# Inclusive and Accessible Learning Materials Guidelines.

These guidelines contain information for use when creating digital and paper based learning materials in order to ensure they are as accessible to as broad a range of students, staff and visitors as possible. Accessible learning materials are central to inclusive teaching, assessment and support practices. By adhering to these simple guidelines, good standardised practice can be established across the institution ensuring students are not disadvantaged and benefit from their introduction.

For some individuals simply having access to digital learning materials allows them to adapt the resources to their specific needs, e.g. in terms of font sizes and styles, background colours, etc.

## 1. Documents, e.g. Word.

### 1.1 Font.

* Use a plain, evenly spaced sans serif font such as Arial, Verdana or Tahoma.
* Font size should be 12-14 point.

### 1.2 Colour.

* Use dark coloured text on a light (not white) background for paper, computer and visual aids. White can appear too dazzling. Use cream or a soft pastel colour, or a 10% grey scale.
* Think carefully about the colours you use for text or graphics. Avoid green and red/pink combinations, as these are difficult for people with colour vision deficiency.
* Use different line styles instead of or in addition to coloured lines in graphs and diagrams (e.g. dashes or dots).

### 1.3 Headings and Emphasis.

* Use **bold** to emphasise key words or phrases, and avoid using bold in other contexts. It is also useful to explain why the text is in bold, e.g. important dates are highlighted in bold.
* Avoid underlining and *italics* as these tend to make the text appear to run together.
* AVOID TEXT IN BLOCK CAPITALS as this can be much harder to read.
* Use a larger font size in boldfor **Headings**.
* Use boxes and borders to emphases key pieces of information, but avoid ‘textboxes’ as they can cause problems when enlarging or using screen readers.

### 1.4 Layout.

* Use [left-justified](https://support.office.com/en-gb/article/Align-text-left-or-right-center-text-or-justify-text-on-a-page-70da744d-0f4d-472e-916d-1c42d94dc33f) with ragged right edge , and ensure all words are equally spaced.
* Avoid narrow columns (as used in newspapers).
* Avoid cramping material and using long, dense paragraphs, a [line spacing](https://support.office.com/en-GB/article/Change-the-line-spacing-in-Word-1970e24a-441c-473d-918f-c6805237fbf4) of 1.5 is preferable.
* Avoid starting a sentence at the end of a line.
* Use bullet points and numbering rather than continuous prose to break down information.
* Put a full stop or semicolon after each bullet point so screen readers know it’s the end of the point.
* Do not put text over images or patterned backgrounds: this makes it difficult to read.
* Number the pages of a document, preferably at the top right-hand corner.
* Use inbuilt [heading styles](https://support.office.com/en-gb/article/Add-a-heading-3eb8b917-56dc-4a17-891a-a026b2c790f2) to create a navigable structure.
* Use a [table of contents](https://support.microsoft.com/en-gb/kb/285059) at the beginning and an [index](https://support.office.com/en-gb/article/Create-an-index-and-update-an-index-cc502c71-a605-41fd-9a02-cda9d14bf073) at end of long documents.

### 1.5 Writing Style.

* Write in Plain English with short, simple sentences in a direct style.
* Avoid abbreviations or provide a glossary of abbreviations and jargon.
* Give instructions clearly. Avoid long sentences of explanation.
* Use an active rather than passive voice.
* Avoid double negatives.
* Be concise.

### 1.6 Visual impact.

* Use flow charts to explain procedures.
* Use pictograms and graphics help to locate information.
* When using images provide some explanatory text or a title, and provide [‘alt’ tags](https://support.microsoft.com/en-gb/kb/923919) for the image. If the image is purely decorative, do not use 'alt' tags.
* Lists of 'do's and 'don'ts' are more useful than continuous text to highlight aspects of good practice.

### 1.7 Checking Readability.

* Use built in [readability checker](https://support.office.com/en-gb/article/Test-your-document-s-readability-85b4969e-e80a-4777-8dd3-f7fc3c8b3fd2) - Word 2010. To run the readability checker, select File > Options > Proofing. Select 'Check grammar with spelling' and 'Show readability statistics'.
* Flesch Reading Ease scores text on a 100-point scale. The higher the score, the easier it is to understand the document. For most standard documents, aim for a score of approximately 70 to 80. Do this by using short sentences, not by dumbing down vocabulary.
* Check long documents in sections, so that you know which parts are too hard.

