INTRODUCTION

This document provides instructions for enhancing the web accessibility of LibGuides produced by MDC Learning Resources. Taking the time to make LibGuides more accessible not only benefits users with disabilities, but also improves the overall quality of LibGuides.

For more information, see Resources for Web Accessibility (http://libraryguides.mdc.edu/webaccessibility), which includes a section on resources for librarians.

MAKING LIBGUIDES MORE ACCESSIBLE

Columns

Two: Optimal ; Three: Okay ; Four: Discouraged

Text

- **Font size:** This is not a major concern, since font size can usually be adjusted on the user’s device. Nevertheless, avoid using a font that is smaller than the default.

- **Font face:** The default font is Arial. If you make any changes, be sure to use a standard (preferably sans serif) font like Verdana, Tahoma, or Trebuchet MS. Avoid using several different fonts in one guide.

- **Font formatting:** Limit the use of bold, italics, and ALL CAPS. Underlining should be used only for hyperlinks. Avoid blinking or moving text.
• **Copy/paste:** Pasting text copied from the web or from a Word document can result in extraneous behind-the-scenes code that hinders the use of screen reader tools. If you need to copy and paste from the web, use the “Paste as plain text” button in the rich text editor and then format the text as desired. If you need to copy and paste from a Word document, use the “Paste from Word” button.

If you’ve already created LibGuides with content copied from the web or from Word, highlight the text, click the “Remove Format” button, then re-format the text as desired.

**Links**

• Hyperlinked text should be meaningful. Check for and fix any links without context.

  **Bad:** Click [here](http://example.com).
  **Better, but still not great:** Click [here](http://example.com) to register.
  **Much better:** To use our services, [register for a free account](http://example.com).

  Prefer descriptive text rather than a URL.

  **Not great:** For more information, visit [http://webaim.org/intro/#principles](http://webaim.org/intro/#principles)
  **Better:** For more information, visit [WebAIM’s Principles of Accessible Design](http://webaim.org/intro/#principles)

• Avoid links that rely on visual cues, such as “Click the button on the left,” or “Click the blue triangle.”

• If including a description of the link, avoid using the “more info” field, which places the description behind a “more” link. It’s better to display the description beneath the link.

<table>
<thead>
<tr>
<th>Don’t</th>
<th>Do</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="http://example.com">Art Basel Miami Beach more</a></td>
<td><a href="http://example.com">Art Basel Miami Beach</a> This website provides information about visiting the exhibitions.</td>
</tr>
</tbody>
</table>

**Videos**

• All videos embedded in LibGuides (and, theoretically, all videos to which we link) must have captions for the hearing impaired. If captions aren’t available and you can’t find an alternative video, you must provide a transcript.

• If you created the video yourself and have uploaded it to YouTube, captions can be automatically generated, but they’re usually not very accurate. Alternatively, you can type in the captions as you listen to the video, or you can upload a transcript and YouTube will automatically sync it to the audio. See [Creating Subtitles and Closed Captions on Your YouTube Videos](https://www.youtube.com/watch?v=XJGiS83eQLK) one of many videos available on YouTube that explains this process.
Headings

When creating a heading, it's not enough just to enlarge and bold the text. To facilitate screen reader navigation, headings should be properly formatted. Select a heading from the Paragraph Format drop-down menu in the rich text editor, as shown below. The font size of your heading can then be adjusted as desired. Proper formatting should also be used for bulleted and numbered lists.

Catalog Search Boxes

Catalog search boxes created prior to the implementation of Mango should be deleted, or replaced with search boxes generated by the FALSC widget creator. However, you'll need to add a “label” tag to the code so that the search box displays a label, as shown below.

<table>
<thead>
<tr>
<th>Search box with no label (not accessible)</th>
<th>Search box with label (accessible)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Search box with no label" /></td>
<td><img src="image2.png" alt="Search box with label" /></td>
</tr>
</tbody>
</table>

To add a label to a keyword search box:

1. Generate the desired code with the FALSC widget creator (https://union.discover.flvc.org/widgetKeyword.jsp).
2. Copy and paste the code into the Embed Code field of a LibGuide Media/Widget content item.
3. Scroll down and find the part of the code that looks like this:

```html
<!-- REQUIRED INPUT with id="searchInput" -->
<input id="searchInput" type="text"/>
```

