

## Accessible technologies to help students with disabilities unlock their full potential by addressing the diversity of needs.

**Supports for students with inclusive personalized non-stigmatizing tools starting in the primary grades through graduation.**

**Preparing all students to be independent with workforce ready skills for higher education and as they begin careers.**

**Knowledge to advocate for the technology and tools needed to be successful and independent in the workplace and life.**

**Reading, writing, math**

- Immersive Reader
- Independently digitize materials with Office Lens
- Dictate content across Office 365
- Word prediction to assist with writing
- Breaking content in smaller parts with Headings in Word
- Built in math tools in OneNote

**Speech, language, communication**

- Practice speaking with PowerPoint Presentation Coach
- Practice conversational learning with Flipgrid
- Reading and listening to text with Immersive Reader
- Process auditory language with live captions
- Respond to prompts using the Chat feature in Teams

**Neurodiversity**

- Minimize distractions with Immersive Reader, Focus Assist, Focus Mode, and Reading view
- Writing assistance with Learning Tools, Word Prediction, and Dictation
- Stay organized using To Do on any device
- Complete work alternatively using Flipgrid, Digital Inking, Sway, PowerPoint Screen Recorder, Whiteboard

**Hearing**

- Personalize the computer with the Ease of Access Center
- Use subtitles in Teams, Translator, PowerPoint Presentation Translator
- Add captions to videos in PowerPoint, Sway and Stream
- Turn on video during a Teams meetings for live interpretation

**Mental health**

- Opportunities to connect with students and families with video chat feature in Teams
- SEL through lessons in Minecraft
- Alternative content creation with Flipgrid, digital inking, PowerPoint recording, Sways, Whiteboard
- Data collection (such as ABC data) through Forms

**Mobility**

- Personalize the computer with the Ease of Access Center
- Dictate presentations and documents
- Use computer with Keyboard only and on-screen keyboard
- Sticky keys and filter keys for one handed access
- Speech recognition to control the computer
- Engage computer using eye control and 3rd party tracking devices
- Play with others using the Xbox adaptive controller

**Vision**

- Personalize the computer with the Ease of Access Center
- Accessibility checker to ensure all content is accessible
- Built in screen reader with Narrator in Windows 10
- Independently digitize materials with Office Lens
- AI translates the visual world into an audible experience
- Basic coding for younger students with Code Jumper

**Executive Function**

- Planning with To Do
- Scheduling in Planner and Outlook
- Breaking down tasks in OneNote and Navigation in Word
- Organization in Outlook, OneNote, and Teams

## Assistive technology Providing support for teachers, students, and parents

The diversity of learning needs demands school systems provide inclusive, accessible learning environments that inspire confidence and encourage independence differently for each student. Learn about how to create a personalized and engaging remote learning experience for all of your students through the resources provided in the sections below at this link:

[Explore Microsoft's special education and accessibility resources for remote learning](#)

# Assistive technology explained



Assistive technology can make a real difference to how learners with dyslexia, literacy difficulties and/or SEND access the curriculum.



## Benefits of using assistive technology include:

- Increased learner independence
  - Workplace skillsets
  - Unlocked cognitive potential
- AT can be used in all GCSEs and functional skills including English and maths

To get the most out of assistive technology, **both the teacher and the learner need to commit to adapting how they work** – Teachers will need to embed the use of assistive technology into their planning and lesson content, and work with learners to rethink how they approach a task.

Teachers will also need to ensure that some forward planning is done to make text and worksheets compatible for computers. Text from books, if full prose, can be scanned with a smartphone and added as a scanned document.

# Free assistive technology options



## Built-in assistance

There are several free functions that are included or can be added to a PC or laptop to support learners:

	Windows/Office	Mac	Chrome	IOS	Android
Text to speech	yes	yes	with extension	yes	yes
Colour Filters/Background	limited	limited	with extension	yes	limited
Speech Recognition	yes	yes	yes	yes	yes
Predictive Text	external keyboard	touch bar	with extension	yes	yes
Spell check/dictionary	yes	yes	yes	yes	spell check

Thanks to Abi James (a.james@soton.ac.uk) for the content of this table.



