



Making text as easy to read as possible

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When teachers at whatever level produce written material for their students to read, there are many things to think about. There would be little point in producing material that the learners simply could not read. Several chapters in Wray (2020) report research into this aspect of reading, usually known as ‘readability’. There is, however, one aspect of classroom text which tends to get neglected in readability studies, yet is almost self-evidently crucial to learners’ reading, and that is the phenomenon which is generally termed ‘typography’. This has traditionally been an area of study for graphic designers and printers, but there are several typographical features which teachers might also profitably take account of. These can be summed up in several key rules concerning

the use of text in the documents you might produce for students (Williams, 2014; Lidwell et al., 2010).

Think about fonts

There are several issues to consider in choosing the fonts you might use to write material for students. One of these can loosely be described as “font personality”. Fonts do seem to have personalities, as can be seen in the brief list below.

pessimistic (*Chiller*)

fancy (*Strada*)

conservative (**Bookman Old Style**)

childish (*Curly M1*)

important (**Britannic Bold**)

professional (Microsoft Sans Serif)

So, what is the rule here? Know your audience, know your document’s purpose, and pick a font that matches

your audience’s expectations and your document’s purpose. Get this rule wrong, and you may have ruined the entire document.

Most documents look better if you use more than one font. But few look good if you use more than three. So, what do you need to remember? No matter what the document is, try using two fonts – one font for the headings and another font for the body text. It will make your document so much more attractive to read than just using one font.

Good Example

See how using two different fonts makes this paragraph look nice? Two non-conflicting fonts can make a document go from bland to professional.

Bad example

See how using the same font twice doesn’t have the same appeal as the paragraph above?

When you use more than one font in a document, you should try to contrast font families. Try to avoid using two fonts that look like each other. So, pick two fonts that come from different font families — serifs (like Times New Roman), sans serifs (like Arial), script (anything that looks like handwriting), or decorative. Make sure the fonts look very different from each other.

You also, of course, need to pay some attention to font size. Because 12-point font was the Microsoft Word default for so long, many of us began to think that 12-point was the best size for reading. But the picture seems to be more complex than this. Research has suggested (e.g., Katzir et al, 2013) that, for young beginning readers, reducing font size seemed to hinder their reading comprehension but, for older students (10 to 11-year-olds), it had the opposite effect. Research by Bernard et al (2003) gave some detailed insights into the effects of popular typefaces and their sizes. The results suggested that:

- At 10-point size, Verdana was the most popular font
- At 12-point size, Arial was the most popular font
- At 14-point size, Comic Sans was the most popular font.

In terms of reading time, it seemed that content written in Times New Roman and Arial was read much faster in comparison to other fonts. It was also observed that Tahoma at font size 10 seemed to be the most legible, followed by Courier at font size 12, and Arial at font size 14. Thus, it does not seem to be the case that a bigger font size

necessarily means faster reading and better legibility.

One thing that will certainly make what you write harder to read will be to write it in ALL CAPITALS. This is because we tend to perceive words as shapes as well as groups of letters/sounds. But when words are written in ALL CAPITALS, the shapes go away — the words all turn into rectangles. This actually slows down reading (as well as giving the reader the impression that you are yelling at them).

Small caps, like all caps, have a readability problem when used for large sections of text. However, small caps can be used for abbreviations so that undue attention is not drawn to them.

Sarah used to work for the BBC but now she works for ITV.

Think about lines and spacing

Line length refers to the width of a line of text on a single line. If a line length is too long, text becomes difficult to read. Line lengths can be long if the font size is large, but if you use a small font size (say, 10pt), your line length should not be more than about 3½ inches. Calculate an ideal line length by taking your font size, doubling that number, and creating a line length about that long in picas (there are six picas in one inch). So, if you have a 12-point font, for example, your line length would be about 24 picas, or four inches. Note that the default in Microsoft Word is 11-point Calibri with 1 inch margins on 8½ inch wide paper. This means the line length is 6½ inches, which is too large.

$$\text{Ideal line length in inches} = \frac{\text{Font Point Size} \times 2}{6}$$

