

## Accessibility Checkpoints for IMAGES in Online Courses\*

\*Includes images in course webpages, as well as images in electronic documents (.doc, .docx) and presentations (.ppt, .pptx) uploaded to course sites.

**WCAG 2.0 Guideline 1.1.1**—"All **non-text content** that is presented to the [student] has a text alternative that serves the equivalent purpose..."

**WCAG 2.0 Guideline 1.4.1**—"Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element."

### BEFORE YOU BEGIN:

- a. Is the value of your image **INFORMATIVE/MEANINGFUL**?  
(i.e. image serves a function and/or is integral to the content of the page)
- OR**
- b. Is the value of your image **DECORATIVE**?  
(i.e. image enhances the design motif of the page but does not convey content)

### CHECKLIST FOR IMAGES

Required for **ALL** images:

- Alternative (ALT) attribute** (i.e. alt="")

Required for **ALL meaningful** images:

- Alternative text** (i.e. within the ALT attribute)
- Colour is not used as the only visual means of providing information**

Required for **SOME** images:

- Extended description<sup>1</sup>**  
*Created as a separate file (page) to describe complex images and figures; provide a link to this page beside the image.*

### Instructional Design Note

If your **image adds meaning** to your page, **use the ALT attribute** to provide alternative text (i.e. a short-text equivalent of the image's meaning).

If the meaning of your **image is too complex** and cannot be properly conveyed with a short-text equivalent, you should write a more comprehensive description in an [extended description file](#) and provide a link to that description from the image.

If your image **does not add meaning** and is included for decorative purposes only, you should still include the ALT attribute with the image BUT you should **leave it empty** (i.e. alt=""). A screen-reader will still detect that this is an image, but in this case:

*"alternative text is superfluous to a screen-reader user; it simply slows the process down with no benefit because the screen-reading software vocalizes the content of the ALT attribute, whether that alternative text adds value or not."*<sup>2</sup>

## ALTERNATIVE TEXT (ALT)

### 1. Why do you need ALT text?

Alternative text provides students access to the content when he/she:

- Is blind or has low vision.  
*ALT text is read by screen readers in place of images.*
- Has a form of cognitive disability.  
*ALT text can help clarify or describe the concept/s being conveyed by the image.*
- Has chosen not to view or load images (e.g. is accessing material on mobile device/Smartphone/etc.)  
*ALT text displays in place of unloaded images.*

### 2. What should you include in ALT text descriptions?

What would your web page look like if the images didn't load? Try writing alternative text for each image that would work as a replacement and "**performs the same function as the image**"<sup>3</sup>. **Alternative text must convey the content and functionality of an image** and should rarely be a description of the image (e.g. *ALT="photo of cat"*). Rather than providing what the image looks like, **ALT text** should convey what the content of the image is and what it does.<sup>4</sup>

### 3. Check Point – Is your ALT text description:

- An **accurate and concise** equivalent to the information in the image/graphic?  
*Typical maximum: 1-2 short sentences.*
- Providing information about the **function of the image** (if relevant)?  
*If your image is hyperlinked to another page or resource, this functional information needs to be included in your ALT text. (E.g. **alt="Assignment Rubric: PDF file"**)*
- Providing only information that is **NOT redundant**?  
*ALT text descriptions **should not provide the same information** as adjacent text. If content of the image is presented in the surrounding text of the page, an empty ALT attribute (**alt=""**) will suffice.<sup>5</sup>*
- Providing **NECESSARY** information?  
*ALT text description **should not include phrases like "image of..." or "graphic of..."** to describe the image; screen readers will already identify the object as an image.*
- Describing a **purely decorative image**?  
*In most cases, if an image has been included solely for ornamental purposes, an empty ALT attribute (**alt=""**) will suffice.*

## USE OF COLOUR

### 1. Why should you not rely on colour alone to convey information in your course materials?

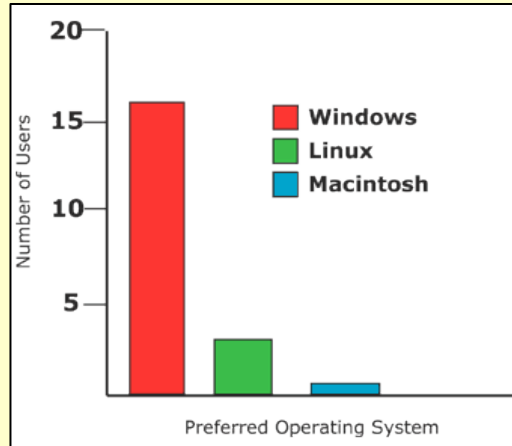
Additional visual cues provide students access to the content when he/she:

- Is colour blind and cannot differentiate between certain colours.
- Is using a device with monochrome display.
- Has poor contrast vision.