## 2. Spreadsheet Programmes, e.g. Excel

The following is based on guidance from the Royal National Institute for Blind People (RNIB). In addition to the general guidance on formatting text and data in documents in Section 1, the following should be used to enhance the accessibility of spreadsheets:

* Break down complex data sets into logical tables ideally with their own worksheets. New tables should be created on separate worksheets to aid navigation and understanding.
* Reserve the first worksheet for a contents or index page.
* Insert all text and data within a logical path that a keyboard only user would take. As a general rule keyboard users will navigate down from cell A1 until the table is reached.
* Empty cells within a table should be marked as such with a minus sign, a zero or N/A for not applicable as appropriate.
* Adjust cell height and width to ensure all text that you want to appear is visible in your spreadsheet.
* Add text descriptions and Alt text to charts and graphics.
* Avoid using visual devices such as colour, shading, patterns and borders to divide up data regions.
* Avoid merging data or header cells. Merged cells cause navigation problems and will not be read correctly if they contain row or column headers.
* Always save your spreadsheet with the focus on cell A1 unless you want to draw attention to a specific cell.

Further information is contained in the Royal National Institute for Blind People (RNIB) Effective Practice Guide: [Creating accessible Excel spreadsheets](https://blogs.shu.ac.uk/ip/files/2016/11/Creating-accessible-Excel-spreadsheets.docx). The guide contains some simple techniques and strategies to help make Excel spreadsheets accessible.

## 3. Presentation Tools, e.g. PowerPoint.

Care should be given when selecting a tool for use in a presentation. Microsoft PowerPoint is a popular tool and has good accessibility features. PREZI is also popular but currently it is often inaccessible to disabled people. Keynote: Apple’s alternative to PowerPoint is reported to have good accessibility.

* Keep slides clear, simple and uncrowded.
* Font size should be 22 – 26 point with heading 28 - 32 point to allow the text to be read by the audience.
* Use minimal text: aim for about 25 words per slide.
* Avoid text special effects, such as shadows.
* Cover one subject per slide: no more than six bullet points.
* Avoid slide designs with patterned backgrounds.
* Stagger complex information using the 'appear' function, but avoid complex visual effects: moving, flashing or dissolving.
* Consider both the font size and number of slides to a page when printing as hand-outs.

During your presentation make sure you:

* Speak clearly and avoid speaking too fast.
* Use simple language and explain terms.
* Avoid or explain jargon and acronyms.
* Give participants time to process information and pause between topics.
* Cover all the information included on the slide. If you are have blind or visually impaired participants make sure you cover all the visual information, this includes describing pertinent parts of any graphics.

## 4. Preparing documents for text-reading software

It is important that documents and publications are prepared to be accessible in alternative formats for people with visual impairments or reading difficulties. Learning materials should be available digitally for use with screen reading software.

* Put full stops after headings to make the text-reading voice drop and pause: you can use a pale tint similar to the background colour to make the full stops less visually distracting.
* Put semi-colons, commas, or full stops after bullet points to make text-reading voice pause.
* Use Styles in Word to organise headings and formatting.
* Avoid automatic numbering as some text readers will not read these. Use manual.
* Contents table listings should be [hyperlinked](https://support.office.com/en-gb/article/Use-hyperlinks-in-a-table-of-contents-9bb0e4ca-361e-4bc0-815b-6a314e03ed8a) to the relevant section to aid navigation. Number contents table items.
* Use internal and external hyperlinks for ease of navigation.
* Avoid text in capital letters in mid-line: they may be read as single letters.
* Include as few signs and symbols as are necessary, e.g. asterisks or dashes (both short and long), as these will be spoken.
* Avoid long dashes: use colons to make the text-reading voice pause.
* Use straight 'quotation marks'. Some screen readers may read out curly or slanting ones as ‘back quote’.
* Avoid Roman Numerals and No. for number.
* Consider whether abbreviations and acronyms need full stops.
* Text readers may have difficulty with tables in Word and may not automatically move on to the next cell without manual use of the Tab key.
* Avoid text in images. The screen readers cannot read them. If used repeat them in the main text.
* Use hyphens in compound words to aid text-reading pronunciation.
* Chunk phone numbers to avoid them being read as millions or hundreds of thousands.
* Use built in accessibility checkers - Word and PowerPoint 2010 include a checker, which makes it much easier to identify and repair any accessibility issues. To run the accessibility checker: select File > Info > Check for Issues > Check Accessibility. The checker will identify any accessibility errors and give feedback on how to fix them.