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 overcome barriers to achieving learning outcomes.

> The program planning process is required to identify and utilize appropriate assistive technology to achieve learning outcomes and maximize student participation. (See the *Program Planning: A Team Approach* fact sheet for information about this process.)

> Use of assistive technology is not an activity in itself; rather, it is a means toward achieving learning outcomes.

Assistive technology is a range of strategies and resources that 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

Supporting
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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
Adapted Learning Environments	• Velcro • Non-slip materials • Adapted scissors • Book and page holders • Slant boards	• Touch lamps • Switch and interface to turn items off and on • Environmental control units • Adjustable furniture	• Sound amplification systems • Environmental control systems • Adapted electronic items and games • Computer adaptations
Mathematics	• Numbered rubber stamps • Graph paper • Abacus/math line • Enlarged math worksheet • Alternatives for answering	• Talking calculators • Calculator with or without printout • Calculator with large keys and displays • Talking measuring tape	• Calculators with special features • On-screen scanning calculators • Mathematics software • Software for manipulation of objects
Organization	• Highlighters/highlighting tape • Colour-coded items • Pocket folders • Calendars/planners • Check-off charts	• Timers • Graphic organizer worksheets • Digital voice or variable-speed recorders • Pagers/electronic reminders	• Personal digital assistants • Hand-held personal computers • Electronic markers • Outlining and brainstorming programs
Reading	• Picture symbols • Adapted books • Line guide • Predictable books • Changes to text size, spacing, and colour	• Digital recorders • Books adapted for page turning • Pictures/symbols with text • Scanning pens	• Talking word processors • Electronic books • Multimedia software • Scanners with optical character recognition (OCR) software
Writing and Spelling	• Pocket dictionary/thesaurus • Variety of pencils and pens • Adaptive pencil grips • Adapted paper (e.g., raised/highlighted lines) • Word cards/books	• Portable word processors • Talking spell checkers • Tape recorders • Books on tape	• Word processor software • Adapted keyboard/mouse • Word prediction software • Voice recognition software

For more information about assistive technology, or print copies of Department of Education resources, please contact

School: School Principal

School Board: Student Services Coordinator

Department of Education: Student Services (902) 424-7454

Additional information can be obtained from the *Assistive Technology* guide (Nova Scotia Department of Education 2006), available at http://studentservices.ednet.ns.ca, and the *Assistive Technology DVD* (Nova Scotia Department of Education 2009), available from your school board Student Services Coordinator or the Department of Education.

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