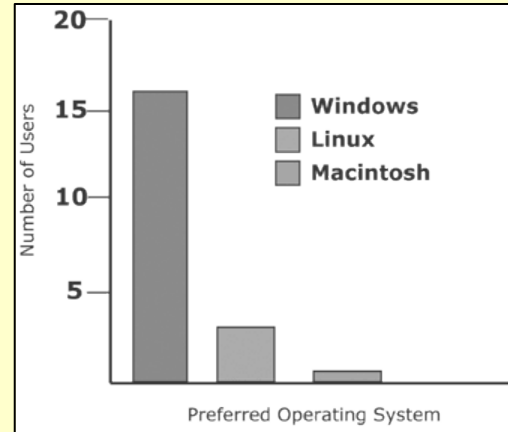
#### Example 1a: Inaccessible Bar Chart<sup>6</sup>

Colour is the only means by which information in the bar chart below is conveyed.

Original – conveys information in colour

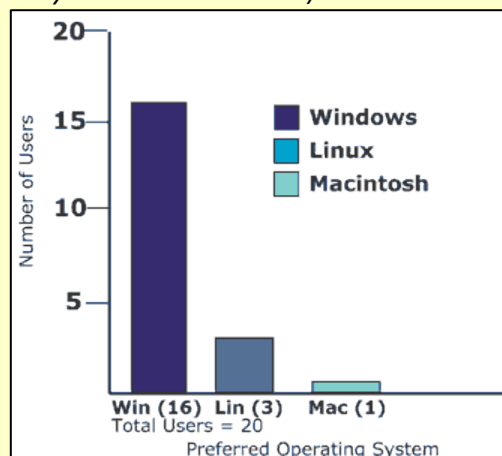


In Greyscale – relevant information is lost



#### Example 1b: Accessible Version of Bar Chart<sup>7</sup>

Colour-blind users can distinguish high-contrast shades **plus** labels for each bar have been added to the bottom of the chart. (Note that this chart would still also require ALT text and possibly an extended description file to convey the illustrated data.)



## USE OF COLOUR (*CONTINUED*)

### 2. **Check Point – Is colour in your course materials and images:**

**One of several means of conveying information?**

*If the point you are making depends on colour to be understood, you may need to edit your image or formatting so that concepts presented in the visuals are not lost to those who are colour blind or who require high contrast between colours.*

## EXTENDED DESCRIPTION

Some images (e.g. illustrations of charts and graphs) are too complex to be described with succinct ALT text. In these cases, you should either provide context details in the text surrounding the image **OR** provide a link to direct students to a longer, text-based description located on a separate page.

### ***Extended Descriptions & LONGDESC Attribute: What does this mean? What would this look like?***

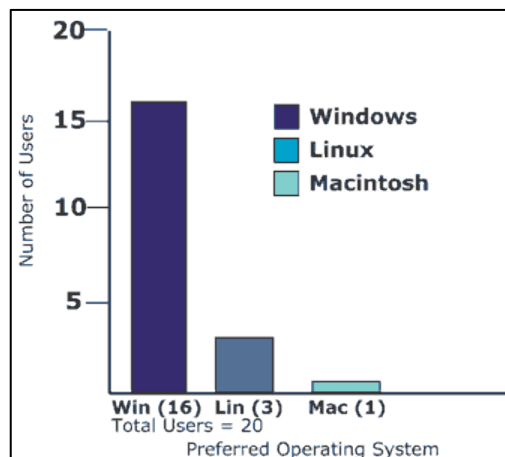
With older web standards, direction for screen-readers to the separate “extended description” file for a complex image was provided within the LONGDESC attribute. In HTML 5, the LONGDESC attribute is not fully supported; we recommend including an adjacent and visible link to the extended description page in addition to or in place of the LONGDESC reference.

