# Creating Accessible OER:

Images, Data, Multimedia

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UBC Point Grey Campus is on traditional, ancestral, unceded Musqueam Territory.

*Photo:* Musqueam Post, s?i:łqəỳ qeqən (double-headed serpent post), on the UBCV Campus

Photo by UBC Brand and Marketing

# Wiki page for this session:

Info about the session, including links to resources and a copy of the slides, can be found on this UBC Wiki page:

https://wiki.ubc.ca/Sandbox:Accessible OER Workshop



Please note that this session is being recorded

# We hope you will leave this session with:

- An understanding of specific formatting issues which can arise with certain types of visual, audio, multimedia and interactive content
- Suggestions for creating accessible images and making image-based or multimedia content more accessible
- An understanding for where to find support and resources for creating and formatting image-based content



# Question:

What techniques are you already using for creating, editing, and presenting image-based or multimedia content?

# Accessibility and open formatting: the benefits

- Students with accommodations which include specific formatting needs will work with you and the CfA when necessary, but accessible-from-the-start images benefit everyone including you!
- Designing for accessibility and using open tools/formats makes your content easier to share, edit, and re-use
- Prevents access issues TAs, colleagues, students and other users don't necessarily have access to proprietary platforms, formats, tools
- Open formats make it easier to access and edit files on different devices

#### Accommodations and Accessibility

- Accommodations often address/include accessibility concerns, but are student-specific, while accessibility is a broader design and content philosophy
- Users who can benefit from accessible design don't necessarily have accommodations (or identify as "needing" accommodations)
- Accommodations can be difficult to access; designing for accessibility helps us get around those limits of access, time, and cost
- Open resources may be used by students with varying levels of institutional support; by designing accessible materials, you help ensure broader usability

#### Formatting and Layout: The Basics

- Font type and size
- Colour, spacing, layout
- Headings, tags, alt-text and image descriptions, captions and transcripts
- Zoom and enlarge capability
- Printable, downloadable, offline access

These basics go a long way, and using built-in "accessibility checkers" both when you **create** and **publish** your content can help make sure your users can easily access the material and adjust as needed.

#### **Platforms and Accessibility**

- How open is your platform? Do users need a log-in or VPN?
- Format choices: can users print, read offline, access via mobile?
- Media choices: incorporating video, audio, images, external links?
- Input choices: radio buttons, page navigation, embedded quizzes, collab...
- Layout choices: text boxes, notes, frames/embedded documents

# When in doubt: simplify

#### Alt-Text vs Captions vs Image Descriptions

Which to use and how to implement depends upon your content:

Is it a "decorative" image or a "load-bearing" image?

STUDYING







# "Decorative" Images

- Non-content photos/illustrations, memes: alt-text/short caption will suffice
- Chapter/section headings, question marks and lightbulbs, clip art: omit
- Consider limiting decorative images and other "busy" visual elements, like inset text boxes or margin notes with graphics

Sometimes we worry that content seems too dry, but be mindful of potential layout issues and the possibility of distraction or overwhelm – fun is important but so is readability

#### Image Description vs Image Incorporation

Incorporating description directly into your text or presentation content helps all students improve their understanding and retention. You may find it helps improve your understanding and sharpens your content delivery style, as well!

Incorporating description might mean you can simplify and shorten your alt-text or captions, but your "load-bearing" images should still include alt-text, captions, and labels/titles to ensure users can easily identify, interpret, and refer back to each image.

#### Image Incorporation





Green

Yellow Red

## Equations, formulas, diagrams

- If it's an image-only file, it's **not** accessible!
- Choose your fighter: OpenMath, MathML, LaTeX, MathJax, KaTeX, Microsoft Equation Editor...
- When notation, equations, or formulae are part of a diagram, consider separating them out
- Consider providing descriptive captions for key diagrams every problem can be a "word problem"

#### Images: re-use, retrofit, or create from scratch?

It's tempting to use screenshots, but over time image quality can degrade, and your images might not be zoomable, printable, or even interpretable...and unless you've kept track of where you've "borrowed" an image from, you might be inadvertently using licensed or permission-only material

- Vector graphics are accessible and durable can save you time and frustration when re-using or updating
- UBC faculty do have access to Adobe Creative Cloud but bear in mind that your TAs and students might not be able to open/edit files
- Free/open source options: GIMP, LibreOffice Draw, Vecteezy, Inkscape

#### Accessible data: tables, charts, and more

- Use headings!
- Consider the options: simplified list formats can be more accessible
- Multi-page or landscape-layout tables are hard for *everyone* to read
- Minimize scrolling and in-row line breaks
- Check your fonts, footnotes, and symbols
- Provide direct access to data files when possible CSV, XML, etc.

## Data visualization: graphs, plots, infographics

- Colour compliance is important, but ensure colour is never the only indicator
- Think about key/legend placement
- Can users view all content without scrolling/referring off-screen?
- Consider separating labels out from images
- Consider providing a text gloss or descriptive caption highlight trends and takeaways

It's often worth asking: "Does this really *need* to be a flowchart or an infographic?"

### Captions vs Transcripts vs Descriptive Audio

- Captions: appear on-screen in sync with video; may include non-verbal audio transcription and speaker identities
- Transcripts: standalone text file including non-verbal audio transcription and speaker identities; may include time stamps
- Descriptive video: "audio subtitles," with a narrator that describes visuals and actions

Captions and transcripts won't capture non-audio content – bear in mind what may be missing. Also remember that many users benefit from captions and transcripts!

## **Specialized Content**

The following content areas might require a little special care and handling:

- Is it big?
- Is it small?
- Is it alive?

Do learning outcomes depend on sensory-based engagement – ID by colour, texture, scent, sound, fine detail? Do students need to move their own bodies, manipulate small objects, use specialized equipment?

Multiple modalities can help students engage, but some students might still need additional accommodation. Lab assistance, tactile/3D model access, alternate formatting and other support are available for UBC students registered with the Centre for Accessibility.

# Upcoming Workshops

• April 25; 11am to 12pm: <u>Creating Accessible Open Educational Resources</u> (OER): OER Tools and Platforms

Are there specific platforms or content implementations you're curious about?

# Thank You!

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