

How to make your documents and presentations more readable and accessible

DRAFT for comments by Dominik Lukeš, Dominik.Lukes@ctl.ox.ac.uk, CC BY
Last updated on 27 May 2022

Overview	2
Five principles of readability	3
How people read: strategies and approaches to inform document creation	5
Readability through the lens of cognitive load	7
10 simple things for more readable documents	8
3 steps to simpler language	11
10 simple things you can do to increase PowerPoint impact	13
Accessibility for users of screen readers or magnifiers	18
Appendix 1: PowerPoint and Word Templates	20
Appendix 2: Visual examples of text formatting	21
Appendix 3: Examples of simplified language	24
Appendix 4: Jargon and acronyms	26
Appendix 5: Examples of slide formatting	30
Appendix 6: How do we know? [IN DEVELOPMENT]	32
Full table of contents	35
License	38

Overview



Space

Increase speed and reduce visual stress



Chunks

Make it easier to scan and navigate



Guides

Indicate what is important



Information structure

Important things first, background last



Simple language

Shorter is better for processing

Five principles of readability

1. Space

Increasing the amount of space makes it **easier to process**. The more space around the text, the **more attention** is available for content.

Easiest ways of increasing space:

- Larger font
- Increased line spacing
- Shorter lines

Avoid formatting that distorts or crowds text:

- Underlining
- ALL CAPS
- *Italics of for whole paragraphs*
- Centred paragraphs
- Justified blocks of text without hyphenation

Also, **avoid table borders** being too close to the text.

2. Chunks

Splitting text into smaller **chunks makes it easier to process**. Readers can both **skim and scan the text more quickly**. And readers under stress will find the text **more approachable**.

You should **break**:

1. text into **sections and subsections** marked with headings
2. lists into **bullet points** or **numbered lists**
3. blocks of text into **shorter paragraphs**

You should do this even for **one-page documents**.

3. Guides

Adding guides to text **helps processing**. The reader has to spend less time decoding the text and **focus on what you want to say**. Here are some types of guides you can add:

1. **Bold key phrases** in long paragraphs
2. Provide an **outline summary**
3. Add **icons** to help recall
4. Summarise instructions with **flowcharts** and mind maps
5. Use **images** to illustrate

4. Information Structure

Give the **important information first**. Very often we start with background information that the reader just skips. You do not have to leave it out, just put **background second or last**. Types of information that can come later:

1. Welcomes and thanks – readers don't notice when it's not there
2. Historical or institutional background
3. Information that is obvious from the title or the layout of the page (this can often be left out completely)

Take your cues from journalistic texts. Start with the new information.

Important! This does **not** mean that you should not include important information. You should not deprive readers of the information that could be useful. But put it at the end or in a linked document.

Three tips for **better information structure**:

1. Move **background last**
2. Organise into **smaller chunks** – shorter paragraphs, more subsections
3. **Show the outline** of the text

5. Simple language

There are many things people say about simple language. They are all useful, but you can simplify your sentences with **three simple-to-follow rules**:

1. Use **shorter sentences** (keep your average between **15-20 words**)
2. **Address the reader** when appropriate (use *you* or commands such as in this list; *you can find* vs *users can find*)
3. **Use verbs** instead of nouns when possible (*when you arrive* vs *upon arrival*)

How people read: strategies and approaches to inform document creation

We learn reading on stories. Stories are read from start to finish; we don't skip around. We read a story, we remember it and we go on to read the next story. But **most documents are not stories**, and they are not (and should not) be read that way. See **Appendix 6: How do we know?** [IN DEVELOPMENT] for more details and list of references.

5 assumptions about reading for document creators

When you are creating a new document, you should **assume most readers will**:

1. not read your document from start to finish
2. not read every word of your document
3. skim first to decide about whether or how much to read
4. return to the document to find specific information
5. read many other documents just before or after

People **read strategically**. In fact, many students struggle with their reading because they do NOT read strategically. This means you should **format your documents to support strategic reading**.

3 reading strategies documents should support

The **most common strategy** by most readers for most documents is to **read it later** which often translates to **never** reading it. But once a reader starts, they use one of **three strategies or modes** to read:

1. **Comprehensive** or Linear – reading from start to finish
2. **Skimming** – reading for gist
3. **Scanning** – reading for specific information

Note: Many texts require deep or close reading. But these are even more effective when they are supported by skimming or scanning. Comprehensive, linear reading without the aid of skimming and scanning may in fact stand in the way of close reading.

Comparing reading strategies and their support needs

Mode	What readers do	How to support them
Comprehensive	<ul style="list-style-type: none"> • Read from start to finish • Never skip • Used for reading stories or magazine articles 	<ul style="list-style-type: none"> • Start with the important information first • Create a document with a logical structure or narrative arc • Use repetition more often to create a more cohesive reading experience
Skimming	<ul style="list-style-type: none"> • Read for gist and general understanding • Decide whether more reading is necessary • Jump to the end first • Read table of contents • Read only first sentences of paragraphs • Read only highlighted information • Randomly jump around text for key words 	<ul style="list-style-type: none"> • Include a table of contents • Label sections with headings • Provide graphical summaries • Use lists • Highlight key words and phrases • Shorten paragraphs
Scanning	<ul style="list-style-type: none"> • Read to find specific information • Often used on second or third pass • Often used to get to passages for close reading 	<ul style="list-style-type: none"> • All the strategies for skimming assist scanning • Make sure table of contents is clickable • Headings should be marked with heading styles • PDFs should be bookmarked • All text should be searchable

Readability through the lens of cognitive load

Cognitive load is the **amount of information** placed in working memory. Working memory **limits what you can reason about**.

Working memory is **limited to a small number of chunks**. Any additional elements added to it will reduce what a person can do.

But the **individual chunks** in the working memory **can be very large** and rich. The richer, the better. That's why the best way to reduce cognitive load is to **increase the number of meaningful chunks**.

