

## Overview of Assistive Technologies

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According to Mohler (2012), assistive technology (AT) 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 functional capabilities of individuals with disabilities.”

AT can be broadly classified into three distinct categories:

- low -tech AT
- high-tech AT
- software solutions

Low-tech AT includes “a variety of simple tools and commercially available devices and solutions that are easy to use, inexpensive, and require little training” (Lane and Mistrett, 1996). Low-tech AT solutions may include, but are not limited to:

- magnification devices
- facilitated communication keyboards
- ergonomic solutions for office/workstation set up
- wrist braces
- large-print calculators
- monoculars and small telescopes for distance viewing
- tape recorders
- accessible landline phones
- modified computer mice

High-tech AT, by contrast, is more expensive, requires more training, and is more complex in terms of electronics and to operate. High-tech AT solutions may include, but are not limited to:

- laptops
- closed circuit televisions (CCTV)
- Braille displays
- iPads, iPhones, and other tablets and mobile devices
- talking scientific calculators
- infrared and FM systems
- talking GPS

Software solutions are a specific category of AT that enables a user to interact with technology and gather data about the surrounding environment. Software solutions may include, but are not limited to (Raskind and Higgins, 1998):

- screen-reading software
- screen-magnification software
- text-to-speech synthesizers
- optical character recognition (OCR) software
- speech recognition software
- word processing, spell checking, and proofreading solutions
- outlining/brainstorming software tools

Faculty members should consult with the student and staff from the disability services office to determine the most appropriate, “best fit” AT solutions.