MOVING FORWARD

News and information about the education of special needs students for teachers and parents

Winter 2013

TECHNOLOGY IS ROCKING OUR WORLD

Like it or not technology is here to stay. Whether you can just awkwardly peck at the keyboard or type like the wind, computer literacy is a must in today's world. Banking, research, social outlets, educational tools and even your medical records are now driven by data systems.

Have you ever watched your child work with different types of technology? Navigating complicated Smartphones, iPods, websites or video games just seems to come naturally to the young. There is an instant attraction to the visual effects on the screen. Maybe it's because the fast pace, sounds, and nonstop action matches their increasingly short attention spans.

For those of you who have a special needs child, there are knowledge and tools out there that can enhance learning and improve the accessibility of technology for all types of physical or cognitive impairments.

Here are some advantages and basic features that will increase learning through software or computers:

- The internet has an unlimited amount of brain boosters, educational programs and memory exercises.

- Software can make organizing information and daily routines much easier.

- Step-by-step instructions can be repeated over and over without the instructor ever losing patience.

- Educational programs use a variety of communication formats like animated cartoons or music that can make learning fun.

- Keyboarding skills can overcome poor handwriting.

- The spell check and thesaurus can improve grammar and increase vocabulary.

- The internet offers an endless array of research and resources on any given topic.

- If your thinking or writing skills could use organizational support, the word processing programs have a cut and paste feature which allows you to move text effortlessly.

These benefits just barely scratch the surface of endless possibilities. One of the most important benefits of technology is **personal independence.** By modifying or improving specific features, programs and equipment offer accommodations for all types of disabilities. Computers, laptops, and tablets are now exploding with user-friendly and educational enhancement tools.

This newsletter is an overview of resources, information and products that are currently out there on the market.

KEEPING ON EYE ON THE COMPUTER

Teach your child to work independently, but monitor what they are doing on the computer. Most software offers parental controls and tracking options that can help make computer usage safer for everyone.

You may think your child is busy doing homework, but when they suddenly "click" out of what they are doing when you walk in, be very suspicious. There are many inappropriate websites that are easy to enter and social media, like Facebook, dominate so many young people's lives. Keeping children on-task while on the computer can be a real challenge.

Be careful not to let computers become the sole source of entertainment for your family. Many young people spend huge amounts of time just sitting in front of technology. Children still need to run, play games, learn sports, dance and just be active.

As a parent, you may also want to watch your own time spent on the computer. It's easy to get caught up chatting, shopping and messaging, which can reduce valuable family time.

THE LURE OF COMPUTER DEPENDENCY

Ok, so your son or daughter totally buys into the technology to enhance their education. The computer can instantly calculate math problems, perform demonstrations, provide definitions to complex words and even read to them.

"How cool is that!"

Well, the problem is that children have to learn to perform these tasks unassisted. Very few children want to do long division or write out spelling words anymore, but there are skills that everyone has to learn to do on their own. We cannot totally rely on technology to accomplish what our brains should be absorbing.

This balance of learning vs. enabling is hard to sustain. It's really hard to sell the "old fashioned" way of doing things in the world of instant results. This means that you may have to take the computer away at times to ensure your child's understanding of the material.

"Think? Why think? We have computers to do that for us!"

Jean Rostand

DON'T FORGET EVERYDAY "LOW TECH" ENHANCEMENTS

In our quest to be fast, accurate and successful, we often forget the role that **"low tech"** tools play in learning. Here are some everyday favorites:

- Use a highlighter to target main ideas in reading.

- Use graph paper to line-up math problems correctly.

- Use index cards to block out everything but one sentence in a reading passage for those who get distracted looking ahead instead of focusing on each word.

- Use color overlays to help enhance visual fields for people with reading disabilities.

- Small pieces of clay can create a perfect pencil grip by molding them to the proper finger grip.

- Binders with color-coded inserts can help with the organization of materials.

- Kitchen timers can help keep children with ADHD on task for short chunks of time.

- Use note cards to write short "hints" to help students memorize key thoughts or large amounts of information.

- Use flash cards to drill on specific, basic skills.

ASSISTIVE TECHNOLOGY THAT ADDRESS DEFICITS

Here is a breakdown of the **technology that is intended to assist students with specific disabilities.** Some of the more complex enhancements may be costly, but a lot of the more basic features are free.

