



# Assistive Technology

## Access to Learning

- > Learning outcomes are statements of what students are expected to know and be able to do.
- > Assistive technology helps students to overcome barriers to achieving those outcomes.
- > The program planning process is required to identify and utilize appropriate AT to achieve learning outcomes and maximize student participation. (See the Program Planning Student Services fact sheet for information about this process.)
- > Use of assistive technology is not an activity in itself; rather, it is a means toward achieving outcomes.

Assistive technology (AT) is a range of strategies and resources which include services and tools used to enable a student to meet learning outcomes or to improve or maintain a student's ability to meet outcomes. Assistive technology has the potential to increase a student's control over objects, daily activities, age-appropriate experiences, and subsequent learning.

### Assistive technology

- considers student's specific strengths and needs based on a functional evaluation in the student's learning environment
- supports access to learning outcomes within various settings
- does not replace instruction in academic and social skills
- relates to task, rather than to a specific disability
- considers the least complex and most efficient intervention
- requires ongoing collaboration in planning, implementing, and monitoring
- requires ongoing professional development to ensure best practices

### Categories of Assistive Technology

There are numerous items that can be considered assistive technology. A useful way of categorizing these items is according to the task for which the item may be helpful. Common categories (with some examples) include the following:

- **Aids for daily living:** book stands, grab bars
- **Augmentative or alternative communication:** communication displays, speech-generating devices
- **Computer access:** specialized keyboards, touch screens
- **Educational/vocational/cognitive:** graphic organizers, word prediction software
- **Aids for vision:** large print, closed circuit television for magnifying documents
- **Aids for hearing:** hearing aids, visual and tactile alerting systems
- **Recreation and leisure:** adaptive sporting equipment, such as lighted or beeping ball
- **Seating and positioning:** custom inserts, cushions
- **Mobility aids:** wheelchairs, walkers
- **Environmental control:** switch-operated appliances, door openers
- **Home/school/work modifications:** custom desks, adapted washrooms
- **Prosthetics and orthotics:** artificial limbs, splints
- **Service animals:** animals trained to assist individuals with disabilities
- **Sensory integration:** weighted vest, gel cushion

As shown in the table below, the categories of assistive technology cover a wide range of tools, from low to high tech.

Category	Low-Tech Tools	Mid-Tech Tools	High-Tech Tools
<b>Adapted Learning Environments</b>	<ul style="list-style-type: none"> <li>• Velcro</li> <li>• Non-slip materials</li> <li>• Adapted scissors</li> <li>• Book and page holders</li> <li>• Slant boards</li> </ul>	<ul style="list-style-type: none"> <li>• Touch lamps</li> <li>• Switch and interface to turn items off and on</li> <li>• Environmental control units</li> <li>• Adjustable furniture</li> </ul>	<ul style="list-style-type: none"> <li>• Sound amplification systems</li> <li>• Environmental control systems</li> <li>• Adapted electronic items and games</li> <li>• Computer adaptations</li> </ul>
<b>Math</b>	<ul style="list-style-type: none"> <li>• Numbered rubber stamps</li> <li>• Graph paper</li> <li>• Abacus/math line</li> <li>• Enlarged math worksheet</li> <li>• Alternatives for answering</li> </ul>	<ul style="list-style-type: none"> <li>• Talking calculators</li> <li>• Calculator with or without printout</li> <li>• Calculator with large keys and displays</li> <li>• Talking measuring tape</li> </ul>	<ul style="list-style-type: none"> <li>• Calculators with special features</li> <li>• On-screen scanning calculators</li> <li>• Math software</li> <li>• Software for manipulation of objects</li> </ul>
<b>Organization</b>	<ul style="list-style-type: none"> <li>• Highlighters/highlighting tape</li> <li>• Colour-coded items</li> <li>• Pocket folders</li> <li>• Calendars/planners</li> <li>• Check-off charts</li> </ul>	<ul style="list-style-type: none"> <li>• Timers</li> <li>• Graphic organizer worksheets</li> <li>• Digital voice or variable-speed recorders</li> <li>• Pagers/electronic reminders</li> </ul>	<ul style="list-style-type: none"> <li>• Personal digital assistants</li> <li>• Hand-held personal computers</li> <li>• Electronic markers</li> <li>• Outlining and brainstorming programs</li> </ul>
<b>Reading</b>	<ul style="list-style-type: none"> <li>• Picture symbols</li> <li>• Adapted books</li> <li>• Line guide</li> <li>• Predictable books</li> <li>• Changes to text size, spacing, and colour</li> </ul>	<ul style="list-style-type: none"> <li>• Digital recorders</li> <li>• Books adapted for page turning</li> <li>• Pictures/symbols with text</li> <li>• Scanning pens</li> </ul>	<ul style="list-style-type: none"> <li>• Talking word processors</li> <li>• Electronic books</li> <li>• Multimedia software</li> <li>• Scanners with optical character recognition (OCR) software</li> </ul>
<b>Writing and Spelling</b>	<ul style="list-style-type: none"> <li>• Pocket dictionary/thesaurus</li> <li>• Variety of pencils and pens</li> <li>• Adaptive pencil grips</li> <li>• Adapted paper (e.g., raised/highlighted lines)</li> <li>• Word cards/books</li> </ul>	<ul style="list-style-type: none"> <li>• Portable word processors</li> <li>• Talking spell checkers</li> <li>• Tape recorders</li> <li>• Books on tape</li> </ul>	<ul style="list-style-type: none"> <li>• Word processor software</li> <li>• Adapted keyboard/mouse</li> <li>• Word prediction software</li> <li>• Voice recognition software</li> </ul>

For more information about assistive technology, please contact

**School:** School Principal

**School Board:** Student Services Co-ordinator

**Department of Education:**

Student Services Division  
(902) 424-7454

Additional information can be obtained from *Using Assistive Technology: Supporting Student Success* available from the Nova Scotia Department of Education website <[www.EDnet.ns.ca](http://www.EDnet.ns.ca)>.

> This is one of a series of six Supporting Student Success fact sheets. Other topics in the series include Adaptations, Enrichment, Inclusion, Program Planning, and Transition.