

Accessible documentation: why and how

It's that time of year where those of us working in education are preparing for the coming academic year and one of these jobs is creating the new administration and learning material needed. This is a good time to have a review of the materials you have and update or replace things, especially if they have been created in a hurry to fill a gap and maybe haven't had time taken to ensure they are "accessible". I am so guilty of this hurried approach and it usually means more work in the long run as I have to revisit things and essentially redo them.

The Student Support Team here are currently working on one of their new students tomes and had contacted me for advice on how to make this mammoth document more accessible for our students. I thought it might be a good move to share some of this info. Also though, to show that things don't have to be overly complicated.

What does accessible mean and why do it?

Accessible really just means easier to use, particularly for someone who has difficulties, but generally, for everyone.

Many people find electronic documents better than printed material. They may just find it more convenient or it may

actually be easier for them to use a keyboard or other device to navigate through pages on a screen rather than turning paper pages, they may even use a computer to read documents or magnify them. Making your documents accessible means a little bit of extra time and attention but it could make a huge difference, not just for users with specific difficulties though, making your documents more accessible also makes them more usable for everyone so it's good practice.

Hints & tips on making a document accessible

Ok then here are a few simple things that you can do when you create a document which will make it easier everyone. I am specifically talking about using MS Word but the same principles can be transferred to the other two main accessible formats: HTML pages or PDF files. And... even your blog pages.

My most important guidelines are:

- Use styles and headings instead of direct formatting
- Construct tables correctly
- treat text appropriately
- white space is your friend

Styles & Formatting

Appropriate layout and formatting help any user to understand the structure of a long document. Headings are a great

indicator of each section, for people and screen readers, and subsections and bullet lists help emphasise important points. I mentioned screen readers, well following some basic rules about headers makes it a much better experience for folk using screen readers too. It helps to make navigation consistent.

You can use direct formatting to achieve the same visual result, for example making a line of text bold and increasing its size. This would make it look like a heading, but it wouldn't appear in a document map and a screen reader wouldn't interpret it as a useful navigation item. So it's good to remember that visually, you are sometimes interpreting what's there rather than seeing what is actually there.

Headings

- Use title style for the document title
- Use headings for major sections such as chapters
- Start with heading 1 for the most important headings
- Continue with heading 2 and heading 3 etc.
- Don't skip from heading 1 to heading 3 or 4 if you can possibly avoid it

Lists

If you want to display an ordered item, use the appropriate list formatting rather than manually typing it yourself. Screen reader programs can announce the beginning and end of a list that is styled in this way. Some will also announce the number of items in the list.

Example

- apples
- oranges
- strawberries

1. Cars
2. trucks
3. buses

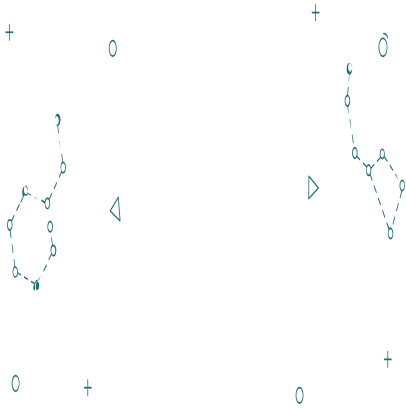
Tables

Another important thing to think about is tables and how you use them.