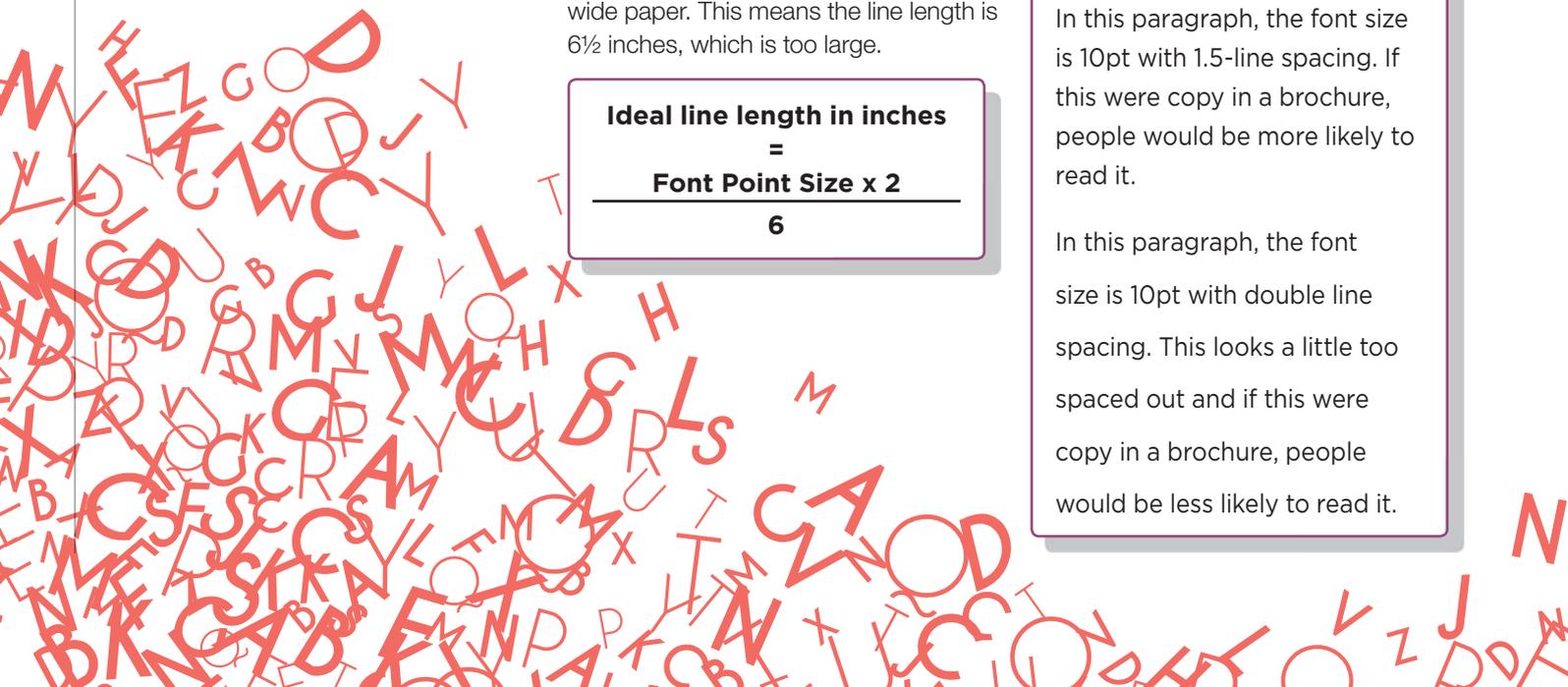


Line spacing, also called leading, is the space between lines. Most often, fonts are designed with line spacing slightly larger than their point size (If you have a 10-point font the default is probably 12-point leading). Typically, that looks crowded with large bodies of text. Consider increasing line spacing to improve readability (but do not increase it too much!).

In this paragraph, the font size is 10pt with single line spacing. It looks a little crowded. If this were copy in a brochure, people would not like to read it as much.

In this paragraph, the font size is 10pt with 1.5-line spacing. If this were copy in a brochure, people would be more likely to read it.

In this paragraph, the font size is 10pt with double line spacing. This looks a little too spaced out and if this were copy in a brochure, people would be less likely to read it.





Think about reader friendliness and legibility

Reader friendliness refers to how well large quantities of text (entire paragraphs) read. It is affected by font size, font type, leading (space between lines), kerning (space between letters), and line length. For greater reader friendliness:

- Use serif and sans serif fonts – usually a sans serif font for headings and a serif font for the body text.
- Do not use script or decorative fonts – unless you have very special reasons (e.g. if you were designing a Christmas card).
- Increase leading / line spacing a bit – but not too much.
- Adjust kerning, if necessary.
- Use an ideal line length.

