

Hudson Valley Special Education Parent Center



WESTCHESTER INSTITUTE FOR HUMAN DEVELOPMENT

University Center for Excellence in Developmental Disabilities

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Quarterly Informational Newsletter - Assistive Technology (AT)

Why AT? Naomi Brickel, Project Coordinator, HVSEPC

Assistive Technology(AT) was chosen as the topic of our first quarterly informational newsletter for a variety of reasons. First, it is a topic that comes up frequently in our discussions with parents and educators. I have been asked repeatedly how to request an AT evaluation, and/or how to get AT into a student's IEP. In discussions with educators the regulations and their implications in regard to assistive technology comes up often. Some parent's have shared frustration over the ineffective utilization of the AT, while others have shared how it changed the life of their child.

As a parent of a student with a disability who utilizes assistive tech through his IEP, I can empathize with all the questions and feelings that are shared. I have lived through the triumphs and frustrations afforded by AT. Unfortunately, at times, I have seen new AT perceived as added work, and we know that technology sitting unused is ineffective. Oftentimes, a new technology is accompanied



by a steep learning curve for staff. It takes a dedicated and talented professional to be able, not only to learn the technology, but effectively maximize its potential within the classroom. Effective use of AT entails more than just

compliance with what's specified on an IEP, it also demands a progressive, energetic, strength-based problem-solving approach.

I have seen a teacher's dedicated approach to the use of technology provide my child access to curriculum in a way that was empowering and practically erased the impact of his disability within a specific curriculum content area. During that time the effect on my son was dramatic and tangible. It is not embellishment to say that he stood taller and walked prouder. A 100% on a science test was hung proudly on the fridge and I realized it was the first time he had ever had something from school (other than art) put up for display. He actually made a point a standing next to the fridge when guests were over to indirectly draw their attention. Another time he came home with a grade of 22 out of 24 on a government test and when he said proudly "And the smartest kid in the class only got 20 out of 24" I was able to correct him and say, "No Johnny, the smartest kid actually got 22." I will never forget the expression on his face as that understanding sunk in.

Assistive technology is so exciting. (Just Google "Iphone apps, disabilities" as a practical example!) The potential for individuals with disabilities is infinite. Technology advances

so fast that it would be impossible to ignore its general impact on our society. Look to the progress in our own lifetime as a practical example. I do not recall how young I was when I first heard the word computer, however, when I did, the word implied a huge machine in a building called IBM that could think and perform intellectual processes infinitely faster than a human being. It was not something that was a part of school or had practical implications in everyday life of regular people. Today, I carry around a tiny computer in my pocket that is also a phone, a video camera, and even lets me download applications to better organize my life and be connected to work and family, as well as entertain according to my own personal affinities and preferences.

Is there not an even greater imperative to insure that access to technology for individuals with disabilities keeps that same pace? As stakeholders touched in some way by the life of a child with a disability, whether parent or professional, I encourage you to be a part of the effort to build capacity in this area. Learn more and promote the development of AT for individuals with disabilities. A special education director once said it to me, that the potential of Assistive Technology is to be the 'great equalizer', as a parent of a child in the district she supervises, I am grateful for her progressive insight and couldn't agree more.

Don't miss these AT events!

1/13/10: AT Overview for CPSE/CSE Chairpersons
8:30-10am@Westchester Inst. for Human Development
Visit www.hvsepc.org for info!

1/19/10: ABCs of AT with David Grapka
7:30 PM @New Rochelle HS Library
Visit www.newrochellesepta.org for info!

1/27/10 AT Overview for Parents
9:30-11am @Westchester Inst. for Human Development
Visit www.hvsepc.org for info!

2/25/10: Demonstration of Bookshare.org
7:30 @New Rochelle HS Library
Visit www.newrochellesepta.org for info!

How My Life Has Changed Through The Use Of Assistive Technology

By David S., Student, New Rochelle HS

The way that assistive technology has helped me is by allowing me to express myself in ways I never thought possible. Before I learned to type all of my thoughts and feelings were locked up in my head and in my heart. Of all the things I had missed out on in my youth the single hardest thing to bear was not having the ability to tell anyone what I was thinking.

I learned to type on a laptop computer in middle school using one finger to first spell words, and later sentences and paragraphs. In the beginning I needed a lot of help and someone to hold my hand as I typed. Most people did not think it was me doing the typing but I knew it was. One person let everyone else know that I was really smart and helped to teach other people how to support me while I type. I began using a program called Kurzweil that speaks what I type. It reads my class work with highlighting which I like. I also use it to take notes and tests. I'm using it now to write this.

Later on in high school I moved from support on my hand to my arm, then shoulder. Now I can type with a finger on my shoulder and some words by myself. On days when I am relaxed I can type more independently. My eventual goal is to type faster and with no dependency on anyone but myself. I have a way to go before I reach that goal, but think it is possible.