What increases cognitive load

- Hard to read text
- Distractions
- Irrelevant images
- Unasked for movement
- Noise

What decreases cognitive load

- Shorter chunks
- Meaningful chunks
- Meaningful structure
- Visual guides to structure
- Combined text and audio

When is cognitive load stressed

Situational demands

Stresses on cognitive load can be **situational**. Processing takes more effort when you are:

- Tired
- Busy
- In a new environment

Permanent demands

Many disabilities or other conditions that are not a disability place an additional load on working memory.

- Visual impairment
- Dyslexia
- Attention disorders
- Mental illness (stress, anxiety)
- Non-native language

10 simple things for more readable documents

Using the five principles, you can improve the readability of your document in 10 steps.

Visual examples are in **Appendix 2: Visual examples of text formatting**, also see **Appendix 1: PowerPoint and Word Templates**.

1. Headings

Break documents into section using headings and subheadings. You must mark headings with styles such as Heading 1, Heading 2, and so on.

2. Bullet points

- Break lists into bullet points.
- Number the list if you often refer to individual points.

3. Paragraphs

Break text into shorter paragraphs. That will greatly increase ease of scanning. Your readers will also not be put off by a big block of text.

4. Bold key phrases

Bold key phrases in longer paragraphs. This has been shown to **increase comprehension**.

Do not bold entire sentences or paragraphs. **Blocks of bold text are more difficult to process visually.**

5. Background last

Start with the key new information. Do not leave out important background but put it last.

Sometimes all you have to do is take the first paragraph and put it second or at the end.

Do not remove important information, but documents often start with welcomes and introductions that are essentially decorative. You can easily **skip decorative text**. Decorative text just gets in the way.

6. Show outline

Show the outline of the text. You can use:

- A table of contents,
- A list of bullets with the key point,
- Icons with key words.

7. Shorter sentences

Shortening sentences will increase readability of your text more than any other advice on simple language. Keep the average between **15 and 20 words per sentence**.

Some other language tips:

- Address the reader rather than talk about them.
- Use verbs rather than nouns when possible.
- Avoid repeating the same word in lists.

8. Line length under 70 characters

Shorter lines are easier to scan. It is not the physical length but the number of characters. Keep your lines between **50 and 70 characters**.

Also, people who use **magnifiers** will find it easier to follow them.

You may not always have control over this but **increasing the font size** achieves the same effect.

9. Font size and line spacing

You can increase speed of reading by up to 10% if you simply make the font bigger and increasing line spacing. This should really be the first thing you do but you may not always have control over this.

- **Ideal line spacing** 1.2-1.5
- **Ideal font size** varies with type face – use minimum 12pt but more is often appropriate. For example:
 - Handout: Arial 14pt
 - Long expository text: Times New Roman 13pt
 - PowerPoint slides: Arial 28pt or more
 - Email: Calibri 14pt

10. Graphics use

Graphics can increase comprehension and ease navigation. They also make the text more approachable.

However, beware of overusing graphics by simply adding too many decorative elements that have little relevance to the content.

Good uses:

- Icons added to lists
- Charts used to summarise
- Images used to illustrate

Avoid:

- Superfluous images
- Images not related to the text
- Very busy and distracting images or icons

3 steps to simpler language

You can find many guides to simple language or Plain English. They give useful advice but many people find it difficult to implement this advice without additional training.

These three steps are intended to give you a usable guide that will give you the most benefit. More suggestions are available in Appendix 4. Another source of useful advice with relevant examples is: [How to write in plain English - Help - University of Kent](#).

More examples in **Appendix 3: Examples of simplified language**.

1. Shorten sentences

Long sentences take more time and effort to process both visually and grammatically. There is no ideal length of a sentence but keeping your average length under 20 words is a sensible rule of thumb.

Why are long sentences more difficult to process:

1. It is more difficult to visually scan to the important point
2. You have to use more complex grammar to connect sentences
3. There is more to keep in memory

Outside of fiction or academic text, long sentences often lead to misunderstanding. This is because readers who are skimming the text may skip an important connection that changes the meaning.

How to shorten sentences:

1. Simply divide the sentence up at the conjunction such as 'but' or 'and'. It is ok to start a sentence this way.
2. Instead of using 'and', simply start a new sentence.
3. Instead of connecting two sentences with 'because', simply start the next sentence with 'this is because'.
4. Convert long sequences to lists. For example, this list could be a sentence.
5. Rephrase the sentence with a command (a plain verb without 'to').

Certain words may be a **useful signal** that your sentence is unnecessarily long or that it contains complex structure:

- While
- Whether
- However

When not to shorten a sentence:

1. You need to express a very complex idea and expect your readers to engage with it deeply.
2. Splitting the sentence up would create more language to process.

But not all your sentences have to be short. And short sentences may not always be appropriate for what you want to say. Sometimes your

You can **check the length of your sentences** using a free online tool called [Hemingway editor](#).

2. Address the reader

Addressing the reader is a subtle signal that what you are saying applies to them. This makes them more likely to pay attention.

There are three ways of addressing the reader:

1. Use **you** instead of a **noun** that describes the reader (for example, “you must wear a mask” instead of “attendees must wear a mask”)
2. Use a **direct command** rather than constructions such as ‘you should’ or ‘can you’ (for example this list).
3. Use **we** instead of the name of the institution (‘we will help you’ instead of ‘our organisation will help you’)

3. Use verbs instead of nouns

Written English uses more nouns than verbs. This is not a problem as such. But because of this we writers of official documents often use **nouns to describe actions**. This take **longer to process** and readers may feel **less likely to do the action**.

Complicated nouns are particularly common in **academic** and **bureaucratic** English. They are nouns like: Provision, Availability, Attendance, Failure. When a reader sees words like this, they are **more likely to disengage** because the text feels more removed.

Here is an **example** of a sentence that used **three nouns** to describe actions:

Failure to achieve compliance will result prosecution.

You can change it to verbs very easily:

If you fail to comply, you will be prosecuted.