4. Insert the highlighted text as shown below. Note that the label does not have to say “Enter keywords.” You can use any meaningful wording. If you want the label to be on the same line as the search box rather than above it, replace `<br>` with a blank space, or with the code for a blank space, which is: &nbsp;

```html
<!-- REQUIRED INPUT with id="searchInput" -->
<label>Enter keywords:<br><input id="searchInput" type="text"/></label>
```

If you've created a search box that includes campus and/or search index dropdown menus, each dropdown menu will also need a label. See section on creating your own catalog search boxes at: https://tinyurl.com/yapz92r6.
**Images**

- To avoid extraneous code, images should be imported from your LibGuide image manager, NOT copied and pasted from the web or elsewhere. (See [https://ask.springshare.com/libguides/faq/924](https://ask.springshare.com/libguides/faq/924))

- **Alt Tags:** To enable screen readers to interpret images for the visually impaired, every image needs to have an “alt tag” in its code. In some instances, the alt tag will contain text that conveys the content or function of the image (e.g., `alt="George Washington"`). In other instances, a “null” (or empty) alt tag (`alt=""`) will be best. Much depends on whether the image’s purpose is to convey information, perform a function (like a hyperlink), or serve as purely decorative. See the examples below, adapted from WebAIM ([https://webaim.org/techniques/alttext/](https://webaim.org/techniques/alttext/)) and Oregon State University ([https://accessibility.oregonstate.edu/alttext](https://accessibility.oregonstate.edu/alttext)).

### Images that convey information:

<table>
<thead>
<tr>
<th>Alternative text should be as simple and concise as possible. An appropriate tag for this image is: <code>alt=&quot;George Washington&quot;</code></th>
<th>A null (or empty) alt tag: <code>alt=&quot;&quot;</code> is best here, because the adjacent text conveys the content. The tag: <code>alt=&quot;George Washington&quot;</code> would be redundant in this case.</th>
<th>In this example, the adjacent text does not directly convey the content of the image, so you do need an alt tag here. Again, simply <code>alt=&quot;George Washington&quot;</code> is probably best.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="George Washington" /></td>
<td><img src="image2.jpg" alt="George Washington" /></td>
<td><img src="image3.jpg" alt="George Washington" /></td>
</tr>
</tbody>
</table>

Because of his role as the Commander in Chief of American forces in the Revolutionary War, and, later, the first President of the United States, George Washington is often called the “Father of his Country.”

### Images that perform a function:

<table>
<thead>
<tr>
<th>Assume this image serves as a link to the Wikipedia entry for George Washington. Although the tag: <code>alt=&quot;Wikipedia entry for George Washington&quot;</code> seems logical, it is inappropriate because it provides information that is not evident from the image alone. A better choice is: <code>alt=&quot;George Washington&quot;</code></th>
<th>In this example, even though the adjacent text conveys the content of the image, you would still need the tag: <code>alt=&quot;George Washington&quot;</code> to convey the image’s function as a link to the Wikipedia entry. A better solution is to combine the image and adjacent text into one link. Then, since both the content and the function are presented in the link, the image can have a null alt tag to avoid redundancy.</th>
<th><strong>Bad:</strong> <code>alt=&quot;Blue circle with white arrow&quot;</code> because it does nothing to convey the function of the image. <strong>Better:</strong> <code>alt=&quot;George Washington’s presidency&quot;</code> because it conveys the image’s function as a link. <strong>Even better:</strong> <code>alt=&quot;Continue to George Washington’s presidency&quot;</code> because it conveys the function <em>and</em> makes it clear that the link goes to the next page in a series. <strong>Best:</strong> As in the previous example, combine the text and image into one link, and then give the image a null alt tag.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="George Washington" /></td>
<td><img src="image2.jpg" alt="George Washington" /></td>
<td><img src="image3.jpg" alt="George Washington" /></td>
</tr>
</tbody>
</table>

Continue to the next page to read about George Washington’s presidency.
NOTE: Do not include words like “Picture of...,” “Image of...,” or “Link to...” in an alt tag. You can include words like “Painting of...” or “Illustration of...,” but only if that information is important.

Decorative images:

The image in this example does not convey any important information or serve any purpose other than making the page look nicer. Therefore, a descriptive tag such as alt="handshake" is not needed. For purely decorative images, a null alt tag (alt="") is recommended.

To add or edit alt tags:

1. Open the edit window of the content area that contains the image.
2. Right-click the image, then click “Image Properties.”
3. Type the appropriate text in the Alternative Text box. If you want the alt tag to be null, remove any existing text and simply type a space. (See also this video: https://youtu.be/nIUF7RcPZOE for a slightly more complicated but better way to add a null alt tag.)
4. Click OK to save.