I have worked really hard to achieve good grades and have amazed everyone with my scores on the regents. Having been in life skills classes I was not prepared for the academic demands of high school classes and often struggled with the fast pace. Now I can participate in class and other students want to read my writings. In creative writing class I wrote the following as a way to introduce myself to the class.

"The most important thing to know about me is to look beyond what you first see. That which seems obvious is really a disguise for the really complex person that is me. I do many things in a different way than most people as you might see on the surface. The part of me that is hard to understand is how I think and reason. I use the computer for expressing all complex thoughts typing one letter at a time. The typing is slow but my thoughts run wild in my mind. You can not imagine being me with so many ideas in my head and the difficulty I have with expressing thoughts.

The way to get a good picture of me in your head is to try to visualize yourself in a place where the people speak a different language. You hear what is being said but do not process the language the same way. To understand in this different language that is not familiar you rely on

other skills and talents you might not ordinarily use. That is what I do several times each day. The routine parts of my day are instances where I operate in a way similar to most people. It is for the novel occurrences which happen throughout my day that I process in a unique way.

The infinite number of choices for many events that you might consider common often overwhelm me, and frustrate me when I can not explain in great detail what I am thinking. You have to have patience at these times and permit me to process in the way I am able.

The things that help me when I can not say what I want out loud are also the reasons why I can do certain things really well. I see many common things as a whole unit not incomplete parts, and can transfer this image to pictures in my mind. Some of these images have become a model for the sculptures and clay pieces I create. There are times I have described my art work as it relates to being who I really am, someone who is creative underneath the surface."

None of this would have been possible without the use of the computer. Most of the time I am now able to type what I am thinking and express my feelings to others. I am also starting to read aloud what I have typed even though that is still difficult. The following poem I wrote for English class last year describes my relationship with my laptop.

<p>Laptop speaks for David but not his mind things differently than he does many words to talk way to talk having no face fast paced things quickest nice to use my own thinking someone else's days I think I really will tell him mind</p>	<p>My I am that which I am his voice I would say and not use so it is not a simple in the world of I am one of the yet it would be and not one of these what is on my</p>
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David S. is a junior in New Rochelle High School who uses a process called "Facilitated Communication" (FC) to participate in a highly competitive general education program. David has attended a summer art program at Purchase College and has had his first One Man Show at the Donald Baughman Museum of Arts & Culture. (For further information about the use of FC please contact Syracuse University's Facilitated Communication Institute at

A Parent's Hope

by Jeff S.

My wife and I would like to offer a parental perspective on the Assistive Technology (AT) that our son David has been using with such success. We have seen David being able to not only finally express himself in eloquent detail, but also to showcase his intelligence, charming personality and unique talents. The typing has allowed David to develop confidence, voice opinion in a more complete and sophisticated manner (he has always been able to allow others to know his desires), charm us with his sophistication, and impress himself as well as others with his true potential. It has done so much to permit him to mainstream his educational process, and compete, quite successfully, with the other high school students, whether in formal classroom work, homework or the NYS Regents examinations. The technology has not changed David, it is just that now David has evolved from simply a student with a communication disorder to an intelligent successful young man who very much is enjoying high school and building the foundations for a very bright and exciting future. It has been a long and complicated process, worth every minute of effort!

Jeff S. is the father of David S. (see previous article) a junior in New Rochelle High School, who through the use of a process called "Facilitated Communication" (FC) has been able to move from life skills classes to access and participate in a highly competitive Regents general education HS program.



Assistive Technology in School

**Greg Stowell , District-Wide Administrator for Special Ed.
Mahopac Central School District.**

Under the law, Assistive technology (AT) is any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain or improve functional capabilities of individuals with disabilities (U.S. Department of Education, IDEA 1997). The use of such devices has the potential to increase a student's abilities and potentially compensate for any barriers that may be created by a particular disability. For children with disabilities in public school classrooms, assistive technologies are their tools to extend their physical, social and communicative abilities. They also provide the means

for academic and cooperative inclusion. School districts are required under law to provide appropriate AT to students with disabilities when it supports their acquisition of a free and appropriate public education (FAPE). In order to support the inclusion and participation of students with disabilities in regular education classrooms, all IEP's developed for children identified as needing special education services, must indicate that AT has been considered to "to provide meaningful access to the general curriculum" (U.S. Department of Education, IDEA, 1997). More specifically, IDEA indicates that AT devices and services must be made available to a child with a disability if required as a part of the child's IEP, related services, supplementary aids and/or services.