But the added benefit of using verbs, is that it puts the writer into a more direct mode of speech. It is then easy to change the sentence to be even more relevant to the reader.

If you do not follow the rules, we will take you to court.

10 simple things you can do to increase PowerPoint impact

Visual examples in **Appendix 5: Examples of slide formatting**. Also see **Appendix 1: PowerPoint and Word Templates**.

1. Text size

Set your text minimum to **28pt for Arial**. Other fonts may need bigger point sizes. Everything else will follow.

Text can be slightly smaller when presenting online. But if you're presenting **text under 18pt**, don't expect the audience to read it.

Larger text means you can:

- Break text over multiple slides.
- Use fewer bullet points
- Create a summary slide

2. Short lines

Do not have lines of text run across the whole slide. Keep to under **30 characters** per line.

You can get shorter lines by:

1. Increasing the font size
2. Using two columns
3. Using SmartArt

3. Bolding of key phrases

Bold key phrases in any block of text such as quotation. You should even bold key phrases or key words in **longer lists**.

Avoid bolding complete sentences or whole paragraphs. Too much bold text is more difficult to process visually.

4. No text over images

Do not place text over an image. Always, **add a solid background** to text if the slide has an image in the background.

You can make the **text background slightly transparent**. No more than 25%.

You can also increase the **transparency of an image** to make it less distracting.

5. Remove logos from every slide

You do not need a logo on every slide. Keep any branding to **only the title and final slide**. Logos on every slide introduce another element of potential distraction.

6. Convert bullets to SmartArt

Use SmartArt instead of bullets. Right-click on any list and choose: **Convert to SmartArt**.

Some benefits of SmartArt:

- Provides **visual division**
- Makes it easier to **indicate relationships**
- Forces **shorter text**
- Transforms **logical structure to visuals**
- Makes it easier to **combine text and icons**

When using SmartArt avoid:

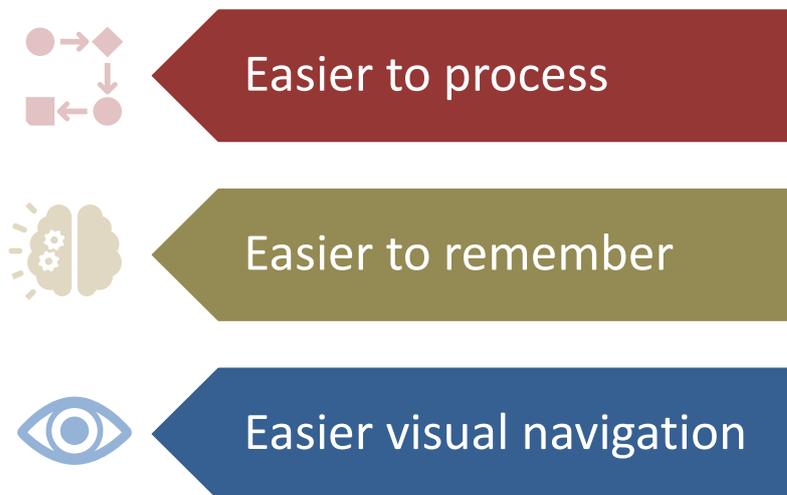
- Small text
- Too much text
- Very busy and complicated lists

SmartArt tips:

- Use Design Ideas to convert lists to SmartArt
- Edit text in the SmartArt outline and not graphics
- Convert SmartArt to shapes for further editing

7. Add icons and or colours to lists

Adding icons or colours to lists makes them easier to process and remember. Icons also provide visual division.



You can use SmartArt to make lists with icons. This also works in Microsoft Word.

Important! Never use **colour as the only way** to get important information. For example, 'items marked in red are compulsory'. Some other ways you can include differentiating information are:

- Bolding
- Shapes or outline styles
- Asterisk
- Consistent position
- Graphics

8. Use animations to draw attention

Animations can be very distracting. **Use them minimally.** But they can be very useful to **draw interest** to particular elements of the slide.

Example of animations that support processing:

1. **Arrow Wipe** or **Fly in** to **point** to an element of an image
2. **Circle Wipe** to highlight text
3. **Colour change** of a slide element

Tip: You can add more than one animation to the same element.

Your aim while presenting is to **draw the viewers' attention** to what you are talking about at the moment in such a way that it supports their understanding. Animation can be helpful but can also draw attention away.