There are no brand names listed because the products change so quickly that it is better not to limit the options or refer a device that falls short of expectations. Once you understand the overall concept, do some research to match individual needs to the current software.

There is technology that records and links audio to what a person writes using a special pen and paper. It enables the user to **take notes while recording someone speaking.** The user can later listen to any section of his notes by touching the pen to the related handwriting or diagrams.

Text-to-speech software generally converts specific written text files into speech. Some text-reading programs also include "picture-to-speech" which is the ability to read from digital scans or photographs.

Screen-reading reads aloud everything displayed on a computer screen to the user. Students can then use the browser to create presentations, spreadsheets or just chat. Screen-reading software may also offer braille in addition to speech.

Voice recognition programs allow users to verbally dictate instead of typing to input text. Users can also control the computer's functions via voice without touching a mouse or a special type of track-pad.

Students who have **visual impairments** can benefit from devices such as audio-books, magnifiers, digital recorders, special lighting, large display calculators, talking calculators, braille writers, translation software, computers with speech output or feedback, computer keyboards with large keys, talking dictionaries, and screen readers.

Students who have **hearing impairments** can utilize special hearing aids, signaling devices, communication boards, amplifiers for classroom instructors, headphones, telephone technology and closed-captioned televisions.

Technology for students with **physical impairments** really vary depending on the parts of the body that require assistance. Some examples include onscreen keyboards, touch lights, voice input/output devices, head, eye or mouth controlled computer-input devices, alternative keyboards, foot pedals, tracker-balls, or an adapted mouse.

The market for assistive technology is growing and becoming more sophisticated. Keep up with the new products by accessing the websites of major technology companies.

Computers are magnificent tools for the realization of our dreams, but no machine can replace the human spark of spirit, compassion, love, and understanding.

Louis Gerstner

TIME-OUT FOR FUN!

With easy access to Smartphones, Laptops, iPods, Video Games, and countless other technology, don't forget to make time to let your son/daughter play the most important role in their life...

BEING A CHILD.

BASIC ASSISTIVE TECHNOLOGY TERMS YOU SHOULD KNOW

Accessibility-The degree to which a product, device, or service is available to as many people as possible.

Assistive Technology (AT) - Technology that focuses on assistive, adaptive and rehabilitative features.

Alternative Keyboard-Alternative keyboards may be different from standard keyboards in size, shape, layout, or function. They offer individuals with special needs greater efficiency, control, and comfort. For example, a traditional keyboard may be confusing to a child with a disability, so it can be replaced with a keyboard that lists letters A-Z in big, bold letters.

Moisture Guard - A soft plastic cover molded to fit and placed on top of the keyboard to protect it from moisture.

Sip and Puff Switch - A switch that is activated by sipping or puffing on an apparatus resembling a drinking straw.

Electronic Pointing Devices—Used to control the cursor on the screen without use of hands. Devices used include ultrasound, infrared beams, eye movements, nerve signals, or brain waves.

Sip-and-Puff Systems—The computer is activated by inhaling or exhaling.

Wands and Sticks—Worn on head, held in mouth or strapped to chin, and used to press keys on a keyboard.

Joysticks—Manipulated by hand, feet, chin, etc. and used to control a cursor on a screen.

EXAMPLE OF FREE ACCESSIBILITY FEATURE ON THE iPAD

VoiceOver is built right into the **iPad** so that all you need is the latest version of iTunes. You can enable VoiceOver without sighted assistance by using the Setup Assistant. Sighted users can also enable VoiceOver directly by using the Accessibility menu in Settings. With VoiceOver enabled, you can use a different set of gestures to control the iPad. For example, instead of tapping to activate a button, tap the button to hear a description of it, double-tap to actually activate it, and swipe it up or down to adjust a slider.

INFORMATION ABOUT THE ACCESSIBILITY FEATURES OF THE MOST POPULAR TECHNOLOGY

For a variety of accessibility features for all **WINDOWS** products
microsoft.com/enable/

APPLE products (Apple has great products for special needs)
Apple.Com (click on Accessibility page)

Coming soon! **KINDLE FIRE** is adding accessibility features amid protests from disabled users!

ANDROID-accessibility of features and apps!
developer.android.com/guide/topics/ui/accessibility/index

SAMSUNG-Type in "accessibility" into their search window and all products will be listed in terms of adaptability

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Moving Forward

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