What assistive technology means for special needs students

Those that use assistive technology differ personally as they do functionally. Every individual student possesses different needs and expectations to assistive technology use. But in order to get a better outcome, these different needs and expectations are ideally assessed so that Assistive technologies can be customized for the individual student’s benefits. In a school setting, it is necessary to make implementations for individuals with disabilities in order to use alternative methods for skills or abilities they may not posses. Each of these alternative forms of input offers advantages and disadvantages and each require certain abilities. The task of matching appropriate assistive technologies to individual learners needs required consideration of:

The specific characteristics of the student (age, abilities, preferences)

The learning environments where assistive technologies will be used

The learning goals that assistive technologies is intended to support

A constant evaluation of student’s productivity and learning requirements is necessary to determine whether a student’s assistive technology needs are being met appropriately. Educators should have realistic learning outcomes for individual life skills students in the classroom (Scherer, 2002). [1]However, the choice of software made by administrators and educators should also take into consideration software attributes that would provide the most appropriate learning environment for life skills students. The content should be low-level, emphasizing developing skills that may be commonplace for students without disabilities. A simple interface with easy navigation and an elementary design will ensure students not to become

frustrated with the digital learning environment (Dell, Newton, & Petroff, 2007).[2]“ The more students can do for themselves, the more opportunities there are for natural abilities and preferences to emerge that enable us to use a person-centered plan for individual program planning” (Rocchio, 1995, p. 4).[3]I strongly agree with the statement made by Rocchio, the more independence students can gain from doing things themselves by the use of assistive technology to help, of course they will natural abilities will shine through.

How can we define advantages of Assistive Technology, when we think of AT high-tech devices comes to mind, but federal legislation defines assistive technology as “ any item, piece of equipment, or product system . . . that is used to increase, maintain, or improve functional capacities of individuals with disabilities.” But there are low-tech devices in assistive technologies also. A low-tech device such as a pencil with tape wrapped around it to make it easier to hold for a student who has impaired muscle control in her hands is included in the federal definition of assistive technology, as is a robotic device that manipulates equipment in a science laboratory for a blind chemistry student. Devices such as E-readers help students turn book pages without applying agility and voice adaptive software can help students answer questions without needing to write.

Augmentative communication systems are often used with students who cannot speak due to severe physical impairments. Augmentative communication devices help individuals in producing and understanding speech. Every student needs some method of communication in order to interact with others and learn from social contact. Students who are

nonverbal or whose speech is not fluent or understandable enough to communicate effectively may benefit from using some type of communication device or devices. To determine an augmentative communication system, will require a team to come together, which will involve assessing the students needs and capabilities. Communication devices include such things as symbol systems, communication boards, programmable switches, electronic communication devices, speech synthesizers, recorded speech devices, communication enhancement software, and voiced word processing.

The disadvantage or downside of assistive technologies is like any other form of technologies, training is an essential for successful use. So without training, students cannot use assistive technologies to their advantages. The technologies that help the least in the classrooms are those that educators have a hard time understanding. I believe that if students can put assistive technologies to good use, but if there are not enough level of training for educators, most of these assistive technologies are a waste of time and money.

In conclusion with the use of appropriate software that matches students' abilities, these students can greatly benefit from the ease, interactivity, multimedia, simulation, feedback, and customization of these applications (Brown, Falvey, Vincent, Kaye, Johnson, Ferrara-Parish, & Gruenewald, 1980). [4]Students using assistive technology to practice and build experience in functional skills should achieve greater independence which will enhance the quality of their lives (Schneider, 1999).[5]When students' quality of life is enhanced, everything else in their lives improves: school performance, social

relationships, family and home life, and self-confidence all benefit from helping students find interdependence in living their lives and contributing at home, work, and school. Assistive technology has the ability to impact greatly on the lives of people with disabilities (cook and Hussey 2002, Gray 1998).[6]Most students with disabilities can and do benefit from technology in the classroom. Incorporating technology increases students' motivation to learn and personalizes lessons to a student's individual needs. Even the students with the most severe and profound disabilities can use assistive technology to join a classroom of typical students, and their potential can be reached in ways we didn't have before.