Biotext

Readability – more than short words

Whether a text is readable depends on a combination of the length, familiarity and complexity of words, sentences and paragraphs. These tips will help you understand and achieve genuine readability for your audiences.

Word length

Average word length can give a rough measure of how difficult or easy the text will be for the average reader. The average word length of your text is calculated by finding the total number of characters in all the words and dividing by the total number of words.

But longer words are not always harder to understand. Some longer words will be understood by most readers because they are familiar words; for example:

> different [9 letters] information [11 letters]

And some short words may be unfamiliar to readers and so hard to understand; for example:

> jib [3 letters] wrest [5 letters]

Word difficulty

The 'difficulty' of a word is often about how familiar it is to the reader. It is hard to say exactly which words are likely to be familiar to adult readers, because everyone will have encountered different words in their day-to-day life.

One measure of the familiarity of words is their frequency in common reading material. Lists of common words and their frequencies are available from international reference databases such as CELEX, or dictionaries for learners of English as a second language. You can use these resources to check the vocabulary range of your text.

Technical words

Sometimes you will need to convey technical ideas to general audiences – for example, health advice or computer instructions. Readability will then depend on how familiar a reader is with the terms as well as the subject area.

To make sure general readers can understand text that includes technical terms:

- limit the number of technical terms by paraphrasing or using alternatives
- explain any potentially unfamiliar or technical terms, or highlight key words and their definitions in boxes
- add upfront explanations to make text clearer – for example:

> Being 'incontinent' means the person can't hold in urine (wee) or faeces (poo). If the person you care for is incontinent, you will need to plan carefully before you travel with them.

Sentence length

Sentences that are long or complex are difficult for readers to process, especially if the grammar and structure are unfamiliar. The average sentence length of your text is found by counting the number of words in your text (only those in sentences) and dividing by the number of sentences. But, just as for average word length, this is only a rough measure of how difficult or easy the text will be to read.

The ideal average sentence length depends on the audience. In general, the broader the audience, the shorter the sentences should be: an average of 15 words per sentence for text for a general audience and no more than 25 words per sentence for more technical text.

This does not mean that shorter is always better. Even very short sentences can be less readable if they chop the material up too much.

For example, a paragraph of 4 very short sentences may actually be less readable and convey less meaning than a paragraph of 2 longer sentences:

> It was hard to sleep. I had a job interview. I was nervous. I really wanted the job.
>
> compared with
>
> It was hard to sleep because I was nervous. I had a job interview in the morning, and I really wanted the job.

A mix of shorter and longer sentences that are connected is the best way to keep readers engaged. Also, connecting words (called conjunctions) like 'and', 'because' and 'although' can provide crucial meaning to a sentence.

Sentence order

The human brain processes sentences more easily when the subject matter is presented in a meaningful order.

> Longer sentences that keep adding more words and more details before the reader reaches closure with the final full stop can be difficult to understand. [25 words]
>
> Longer sentences can be difficult to understand, because they keep adding more words and more details before the reader reaches closure with the final full stop. [26 words]

Although the first sentence is shorter than the second, it may be more difficult for readers because its main idea (longer sentences are difficult to understand) is broken up by other words that are less important. Readers have to detour through the less important words before coming back to the main statement to finish the sentence. In the longer version, the main idea is delivered in full at the start of the sentence, and other information is added after.

Text formats

The structure and formatting of text on a page can affect readability. Most readers find formats that have shorter paragraphs and generous use of white space easier to read, and pages of long, densely spaced paragraphs harder to read.

Readability checkers

Several readability checkers are available to help you assess the readability of your text. Some are more sophisticated than others. Many offer a grade score to suggest what age or level of education is needed to read the text.

Caution

Take care when using any readability checking system, because none of them give you the full picture of how readable a piece of text is, or how well it suits your audience's reading skills. If possible, test your text with your audience.

Readability grades and targets

Reading grades and common audiences are:

- grades 4 to 5 – children, adult readers with intellectual disability or cognitive problems
- grade 6 – children, readers with lower levels of education and literacy
- grades 7 to 8 – mixed adult audiences, including competent and less-competent readers; grades 7 or 8 are probably the most common targets for general and online content
- grade 9 – as for grades 7 to 8, with a few more technical terms and concepts
- grades 10 to 12 – technical and professional audiences
- grades 13 to 16 – technical and professional audiences, university-level content.

Your readability target should be based on your understanding of the audience and their reading ability.

Your readability target will also depend on whether you have a single type of target audience or a mix of types. If you have only one type of audience, the readability level of the text can be tailored to that audience. If you have several audiences, you may need to target the audience with the lowest reading ability, or include summaries or explanations for technical content.

Take extra care in setting reading targets for readers with English as a second language. First-language English users are familiar with thousands of English words, idioms and sentence structures, encountered in everyday conversation and written material. The language skills of second-language users may be more limited. For these audiences, take care with word and sentence length, sentence structure, and especially the use of idioms and metaphors. You may also want to think about using visual methods to convey information to these audiences.

Your readability target will also need to consider the difficulty of the content. Reaching lower reading grades with complex or technical content is especially challenging because some terms cannot (and should not) be simplified. Instead of simplifying complex terms, aim to define them using plain language. Identify the key messages you want your audiences to understand and build your content around these. Consider where summary and visual elements will improve audience understanding.