9. Make images full screen

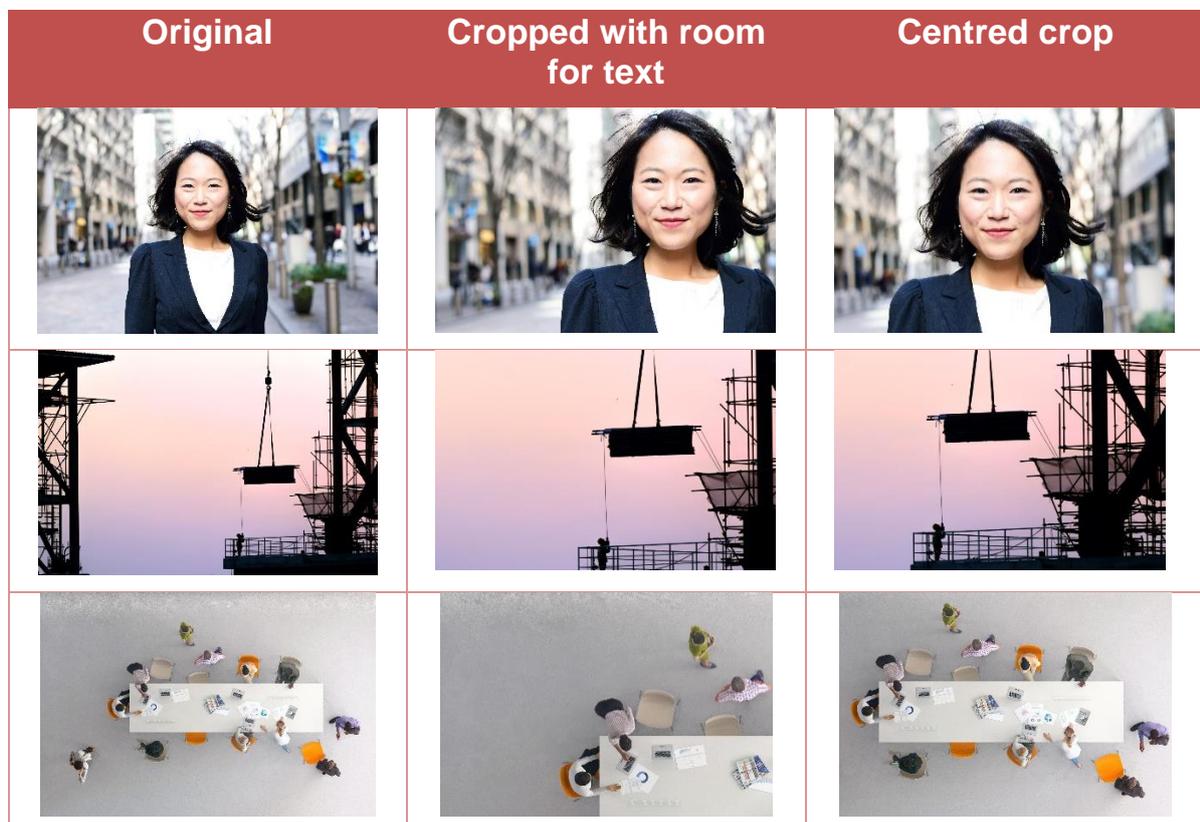
You can make **images more impactful** if you stretch them across the whole screen. This will achieve several things:

1. Zoom in on what is important
2. Force you to use less text
3. Make the slide look more modern

Cropping and zooming

Many people are afraid to crop parts of images. **But cropping is an essential technique** for amplifying the message that is used by artists and professional photographers.

Cropping an image can also leave **more room for text**. Here are three examples of different ways of cropping images, using Microsoft stock photos.



Transparency to reduce overload

Images covering the full slide can be overwhelming. You should set their **transparency to between 30 and 50%**. This is particularly important when you place text over the image, even if the text has a solid background.



10. One bullet, one slide

Think of the **purpose** of the PowerPoint slide: It is to **help your audience process** what you are saying while you speak. This means that you should only show things relevant to what you're speaking about at the moment.

If you have a slide with **5 bullets** and will spend at least **1 minute talking** about each bullet, you should consider this:

1. A **title slide** introducing the topic
2. Individual **slide for each** bullet
3. **Overview slide** showing the summary of all points

Accessibility for users of screen readers or magnifiers

All of the top 10 readability tips will increase the overall accessibility of your documents. You must also take into account people who may use screen readers or magnifiers.

Word

1. Always mark sections with **Heading styles**
2. Use the **list for bullets** – do not use bullet pictures or just plain paragraphs
3. Mark first **row of tables** as header
4. Indicate **Alternative Text** for images even if it is only marked as decorative
5. **Do not** place text in **text boxes** or tables simply to add borders (you can put borders around text directly)

Use **Accessibility Checker** to get more details about your document.

PDF

1. Always start from an **accessible Word** document
2. Never print to PDF, use **Save as PDF** in Word
3. Go to Options on save and choose to convert **Headings to PDF bookmarks**
4. **Add title** to the Word document info when exporting to PDF

PowerPoint

1. Use **template layouts**
2. Every slide must have **a title** with text for navigation (it can be hidden from view)
3. Use **tables** for very complex relationships
4. All images must have an **Alternative text** indicated even if it is to mark them as decorative
5. Save **PowerPoint as PDF** for SmartArt accessibility

Use **Accessibility Checker** to get more details about your document.

You should also consider providing **an alternative to slides**. Slides are primarily a visual medium to support the processing of presentations. Providing **a structured handout** with an outline of the key points and references, can be more useful for somebody with a screen reader than adding image descriptions.

Links

What to do

When sharing **links in documents, emails, or webpages**, make sure the content of the link is clear without context. Avoid:

- [Click here](#)
- <https://link.com/page.htm>

Use the [name of the page](#) instead and make it clickable by adding a link to it.

Why

- Screen reader users often navigate directly by link and 'Click here' does not tell them what is in the link.
- When the screen reader reads out the whole long link, it is very difficult to understand where it leads.
- Dyslexic readers are confused by the additional visual noise

Appendix 1: PowerPoint and Word Templates

You can get a head start on making better documents and presentations if you use one of the templates.

[Download the templates \(Oxford SSO required\)](#)

You can change them to better suit your needs.

PowerPoint template

The accessible PowerPoint outline template gives you a head start by predefining:

1. Title layouts with minimal text and Oxford images
2. Section title layouts with a title and a space for an icons
3. Title only slides for images
4. Slides with hidden titles (titles moved outside view)
5. Slides with title and text without bullets
6. Slides where the text can serve as a title
7. Traditional slide layout for backward compatibility

All slides on the template have **a title** for accessibility. This title is hidden but you can see it via **View > Outline view** or by **zooming out**.

You should only use predefined layouts. You can move elements around but do not add blocks of text outside the predefined fields.

Word template

This template makes it easier to get started. It has predefined:

1. Headings 1-5 using normal fonts
2. Default style size font size 13pt (Arial)
3. Default line spacing 1.25
4. Minimalist header for first page
5. Page numbers in the footer

Appendix 2: Visual examples of text formatting

In this appendix, we look at a simple paragraph from the GOV.uk page on [Holiday entitlement - GOV.UK \(www.gov.uk\)](http://www.gov.uk) that has been unchanged for many years.

Note: this example is taken from a well structured page, using simple language. It is not always feasible to simplify every single paragraph. In general, **GOV.UK is an example of best practice**. Another example of a page using all these principles successfully is [Carer's Allowance: How it works - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

We will look at how you can improve readability by applying the principles described here in 5 steps.

