Creating Accessible OER:

OER Platforms







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:

- Insight into potential formatting issues which can crop up when sharing your content on various platforms
- Tips for evaluating and implementing accessibility options on various content platforms, and dealing with any issues which arise
- Inspiration and tools for creating accessible content that engages students, regardless of platform



Question:

What platforms and modalities are you using to share content with your classes?

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

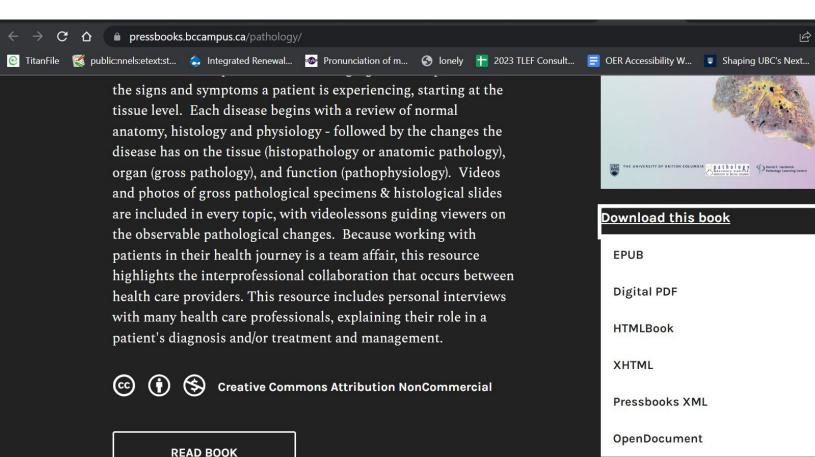
Formatting and Layout: The Basics

- 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

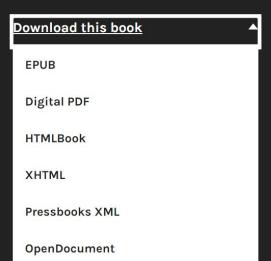
These basics go a long way, and using built-in "accessibility checkers" both when you **create** and **publish** your content can help make sure your users can easily access the material and adjust as needed.

Open Publishing Platforms

- Options include PressBooks, Wiki, WordPress, etc.
- Many have accessibility options built in; check for guides and tools
- When possible, choose platforms which allow users to change settings, select from a variety of formats, and work offline







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



Alt Text

```
<img src="dandelions.jpg" alt="">
<img src="dandelions.jpg" alt="dandelions">
<imq src="dandelions.jpg" alt="a photograph featuring a series of dandelions set against a</pre>
black background; the first one is a full puffball and the second one has all the seeds
blown off and the third one is still yellow and not a puffball yet and the fourth one is
another full puffball and the fifth one is still yellow and the sixth one is partially
blown apart and the seventh one is in a partial state of transformation and there are
floating dandelion seeds everywhere">
<img src="dandelions.jpg" alt="dandelions in the process of developing seed heads">
<imq src="dandelions.jpg" alt="dandelion flowers, seeds, and seed heads with pappus">
```

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"

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.

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.

Jupyter

- 'Classic' interface allows users to open notebooks, terminals, text files
- JupyterLab offers more options, including editors, plug-ins, interactive maps
- Many users find the JupyterLab interface easier to use and customize, but it may be less accessible for other users
- Where possible, offer options, and make source files available so users can choose the interfaces that work best for them



Jupyter Accessibility -Team Compass

Q Search this book...

Jupyter Accessibility Accessibility Docs

ACCESSIBILITY EFFORTS

Jupyter Accessibility Statement

COMMUNITY

Contribute to Jupyter Accessibility Community Calls and Events

ACCESSIBILITY RESOURCES

Useful Jupyter Accessibility Resources Mapping JupyterLab's user interface to source code

FUNDED ACCESSIBILITY WORK

Funding Accessibility efforts

Jupyter Accessibility Roadmap - CZI EOSS Cycle 4

Jupyter Accessibility Roadmap - CZI EOSS Cycle 4 - Completed Items









Jupyter audits

Accessibility Statement for JupyterLab

The current state of JupyterLab

Conformance status

Compatibility with browsers and assistive technology

Technical specifications

Limitations and alternatives

Assessment approach

Evaluation report

What the community is doing

Feedback and Formal complaints

Compatibility with browsers and assistive technology

JupyterLab is designed to be compatible with the following

Operating systems:

- Windows
- macOS
- Linux
- iOS
- Android

Browsers (mobile and desktop):

- Firefox
- Chrome
- Safari
- Chromium browsers

JupyterLab is not compatible with:

Operating systems:

Browsers (mobile and desktop):

- Internet Explorer
- Edge

Assistive technology:

- JAWS
- NVDA
- VoiceOver
- Narrator
- · Orca screen readers
- · voice control technology

Potential Non-Content Accessibility Issues

- Accessible folder/file names
- Colour contrast
- Status changes and mode changes (command/code editor)
- Navigating via keyboard (menu items)
- 'Keyboard Traps': users can get into an element but can't get out

Content generated within the environment may not be accessible (graphs)

