



How can you make your PDF documents more accessible?

Introduction

PDF is often seen as the ideal document format. Formatting and lay-out are locked so that every user gets to see the same document. PDF is also a safe document format because it is not easy to edit. For students with an impairment, however, a PDF file can sometimes be hard to access. Screen readers cannot always handle PDF files. These students are therefore better served with a Word document.

Tips for improving accessibility

- **Website guidelines.** All guidelines that apply to making websites more accessible also apply to PDF files.
- **Accessibility check.** When creating a source document in Word, run an accessibility check (Review > Accessibility check).
- **Title.** Give the PDF file a clear title that reflects the content.
- **Headings.** Make sure your source text is well-structured. Mark headings with the right heading level. Don't format the headings, but use the official Word headings in the template. This allows screen readers to recognise the headings.
- **Lists.** Use the Word list option in your source document, and do not simply mark items on lists using a minus (-) sign.
- **Bookmarks.** For long documents, create bookmarks to mark parts of the documents, such as chapters. This allows visitors (with or without screen reader) to easily jump from one section of the text to another, using the bookmarks.
- **Language.** Preferably use a single language. Students with dyslexia sometimes have trouble with multiple languages. Try to keep your sentences relatively short. Long sentences can be hard to follow for students with dyslexia. Explain complex situations that require a lot of text by also using images. Divide topics into sections, and remember to leave white spaces to clearly separate topics. Use short clear sentences in exam questions and instructions. Students who struggle with information processing find it even harder to process information during exams, due to exam stress.
- **Font type and size** Avoid changing font type and size to emphasise certain parts of the text. Preferably use fonts such as Helvetica, Arial, Verdana or Calibri, font size 12, line spacing 1.5.
- **Images.** Make sure your images are accompanied by descriptive alt text. Images cannot be perceived by students with a visual impairment who use supporting reading software. Avoid using text in images as the only method for conveying information. You can always use the alt text to provide a description of the image and point to the presence and function of the text.
- **Numbers.** Write figures as numbers, unless they do not refer to specific facts (a few hundred). The same applies to ordinal numbers (2nd and 3rd).
- **Formulas.** The best tool for writing formulas is MathML. If that does not work, you can also write out the formulas.



- **Hyperlinks.** Add relevant text for hyperlinks and screen information. Don't use 'Click here'. Students who use screen readers sometimes scan a list with links. Links should therefore convey clear and accurate information.
- **Colour contrast.** Make sure there is enough contrast between foreground and background colours. Make sure colour is not the only tool you use to get your text across. Opt for shading contrast rather than colour contrast for graphs.
- **Tables.** Keep tables as simple as possible, and split them where needed so there are no 'headings of headings' within the table.
- **Conversion.** Convert your source text by saving it as a PDF file. Never use a PDF printer because in the process of conversion, the code layer will be deleted. If you do need to convert from paper, use Optical Character Recognition.
- **Post-editing.** Sometimes, you need to post-edit your document in Acrobat Pro. For example to establish tab order, or to mark the row headings in a table. Adobe also offers the option of checking your document for accessibility (Advanced menu > Advanced > Accessibility > Full Check).

More information:

[Digitoegankelijk.nl](#) (Dutch only)

[ECIO](#) (Dutch only)

[Contrast and Colour Accessibility](#)

[W3C Maths Home](#)

[Writing out formulas](#)

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