1. Text as experienced by dyslexic readers

This example shows cramped text that illustrates how **people with dyslexia often experience reading**.

An employer can choose to offer more leave than the legal minimum. They do not have to apply all the rules that apply to statutory leave to the extra leave. For example, a worker might need to be employed for a certain amount of time before they become entitled to it.

Seeing **text like this, increases:**

- Visual tiredness
- Stress, anxiety and confusion
- Reluctance to read

All of these contribute to lack of understanding.

2. Benefits of space

Simply increasing the font size and line spacing gives the reader a much more of a sense of reading ease.

An employer can choose to offer more leave than the legal minimum. They do not have to apply all the rules that apply to statutory leave to the extra leave. For example, a worker might need to be employed for a certain amount of time before they become entitled to it.

3. Benefits of highlighting key words

We can make it even easier for the reader to skim and scan the paragraph by bolding key phrases.

An **employer can choose to offer more leave** than the legal minimum. They do not have to apply all the rules that apply to statutory leave to the extra leave. **For example**, a worker might need to be employed for a certain amount of time before they become entitled to it.

This makes it much more approachable and easier to process.

4. Benefits of chunking text with bullet points

An even more powerful aid to processing is breaking the text into smaller chunks.

For this paragraph, breaking it into three bullet points makes it much easier to process. Bullet points can be useful even if the text is not a list such as in this case.

More leave possible

- Employer can choose to offer more leave than legal minimum
 - Extra leave does not require same rules as statutory leave
 - Example: Extra leave may only be available after a worker has been employed for some time
-

Another example of using bullet points to get the benefit of easier scannability:

For this course you are required to submit one individual assignment, weighted at 100%. There will be a choice of two questions; you should answer only one of the two. The assignment should be a maximum of 3,000 words including the main body of text, tables, figures, and diagrams, and excluding appendices, footnotes, and the full list of references at the end of the document.

You can see that the reader is less likely to misunderstand the assignment.

For this course you have to submit one individual assignment weighted at 100%.

- There will be a choice of two questions; you should answer only one of the two.
 - The assignment should be a maximum of 3,000 words
 - The word count includes
 - the main body of text,
 - tables, figures, and diagrams,
 - The word count excludes
 - appendices
 - footnotes
 - full list of references at the end of the document.
-

5. Benefits of combining bullet points with bolding

Even with bullet points, bolding key phrases adds another level of guidance for the reader. It is more readable even with a smaller font.

More leave possible

- Employer **can choose to offer more leave** than legal minimum
 - **Extra leave** does **not require same rules** as statutory leave
 - **Example:** Extra leave may only be available after a worker has been employed for some time
-

This can be seen even in the second example:

For this course you have to **submit one individual assignment** weighted at 100%.

- There will be a choice of **two questions**; you should **answer only one** of the two.
 - The assignment should be a **maximum of 3,000 words**
 - The **word count includes**
 - the main body of text,
 - tables, figures, and diagrams,
 - The **word count excludes**
 - appendices
 - footnotes
 - full list of references at the end of the document.
-

Appendix 3: Examples of simplified language

Benefits of rephrasing text to address the reader

Using the example above, we can see that rephrasing text to address the reader changes the focus (underlined):

More leave possible for you as an employee

- Your employer **can choose to offer more leave** than the legal minimum
- **Extra leave** you receive does **not require same rules** as statutory leave
- **Example:** Extra leave may only be available to you after you have been employed for some time

You can see another example of rephrasing a policy paragraph. Things that were changed are underlined.

Version with abstract nouns:

The purpose of the assignment is to provide candidates with the opportunity to demonstrate that they have understood the key concepts and frameworks covered in the module and are able to synthesise and analyse this material, including examples, to construct a coherent argument.

Version that addresses the reader:

This assignment will give you an opportunity to demonstrate that you have understood the key concepts and frameworks covered in the module and that you are able to synthesise and analyse this material, include examples, and construct a coherent argument.

Benefits of shortening sentences

The example above can also be improved by **splitting it into two sentences**:

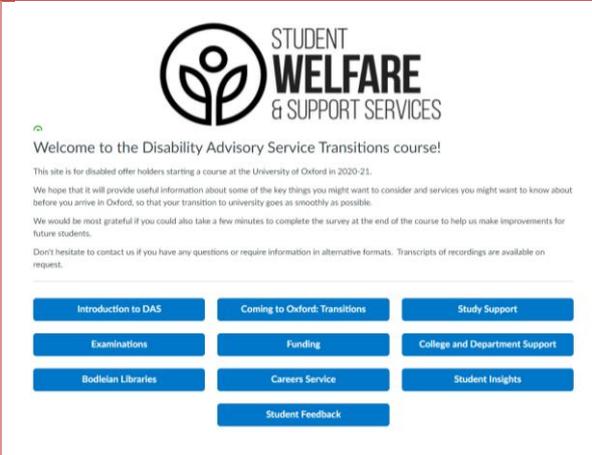
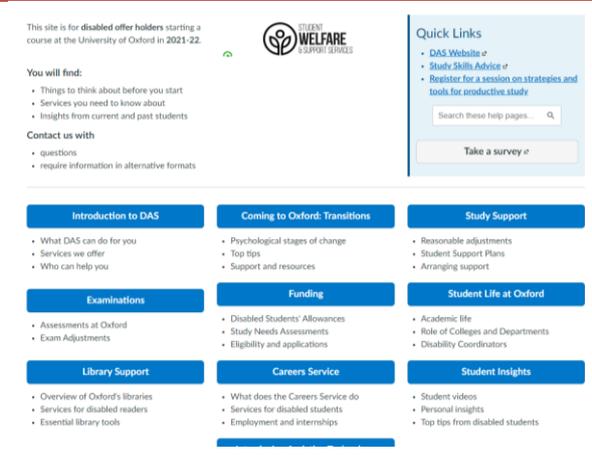
This assignment will give you an opportunity to demonstrate that you have understood the key concepts and frameworks covered in the module. You will also show that you can to synthesise and analyse this material, include examples, and construct a coherent argument.

