Creating Accessible PDF Documents for Students

If you teach a student with low vision, you already know how much a single worksheet can shape their day. When a PDF works with their screen reader or magnifier, they participate right alongside everyone else. When it doesn't, they get left behind through no fault of their own.

Here's the good news: making an accessible PDF is a skill, not a mystery. The single most important step is building your document with real structure from the start, using proper headings, tagged lists, and alt text. Get that right, and most assistive technology will handle the rest.

This guide walks you through creating accessible PDFs from Word or Google Docs, fixing documents you already have, handling math and science content, and testing your work before it reaches a student.

PDFs matter here because they are everywhere in education. Worksheets, permission slips, study guides, and reading packets all tend to land in a student's inbox as a PDF. That makes the format one of the most common barriers a student with low vision runs into, and one of the easiest to fix once you know how. It sits alongside the other classroom accommodations for students with low vision that make a school day work.

What Makes a PDF Accessible

An accessible PDF is one that a student can read with a screen reader, a magnifier, or reflowed text, and still get everything a sighted classmate gets.

A few things make that possible:

- Real document structure. Headings, paragraphs, and lists are tagged so assistive technology understands the layout, not just how it looks.
- Text-based content. The words are actual selectable text, not a scanned picture of text.
- Alt text on images. Every meaningful image, chart, or graphic carries a short description.
- A logical reading order. The content is read top to bottom in the order it's meant to be understood.
- Sufficient color contrast. Text stands out clearly from its background.
- Reflowable text. A student using magnification software can enlarge the words without scrolling sideways to catch the end of every line.

If a PDF has all of these, it will work with the tools your students already rely on. If it's missing them, even a simple handout can become a wall.

Creating Accessible PDFs from Word or Google Docs

Most classroom documents start in Word or Google Docs. The choices you make there decide whether the exported PDF is usable.

Microsoft Word to Accessible PDF

Word gives you the most reliable path to an accessible PDF, so start here when you can.

- Use the built-in heading styles (Heading 1, Heading 2, and so on) instead of just making text bold and large. Styles are what create real structure.
- Add alt text to every image before you convert. Right-click the image, choose View Alt Text, and describe what it shows.
- Run Word's built-in Accessibility Checker (Review > Check Accessibility) and fix what it flags.

- Export with File > Save As and choose PDF, not Print to PDF.
- In the export options, turn on “Document structure tags for accessibility.” This is the setting that carries your headings and alt text into the PDF.

Google Docs to Accessible PDF
Many schools live in Google Workspace, so this path matters, with one honest caveat.

- Use heading styles and structured formatting, just as you would in Word.
- Add alt text to images by right-clicking and choosing Alt text.
- Export with File > Download > PDF Document.
- Know the limitation: Google Docs gives you far less control over PDF tagging than Word does. The exported file is often less accessible than it looks.
- For anything important, consider downloading to Word format first, then exporting the PDF from Word for cleaner tags.

Fixing Existing Inaccessible PDFs
You will not always start from scratch. Sometimes a colleague hands you a PDF that a student can’t use, and you have to remediate it.

Scanned Documents
A scanned handout is just a photograph of a page. A screen reader sees an image and nothing else.

- Run OCR (Optical Character Recognition) to turn that image into real, selectable text.
- Adobe Acrobat Pro has a built-in OCR tool under Scan & OCR.
- Free options exist too, including Google Drive (open the file as a Google Doc) and several online OCR services.
- Always proofread after OCR. It commonly misreads characters, mangles columns, and drops formatting, and those errors carry straight into the assistive technology.

Tagging Unstructured PDFs
Some PDFs have text but no tags, so assistive technology can’t tell a heading from a caption.

- Adobe Acrobat Pro’s accessibility tools let you add tags, set the reading order, and add alt text after the fact.
- This work is detailed and can take a while on a long document.
- Be honest about the trade-off: if a file is badly built, recreating it in Word is often faster and cleaner than repairing it.

Math, Science, and Complex Content
Equations, tables, and diagrams are where accessibility usually breaks down, so they deserve extra care.

- **Math equations:** Build them with MathML or an equation editor whenever you can. An equation saved as a flat image is invisible to a screen reader unless you write out the full expression in alt text.
- **Tables:** Mark the header row and header column properly so a student can tell which number belongs to which label. Avoid using tables just for visual layout.
- **Graphs and charts:** Pair every visual with a text description or a simple data table, so the information doesn’t live only in the picture.

- **Diagrams:** Add a clear verbal description, and where the concept is spatial, a tactile version can help a student far more than any image.
- **Chemistry notation:** Subscripts, superscripts, and bond structures are genuinely hard to convey. Spell them out in text and, when it matters, talk with your student's teacher of the visually impaired about the best format.

Testing Your PDF Before It Reaches a Student
Never assume a document works. Test it the way your student will actually use it.

- Run Adobe Acrobat's built-in Accessibility Checker for a first pass on tags and structure.
- Try PAC (PDF Accessibility Checker), a free tool that catches issues Acrobat misses.
- Open the file with an actual screen reader, such as NVDA on Windows or VoiceOver on Mac, and listen to whether it reads in a sensible order.
- Watch for the usual failures: missing tags, image-only pages, and a reading order that jumps around.
- Then do the one test that matters most: ask the student. They know within seconds whether it works with their tools, and their feedback beats any checker.

One more thing worth remembering: an accessible document helps everyone. Clear structure and readable text serve the student using a magnifier and the one skimming on a phone alike.

A helpful habit is to keep a short checklist near your desk: real headings, alt text, selectable text, logical reading order, good contrast. Run through it before you send anything out. After a few documents, the steps stop feeling like extra work and start feeling like the normal way you build a file.

Take the Next Step
Building accessible PDFs takes practice, and you don't have to figure it out alone. At New England Low Vision and Blindness, we help schools and teachers create digital materials that work for every student.

If you're learning to make your classroom documents accessible, we're happy to walk through it with you. Schedule No-Obligation Consultation and we'll help you set up a workflow that fits the tools you already use.

Related Articles

- Classroom Accommodations for Students with Low Vision: Complete Guide
- Large Print Materials in the Classroom: Creation and Sourcing Guide
- Classroom Lighting Accommodations for Students with Low Vision
- Preferential Seating for Students with Low Vision
- Classroom Arrangement for Students With Visual Impairments

About This Document

This white paper was created by New England Low Vision and Blindness. Portions of the content were generated using AI technology and reviewed for accuracy. However, the information is provided “as is” and is not intended as a substitute for professional advice or a comprehensive assessment.

About New England Low Vision and Blindness

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