

## Guidance on Adapting/Enlarging Texts for Students with Vision Impairment

For students who have a vision impairment (VI), it is often assumed that text needs to be enlarged. Although this is the case for many, it is not required for all students with a VI, and for some students, who have eye conditions that cause a reduction in field of vision, enlarged print may be detrimental. It is the role of the Teacher of the Vision Impaired (TVI) to determine the appropriate print size for reading and it is essential that advice from the TVI is understood and followed.

Students with VI need to be given **access to learning** ie the student is provided with access to appropriate information in order to learn about a curriculum area. In addition, they must also be given optimum opportunities for **learning to access** ie the student is provided with the means by which he or she is able to access information independently. As these approaches are not mutually exclusive, each will be required at different stages in the student's educational career, depending on the curriculum context. Teaching students access skills has important longer-term benefits for students with VI as they become independent adults.

The use of low vision aids or assistive technology to view printed material empowers the student to make their own adaptations. Devices such as e-readers, tablets and computers allow students to select the size that suits them best in any given situation and environment. If a student becomes dependent on using large print, when low vision aids or other devices would allow them to read print efficiently, the student's access to print materials is restricted to those situations where large print is available.

There are various alternatives to large print paper copies:

- Take a photograph on an iPad; the student can then 'zoom in' at the required magnification.
- Source the text within RNIB Bookshare. Books can be downloaded in a range of accessible formats that can be read electronically or adapted to suit the personal reading requirements of the student. Bookshare allows you to access books that require further modification to create large print paper copies. You can do this yourself, and guidelines are provided by Bookshare regarding modification [here](#). Bookshare have produced a guide to support users in accessing their website. Click [here](#) for a copy of their "Getting started" guide. Further information is available [here](#). Additionally, from the RNIB Bookshare homepage select the [Help Centre](#) tab to access several training videos to support users in familiarising themselves with the service and to access the materials on the site.
- Email/ share the document/ PDF/ PowerPoint etc. electronically to an iPad.

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- Reformat the information. Create a Word document in an appropriate font and text size and print paper copy for student.
- Use a scanner to scan the page/pages/book and share electronically to iPad.
- Use a scanning app to edit and produce an appropriate font and text paper copy or an electronic version to share to the student's device. There are several iPad (and Android) apps which can convert a text image to 'editable' text. Microsoft Office Lens is an App that allows you to convert to Word documents and PowerPoint in addition to PDFs. Office Lens uses your phone camera to take photos of pages, and then converts them to readable text using OCR. You can either have the apps built in Immersive Reader to:
  1. Read text out loud;
  2. Enlarge text and;
  3. Space out words for students with dyslexia or export them to word, pdf and other formats.

Office Lens converts not only physical documents to electronic formats but also text written on whiteboards in a classroom. Office Lens app is free and available for iOS, Android, and Windows. The TVI can provide further guidance on using Office Lens.

- Student uses handheld magnifier (these are provided by Low Vision Clinic, if appropriate) or a larger portable video magnifier, if one has been provided for the student to use by the TVI.

Enlarging materials on a photocopier should be avoided where possible and only used when no other alternative is available. If the text is faint or of poor quality, this is likely to get worse when enlarged on a copier, as are graphics and images. Any design features that are difficult for someone with sight problems to read such as italics are not resolved. Students with VI should not be given photocopies on A3 size pages. These create several problems for the reader. An A3 document is unwieldy to read, carry and store, and this may be particularly difficult for someone who gets very close to the page to read. It may also be unacceptable because it makes the reader stand out within a school class. Materials that have had to be enlarged onto A3 pages should be cut up and recopied onto an A4 page.

In general, A4 portrait is preferred for standard documents. However, some layouts may be clearer on larger paper or in landscape orientation. For example, using larger paper or a different orientation may make it possible to include the full width of a table, more columns of a spreadsheet, a whole diagram, or a complete map. The greater ease of comprehension this gives may outweigh the general unwieldiness of larger paper.

Where enlarging on a photocopier is unavoidable, please ensure that a photocopier that can provide clear, sharp, clean copies is used.

There is no magic formula regarding copying as the size is dependent upon the original font size. However, copying regular print i.e. 12pt at 129% will produce 16pt font size. Copying regular

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print at 155% will produce 18pt font size. Copying regular print at 181% will produce 20pt font size.

To provide good quality photocopies or scans, you should:

- Copy from an original of the text and ensure that it is in good condition;
- Make sure the copier's glass surface is clean;
- Use a copier with fresh toner or one that has a good supply of toner available to ensure quality of photocopy;
- Apply pressure to a book's spine to reduce centre margin problems;
- If possible, select the copier's photo setting for best detail o This can be done by selecting the "Reduce/ Enlarge" button and selecting the % size of enlargement you wish to use that best suits the results you require;
  - Trial and error is required to get the right combination of effects, so make a few test sheets to establish the best setting for each individual print job that meet your text size requirements and that allows all text and images to be captured and seen well;
  - Remember you will need to include a blank margin beside text/images if binding is required;
  - Set the contrast button to darken the work being copied or lighten so that the text is clearer and better defined. This is especially important when you are photocopying a black and white textbook, a play or reading book;
- Place a white sheet of paper behind small items to avoid using excess ink or getting grey or black shadows on copies;
- Make a note of the settings and paper orientation you have decided to work with in case you are interrupted part way through the modification and have to return to the job;
- Try to complete an enlargement modification in one go. If interrupted, make a note of the page you have reached and ensure to pause on the back of a two-sided copy page. When you resume copying check you are starting from the next page and it is page one of two if double sided - otherwise it is possible to miss individual pages;
- Periodically check the finish of pages as they come off the copier to ensure you have captured all the text and images, have the book/ copier correctly aligned and have good colour contrast.<sup>1</sup>

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<sup>1</sup> <https://accessstoeducation.birmingham.gov.uk/wp-content/uploads/2019/11/Guidelines-on-PE-ModificationThornbury.pdf> accessed July 2020

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