



# EFFECTIVE PRACTICES in Special Programs

No. 2 SPRING 2002

## ASSISTIVE TECHNOLOGY

Assistive technology is any tool that students with special needs can use to make it easier for them to learn. Wheelchairs, prostheses, talking calculators and alternate keyboards are examples of assistive technologies that can be used to improve the lives of students with special needs. Called assistive, adaptive or augmentative, these technologies improve interaction and classroom independence, and may reduce the need for modified curriculum or teaching methods for some students.

Assistive technologies are in many cases small and portable and may be used in the individual's life so that the technological aid is empowering in the school, home, at social gatherings and in the community.

This issue includes a summary of current research and looks at the Glenrose Hospital's I CAN Centre, where over 1000 people have accessed information about assistive technologies.



### CURRENT RESEARCH ON ASSISTIVE TECHNOLOGY

Current research shows that assistive technology is individualized, multi-technological and involves a process of identification.

#### Individualized

- Provides a technological solution to individual student needs.
- Augments the Individualized Program Plan (IPP) as a specific tool that will be used to access the curriculum.
- Helps students develop skills or methods to overcome barriers to learning.

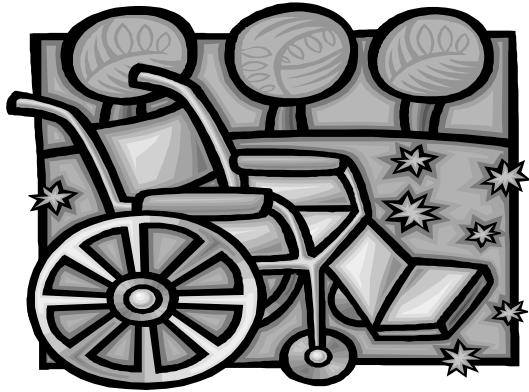
#### Multi-technological

- Solutions may be "no tech," "low tech" and/or "high tech" tools, devices, ideas and strategies. In many cases, the solutions may be a combination of all formats.
- *Assistive* technology may be used to enable individuals to perform tasks that are difficult/impossible.
- *Adaptive* technology may be modified to meet the needs of an individual student.
- *Augmentative* technology may supplement or replace natural speech.

#### A process of identification

- Student needs in the learning environment will change as tasks are mastered and goals achieved.
- IPP team members identify and remove barriers that prevent or impede participation.
- Researchers discover new formats and devices that may assist the student in overcoming barriers.

## Glenrose Hospital I CAN Centre and the Assistive Device Service



The Glenrose Hospital has offered rehabilitation services to Albertans and out-of-province residents for over 30 years. In 2000, an Assistive Device Service department and resource library opened in the Hospital's I CAN Centre.

The I CAN Centre helps children and adults with severe disabilities more actively participate in the world around them and do things for themselves. The Centre includes a children's active learning and play space, power mobility training space, device-loaning library, conference and resource areas, as well as Telehealth Videoconferencing which provides audio-visual links for workshops. Access to a wide range of assistive technology devices and to the expertise of the Centre staff promotes a practical understanding.

*What is the price of a dream not dreamed?  
What is the price of a word not spoken?  
What is the price of a voice not heard?  
What is the price of a vision not imagined?  
What is the price of a life not lived?*

Michael Williams, Augmentative and Alternative Communication (AAC) User

During the first year of operation for the I CAN Centre, over 250 clients and 1000+ people have accessed information related to assistive, adaptive and augmentative technologies. Enhanced space and facilities have allowed the staff to provide group training activities for clients as well as accommodate the larger community's need for education. The Centre provides hard tech (things), soft tech (ideas, knowledge) and a professional support team to a growing audience of patients and educators. Through much research, workshops and on-site training, the I CAN Centre is leading Alberta into the remarkable realm of assistive technologies.

Workshops are advertised through an online list and in the newsletter, *ADS TechTalk*. The I CAN Centre offers open houses and is open two days each month for Drop-In Demo Days based on monthly themes. These Demo Days are an excellent way for parents, families, teachers and teacher assistants to see what's new and learn more about a particular application of assistive technology in the context of a functional setting. For registration and information, contact (780) 491-6070.