Complex images: If you must include a complex image (such as a chart or graph), try to choose images for which a brief summary of the data is sufficient for understanding the information the image conveys. For example, the alt tag for the image below is: alt="Sales have steadily increased in the last 9 years from 5 million in 1996 to 16 million in 2004." A general rule is that an alt tag should not contain more than 150 characters.
Text within images: Avoid whenever possible. In the example below (left), the word “Welcome!” is an image, but the message could be conveyed just as well with actual text (as shown in the center). Any time text can be used in lieu of an image, prefer the text. If an image with text must be used, the alt tag should usually match the text in the image. In the example on the right, the alt tag would simply be: alt="Daisy Farm Project"

Colors

- Do not rely on color alone to convey meaning. For example, “Click the green button to continue” is a problem, because some people will not be able to discern which button is the green one.

- If you change the colors of tabs or boxes, you’ll have to ensure ADA compliant contrast between foreground and background colors. Here are your options:
  - Option 1: Easy
    Revert to the default tab and box colors. Select “Tab & Box Options” from the drop-down menu in the upper right corner of the edit screen, then click “Revert to Default.”
  - Option 2: Moderate
    Choose from a selection of accessible color schemes: http://libraryguides.mdc.edu/ColorScheme1
  - Option 3: Advanced
    Choose your own colors, test them for compliant contrast, and make adjustments as needed. See TESTING LIBGUIDES FOR ACCESSIBILITY, pg. 7 - 8.

Documents

- Word documents, PowerPoint presentations, PDF files, etc. that you upload into your LibGuides must first be made accessible. The short videos in this playlist: http://tinyurl.com/m6muzsy provide some good instructions.

- Make sure your Word documents and PowerPoint files are accessible BEFORE converting them to PDF.

- If you’re linking to a PDF document on the web, a good practice is to indicate that the link leads to a PDF file, as suggested below.

  - Creating Effective Library Research Assignments [PDF]

Tables

Tables should only be used for information (like numerical data) that lends itself to a tabular format. Consider deleting tables that are not being used for this purpose.
TESTING LIBGUIDES FOR ACCESSIBILITY

One way to detect accessibility issues in your LibGuides is to use WebAIM’s handy Wave Extension for Firefox or Chrome: http://wave.webaim.org/extension. If a LibGuide contains multiple pages, you should test EVERY page.

Once you’ve installed the extension:

1. Go to the page you want to test. IMPORTANT: Be sure you’re not in LibGuide “edit” mode when using the Wave tool. Go to preview mode, or open the LibGuide as a user would do.

2. Click the Wave icon in your browser navigation bar.

3. A column on the left side of the screen will display an evaluation summary of the page. You’ll want to pay attention to Errors (red), Alerts (yellow), and Contrast Errors. The goal is to keep testing until you reach zero errors, zero contrast errors, and as few alerts as possible for each page in the LibGuide.

4. To exit the Wave evaluation, refresh the screen.

ERRORS:

If your LibGuide contains errors, a red flag will appear in each problem area. Click a flag to display information about the error and how to correct it. In the example on the right, the error is due to an image that is missing an alt tag.

ALERTS:

Click the yellow flags to display the alerts, and do your best to resolve them. (NOTE: There are two alerts you will always see at the top of the page near the MDC banner, as shown on the right. These are known issues you will not be able to resolve, so you can ignore these two.)
IMPORTANT: Even if your guide contains no errors, there might still be accessibility issues to address. One issue that commonly slips through the cracks involves alt tags. In the example on the right, the image has an alt tag, so the Wave tool did not flag it as an error. However, the alternative text (“Photograph of a magnificent great blue heron perched on a log in the Everglades”) is unnecessarily descriptive. A better alt tag for this image is simply alt=“Great blue heron.” Since the Wave evaluation displays the alt tags for all images on a page, it’s a good opportunity to review them all to make sure they’re appropriate.

CONTRAST ERRORS are likely due to changes you’ve made to tab and/or box colors. The easiest way to correct this is to revert to the defaults (see Colors, pg. 6).

If you prefer to choose your own tab and box colors, or if there are other contrast issues, do the following:

1. Click the Contrast tab above the Wave evaluation summary.
2. Click an area in the page where a problem is indicated.
3. Use the Contrast Tools to select lighter or darker colors until all the “fail” ratings change to “pass” ratings.
4. Make a note of the resulting 6-digit foreground and background color codes, then use those codes when you change the colors in your LibGuide.

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