Sometimes, students' needs can be met using Universal Design for Learning (UDL) methodologies. Universal design is defined as the practice of designing of all educational products and environments beyond making them accessible for just people with disabilities, but rather it makes all aspects of the educational experience more inclusive for every child, parent, staff member and visitors (Burgstahler, 2009). Technology manufacturers are encouraged to follow suggested federal guidelines to design products that are accessible to more users.

In other instances students may require supports that are individualized to meet their particular needs. In some cases, "low tech" AT devices/services may be employed. Several examples of low tech assistive technology include to such items as pencil grips, seat cushions, book holders, and simple switches. For other students, "high-tech" assistive technology devices may be necessary. Examples of high-tech assistive technology included augmentative communication devices, text-to-voice software and FM auditory trainers.

References:

US Department of Education
www.ed.gov/offices/OSERS/IDEA/regs.html

Burgstahler, Sheryl, (2009)
Universal Design in Education: Principles and Applications

Assistive Technology Lingo Simplified

Beth Heyd, Assistive Technology Program at WIHD

An assistive technology (AT) device is any item, product, or piece of equipment that can be used to maintain or improve the functional abilities of an individual. It may be as simple as an adapted pen or as complex as an eye-controlled computer system. AT, as in most specialties, has its own "language" which we have attempted to simplify below. AT is classified from low-tech (adapted pen), mid-tech (amplified phone), to high tech (eye-controlled computer). Categories for AT include, seating/positioning/mobility (SPM), alternative and augmentative communication (AAC), learning/cognition/development (LCD), computer/writing supports and access, environmental controls (ECU), daily living, and visual and hearing supports.

SPM provides an individual supports in sitting, standing and walking; equipment can include adapted chairs and bicycles, standers, canes, walkers and wheelchairs. Simply put, think of great-grandma or grandpa, they may use a cane or walker to help them walk.

AAC provides an individual with a means to communicate; with AAC a person can interact with others and has the ability to express desires and needs. AAC devices range from low-tech communication boards with pictures, to complex computer based devices with symbols that speak when selected. Simply put, press a button with a picture or word, and a voice will speak.

LCD equipment is any device that increases or supports one's ability to learn and includes switch adapted toys, weighted blankets, fm systems, adapted books and electronic note takers. Odds are that you have items around your home that are considered LCD, early learning software for your computer or even a dictionary. Computer, writing supports, and access are key for many AT users. If you have difficulty using your hands, these supports may assist in communication, organization, writing, and learning. AT includes adapted pens and slant boards, small portable word processors, adapted keyboards and switches, joysticks, and high tech devices using your voice or eyes for input. Have you ever seen a large mouse or trackball to use with a computer? That large mouse is access.

If an individual does not have the ability to physically manipulate their environment EC units can work between the person and items they need to control (ie, lights, television) and may include a simple box with a controller to a computer based system. Think of life before a remote control . . . the remote control falls within this category. Daily living supports range from grip bars in the bathroom to bath chairs and adapted eating utensils. In your kitchen, that round rubber circle in the back of the junk drawer that helps you open stuck jars, is a daily living support. Visual supports include simple magnifiers, talking thermometers, computer screen readers and the obvious, the trusty eyeglasses.

Products for those with hearing loss include personal voice amplifiers, amplified phones, and smoke alarms with strobe lights. The volume control lever on your telephone falls in this category.

An extensive variety of AT devices exist that will support an individual regardless of age. This is just a small sampling. Many people hear the term Assistive Technology supports and feel their anxiety levels rising . . . they do not need to. Relax, breathe and start by contacting your regional tech site. These sites are federally funded through the Rehabilitation Services Administration. Staff at each site is trained and at no-charge provides information, assistance, referrals, device demonstrations and device loaning. Twelve sites are located throughout New York. Find your regional center at [NYS TRAIID Project](#) and let them begin to guide you and assist you in your quest for more independence.

***Beth Heyd** is the coordinator of the Assistive Technology Program at WIHD, Valhalla, NY. Beth has extensive experience in organization and management of the Institute's Assistive Technology Loan Program. This program provides short term loans of AT equipment to individuals across the lifespan. Additionally, Beth provides AT device demonstrations to organizations throughout the community. She manages information dissemination/AT referral activities.*



Check out these resources on the web....

[Assistive Technology-Inclusive Communities](#)

http://www.pbs.org/parents/inclusivecommunities/assistive_tech.html

An AT overview by Patti Slobogin

[Closing The Gap](#)

www.closingthegap.com provides information and training necessary to locate, compare, and implement assistive technology

[The ABC's of Assistive Technology](#)

<http://www.hvsepc.org/1209.html>

by David Grapka

[Wikipedia](#)

http://en.wikipedia.org/wiki/Assistive_technology

Wikipedia explains AT. Excellent resource.

[The Family Center on Tech. and Disability](#)

www.fctd.info filled with information, resources, family guides.