | Class meets on campus
  *      | Class meets online
  @      | Class meets at the lake

  Use the Legend in conjunction with the Date to ensure you attend the correct meeting place.

  Date | Lesson
  ----|--------
  - July 10 | Group activity
  * July 12 | Watch video
  @ Aug 21 | Explore trails

- Do not underline text unless the wording is a hyperlink.
  
  Example:
  
  Google is a good search tool

- Do not use all CAPS unless the wording is an acronym.
  
  Example:
  
  UPS - United Parcel Service
  USPS – United States Postal Service

Color

Contrast

- Use colors that contrast well in order that those who are color blind or visually impaired can better read the material.
  
  Example
  
  Acceptable contrast
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<table>
<thead>
<tr>
<th>Year</th>
<th>User</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Jane Doe</td>
<td>Clerk</td>
</tr>
<tr>
<td>2016</td>
<td>John Doe</td>
<td>Manager</td>
</tr>
<tr>
<td>2017</td>
<td>Jane Doe</td>
<td>Accountant</td>
</tr>
<tr>
<td>2017</td>
<td>John Doe</td>
<td>Director</td>
</tr>
</tbody>
</table>

Unacceptable contrast

<table>
<thead>
<tr>
<th>Year</th>
<th>User</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Jane Doe</td>
<td>Clerk</td>
</tr>
<tr>
<td>2016</td>
<td>John Doe</td>
<td>Manager</td>
</tr>
<tr>
<td>2017</td>
<td>Jane Doe</td>
<td>Accountant</td>
</tr>
<tr>
<td>2017</td>
<td>John Doe</td>
<td>Director</td>
</tr>
</tbody>
</table>

Convey Meaning

- Do not use color alone to emphasize information. If you use color to emphasize, make sure to add another form of emphasis, such as an added statement. You may use black and white or gradients to signify differences to users without the ability to detect color.
  
  Example:
  
  Assignments (optional extra credit assignment indicated in red): Forum Post, Reading, Journal Entry

- Use wording and color to emphasize information.
  
  Example:
  
  Assignments: Forum Post (required), Reading (required), Journal Entry (optional extra credit)

Sentence/Paragraph Structure

- First sentence of the paragraph should state the main idea of the paragraph.
- Place text in blocks to keep it manageable.
- Use ‘Unordered’ (bulleted) or ‘Ordered’ (numbered) lists to structure content and to ensure proper reading order for students using screen readers. Do not use “homemade” bullets but instead use the bullets/numbers provided from the textbox editor within Moodle.
  
  Example:
  
  ![Unordered](unordered.png) ![Ordered](ordered.png)

- Use illustrations and multimedia along with text to give multiple ways to meet different learning preferences.
  
  Example:
  
  Sample image with text
Coastal Office of Online Learning annual team meeting!

View a Sample Video with CC (closed caption text)

**Hyperlinks**

**Consistency**

- Use the same names for links throughout the course.
  
  **Example:**
  
  ‘Course Home’ always links to the course landing page

- Do not use link names that are used by Moodle (Example My Courses, Grades).

- Content internal to the course should open in the same window.

- Content external to the course (e.g., Google URL) should open in a new window. In order for content to open externally in new windows, pop-up blockers should be disabled for the Moodle LMS.

**Descriptive**

- All links should be clearly descriptive—not “raw URLs”. In other words, the meaning of the link can be understood without any surrounding text.
  
  **Example:**
  
  Correct: If you need help, start by checking the Moodle documentation.
  
  Incorrect: If you need help, start by checking the Moodle documentation at: https://docs.moodle.org/32/en/Teacher_quick_guide

- Do not create a link that does not make sense for screen reading or text-to-speech users
  
  **Example:**
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**Click here** to perform a Google Search

- Use the ‘Link’ option in Moodle to put a link on text.
  
  **Example:**
  
  Atto editor view

  ![Atto editor view](image)

  **Click here to view the link!**

**URLs**

- Do not display the “raw” URL as it can degrade the user’s experience. Users of screen reading or text-to-speech software must listen to the URL being read to try to determine the purpose. One exception is for computer science and related disciplines where URLs are integral to the student development activities, or if the intent is for students to learn the URL, such as:
  
  [http://online.coastal.edu](http://online.coastal.edu)

  **Example:**


  - Users of speech recognition software may have difficulty activating the RLS by voice command.
  - The visual appearance of URLs is not aesthetically appealing to web viewers.

- Instead, select the text that you wish to link, press the “link” button within the text editor, and add the URL in the designated field.

  **Example:**

  ![Create link](image)

  Once you hit the “link” button, this dialogue box should appear, prompting you to add in the desired link.
Tables

Captions/Headers

- A caption is a brief description of the table information and is placed at the top or bottom of the table.
- A caption is not read out as a heading to screen readers.
- A header contains words in the first row and first column of a table.

<table>
<thead>
<tr>
<th>Year (column header)</th>
<th>User Name (column header)</th>
<th>Position (column header)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 (row header)</td>
<td>Jane Doe</td>
<td>Clerk</td>
</tr>
<tr>
<td>2016 (row header)</td>
<td>John Doe</td>
<td>Manager</td>
</tr>
<tr>
<td>2017 (row header)</td>
<td>Jane Doe</td>
<td>Accountant</td>
</tr>
<tr>
<td>2017 (row header)</td>
<td>John Doe</td>
<td>Director</td>
</tr>
</tbody>
</table>

- Avoid merging cells as screen readers have difficulty reading the contents.

