

Physical tools to help learners with SLDs



Context

Despite the online environment, students can benefit from material and physical tools that facilitate learning. These can take many forms, from pen grips to e-readers, they are especially designed to help learners with difficulties.

These tools fall into the category of "Assistive Technology" (AT). The term refers to tools or devices designed to help people with learning disabilities perform better and encourages them to become more independent and self-reliant.



What is the purpose of AT?

Assistive Technology helps people with specific learning disorders accomplish tasks such as:



Reading



Taking notes



Managing time



Organizing ideas



Mathematical skills



Writing and Spelling



Types of AT for learning disorders

Reading: E-readers

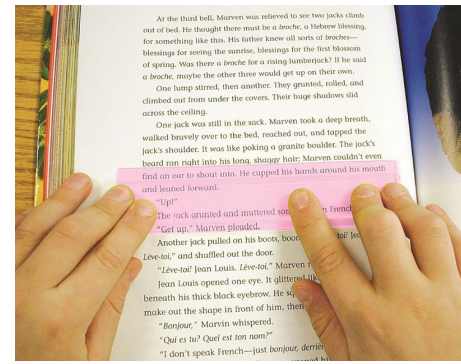
Electronic readers, or e-readers, help improve the reading experience by keeping users focused on reading. **Without ads, notifications, or games or other common distractions, users can easily keep their focus without any interruptions.**

E-readers can also include text to speech feature that allows people who have difficulty reading to the actual text.



Reading: Reading rulers

Reading Rulers are a colored transparent ruler that is placed over text that a person is reading, changing the background colour of the white page to that of the coloured ruler. It is especially relevant for dyslexic readers who easily find themselves losing track of where they are on the page.



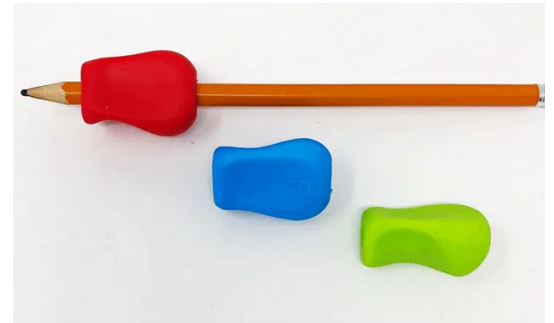
Writing: Smartpens



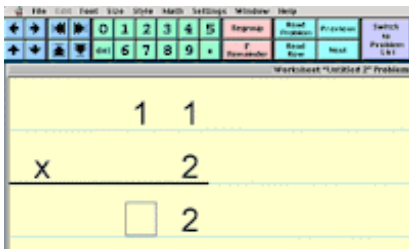
Smartpens assist those who struggle with **writing, listening, reading, and remembering information**. Often, a special paper is used with the smartpen to translate the learner's handwriting into a digital file. They can be used for making audio recordings of what was said, to be played later so people with attention disorders, or those who were unable to follow during the lesson can re-play the content.

Writing: Pen grips

A pencil grip fits over the pencil to position the thumb, index and middle finger correctly. Grasping the pencil properly lets the learner write more neatly and more quickly without her hand muscles getting tired. This tool is especially useful for learners with dysgraphia.



Mathematics: Electronic Math worksheets



This technology helps organize, align numbers, and solve math-related problems. Numbers on the computer screen can also be read by a speech synthesizer which can be useful for people who have reading problems.

Mathematics: Geometric tools

Students with dyspraxia for example, can have difficulties with geometry. That is due to their problems with fine motor skills and manipulation difficulties. Additional challenges can include also spatial awareness e.g. when drawing shapes, graphs, tables etc. A non-slip mat to put under the student's notebook can prove especially relevant when working with such tools.



Resources

Check out the Dyspraxiatheca project (<https://www.dyspraxiatheca.eu/en/>) and the LD resource foundation (<https://www.ldrfa.org/top-assistive-technology-tools-for-dyslexia-and-dysgraphia>), for more ideas of AT tools!