

Writing and note-taking supports



Context

Note-taking is fundamental for learning, but it can be a difficult task for students with impairments; this is where supportive technology comes in help: products or systems that can assist or support individuals with disability, impairments or restricted mobility to perform tasks and functions that otherwise would be difficult or impossible.

To help the students in the task of taking notes, some products or software can really make the difference in terms of quality of life and education accessibility.



General Principles

Considering the specific difficulties of people with impairment or disability, the kind of technological help they need to achieve a particular goal becomes clearer:

- Motor impairment can signify difficulties in hand dexterity and motor control in general, this kind of disability makes challenging to perform some movements and can affect manual and digital writing skills.
- Sensorial impairments imply instead the necessity to find alternative strategies for taking notes in class, exploiting a different sensorial channel.
- Cognitive disability implies instead a great difficulty in the processes cognitive linked to writing.

Special hardware and software that can facilitate the writing process do exist for physically making computers more accessible or help performing tasks: adaptive and assistive technology.



Technology for special needs

Adaptive technology refers to items or tools specifically designed for people with disability and particular necessity.





Assistive technology refers instead to items, pieces of equipment or product systems that are modifiable to increase, mantain or improve functional capabilities of individuals with disabilities.



₩ Writing and note taking aids

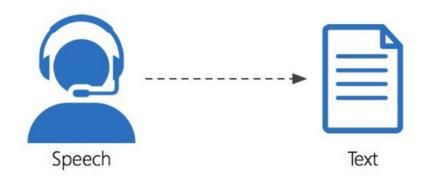
Adaptive and assistive computer keyboards are, for example, designed to fit the particular motor possibilities and limits of a person, while high contrast keyboards help differentiating keys making the processes involved in computation easier.



Braille note-takers are assistive technology instead digital typewriters with braille keyboards, which create a digital document later accessible via braille displays or printers. Physical or digital audio recorders can help recording the teacher's explanations to be later transcribed to notes or passed through dedicated software.



Speech-to-text software can really support accessibility to lesson of students with SEN or hearing impairment, as it transcribes the speech from audio recordings or videos to written form, creating notes which can be further simplified or organized.



Adaptive and assistive technology permit to students with SEN to improve performances and access at the lesson's content.

Other useful examples of assistive software for different purposes can also be found in DigitALL's **Toolbox**.



Resources

Many blogs dedicated to this topic exist, to deepen the knowledge in this field. Between these we can list RESNA's Assistive technology journal, dedicated to research of scientific publication in the multi-disciplinary fields related to disability and assistive technologies. It is an online journal published on the official RESNA site: https://resna.org