<table>
<thead>
<tr>
<th>User Name (column header)</th>
<th>Position (column header)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016 (merged cell)</td>
<td>Clerk</td>
</tr>
<tr>
<td>John Doe</td>
<td>Manager</td>
</tr>
<tr>
<td>2017 (merged cell)</td>
<td>Accountant</td>
</tr>
<tr>
<td>John Doe</td>
<td>Director</td>
</tr>
</tbody>
</table>

- Avoid nesting tables; rather break the data into individual tables.

Example:

<table>
<thead>
<tr>
<th>Avoid nesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
</tr>
<tr>
<td>Accounting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Purchasing</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

- Do not use tables to control the layout or position of content (Example placing an image next to text).

Example:

| Blueberries are low in fat and high in fiber. |

Color

- Do not use color to convey meaning of information within tables. Color is not announced to users of screen reading software and may not be noticed by users of screen magnification and/or high color
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Examples:

Assignments (optional extra credit assignment indicated in red): Forum Post, Reading, Journal Entry

- When alternating row or column background color, the color must meet color contrast requirements.

Example:

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</tr>
<tr>
<td>2017</td>
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<td>Director</td>
</tr>
</tbody>
</table>

Images

Decorative

- An image used to visually divide the course content and that serves no other function is considered decorative.

Example:

An image description is not needed for decorative images as they have no meaning.

Example:

Atto editor provides a ‘Description not necessary’ box for this purpose. This will cause screen reading software to ignore the image. Faculty should select the ‘Description not necessary’ checkbox rather than entering an alt tag/description only if the graphical element is purely decorative.
Meaningful

- An image that has a purpose and/or serves to provide users with additional instruction or information is meaningful, rather than purely decorative.
  Example:
  ![Bike Image](image-url)

  OR

- An image description is needed for descriptive images so screen reading software will indicate the image’s meaning to the user, who may then experience your content in the same way as users not reliant on a screenreader. The text should be no more than 140 characters when entered into the description field of Moodle.
- TIP: Do not include “image of” in your description, as screen readers already include this, and it provides an unnecessary distraction from information.
  Example:
  Atto editor provides an area to input alternative (alt) text to convey the meaning of the image (not a literal description).
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- Image-based text should primarily be used for logos and when the text is needed to convey the meaning (Example maps, graphs).
- Where logos contain text, the alt tag description should include the details of the information.
  
  Example:

  ![Coastal Carolina University logo](image1)

  Alt text=Coastal Carolina University logo

Map

**2013 COASTAL CAROLINA FOOTBALL**

- Complex images should contain alternative text as well as a long description that defines the image either above or below the image
  
  Example:
  
  o Alt text = Diagram of CCU football stadium seating
  o Long description = 2013 Coastal Carolina Football stadium seating diagram. The sections are Teal zone, Bronze zone, Family zone, Visitor zone, Blitz zone, CCU Player guest, Chantourage,
Accessibility Best Practices for Moodle

and CCU band. For tickets call 843.347.3499 or visit the website

- An easy way to think of this is to imagine that alt text sits “behind” the image, for a screen reader to read, while descriptions are more like captions that are on the page itself, describing the image in greater detail for anyone (even those who can see the image) to have access to.

Example:

![Images & Multimedia](image)

(Image B. above specifies the unique items in an operant training chamber, including the speaker, the lights, the lever, and the dispenser).

The alt text is not displayed for the image on the left (it simply reads “B.F. Skinner”), while the description of the more complex image on the right actually appears on the page.

Audio and Video

Media Tool

- Use the ‘Media’ tool in the Moodle textbox editor to insert audio or video files to the course.

Example:

![Media Tool](image)

- By clicking ‘Browse repositories’, the file picker will appear allowing you to select the audio or video file. These files can be hosted on your PC or hosted externally in Echo360.
- You can also insert a direct link to other external platforms such as YouTube using this tool.
  - Be aware that transcripts should be provided with files that contain audio-only content for users with hearing disabilities and those that prefer to read the content.

Video Captioning Guidelines

- The [Described and Captioned Media Program](https://www.dcmp.org) provides guidelines called the [DCMP Captioning Key](https://www.dcmp.org/captioning-key) which helps ensure captions are accurate, consistent, clear, readable, and equal.
- Transcripts alone are no longer legally sufficient for making content accessible when video and/or screencasting is being used. Students must be provided with equivalent materials if they are unable to view content presented on the screen, therefore all content that includes audio plus any other format (such as PowerPoints, annotated text for solving problems, videos, and more) must be time-synched and include closed captioning.
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Audio Descriptions

• Captions or subtitles are required for all video content and must have time-syncing of audio and video/screen capture.
  Example

A video that contains closed captions will look like this.
  View a [Sample Video with CC](#) (closed caption text)

Delivery Options for Multimedia

• Use a delivery method (linking to a file, inserting/embedding media) that supports captions, subtitles, and descriptions (if they will be included).
• Faculty at CCU are encouraged to use the campus-wide lecture capture tool, [Echo 360](#), which allows for captions and transcripts to be added to multimedia files.

Additional Faculty Resources

• The Kimbel Library offers audio/video materials that may already meet accessibility standards.
  o Review the [Faculty Services](#) to see what services are available for faculty.
  o Review the [Digital Collections](#) to see the collections that are available.
• The Coastal Office of Online Learning (COOL) maintains a document of digital accessibility and universal design resources and best practices.
• The Coastal Office of Online Learning (COOL) provides a captioning service for courses using multimedia. View the [guidelines for submitted videos](#) and fill out the [Google form](#) to request this service.
• The Coastal Office of Online Learning (COOL) is happy to help with any questions you may have about creating accessible documents. Please contact the COOL office at (843) 349-6932, email at [coastalonline@coastal.edu](mailto:coastalonline@coastal.edu), or stop by the office in Kearns 216, Mon-Fri 8:30 a.m. to 5p.m.