

**Technology Access for ALL Students**

**Judie Lee, IPAT Director**

In today's world, technology is considered a necessary tool for all students. It has become a basic requirement, just like reading, writing, and math, that every student must master to succeed and be productive. To prepare students for life beyond the classroom, general education has been given the responsibility for updating curriculum objectives and instructional strategies to include technology as a learning tool.

Consequently, a shift in thinking needs to take place, from assistive technology as a 'fix' or 'rehabilitative' to thinking of it as access to the general curriculum and part of instructional technology. Assistive technology must also be considered as supporting curriculum achievements. Word processors, for example, encourage creativity, organization, and self-critiquing for all students and provide individuals with physical disabilities a way to write with greater ease. Students who are non-verbal have opportunities to participate in class discussions, raise questions in real time and have greater access to learning opportunities through the use of voice synthesizers.

Every school district taking a responsible approach to addressing their technology needs has a technology plan in place. To assure that technology is accessible to ALL students, the plan should include assistive technology considerations as well. For example, is assistive technology reflected in the professional growth plan and the budget? Are processes in place to assist with identifying individual student needs? Do purchasing considerations include adaptability questions? Making assistive technology a part of the school district's technology plan is a first step to insuring technology access is available to ALL students.

IPAT has developed a guide to help plan for assistive technology which identifies the critical elements to address and includes checklists, worksheets, tables, and other resources to assist in analyzing and designing an assistive technology plan. A free copy of *Technology for all: A guide to solving the puzzle* is available by calling 1-800-265-IPAT.

**Taking the Eenie, Meenie, Miney, Mo out of Selecting an Access Method**

There are two basic access methods that provide the link between the person with a disability and the device being controlled; direct selection and indirect selection.

With direct selection the individual locates a target and goes directly to it using voice, finger, hand, eye or other body movement. Typing on a keyboard or even picking a flower from the garden are considered direct selection. Physically, direct selection requires controlled, repeatable movements. Cognitively, there is an immediate, direct result from the selection made, making it intuitive, easy and quick. Direct selection options need to be explored fully before opting to use indirect selection.

With indirect selection there are in-between steps involved when making a selection. The most common indirect selection method is scanning. With scanning, the items to be selected are displayed on a device and are scanned in a pre-set order by a pointer or light on the device. When the item that the individual wants to select is pointed to or lit, the individual sends a signal. Most signals are sent through a switch or a number of switches. Activating the switch makes the choice. Scanning can be done in a line, in a circle or on a grid. These three lay-outs can be set-up to increase the rate of selection by using group-item, row-column, halving, quartering or frequency of use placement. (For further description request IPAT Fact Sheet)

Scanning not only requires several more steps than direct selection but the individual user must also have good visual tracking skills, a high degree of attention and the ability to sequence. Scanning replaces the need for refined motor movements but increases the thinking load and time factor in task completion.

With advances in assistive technology, the range of control interfaces available for use by persons with disabilities continues to increase. Understanding selection methods and using a systematic process for matching the method to the skills and needs of the individual increases the likelihood of independence and productivity.

## **Get a Tax Break: Resources for Filers with Disabilities**

### **(Reprinted with permission from Disability Resources Monthly)**

Is your disability pension taxable? Are you entitled to special credit for the elderly or disabled? Can you deduct the cost of fixing a wheelchair, caring for a guide dog, providing speech therapy for your child, constructing a ramp for your home, or paying for attendant care at your workplace? Can your business deduct the costs of providing access for employees or customers with disabilities? Many people with disabilities, caregivers, and service providers are unaware of the benefits available to them, don't know how to find the specific information they need, or have difficulty leaving home or using the telephone to obtain forms, publications, or

personal assistance. Some of the options for obtaining tax information are listed here to help you take advantage of available tax benefits.

**By Telephone:**

IRS Publications and forms: 800-TAX-FORM (800-829-3676)  
IRS Quick Tips: 800-829-4477

Request Topic 102 for Info about Tax Assistance for  
Individuals with Disabilities and the Hearing Impaired

IRS Tax Questions: 800-829-1040

Filing: If you are a Form 1040EZ filer who received the TeleFile tax booklet in the mail, you can use Telefile to file your return with a touch-tone phone.

TTY/TDD: 800-829-4059

**By Fax:**

From a fax machine or fax modem, call 703-368-9694 and follow the voice prompts to order up to three items from the index.

**In Braille:**

ND State Library 800-843-9948  
Publication 17 - Your Federal Income Tax  
Publication 334 - Tax Guide for Small Business  
Forms 1040, 1040A, 1040EZ and related instructions

FYI: Online filing call 800-829-1040, request the Electronic Filing Coordinator.