The reader of the modified version is more likely to focus on all parts of the assignment.

Benefits of reducing decorative text

Decorative text often adds a processing burden without adding any useful information. Here is an **example of a page redesign** where a prominent **welcome message was removed**. It was replaced by bullet points outlining key information and quick links.

Notice, that the amount of text on the redesigned page did not change. In fact, **words were added to the section links** to give readers a sense of what they can expect on the page.

With decorative text	Without decorative text
	

Appendix 4: Jargon and acronyms

Avoiding jargon and acronyms is common advice for simple readable language. Unfortunately, this is not easy advice to put into action. Whether acronyms or jargon are appropriate will depend on the subject and the audience. This is why this guide only addresses this in the appendix.

Jargon and difficult words

Thinking about the audience

What is a difficult word or jargon varies by the knowledge and experience of the reader. For a **professional group**, not using jargon would make communication more difficult. It would lead to misunderstanding.

In famous cartoon [xkcd: Up Goer Five](#), uses only the 1000 most frequent words in English to describe a space rocket. It would be **easier for even lay readers to learn basic jargon** such as ‘escape hatch’ than to read an entire article like this.

The **problem with using jargon** in public communication is not that the reader does not know it but that it is used unthinkingly. It is possible to use jargon in such a way that the reader’s knowledge is built up as they read.

Types of audiences and their needs

Type of audience	Audience needs	Strategies for using jargon
Professional in-group	Jargon is part of the vocabulary expected of every member	Use jargon freely
Professional out-group (e.g. related profession)	Jargon is part of the vocabulary but many aspects of the specialist jargon used in the text may be unfamiliar	Use jargon freely but consider: <ul style="list-style-type: none">• Does same jargon have different meaning in different subdisciplines?• Are some terms specific to your subdiscipline? Take extra care to define what you mean by specialist terms.

<p>Prospective members of professional in-group</p>	<p>Likely unfamiliar with most jargon but are expected to learn.</p>	<p>Use jargon in such a way that the readers' knowledge is built up gradually.</p> <p>Provide frequent definitions and glossaries.</p> <p>Consider the stage of learning of the reader.</p>
<p>General public</p>	<p>Unfamiliar with jargon of your profession and discipline.</p> <p>Will not engage with your text for long enough to be expected to learn or look up jargon.</p>	<p>Avoid jargon if at all possible. Exception may be terms expected to be known by the educated public (e.g. genetics).</p> <p>Repeat the term earlier than might seem natural rather than referring back to it with a pronoun.</p> <p>Pay special attention to in-group language you may have forgotten is not commonly used in non-professional setting.</p> <p>Pay attention to when you are making wording decisions based on what others in your group will think. Focus on understanding by the audience not satisfying individual preferences by others in your group.</p> <p>Check understanding with a reader outside your group.</p>

Note: Avoiding jargon is a balancing act with **no perfect solution**. Even with care, many professional writers may not realise that terms they use daily in informal conversations are actually jargon.

Also, **jargon is usually not the biggest problem** the reader will face. Often, dense paragraphs with long complex sentences will be more of a problem. In well-formatted texts with good information structure, jargon will be much easier to deal with.

Acronyms

Acronyms are a **type of jargon**. They are often used as part of the vocabulary of a professional group. All the tips about jargon apply here, as well. Here are some additional considerations.

Pros and cons of acronyms

There are many **good reasons to use acronyms** to make texts more readable. Acronyms:

- **Reduce** amount of repetitive text
- Make sentence with **complex structures** easier to process
- Use **more familiar form** of a name to a group

In fact, many acronyms just become words for groups of people who use them often. They become part of the vocabulary that is expected of a member of the group. It would be doing your readers a disservice not to use the acronym even if the reader is new to the group.

But when you use an acronym, be aware that **acronyms cause accessibility problems**:

- **Readers with dyslexia** struggle with processing unfamiliar words (letter sequences)
- **Screen readers** pronounce acronyms unpredictably, sometimes confusing them with words
- **People outside your group** have to learn them as jargon

How to use acronyms

There are **no easy-to-follow rules** for acronyms in all contexts. Texts on the same subject will have to use them differently **depending on the audience**.

Type of audience	Types of document	Strategies
Internal group	Internal communications such as emails or memos Guides and policy documents (not aimed at new members)	You can use common acronyms freely without providing the full text anywhere. Make sure that new members of the group can access the acronyms.
Professional group with external members	Academic publications Reports aimed at professional bodies	Make sure all acronyms are explained at least once in the text (in longer texts, spell the acronyms out occasionally to assist

		<p>readers who may be scanning)</p> <p>If there are many new acronyms, provide a glossary</p> <p>Some exceptions may be well-known acronyms in a particular group (DfE, DoJ, EU)</p>
Public communication	<p>Website for potential employees</p> <p>Public relations documents</p> <p>Public guidance on professional matters</p>	<p>Avoid the use of acronyms altogether</p> <p>When acronyms are necessary for readability provide an explanation (ideally with a link to a glossary)</p> <p>Do not just spell out the acronym once, spell it out again after a few paragraphs (or use the full term with the acronym in brackets)</p>

Ad-hoc acronyms

Writers in academic settings will often make up **acronyms for a repetitive term** that occurs frequently. Often, they do this for two **contrasting terms**. For instance, in this text, I might have chosen J, A, AHA for jargon, acronyms, and ad-hoc acronyms. Or IG for internal group and PG for professional group with external members.

This is **almost never worth it**. Your readers are much less likely to remember the meaning of the acronyms from paragraph to paragraph than you, the writer. Remember, a paragraph that may take you 15-30 minutes to write will take your reader about 1 minute to read. The reader has much less time to become familiar with it.

And even when an ad-hoc acronym is used frequently, the reader must often refer back to its original definition. In a long text, this may be time-consuming. As a result, your readers are **more likely to confuse the terms** and misunderstand the text. Or they will just abandon the text altogether.

