

ASSISTIVE/ AUGMENTATIVE TECHNOLOGY:

Assisting Students with Hearing Impairments and Deafness

What is Assistive/ Augmentative Technology?

Assistive Technology is “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability” (IDEA, 2017).

1. Written Instructions

- **Low Tech:** This level refers to assistive tools that are low cost, easy to procure, and do not involve complex training to administer.



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Wales.gov

An example of low-tech assistive technology for students with hearing impairment is written instructions. Typed or hand-written directions, instructions, tests and copies of class notes are all useful for students with hearing impairment and deafness. It is also helpful to students to include pictures in the document.

2. Hearing Aids

- **Mid-Tech:** This level of assistance refers to assistive tools that are moderate in cost, usually battery-powered, and require some training to use.



Mayoclinic.org

An example of mid-tech assistive technology for students with hearing impairment are hearing aids. These devices fit inside the outer ear, and are battery-powered. They can amplify sound, and also be adjusted for reducing ambient noise. Hearing aids are portable and discreet assistive technological aids.

3. Text-to-Speech Software

- **High-Tech:** This level of assistance refers to assistive tools that are higher in cost, usually involve computers or are electrically or structurally complex, and require significant training to utilize.



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Speech-to-text software technology runs through specialized programs, and verbalizes text for students. This is a great assistive technology for any students who struggle with vision impairment, reading comprehension, processing speed, or a reading learning disability. The students I've worked with have also used this technology for reading test questions and reviewing text book material.

References

- Gargiulo, R. M., & Bouck, E. C. (2018). Chapter 5: Assistive Technology. In *Special education in contemporary society: an introduction to exceptionality* (pp. 135–158). SAGE Publications, Inc.
- Reed, P., & Lahm, E. (2009). *Assessing students' needs for assistive technology: a resource manual for school district teams*. Wisconsin Assistive Technology Initiative.
- WPU. (2020). Hearing impairment. WPU Assistive Technology.
<https://wpuassistivetechology.weebly.com/hearing-impairment.html>.