# Braille Instruction and Assistive Technology

*Providing students with increased learning opportunities using cutting edge technology and Braille instruction*

## Braille Services

Individual Braille instruction is provided to students who are developing an understanding of Pre-Braille, have emerging Braille skills, need assistance with learning the contracted Braille code and associated rules, and for those who need to have the fundamentals and techniques of reading Braille reinforced.

**Braille Instruction** is determined through an evaluation process and is completed to establish the level of service needed.

**Pre-Braille Skill Instruction:**
- Basic concept and tactile development
- Spatial positioning skills
- Braille cell and dot position recognition
- Alphabetical Braille and basic punctuation
- Emerging Braille

**Literary Contracted Braille** (A code of Braille symbols, or group of symbols, represent words and punctuation in a type of short-hand process of reading and writing):
- Braille Code signs and symbols
- Rules of application of code
- Formatting rules and guidelines for producing specific types of Brailled material such as outlines, reports, foreign languages, lists and columns.

**Nemeth Math Code** is a system of Braille symbols that represent the numbers, operations and formats used for Braille mathematics.
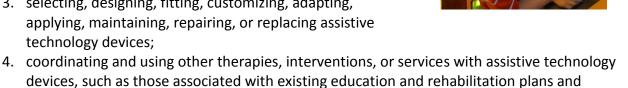
# What is Assistive Technology?

Assistive Technology device 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 student with a disability.

Assistive Technology (AT) service is any service that directly assists a student with a disability in the selection, acquisition, or use of an assistive technology device. The term includes:



1.  the evaluation of the needs of a student with a disability including a functional evaluation of the student in the student's customary environment;
2.  purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices by students with disabilities;
3.  selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
4.  coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs.

Services provided within the Assistive Technology Center (ATC) focus on computer access, input and output processes, accessible text formats, and other technology devices that enhance functional reading and writing as a fundamental communication tool for students with visual impairments.

The ATC houses a variety of keyboard styles, switches, mice, computers, screen readers and magnification software, scanning and reading devices as a means to achieve greater independence with computer access.
AT tools help augment a student's strengths, provide alternate modes to complete tasks, and improve a student's ability to achieve their individual goals.

A team approach is used to determine the student's strengths and needs. ATC staff meet and consult with the classroom teachers and other therapists as necessary. ATC staff are familiar with regular and assistive technology devices and software.

All AT is not the same. Devices referred to as "no-tech" require minimal or no training in their use, such as non-skid surfaces, grease boards, markers and large lined paper. "Low-tech" devices are low-level electronics or technology such as talking watches, timers, calculators and voice-recording devices for note taking. "High-tech" AT includes computers, specialized software, Personal Digital Assistants (PDA's), digitized books, video capture devices, and so on, that may require training to use effectively.

**Implications for Instruction**

Technology advancements occur frequently, and most are very expensive.  As a result, it can be difficult for many to stay aware of the latest specialized devices and software.  To use technology it is necessary for a student to receive training to learn to use each type of device or software effectively.

Related service departments at NYSSB utilize various assistive technologies to help individual students progress with skill development.  The ATC focuses on high tech tools revolving around the use of a computer.  The Center offers a central location with knowledgeable staff who try various technology options with students to better determine what may be the most productive option for them.