Appendix 5: Examples of slide formatting

One bullet, one slide

Instead of keeping a single slide with a title and six bullets, this example shows:

1. **Introductory slide** (instead of a title at the top of a slide)
2. **Summary slide** introducing the 6 ideas in short phrases (can be at the end)
3. **Six slides** – one for each bullet – with text highlighted in bold and an icon added to each.

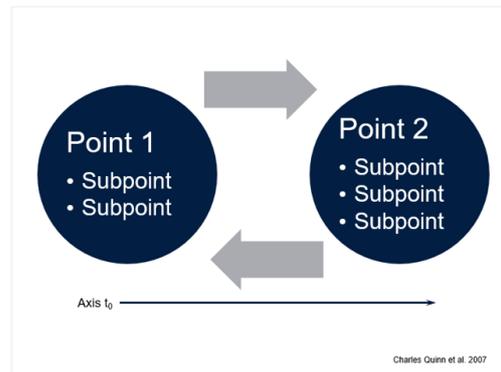
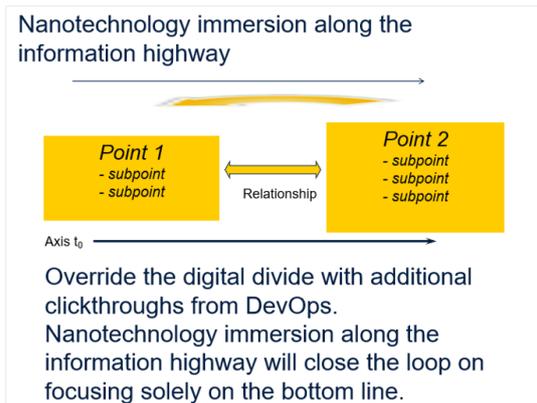
<p>Collaborative thinking to further the overall value proposition</p> <ul style="list-style-type: none">▮ Leverage agile frameworks to provide a robust synopsis for high level overviews.▮ Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition.▮ Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.▮ Bring to the table win-win survival strategies to ensure proactive domination.▮ At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution.▮ User generated content in real-time will have multiple touchpoints for offshoring.	<p>Collaborative thinking</p>	
	 <p>Leverage agile frameworks to provide a robust synopsis for high level overviews.</p>	 <p>Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.</p>



Remove extraneous text from images

The slide combining title, graph and a description is changed by:

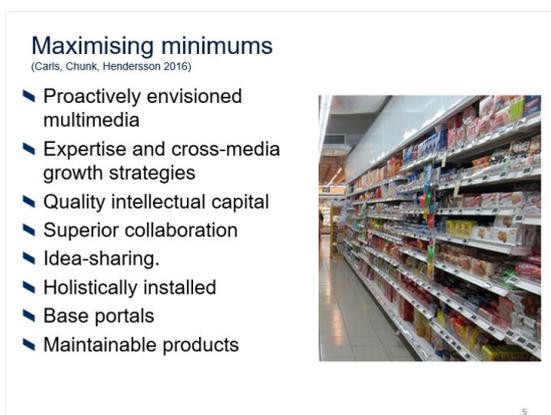
1. Remove title
2. Remove description (simply talk about the graph and include it in the notes)
3. Zoom in on the chart and increase font size and emphasize the relationships



Zooming in on images

Full-screen images are better than images next to text when possible. You almost never lose any important information.

Multiple bullets can be left simply for narration, slide notes, or individual slides.



Appendix 6: How do we know? [IN DEVELOPMENT]

Readability is a difficult subject to get reliable data on. It is difficult to define exactly what a readable text is and how to measure it. Various measures have been introduced:

- Speed of reading
- Comprehension
- Subjective perception
- Text interaction

But each of these has many confounders and it is not always possible to make good predictions about specific texts and individual readers. It is not also clear how well readability principles translate between different types of texts.

Because no unified measures exist, there are few systematic reviews of the literature on readability. There are many studies that generally point in the same direction, but it is difficult to estimate the magnitudes of impact.

Evidence for text formatting

The key interventions supported by evidence are:

1. Font size (Rello and Baeza-Yates 2017; Rello, Pielot, and Marcos 2016; Simas da Rocha et al. 2020)
2. Line length (Nanavati and Bias 2005)
3. Bolding of key words (Rello, Kanvinde, and Baeza-Yates 2012)
4. Using colours (Simas da Rocha et al. 2020; Jandreau, Muncer, and Bever 1986)

Evidence for text structure

1. Structured text is easier to read (Kendeou and van den Broek 2007; Schwarz and Flammer 1981).
2. This has been well supported by eye tracking studies on web reading by [Norman Nielsen Group](#).

Evidence for simple language

1. Using frequent and short words (Rello et al. 2013; Dale and Chall 1949)
2. Limits of readability formulas (Bruce, Rubin, and Starr 1981)

Evidence for reading strategies

Strategic reading is one of the key recommendations for improving academic reading. There is good evidence that it improves comprehension and information retention. (Voss and Silfies 1996; Kendeou and van den Broek 2007; Bogaerds-Hazenberg, Evers-Vermeul, and Bergh 2021)

References [PARTIAL]