For free assistance with basic income tax return preparation, call your local AARP or IRS office. Tax publications and forms can also be obtained at many libraries and post offices.

**With AT I Can Be Like Everyone Else**

**Josh Coverstone - Fargo, ND**

My name is Josh Coverstone, I am 14 years old and I live in Fargo, ND. I am legally blind, and have albinism. Assistive technology has been a blessing for me. My vision makes it difficult for me to take written notes and copy from the board for my school work. To help me, I use an IBM

compatible laptop, which allows me to take notes easily and make them readable for myself and everyone else. It also helps me stay organized by having the ability to save information into different files based on their subject matter. This makes my work easy to locate when I need it in the future.

My laptop's custom magnification program called Magic, allows me to surf the net, and use dictionaries and encyclopedias at a size I can read. In addition to my Magic software, I use a program called Write:Out Loud which reads aloud what I have typed. This is useful for the correction of punctuation and spelling errors.

I am an avid reader, and sometimes the challenge of only being able to find a book in small print can be frustrating to say the least! To accommodate my desire to read, I use an Aladdin color CCTV which magnifies all material put under its monitor. The color option in the CCTV has proven to be beneficial on many occasions, such as in my geography class. I would use the CCTV to read maps we were studying and I could see the colored outlines of the countries, which really helped me. With the CCTV I was able to do all the other work (which was sometimes visually straining) that the other kids were able to do.

In my math classes, I often found it a challenge to follow the instructors demonstrations, because I could not see the board. This was easily solved by using my 8x monocular, which allows me to see everything perfectly clearly. Assistive technology has helped me transition into a normal classroom setting, where with the use of my assistive technology I can be like everyone else.

## **Books and Coffee Equal Foundation Dollars**

### [Books and Coffee Equal Foundation Dollars](#)

When assistive technology is an avenue to literacy, the Starbucks Foundation and its local franchises may be possible sources of funding. The foundation, endowed with \$500,000, chose literacy as a priority and funds literacy programs because of the historical connection between coffee and books.

Although the Starbucks Foundation limits its funding to literacy programs, children and youth nonprofits should also be able to find cash and product donations through local franchises. Any group or organization in which a Starbucks employee is an active member is eligible for donations. Involving the local franchise in your nonprofit activities is a great way to increase their understanding of your literacy efforts and provides them

first-hand information which they can use when recommending programs for financial support.

To put your AT and literacy plans in action, consider visiting your local Starbucks to pick up a grant application from the marketing department or district/store manager. Introduce yourself, your plan and buy them a cup of coffee!

For further information contact:

The [Starbucks Foundation, Literacy Hotline](#), 206/447.7950 (ext. 7022)

### **The Franklin Speaking Language Master™ Special Edition**

#### [The Franklin Speaking Language Master™ Special Edition](#)

This is a hand held speaking dictionary, thesaurus, grammar handbook and spelling corrector. This portable language reference provides visual and auditory reinforcement by speaking everything printed on the screen.

All words and definitions are Merriam-Webster featuring: 300,000 in-depth definitions, over 500,000 synonyms and 10,000 antonyms, verifies and spells 110,000 words, identifies and defines commonly confused words such as to, too, and two, provides on-screen grammatical assistance at the touch of a key, and has an advance word list containing 3,300 words found on the SAT's and other achievement tests.



Call the IPAT Equipment Loan Library at 800-321-1141 to borrow this for up to six weeks at no charge. It is available for purchase from [Franklin Learning Resources](#) at 800-525-9673 for \$500.

### **Mark Your Calendar!**

#### **Assistive Technology in the School Setting**

Parents, teachers, students, and others welcome. Call Connie 1-800-265-IPAT. All training sponsored by IPAT, presented by Anne Carlsen staff.

- February 17 Bottineau, ND
- February 24 Hazelton, ND
- March 5 Bowman, ND
- March 17 Mandan, ND
- pending* Gackle, ND

## Health and Wellness Fairs, Senior Focus

Call AT Help Line 1-800-472-2911

- March 17 Trinity Lutheran Church  
Bismarck, ND
- April 21 Burleigh Co. Senior Adults  
Bismarck, ND

## IPAT Equipment Expo! Sites

Drop in to explore simple to complex AT devices. Call Mike 1-800-265-IPAT

February 18, 1999

- University of Mary Library  
10am - 3pm  
Bismarck, ND

March 23, 1999

- Doublewood Inn  
10am - early evening  
Bismarck, ND