

## Assistive Technology: Devices for Students with High-Incidence Disabilities

Est. Time: 3.5 Hours

### Objective

Learn about various assistive technology (AT) devices available for students with high-incidence disabilities (e.g., learning disabilities, ADHD).

### Overview

Students with disabilities often have difficulty accessing the general education curriculum due to barriers (or challenges) related to their disability. To address those barriers, teachers can provide accommodations—that is, adaptations or changes to educational environments and practices designed to help students overcome the challenges presented by their disability. Among these accommodations is **assistive technology (AT)**, which encompasses a spectrum of tools and devices, as well as the services and supports used to ensure that those devices are used appropriately.

An AT device is a piece of equipment or technology that students can use to address barriers related to developmental, functional, or learning skills. These devices might be something as simple as a specialized rubber pencil grip or as complex as speech-to-text software. Determining a student's AT needs is an individual process that should be based on their specific areas of need. The needs of one student with a learning disability (LD), for example, may not be the same as for another student with a similar disability.

When AT is appropriately integrated into the general education classroom, students are better equipped to complete work and meet their educational goals. Although many students with disabilities can benefit from the use of assistive technology, it tends to be underutilized by students with high-incidence disabilities (e.g., LD, ADHD). Without the assistance of appropriate AT, these students continue to struggle academically.

### For Your Information

The Individuals with Disabilities Education Act (IDEA) defines an assistive technology device as “any item, piece of equipment, or product system, that is used to increase, maintain, or improve the functional capabilities of a child and specifically excludes a medical device that is surgically implanted or the replacement of such device.” (e.g., a cochlear implant) (Authority: 20 U.S.C 1401(1) or IDEA Amendments of 2004. P.L. 108-446, 20 U.S.C. § 1400 et seq., 300.5)

## Assistive Technology: Devices for Students with High-Incidence Disabilities

### Activity

Form groups of four or fewer and complete the following.

1. Consider the learning barriers in the table below. Complete the table below by identifying at least two AT devices that could effectively address each barrier.

Barrier	Possible AT Device
Word recognition and decoding	
Spelling	
Handwriting	
Forming words to speak	
Hearing sounds when background noise is present	
Seeing printed material	

2. Choose one of the AT devices you listed in the table above to explore.
  - a. Use at least three references (reputable Websites, textbooks, peer reviewed articles) to find information about the device.
  - b. Create a handout summarizing the information that you obtained. Be sure to include:
    - A brief description of the device
    - How the device will address the identified challenge
    - Where the device can be obtained or purchased and the estimated cost
    - Target population (e.g., appropriate age group, setting for use)
    - Training the student and teacher may need to effectively utilize the device

**Optional:** Interview someone that works at one of the agencies or organizations that you discovered or someone with the learning barrier. Ask questions about how the AT helps to address the barrier and improve performance (e.g., communicating, performing academic tasks).