

Writing for People with a Print Impairment and Checking for 'plain English' readability scores

Introduction

Access to information is important for full participation in community life. If we only provide information in the traditional print format, we are knowingly excluding a large section of the population who are not able to access information in this way. Under the Disability Discrimination Act 1992, information must be provided in an accessible format to people with a disability in the course of providing goods and services.

Many people are not able to read the printed information we are all bombarded with daily. More than 49% of the population have some form of vision impairment and in Victoria 24% of those people are legally blind. Regular formatting of printed information is clearly not suitable for people who have a vision impairment, or people who have difficulty holding documents or turning pages due to a physical impairment.

Other people who have a print disability include people with:

- Dyslexia
- Learning disability
- English as a second language
- Literacy issues or
- Early dementia.

Furthermore, with the wide variation in literacy and numeracy in the community, providing information in the usual printed format only, may exclude a large number of people from receiving and understanding information. Imagine not being able to read books, newspapers, magazines, phone and electricity bills, instructions on how to use household appliances, holiday brochures, personal and business letters or the TV guide.

General Guidelines

The following guidelines contain basic tips about how to prepare written information in more accessible formats (including large print). This document has been prepared using the Vision Australia Guidelines. The tips below cover: how the text should look, the most appropriate formatting, the overall look of the document and how to provide alternate formats when requested.

The text:

Text size - As a general rule, documents must have a text size of no less than 12 points (as demonstrated in this text). People with a vision impairment often have many tools to assist them to enlarge the text, especially whilst using a computer, so as a rule of thumb size 12 is the minimum size (only if it is one of the recommended fonts).

Font type - Do's and Don'ts.

Do use simple fonts that do not have 'serifs' (feet) as they are more easily read than 'fancy' fonts whether they are in minutes, reports, books, correspondence or signs. Be careful - even some fonts without serifs like 'Calibri' are on the not recommended list. The two most used and recommended fonts are Arial and Tahoma. (See the full list at the end of this document)

Don't use fonts that are difficult to read and in common use which include: Times New Roman, Garamond or Courier, all of which use serifs – for example:

- This is a sentence using a size 12, Times new Roman and has a 'serifed' font - the letters all have 'feet' or 'hooks' on letters. There are three main issues – size 12 is smaller than a standard font like Arial, the lower case 'G' is a similar shape to a numeric 8. The other issue is with the lower case 'L' which is identical to a numeric 1. If you blur your vision, you will see that it is very hard to distinguish g from 8 or numeric 1 from lower case l (L)
- This is a sentence using a non serifed font – the letters are simpler in design and easy to read. Compare the difference with the lower case G's and L's. For example: g is different from 8 and 1 is different from l.

Upper or Lower Case - Do's and Don'ts.

Do use 'sentence case' - titles and headings should be in upper and lower case

To Emphasise Headings and Titles use '**bold**' formatting, or a different non serifed font or a larger text size. You can use other options like contrasting to grab attention or look stylish. (See more under highlights or headings).

Don't USE CAPITALS FOR A WHOLE LINE OF TEXT FOR A HEADER.

Formatting:

Paragraphs - Do's and Don'ts.

Don't indent the first word or the first few letters to indicate a new paragraph. A person with a vision impairment looks for the first word of the next paragraph on the margin and may skip to the next line if a space is used.

Do use an extra line space and maintain the blocked format of the left margin of the text.

Columns and hyphenations - Do's and Don'ts.

Don't use columns – people with limited vision read from left to right all the way across the page. Creating 2 columns for newsletters etc can be confusing when navigating the start and finish of lines. The same principle applies to hyphenations. If you have to use columns e.g. in tables, use light background colours or borders to alert people that there are columns.

Do make all text in one column and uncheck the hyphenation box in your formatting tools.

Spacing between lines - Many people with impaired vision have difficulty finding the start of a new line in a paragraph. Increase the spacing between lines by at approximately 20% of normal spacing. The default line spacing for most word processing packages is usually set at 'single' spacing and will have to be adjusted. For example, setting the line spacing setting to 1.15 lines (or 1.5) in Word will achieve an acceptable increase in line spacing. This document is spaced at 1.15 lines.

Margins - Left and right hand margins should be the same. This means that print on both sides of each single page will be aligned.

Alignment - Do's and Don'ts

Do align text to the left-hand margin with ragged right hand alignment – this means that the spacing is consistent and easy to read.

Don't 'justify' text as the spacing varies per line and is more difficult to read for people who have central vision loss, especially on signage.

Highlighting or headings - Do's and Don'ts

Do highlight a section of the text by using a border or using **Bold** or by using a different non-serif font.

Don't use *Italics or underlining as they clutter the text* making it more difficult to read.

How the document looks:

Contrast - There should be a high luminance contrast between the text and background of the text. Luminance contrast is the difference in the amount of light reflected by the two colours. The recommendation is that there should be no less than 80% contrast from the letters to the background. For example:

- Black lettering on white background is universally accepted.
- **White or yellow lettering on a black background is acceptable as long as the text is emboldened.**

It is important to remember that colour and luminance contrasts are different factors. The use of red text on a green background is an example of a colour contrast that provides little luminance contrast and is quite inaccessible to people with colour deficiency (colour blindness). Consider how the coloured document would look photocopied in black and white – that will give you an idea about luminance and the % of contrast.

Watermarks - Don't ever use them!

Paper Surface - Do not use gloss surfaces for signage or printed information. These surfaces cause problems with glare.

