Assistive Technology

What is Assistive Technology?

Assistive technologies (AT) are the tools and strategies that act to liberate the use of technology for all students as well as to provide new ways to "assist" interactions and learning. They act to "augment abilities and bypass or compensate for a disability" (Lewis, 1994) AT is anything that makes it easier for a student to: read, write, speak, see, get around or move and play. Educational and assistive technology give students with disabilities greater possibilities to master content,



organize and control behavior. Recent technology innovations are changing the ways teachers teach and children learn. Students with disabilities are capable of participating in the general education curriculum to varying degrees with some adaptation and modifications that AT can provide. For more information about AT visit www.atto.buffalo.edu.

Assistive technology includes devices and services. According to the Individuals with Disabilities Education Act (IDEA) and the *Regulations Governing Special Education Programs* for Children with Disabilities in Virginia, the terms are defined as:

"Assistive technology device" means 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 the functional capabilities of a child with a disability.

"Assistive technology service" means any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device. The term includes:

- 1. The evaluation of the needs of a child with a disability, including a functional evaluation of the child in the child's customary environment;
- 2. Purchasing, leasing or otherwise providing for the acquisitions of assistive technology devices by children with disabilities;
- 3. Selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- 4. Coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- 5. Training or technical assistance for a child with disability or, if appropriate, that child's family; and
- 6. Training or technical assistance for professionals (including individuals providing education or rehabilitation services), employers, or other

individuals who provide services to employ or are otherwise substantially involved in the major life functions of that child.

The Use of Instructional Technology vs. Assistive Technology

Computers have become an essential literacy tool in our society. Over 76% of American students use a computer at school; 83% use one at home for school assignments/word processing Internet access in public schools has increased to 78%, with 27% of classrooms with Internet access (National Center for Education Statistics, 2001). This raises questions as to how school systems are providing access of this available technology to their students and their teachers. One technology that can help all learners is universal design (UD). With UD, students can access content using their strongest learning mode. For example, a social studies text may be presented in print and electronically at a lower reading level with graphics to add clarity or be read aloud by the computer. Also, the text could be highlighted, the font enlarged, or the background changed. Additionally, with universally designed materials, there will be less need for teachers to make adaptations because most will be imbedded (Council for Exceptional Children, November 2003). For more information about Universal Design visit www.cast.org.

The Virginia Department of Education is working hard to provide resources in the area of AT. Training has been provided to local assistive technology teams in local school systems across the state by the Department's Training/Technical Assistance Centers (T/TAC) located at seven universities. Visit the T/TAC training website at www.ttaconline.org for more information on events, resources, Enhanced Scope and Sequence Plus, webshops and www.workshops.



Other State Resources:

http://www.VATS.org

Virginia Assistive Techology System (VATS)

http://www.vcu.edu/partnership/pda/

For information on the consortium for handheld technology project.