### Immersive Reader – Microsoft Word Online

Microsoft Word Online offers one particularly useful add on called Immersive Reader. Its functions let you:

- Read text aloud
- Change the text's language for EAL learners
- Highlight verbs and nouns in a body of text
- Focus on a single line or paragraph using text windows
- Add symbols to words (useful for non-verbal learners)

Immersive Reader can be found under the 'View' tab in any document opened in Word Online.

## Products you can purchase

Some learners, especially those that struggle to access and create written information, may need more support than the freely available assistive technology outlined above.

### Reading pens

These pens track text and read it line by line. They are discreet and can be preferred by older learners in the classroom if laptops and tablets are not a common sight.

They are allowed in all exams and mean that schools don't need to apply for electronic versions of exam papers or place learners in separate exam rooms.

While the upfront cost per pen is expensive, they can be used by more than one student – so you can order a batch to be shared across school years and cohorts.



These options have all been tested by our consultant teacher, Kelly Challis.

### Clicker 8 and Docs Plus



Both of these programmes are enhanced word processor programmes, with scaffolds to support writing.

- Clicker 8 – best suited to primary schools
- Docs Plus – designed for secondary schools and compatible with exam conditions

The benefit of both of these programme is their adaptability. Scaffolds are embedded and include planning templates, cloze activities, and word banks. They both also have a feature which predicts the word being typed and supplies several options to choose from.

Teacher dashboards also allow you to track the learner's progress and gauge how much additional time they might need for timed assessments.

However, both programmes require a PC or tablet and require the learner to have their own account, so the cost per learner could make this an expensive option.



### Claread

Claro have a whole suite of useful programmes which can support both reading and writing. These include mind mapping, fluency support, word banks and speech to text.

### Read&Write

This programme has several options and runs as an added tab which can be accessed for any programme or webpage you have open. It needs to be downloaded to individual PCs or laptops.

## Other uses for technology

### Supporting organisational skills

Pupils with literacy difficulties can benefit from supporting their organisational skills as well as their literacy skills and this is where technology comes into its own.

Arguably, the best tool for organisation is the smartphone:

- Set reminders for lessons and deadlines
- Enable speech to text
- Type out notes (rather than hand-write)
- Take pictures to upload later to a PC or laptop.



However, it's worth noting that although smartphones are fast becoming the norm, not all learners will have access to one.

### Get pocket

This is a great visual website for aiding organisation and saving links and documents in one place:  
[www.getpocket.com](http://www.getpocket.com)



### Thinking visually

Being able to think visually and use diagrams can help learners who find writing lists and linear planning difficult.

Products like Microsoft OneNote and Google Doc's Draw allow you to create diagrams and structure tasks, add new pages and write anywhere on the page.

### Glossary of resources

Clicker 8 and Docs Plus: [www.cricksoft.com](http://www.cricksoft.com)

ClareRead: [www.claresoftware.com](http://www.claresoftware.com)

Read&Write: [www.dyslexic.com](http://www.dyslexic.com)

Immersive Reader: [www.one-note.com/learningtools](http://www.one-note.com/learningtools)

Scanning pens: [www.scanningpens.co.uk](http://www.scanningpens.co.uk)

GDocs Draw: [docs.google.com/drawings](http://docs.google.com/drawings)



**There are lots of programmes out there to support learners with literacy difficulties and they are a valuable resource for any classroom. They need investment and support for both the learner and the teacher to ensure that it becomes the normal way of working.**

### Let us know how you get on

We would love to hear your experiences with assistive technology!  
Find us on Twitter @DriverTrust  
and at [driveryouthtrust.com](http://driveryouthtrust.com)