Providing Alternate Formats.

This terminology is about providing information in other formats for people who may have very limited or no vision at all. Many people in this category either have a computer equipped with screen reader or other adaptive technology or depend on audio versions of the written version. Alternate formats that need to be considered when catering for all levels of vision impairment include:

Large Print:

For those people who do not have adaptive technology and who request a 'large print' document, it is recommended that the text be in size 16 point, with some organisations recommending a large print standard of 18 point. It may be advisable to check with the users of large print documents to try to meet their individual needs with regard to text size. Generally with large text versions, graphics or photos are left off.

Audio and video:

Provide audio options with 'fast forward' options to skip each topic that is not of interest to the listener. For YouTube or any other visual options, provide closed captions or at least subtitles.

Website:

Organisation website need to be compliant with the international W3C standards for web design. Any documents attached to the website must be in 'Word' format as most screen readers cannot read PDFs. There are some PDFs that are readable and unless you are aware of the difference err on the side of 'just don't use them'.

In Conclusion

Having created information in accessible or alternate formats, it is recommended that you promote that availability of those formats widely (in accessible format of course!) and create a register of people that would like to have different formats of specific information as necessary.

It is also recommended that you provide alternate phone options for contacting your organisation other than calls with a pre-recorded electronic "push 2 to enquire about..." as it excludes people with a hearing loss or who are deaf. Avoid using a typical 1300 number for the same reasons. People who have a hearing impairment cannot use the land line phone and use the National Relay Service or the outdated TTY service (telephone typewriter). The solution is to provide a generic mobile phone number for SMS use only. Response conversations can be made via SMS. People with a hearing impairment know they can use faxes or emails but sometimes like all of us, they just like to 'talk' to someone and not wait 24 hours for responses via emails.

Further information about fonts:

Vision Australia Guidelines recommended fonts:

The displays of fonts below are all in size 12 and the sentence demonstrates how the font actually appears. The main culprits in non compliant fonts are the lower case G's and L's which are similar to the numerals 8 and 1 respectively. You will see the comparisons below each description. They are in order of recommendation:

Arial

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L')

Tahoma

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L')

Verdana

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L')

Corbel

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L'). (The size is slightly smaller than Arial.)

Gautami

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L'). This font has a natural wider spacing that looks more like a 1.5 space. (The size is slightly smaller than Arial.)

Malgun Gothic

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L'). This font has a natural wider spacing that looks more like a 1.5 space.

MV Boli

In this font the lower case g is acceptable and doesn't look like an 8. The numeral 1 is different from the lower case l ('L'). This font has a natural wider spacing that looks more like a 1.5 space. Although this font is on the 'ok' list - its italic version is the least recommended font.

AVOID these fonts as they either have inconsistent point size of bad G's or L's even though they don't have serifs:

Calibri

In this font the lower case g is not acceptable because it looks like an 8. However the numeral 1 is different from the lower case l ('L').

Browalia New

This font is not recommended because the size 12 is not a compatible size for a 12 pt.

Gill Sans

In this font the lower case g is not acceptable because it looks like an 8. The numeral 1 is the same as the lower case l ('L').

Checking your documents for Plain English - 'readability' in Microsoft Word

Its easy and already installed in your Word program! A simple set up to check your spelling, grammar and readability which works out your levels of plain English for the document you have written. The scores then tell you if your work is easy for people to understand or not. You should try to check the readability scores for every written document you produce. Statistics say that the average literacy level in the community is equivalent to year 8 education therefore it is important to cater for your readers.

Setting up readability scores

You can check individual paragraphs and sentences as well as the finished document. This lets you identify any problem areas causing the poor scores.

How to set up Microsoft Word readability statistics:

1. Go to your Word document
2. Go to review tab
3. Click spelling and grammar icon
4. Click on options then proofing
5. Check box: 'check grammar with spelling'
6. Check box: 'show readability stats' then OK
7. Click 'recheck document'
8. Dialog box will appear that says 'spelling & grammar check complete', click OK
9. Dialog box will appear that says 'readability stats' (as shown on the next page)
10. Look at the bottom of the box for Flesch-kincaid grade level score and pray that your document scores 8.0 or less!

On the next page is a screen shot of a dialog box with a set of scores. The section that is important is the last one called 'readability'.

Readability scores

There are three readability scores. Readability bases its rating on the average number of syllables per word per sentence and the amount of 'passive' sentences. If your score is too high, edit your words to reduce those 2 factors.

Reading ease score

Writing for people with a print impairment

- This rates text on a 100-point scale – the higher the score, the easier it is to understand the document
- Your score must be at least 50 for most standard documents.

Grade level score

- This rates text on American school grades – for example a score of 8.0 means that an eighth grader can understand the document. The highest, or worst, possible score is 12. If it is more than 12 then you are expecting your readership to have an equivalent of a tertiary level of education.
- Your score must be no higher than 10 for most standard documents (year 10 equivalent).

Readability Statistics	
Counts	
Words	1468
Characters	7434
Paragraphs	120
Sentences	86
Averages	
Sentences per Paragraph	1.4
Words per Sentence	11.9
Characters per Word	4.8
Readability	
Passive Sentences	2%
Flesch Reading Ease	58.6
Flesch-Kincaid Grade Level	8.0

Meeting the scores

How you can improve your readability scores:

- use shorter, less academic words
- use 'active' (not 'passive') sentences
- reduce the use of acronyms
- avoid jargon
- write as you would speak.