# The Glenrose I CAN Centre

## Q and A's

### How does the Glenrose I CAN Centre benefit students with special needs?

The purpose of using assistive technologies in the educational environment is to give students with special needs the tools to do what other students are doing. In keeping with the mission of the Capital Health Authority and the Hospital, the mission of the Assistive Device Service is to positively affect the lives of people who have disabilities through the use of assistive technology.

Through an on-going plan and modifications for the use of the assistive technologies, parents and educators will promote the student's ability to grow, mature and learn.

### How should teachers, teacher assistants, parents and students use the I CAN Centre?

- Attend an Open House or attend a Drop-In Demo Day to learn about strategies for promoting communication and interaction within Alberta's *Program of Studies*.
- Share your awareness of potential strategies with the student support team at the school level and explore the capabilities of specific devices.
- Integrate the knowledge of various strategies and tool capabilities into the learning environment as part of the Individualized Program Plan.

### What areas of support does the I CAN Centre team focus on?

Four areas of support are focused on through High Tech and Low (or No) Tech applications. The four areas of need are categorized as:

- Augmentative Communication – using signing, symbol boards, devices, and/or computers, if speech is unclear.
- Power Mobility – driving an electric wheelchair, for example, if independent mobility is an issue.
- Environmental Control – controlling lights, doors and other common environmental barriers, when mobility is an issue.
- Computer Access – finding different ways of using a computer if a typical keyboard and mouse are a barrier to use, and finding appropriate software to assist with reading educational, recreational or written communication goals.

### Where can I get more information?

For more information about the I CAN Centre's ongoing workshops, open houses, and Demo Days, where staff members are available to answer questions and provide hands-on practical strategies that may be incorporated into your classrooms, please contact:

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☎ (780) 491-6071  
E-mail: [cbelivea@cha.ab.ca](mailto:cbelivea@cha.ab.ca)  
Web site: [www.cha.ab.ca/healthsite/pk2863sh.asp](http://www.cha.ab.ca/healthsite/pk2863sh.asp)

# ALBERTA LEARNING RESOURCES WITH ASSISTIVE TECHNOLOGY SECTIONS

## *Programming for Students with Special Needs series*

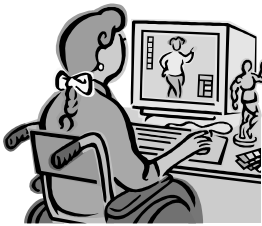
- *Individualized Program Plans*, Book 3 – for more information about writing IPPs.
- *Teaching Students with Learning Disabilities*, Book 6 – for more information on student support teams.
- *Teaching Students who are Deaf or Hard of Hearing*, Book 4 – for more information on augmentative communication.
- *Teaching Students with Visual Impairments*, Book 5 – for more information on specialized equipment for students with visual impairment.

To order these resources please contact:

Learning Resources Centre  
Customer Service and Marketing  
12360–142 Street N.W.  
Edmonton, Alberta  
T5L 4X9

☎ (780) 427–5775;  
or toll-free in Alberta: 310–0000  
Fax: (780) 422–9750

Web site: [www.lrc.learning.gov.ab.ca](http://www.lrc.learning.gov.ab.ca)



*The success of technology has more to do with people than machines.  
All the right parts and pieces together won't work miracles by themselves.  
It is people who make technology powerful by creatively using it to fulfill  
their dreams.*

Alliance for Technology Access, 1996



*Effective Practices in Special Programs* is a newsletter developed in response to the Special Education Review Recommendations #51-52 identified in *Shaping the Future for Students with Special Needs* (November 2000). Each issue includes a summary of current research on a topic and features resources or school(s) in Alberta that have developed and implemented effective practices.

This newsletter is posted on Alberta Learning's Web site at  
[http://www.learning.gov.ab.ca/k\\_12/specialneeds/practices.asp](http://www.learning.gov.ab.ca/k_12/specialneeds/practices.asp)

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