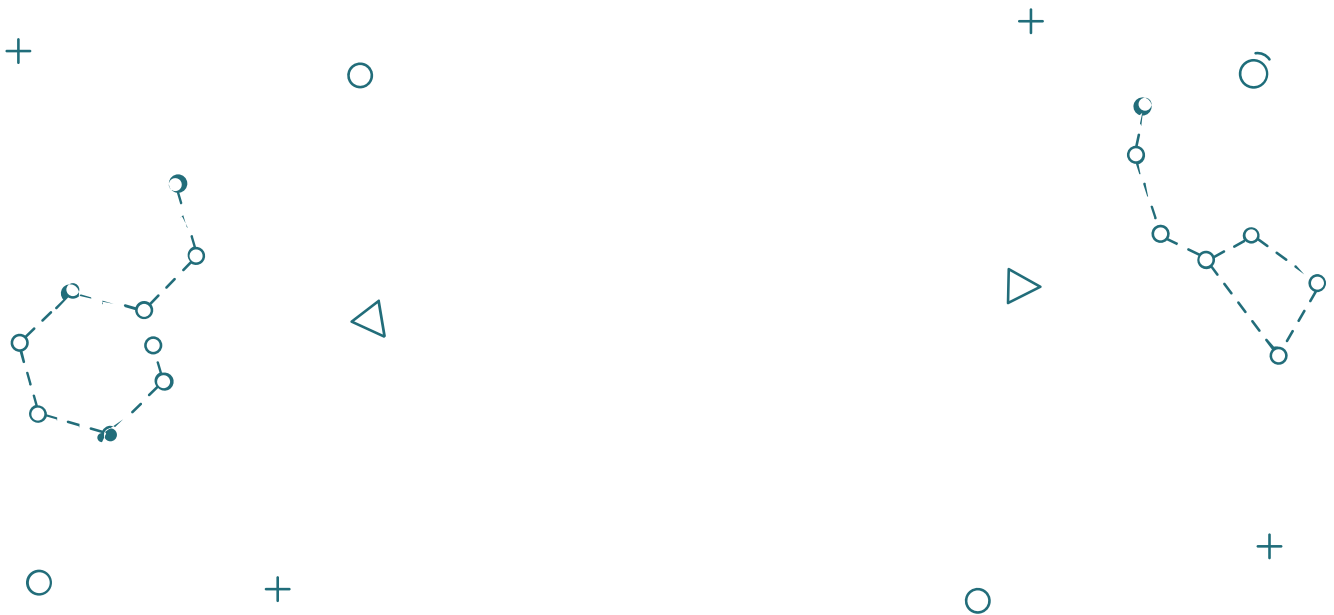
Please don't use tables to display lists. Remember that it may make the document look pretty, but it won't behave as expected when someone is using a screen reader. Tables should only be used to display tabular information. This goes for using tables to layout a document. A screen reader will read out the tables of the cell in order from top left to right and then downwards, regardless of how you want the document to be read.

Be careful using tables to show text, make sure that all the text which should be read together is in one cell.

Do it like this



Don't create a table this way



Otherwise, a screen reader will read the text as:

Jack and Jill
 Old King Cole
 Went up the hill
 Was a merry old soul
 To fetch a pail of water.
 And a merry old soul was he.
 Jack fell down
 He called for his pipe
 And broke his crown
 And he called for his bowl
 And Jill came tumbling after.
 And he called for his fiddlers
 three.

Font

It's a good idea to keep fonts to around a size 14 but definitely no smaller than 12. This will help users with visual impairments. It is also good to avoid what's called a non-serif font like Times New Roman. The little tails on the letters make it harder for some people to read. Think of it as the more ornate the font, the more people will find it harder to read.

I tend to stick to:

- Arial
- Verdana
- Calibri
- Tahoma
- Helvetica

Use dark text against a pale background, this is best for users with specific learning difficulties such as dyslexia, but it's good to know that a dark grey works better for most people than black. Black text on a white background is a very dramatic contrast and can cause blurriness for some people. However, just to contradict myself, some users with visual impairments may find a pale font on a dark background easier to read. The importance is that there is sufficient contrast between the text colour and the background colour. For example, black font on a cream or buff background is a good contrast and is usually popular amongst those with difficulties s is dark grey text on white. I use purple paper with black text.

Backgrounds should always be plain.

Some individuals may require printed documents on different coloured paper as this can assist those with Irlen Syndrome (Scotopic Sensitivity Disorder), Dyslexia, and other specific learning difficulties. See my aforementioned need for purple paper.

When aligning font, don't justify text as this makes the spaces between the words uneven and difficult to read. The spacing it creates is called rivers and can pull the readers' focus away from the text.



Always align left.

This was a very brief tour of some accessibility hints for your documents, but you could go investigate if you'd like to get into this in more detail. Speak to your disability officer and ask for their advice for your particular workplace or institution.