- Bogaerds-Hazenberg, Suzanne T. M., Jacqueline Evers-Vermeul, and Huub van den Bergh. 2021. 'A Meta-Analysis on the Effects of Text Structure Instruction on Reading Comprehension in the Upper Elementary Grades'. *Reading Research Quarterly* 56 (3): 435–62. <https://doi.org/10.1002/rrq.311>.
- Bruce, Bertram, Andee Rubin, and Kathleen Starr. 1981. 'Why Readability Formulas Fail'. *IEEE Transactions on Professional Communication* PC-24 (1): 50–52. <https://doi.org/10.1109/TPC.1981.6447826>.
- Dale, Edgar, and Jeanne S. Chall. 1949. 'The Concept of Readability'. *Elementary English* 26 (1): 19–26.
- Jandreau, Steven M, Steven J Muncer, and Thomas G Bever. 1986. 'Improving the Readability of Text with Automatic Phrase-Sensitive Formatting'. *British Journal of Educational Technology* 17 (2): 128–33. <https://doi.org/10.1111/j.1467-8535.1986.tb00502.x>.
- Kendeou, Panayiota, and Paul van den Broek. 2007. 'The Effects of Prior Knowledge and Text Structure on Comprehension Processes during Reading of Scientific Texts'. *Memory & Cognition* 35 (7): 1567–77. <https://doi.org/10.3758/BF03193491>.
- Nanavati, Anuj A., and Randolph G. Bias. 2005. 'Optimal Line Length in Reading - A Literature Review'. *Visible Language* 39 (2): 120–44.
- Rello, Luz, and Ricardo Baeza-Yates. 2017. 'How to Present More Readable Text for People with Dyslexia'. *Universal Access in the Information Society* 16 (1): 29–49.
- Rello, Luz, Ricardo Baeza-Yates, Laura Dempere-Marco, and Horacio Saggion. 2013. 'Frequent Words Improve Readability and Short Words Improve Understandability for People with Dyslexia'. In *IFIP Conference on Human-Computer Interaction*, 203–19. Springer.
- Rello, Luz, Gaurang Kanvinde, and Ricardo Baeza-Yates. 2012. 'Layout Guidelines for Web Text and a Web Service to Improve Accessibility for Dyslexics'. In *Proceedings of the International Cross-Disciplinary Conference on Web Accessibility*, 1–9.
- Rello, Luz, Martin Pielot, and Mari-Carmen Marcos. 2016. 'Make It Big! The Effect of Font Size and Line Spacing on Online Readability'. In

Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems, 3637–48.

Schwarz, Maria N. K., and August Flammer. 1981. 'Text Structure and Title—Effects on Comprehension and Recall'. *Journal of Verbal Learning and Verbal Behavior* 20 (1): 61–66. [https://doi.org/10.1016/S0022-5371\(81\)90301-7](https://doi.org/10.1016/S0022-5371(81)90301-7).

Simas da Rocha, Bruno, Cassia Garcia Moraes, Lucas Miyake Okumura, Fernanda da Cruz, Lisana Sirtori, and Emilia da Silva Pons. 2020. 'Interventions to Reduce Problems Related to the Readability and Comprehensibility of Drug Packages and Labels: A Systematic Review.' *Journal of Patient Safety*, April. <https://doi.org/10.1097/pts.0000000000000619>.

Voss, James F., and Laurie Ney Silfies. 1996. 'Learning From History Text: The Interaction of Knowledge and Comprehension Skill with Text Structure'. *Cognition and Instruction* 14 (1): 45–68. https://doi.org/10.1207/s1532690xci1401_2.

Full table of contents

Overview	2
Five principles of readability	3
1. Space	3
2. Chunks	3
3. Guides	3
4. Information Structure	4
5. Simple language	4
How people read: strategies and approaches to inform document creation	5
5 assumptions about reading for document creators	5
3 reading strategies documents should support	5
Comparing and supporting reading strategies chart	6
Readability through the lens of cognitive load	7
What increases cognitive load	7
What decreases cognitive load	7
When is cognitive load stressed	7
Situational demands	7
Permanent demands	8
10 simple things for more readable documents	8
1. Headings	8
2. Bullet points	8
3. Paragraphs	8
4. Bold key phrases	8
5. Background last	9
6. Show outline	9
7. Shorter sentences	9
8. Line length under 70 characters	9
9. Font size and line spacing	10
10. Graphics use	10
Good uses:	10
Avoid:	10
3 steps to simpler language	11
1. Shorten sentences	11
2. Address the reader	12
3. Use verbs instead of nouns	12
10 simple things you can do to increase PowerPoint impact	13
1. Text size	13
2. Short lines	13
3. Bolding of key phrases	13

4. No text over images	13
5. Remove logos from every slide	14
6. Convert bullets to SmartArt	14
Some benefits of SmartArt:	14
When using SmartArt avoid:	14
SmartArt tips:	14
7. Add icons and or colours to lists	15
8. Use animations to draw attention	15
9. Make images full screen	16
Cropping and zooming	16
Transparency to reduce overload	17
10. One bullet, one slide	17
Accessibility for users of screen readers or magnifiers	18
Word	18
PDF	18
PowerPoint	18
Links	19
What to do	19
Why	19
Appendix 1: PowerPoint and Word Templates	20
PowerPoint template	20
Word template	20
Appendix 2: Visual examples of text formatting	21
1. Text as experienced by dyslexic readers	21
2. Benefits of space	21
3. Benefits of highlighting key words	22
4. Benefits of chunking text with bullet points	22
5. Benefits of combining bullet points with bolding	23
Appendix 3: Examples of simplified language	24
Benefits of rephrasing text to address the reader	24
Version with abstract nouns:	24
Version that addresses the reader:	24
Benefits of shortening sentences	25
Benefits of reducing decorative text	25
Appendix 4: Jargon and acronyms	26
Jargon and difficult words	26
Thinking about the audience	26
Types of audiences and their needs	26
Acronyms	28
Pros and cons of acronyms	28
How to use acronyms	28

Ad-hoc acronyms _____	29
Appendix 5: Examples of slide formatting _____	30
One bullet, one slide _____	30
Remove extraneous text from images _____	31
Zooming in on images _____	31
Appendix 6: How do we know? [IN DEVELOPMENT] _____	32
Evidence for text formatting _____	32
Evidence for text structure _____	32
Evidence for simple language _____	32
Evidence for reading strategies _____	33
References [PARTIAL] _____	33
Full table of contents _____	35
License _____	38

License



This work is licensed under a [Creative Commons Attribution 4.0 International License](#). You can share it or modify without asking for permission as long as you provide attribution.

This license does not apply to the stock images used, which are used under the [Microsoft Premium Content License](#) and cannot be used or redistributed outside this work.