

# ACCESSIBILITY RESOURCES FOR SPECIAL STUDENTS

By Lorrie Jackson

## WHY A TECHTORIAL?

### **What will I learn today?**

You will learn about the free accessibility tools found on most computers and about the online resources available for students with special needs.

### **What hardware and/or software does the techtorial apply to?**

This techtorial applies to both PCs and Macs.

### **Which National Educational Technology Standards for Teachers does the techtorial address?**

The techtorial will help teachers accomplish standard IV.E. in particular.

The International Society for Technology in Education (ISTE) has developed a set of National Educational Technology Standards for Teachers. Standards or Performance Indicators are included for each techtorial to help teachers and administrators improve technology proficiency. For a complete description of the standards indicated, go to [NETS for Teachers](#).

## TECHNOLOGY FOR SPECIAL NEEDS

Today's classrooms include learners with a variety of needs and abilities -- and teachers need to be sure that all students have access to, not just the same content, but also the technology needed to facilitate, supplement, and enhance learning. With just a few free computer-based tools and online resources, almost any student can use technology successfully.

Following are sites, tips, and tools for helping students with special needs and special gifts use computers in the classroom.

Next: Accessibility tools for PC users!

## ACCESSIBILITY ON A PC

Click Programs> Accessories>Accessibility in START> or go to Accessibility Options in the Control Panel to find these Windows tools:

- **Narrator:** This tool for the visually impaired reads aloud (in English only) all windows and text.
- **On-Screen Keyboard:** Users with physical limitations can open a window containing a keyboard layout and then use the mouse to type on that keyboard.
- **Magnifier:** This tool for the visually impaired increases font and graphic size, and inverts text colors (changing white to black, for example).

- **Sticky Keys:** With this tool, for users with limited hand or finger movement, keys such as SHIFT or ALT can be pressed once rather than held down for commands or typing.
- **Filter Keys:** Students whose disabilities may cause them to type extra keystrokes will benefit from this tool, which eliminates extra characters or symbols.

For more tools and resources, go to Microsoft's [Accessibility Technology for Everyone](#) page.

Next: Accessibility tools for Mac users!

### ACCESSIBILITY ON A MAC

The following tools can be found in the Apple System Preferences folder:

- **Speech Recognition:** Users can speak commands -- such as "Quit Microsoft Word" -- instead of clicking a mouse or entering keyboard commands.
- **Text-to-Speech:** This tool reads aloud alerts (and documents in some applications). A Spanish version also is available.
- **CloseView:** Magnify text and graphics with this tool.
- **Mouse Keys:** With this tool, users with fine motor disabilities can operate the mouse using keys on the numeric keypad.
- **Sticky Keys:** Users with limited hand or finger movement can press keys -- such as SHIFT or ALT -- once, rather than holding them down.
- **Slow Keys:** Students whose disabilities might cause them to type extra keystrokes will benefit from this tool, which eliminates extra characters or symbols.
- **Visual Alerts:** Users with hearing disabilities can use this tool to display alerts on the computer screen rather than through beeps or other sounds. (Go to Sound in the Control Panel to access the feature.)

Go to Apple's [Accessibility](#) page for more information about these and other tools.

Next: Online resources for students with learning disabilities!

### INTERNET RESOURCES FOR THE LEARNING DISABLED

The following Web sites offer resources for students with learning disabilities:

- [LDOnline](#) and [LD Resources](#) provide a wealth of information for students with learning disabilities, as well as for their parents and teachers.

- Use Windows Narrator, Apple's Text-to-Speech, or other software to read aloud books for students with learning disabilities. Free, online copies of thousands of books can be found at the [Online Books Page](#).
- Skill-and-drill sites, such as [A+ Math](#), [Gamequarium](#), and [FunBrain](#) help reinforce multiplication tables, grammar facts, and more.

Next: Online resources for gifted students.

## **INTERNET RESOURCES FOR THE GIFTED**

The following Web sites offer resources for gifted students:

- Challenge gifted students through competitions such as [ThinkQuest](#), and [Teen Ink](#).
- Invite students to collaborate with mentors in their prospective careers or other areas of interest. Pick an existing mentor program, such as [The International Telementor Program](#), [Amazing Kids](#), or [The Electronic Emissary Project](#).
- Have gifted students display their work as [PowerPoint](#) or [HyperStudio](#) presentations, or as Web pages (See [Project Poster](#) at [4Teachers](#) for an easy and free method.)

Caution: Make sure the work you assign is creative, engaging, and relevant. Busy work will frustrate and disengage gifted students.

Next: More online resources!

## **TELL ME MORE**

Where can I find more information?

Select Special Education Resources in the drop-down menu of Bernie Poole's [EdIndex](#). Or, if you're interested in making sure your or your school's Web pages are accessible to all users, try [Usability](#), a government clearinghouse for Web accessibility issues and guidelines.