



## First Thing: Accessibility

Is your research accessible and inclusive to research participants? Are your research outputs accessible to those with disability? Disability is a broad term including people who are deaf or hard of hearing, blind or have low vision, have mobility impairments, have cognitive or learning disabilities, or have mental health barriers. Dr Sheelagh Daniels-Mayes and Andrew Normand bring us this post about accessibility in research.

### [Research\(ing\) for accessibility and inclusion](#)

People with disability are often forgotten in the research process. They not only respond to surveys and participate in interviews, but they are also researchers, reviewers, grant writers and so on.

Web accessibility and accessing digital content can pose many barriers when accessibility is not considered. They include surveys that can't be navigated, PDFs that can't be read through screen readers, websites that just make no intuitive sense, and forms that can't be completed.

How do you provide a peer review if you can't use the necessary website? How do you undertake a literature review if you can't read the literature? How do you watch a video or engage with social media if there is no captioning, image description or audio description?

Inaccessible digital content and websites exclude researchers and participants with a disability and consume precious time.

Providing accessibility is not scary! Here we provide some simple ways to get you started.

## Consider universal design for research

Whilst there are few scholarly articles on Universal Design for Research, [Williams & Moore, 2011](#) suggest a few simple rules:

- plan your research to include all potential participants who meet inclusion criteria.
- do not create exclusion criteria unless there is a compelling scientific rationale.
- provide flexible options for recruitment, research instruments (e.g. questionnaires), measurements, and responses from participants.
- when you do not know how to include someone with a disability, consult someone who does.
- whenever feasible, plan for participation from a distance, for example via online surveys or telephone interviews.
- when planning a location for face-to-face interaction, consider
  - the needs of nondrivers (such as a need for accessible and reliable public transportation, or inclusion of transportation for nondrivers in the research budget) and
  - building accessibility standards, especially those pertaining to people in wheelchairs.
- before research activities begin, provide an orientation to surroundings for people with vision impairment by
  - explaining the route or guiding each person from the front door to the correct room within a building and
  - giving a brief orientation to the room layout, the location of a nearby bathroom, and, if meal-times are included in research activities, a location for obtaining refreshments.

## Consider known limitations of your survey and data visualisation tools

The front end of Qualtrics surveys, where users submit data, can be made accessible, as long as you use the right types of survey questions. [Qualtrics has a list of accessible and inaccessible question types](#). An inbuilt accessibility checker is available in the Survey tab, by clicking on Tools, then Review and Check survey accessibility. The survey creator part of [Qualtrics is not regarded as accessible to screen reader users](#).

PowerBI also has a number of [known accessibility limitations](#).

The two form-creation tools that screen reader users seem to recommend are [Google Forms](#) and [Microsoft Forms](#). Amherst College has some good [information on Google Forms Accessibility](#). Microsoft has information on [how to create forms using a screen reader](#).

## Provide multiple ways of responding to surveys

Current thinking in relation to accessibility is that instead of publishing content in one format only, it is better to publish in multiple formats and let users select the format that meets their needs. For example, in addition to an online survey, an alternate version available in Word can be provided to participants who have difficulty accessing online versions. It will also come in handy for face-to-face surveys.

## Add headings to research publications

- Headings should be short and concise.
- By reading the headings alone users should get a good idea of the page contents.

## Add alt text to images and diagrams

- If the image conveys content, add alt text.
- If the image is purely decorative, add null alt text (alt="").
- When deciding whether an image is purely decorative, ask yourself:
  - Why was the image chosen?
  - Is the content in the image already described in the surrounding text?
- Don't be too brief and don't be too literal.
- Consider publishing chart data in tabular format as well.

## Publish research results in multiple formats

Most research papers begin life as Microsoft Word documents. That is great news because:

- Microsoft Word has an excellent built-in accessibility checker that can be accessed by clicking on Review and Check Accessibility.
- Word is the preferred document format for most screen reader users.
- Semantic information in Word documents, such as headings created using styles, will be carried across when exported as other formats, such as PDF.

## Learn more

- [People with disability, Australian Government Style Manual](#)

## Unimelb staff resources

- [Present from PowerPoint Live in Microsoft Teams – Microsoft Support](#)
- [Making documents accessible | Microsoft 365](#)
- [Make your Microsoft Teams meetings, calls, and messages accessible to people with disabilities – Microsoft Support](#)
- [Accessibility solutions in Microsoft training on-demand \(sharepoint.com\)](#)

## About the authors

[Dr Sheelagh Daniels-Mayes](#) is a Lecturer in Indigenous Studies and Deputy Associate Dean, Diversity and Inclusion, at the Faculty of Arts. Sheelagh is vision impaired and uses screen reader software to engage with and navigate digital content such as websites or scholarly articles, essential to undertaking her work.

Andrew Normand is Web Accessibility Lead, the Assurance Group, Business Services. [Click here to visit the University's accessibility website.](#)

*Editors' Note: The editorial team endeavours to make the 23 Research Things as accessible as possible. If you have suggestions or concerns about the accessibility of any posts in the series [please email us](#).*

*Featured image credit: Photo by SHVETS production from Pexels:  
<https://www.pexels.com/photo/young-lady-learning-sign-language-during-online-lesson-with-female-tutor-7516363/>*