

Access to Curriculum: It's the Law!

ALL students have the legal right to access general education curriculum. This means that ALL students deserve the opportunity to experience instruction in the same curriculum which ALL students are expected to be able to learn and to do.

Teachers can provide access to the general education curriculum for students with special needs by making appropriate changes in the ways they expect students to learn and and to demonstrate what they have learned. These changes in HOW students learn and HOW they demonstrate what they have learned are called "accommodations".

According to the law, educators can make accommodations for special needs in the general education curriculum (and still be fair to all students) in five areas:

- methods and materials for instruction.
- assignments and assessments,
- learning environment,
- time demands and scheduling,
- special communication systems.

Many of these accommodations, or changes in how students learn and demonstrate what they know, are just good teaching practices which benefit all students. Some of these changes may be accomplished easily and effectively with technology. For example, technology tools can help students read to learn, organize their thoughts, and write more effectively.

Teachers can provide accommodations for special needs, and benefit all students at the same time, by providing reading, writing and organizational tools on one or more computers in the classroom. Teachers may also need to provide changes in the physical setting, or ways to input and/or output information, so that ALL students will be able to use the tools to help them learn and demonstrate what they have learned.

## **Use Technology to Help Students Read to Learn**

Students who have limited reading ability cannot learn by reading the required content material, or independently do worksheets which require reading, or read questions on tests. One accommodation teachers can provide for these students is to have the computer read the material to them. Content to be read can be scanned into the computer and translated into a program which can speak the text. Students can independently complete the assignment or take the test. Earphones help the students maintain privacy and prevent other students from becoming distracted.

Suggested equipment for this "access to reading" station includes a computer, a scanner, OCR software which will translate the print material into readable electronic text, a program that will read the text to the student, and earphones.

Access to Reading Station		
Product	Example	Company
Scanner	Microtek X6	Microtek
OCR Software	TextBridge Pro	ScanSoft
Text Reader Computer (min. 64 MB RAM)	CAST eReader	CAST

## **Use Technology to Help Students Write**

Students who have limited ability to write cannot complete assignments or tests which require them to communicate what they know on paper. These students may have problems with the physical task of handwriting, or they may not be able to organize their thoughts, retrieve words, spell, or use correct grammar. Teachers can provide accommodations for many of these students with an "access to writing" computer workstation.

A word processor, or talking word processor if the student also has problems with reading will assist students with the physical task of writing. A cognitive organizer will help students organize their thoughts through brainstorming, webbing, mindmapping, flowcharting, or outlining. A word prediction program will anticipate the words and phrases students are trying to write. A spellchecker and/or a grammar checker will assist students with proofreading.

Access to Writing Station		
Product	Example	Company
Cognitive Organizer	Inspiration	Inspiration
Talking Word Processor	Write:OutLoud	Don Johnston
Word Prediction Software	Co:Writer 4000	Don Johnston
Computer (min. 32 MB RAM)		

## **Use Technology to Help Students Access the Computer**

Some students may not be able to use the keyboard to input information and may require an alternate way to use the computer as a tool. Others may need another way to use output from the computer, such as speech or braille. Some students may need changes in the physical setting, such as the way the placement of the monitor, or the height of the table.

Teachers can provide accommodations for special needs and benefit ALL students who may have special physical access needs at one time or another. Although teachers may want to consider the needs of their own students in selecting alternate input and output methods for a classroom station, some common equipment includes an alternate keyboard, software to make overlays for the keyboard, some type of trackball, switch access, and an adjustable table.

<b>Physical Access Station</b>		
Product	Example	Company
Alternate Keyboard	IntelliKeys	Intellitools
Additional Software	IntelliTalk, IntelliPics, Overlay Maker, ClickIt	Intellitools
Switch Access	SAM Trackball, Jellybean Switches	R.J. Cooper
Adjustable Table	·	KI
·		

Resources	
Universal Access Project	
http://www.sunlink.ucf.edu/ua	Trace Research and Development Center
-	http://www.trace.wisc.edu
CAST (Center for Applied Technology)	
http://www.cast.org	National Center to Improve Practice Through
	Technology, Media and Materials (NCIP)
National Center to Improve the Tools of Educators	http://www2.edu.org/NCIP
http://idea.uoregon.edu/~ncite	

Product	Company	Price
Co:Writer 4000 (Windows & Macintosh)	Don Johnston Incorporated 26799 West Commerce Drive Volo, IL 60073 USA (800) 999-4660 Fax: (847) 740-7326 http://www.donjohnston.com	\$325
Inspiration, Kidspiration (Windows & Macintosh)	Inspiration Software, Inc. 7412 SW Beaverton Hillsdale Hwy, Suite 102 Portland, OR 97225-2167 USA (800) 877-4292 Fax: (503) 297-4676 http://www.inspiration.com	\$57.95 \$57.95
Intellitools Access Pac for Windows (Each set includes: IntelliKeys with PS/2 cable, Overlay Maker, IntelliTalk, IntelliPics, and ClickIt!) (also available for Macintosh)	Intellitools, Inc. 55 Leveroni Court, Suite #9 Novato, CA. 94949 (800) 899-6687 (USA and Canada) Fax: (415) 382-5950 http://www.intellitools.com	\$680
pwWebspeak (Windows only)	The Productivity Works, Inc. 7 Belmont Circle Trenton, NJ 08618 http://www.prodworks.com	\$150
TextBridge Pro (Windows & Macintosh)	Xerox (ScanSoft, Inc.) 9 Centennial Drive Peabody, MA 01960 (978) 977-2000 http://www.scansoft.com	\$79.99
CAST eReader (formerly Ultimate Reader) (Windows & Macintosh)	CAST (Center for Applied Special Technology) 39 Cross Street Peabody, MA 01960 (978) 531-8555 Fax: (978) 531-0192 http://www.cast.org	\$199
Write Out:Loud (Windows & Macintosh)	Don Johnston Incorporated 26799 West Commerce Drive Volo, IL 60073 USA (800) 999-4660 USA GLOBAL Fax: (847) 740-7326 http://www.donjohnston.com	\$99

## **HARDWARE**

Computer

AbleNet Jellybean Switches (2) AbleNet, Inc. \$42 1081 Tenth Ave. SE. Minneapolis, MN 55414 (800) 322-0956 Fax: (612) 379-9143 http://www.ablenetinc.com \$518.52 (call for **Adjustable Work Station** Krueger International KIW AWS3048-BN P.O. Box 8100 installation Green Bay, WI 54308 T-Edge pricing) 30 X 48" with wireway (800) 454-9796 regularly \$962 RJ Cooper & Assoc. **SAM Trackball** \$164 (Switch Adapted Mouse Device) 24843 Del Prado #283 Dana Point, CA 92629 1-800-RJCooper (949-661-6904) Fax: (949) 240-9785 http://www.rjcooper.com ScanMaker X6 Flatbed Scanner Microtek (available from 3<sup>rd</sup> party vendors) \$99.95 http://www.microtek.com

Available from many vendors

Approximately \$1200 - \$2000