#### **Example: Bar Chart with link to extended description**

***The “behind the scenes” HTML code , including both LONGDESC attribute and accompanying link:***

```
<IMG SRC="os-chart.gif" ALT="Bar chart illustrating users' operating system preferences" LONGDESC="os-chart.html"><br />
<A HREF="os-chart.html" TITLE="Bar chart details">Text description of chart details</a>
```

***How the HTML renders on screen:***



[Text description of chart details](#)

***The following extended description would be located on a new web page/file [os-chart.html], accessed by your “Text description....” link.***

#### Text Description of Bar Chart

This bar chart illustrates the results of a survey in which 20 users were asked to identify their preferred operating system. These preferences broke down as follows:

- 16 preferred Windows
- 3 preferred Linux
- 1 preferred Mac

## EXTENDED DESCRIPTION (*CONTINUED*)

### 1. *Why would you need an extended description?*

Extended descriptions are used when the amount of text required to fully explain the context of the image is [too long for ALT text](#). Extended descriptions of complex images provide students access to the content when he/she:

- Is blind or has low vision.  
*Text is read by screen readers in place of complex images (e.g. image-renderings of charts, graphs, etc.)*
- Has a form of cognitive disability.  
*Text descriptions of complex images can help clarify or describe the concept/s being conveyed by the image.*

### 2. *Check Point – Is your extended description:*

- An **accurate** equivalent to the information in the image/graphic?  
*Your extended description supports your ALT text – it just conveys the content and intent of the image in an amount of detail that is too long to be captured in ALT text.*
- Providing only information that is **NOT redundant**?  
*If the equivalent text for your complex image is already presented in the context of the page (i.e. in the text surrounding or adjacent to your image), you do not need to provide this same information as an extended description on a separate page.*
- Easily accessed via a **link adjacent to your complex image**?  
*Alternatively, you may choose to hyperlink the image itself to the separate page on which you have provided your extended description.*

## REFERENCES

- Accessible Images*. 2014 WebAIM. <http://webaim.org/techniques/images/>
- Accessibility Checklist*. AccessAbility: Accessibility & Usability at Penn State. <http://accessibility.psu.edu/checklist#multimedia>
- Accessibility Checklist*. AccessAbility: Accessibility & Usability at Penn State. <http://accessibility.psu.edu/charts>
- Alt text blunders*. 2014 WebAIM. <http://webaim.org/articles/gonewild/#alttext>
- Alternative Text*. 2014 WebAIM. <http://webaim.org/techniques/alttext/>
- Image ALT Tag Tips*. AccessAbility: Accessibility & Usability at Penn State. <http://accessibility.psu.edu/images>
- Top Ten Tips for making your website accessible*. webAccess. 2012. <http://webaccess.berkeley.edu/developer-information/top-ten-tips/#alt>
- WebAIM's WCAG 2.0 Checklist for HTML documents*. 2014 WebAIM. <http://webaim.org/standards/wcag/checklist#sc1.4.3>

## OTHER GUIDES IN THE CHECKPOINTS SERIES

- Accessibility Checkpoints for Audio Materials in Online Courses*. (Spring 2014). Centre of Excellence for Teaching & Learning (CETL), Camosun College.
- Accessibility Checkpoints for Documents in Online Courses*. (Fall 2014). Centre of Excellence for Teaching & Learning (CETL), Camosun College.
- Accessibility Checkpoints for Images in Online Courses*. (Spring 2014). Centre of Excellence for Teaching & Learning (CETL), Camosun College.
- Accessibility Checkpoints for Video Materials in Online Courses*. (Summer 2014). Centre of Excellence for Teaching & Learning (CETL), Camosun College.

---

<sup>1</sup> In HTML tagging pre-HTML 5, this was material was referenced by the LONGDESC attribute in an Image tag. The LONGDESC attribute is not currently part of HTML 5 which is why we recommend providing a standard (visible) link to the extended description page as well – or in place of – the LONGDESC reference.

<sup>2</sup> Adapted from: *Top Ten Tips for making your website accessible*. webAccess. 2012. <http://webaccess.berkeley.edu/developer-information/top-ten-tips/#alt>

<sup>3</sup> Guidelines on *alt* text in *img* elements. <http://www.cs.tut.fi/~jkorpela/html/alt.html>

<sup>4</sup> *Alt text blunders*. 2014 WebAIM. <http://webaim.org/articles/gonewild/#alttext>

<sup>5</sup> *Alternative Text*. 2014 WebAIM. <http://webaim.org/techniques/alttext/>

<sup>6</sup> *Charts & Accessibility*. AccessAbility, Penn State. <http://accessibility.psu.edu/charts>

<sup>7</sup> *Charts & Accessibility*. AccessAbility, Penn State. <http://accessibility.psu.edu/charts>.