Legibility refers to how well short bursts of text (like a logo or name) read. For words whose understanding is very important, legibility is critical. On your CV, for example, you will want to use a typeface in which your name is legible. Note that legibility is affected by the actual letters in a word. Sometimes one word will read perfectly fine in a particular font, but another word will be difficult to read in the same font. If a name or word is uncommon or spelled uniquely, do not choose a typeface that is difficult to read.

The following font looks elaborate but is legible because the word is fairly familiar.

Annie

The following word, however, although in the same font, is not as legible because the word itself is unfamiliar.

Jessyka

A change of font will make this word perfectly legible.

Jessyka

Both kerning and letter spacing refer to the process of adjusting the spacing between characters.

Here the letter spacing is set to normal.

Here it is set to expanded.

And here to condensed.

The font used above is Lucida Console, which is a monospaced font, that is, each letter is exactly the same width, as on a manual typewriter. Notice the slightly larger gaps between letters such as l and i than between the other, broader letters. It is more usual nowadays to use a proportional font, in which there are thin letters and wider letters. Here are the same three lines in Verdana, a proportional font.

Here the letter spacing is set to normal.

Here it is set to expanded.

And here to condensed.

It should be clear that a proportional font, set with normal line spacing, is marginally easier to read. The odd letter spacing around l and i has disappeared.

Kerning refers to the ways in which one letter takes account of an adjacent letter, to improve legibility. The effects can readily be seen in the following words:

Tea
Tea

CQH

You should see that in the first word the initial T does not overlap at all with the following e, which creates a space between them which appears different from the space between the e and the a.

In the second word, through kerning, the T is now closer to the e and in fact its cross bar overlaps slightly. This allows the spaces between all the letters to appear even. This evenness generally promotes greater ease of reading.

Care needs to be taken, though, with the degree of kerning which is used. Look at the following example:

WAR
WAR
WAR

Here we have three versions of "WAR" in the same font but with different degrees of kerning. The top version has no kerning at all, which creates a rather odd gap between the W and the A. The middle version has some kerning and is perhaps the easiest of the three to read. The bottom version has probably been over-kerned for this character combination: the tightly spaced "WA" does not balance with the "AR" pair so the gap between A and R looks odd.

See how ugly and utterly tacky the hyphenated words in this otherwise wonderfully constructed paragraph look? Avoid the pitfall of making your reader unnecessarily hang in suspense. Plus, getting rid of the hyphens will remove some of the visual noise.

Line breaks and hyphens can also cause problems. Line breaks refer to when a word at the end of a line is broken into two and hyphenated to lead the reader to the next line. The reality is that line breaks are bad for readability and are often just plain ugly. Adjust your word processing program to get rid of them if you can (see above).

Think about highlighting

Highlighting text is an important part of readability and scannability. The general rule, though, is never to highlight more than 10% of a page. If everything is highlighted, nothing becomes highlighted. Also, only use two or three highlighting techniques at once. Do not, in other words, use colour, italics, boldface, font change, size, and underlining all at the same time.

Highlight with *italics*.

Highlight with **bold**.

Highlight with **font change**

Highlight with underlining.

Do not use **too many** techniques **at once**.

Consider using old style figures

Old style figures refer to numbers that are written with elements that go above and below the baseline (the imaginary line upon which text sits). Just like letters.

123456789 (A font such as High Tower Text does this automatically).

Often, if you use old style figures, numbers will blend in better with the text.

Look at the two examples below. The second uses normal numbering, which has the effect of making the numbers stand out from the text, simply because they are higher.

The first example uses old style figures, all the same height as the surrounding letters and using normal letter size descenders. Because these figures have similar dimensions to the letters, they stand out less. This blending makes the text slightly easier to read.

SINCE THE BEGINNING OF THE Cambrian period 540 million years ago, oxygen levels have fluctuated between 15% and 30% by volume. Towards the end of the Carboniferous period (about 300 million years ago) atmospheric oxygen levels reached a maximum of 35% by volume.

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Conclusion

As we have seen, there are a number of typographical features which will affect whether your students will find the text you write for them easy or difficult to read. In most cases, it will be the content of a text that you wish them to focus on. So, it is important that visual aspects of text do not get in the way of this.

References

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