

Assistive Technology and Aging: Tools for Independence
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Technology significantly influences the way most of us go about the business of living. Food gets cooked in the microwave, TVs and even ceiling fans are operated by remote control, cell phones connect us to loved ones, and many of us even purchase goods and services through the internet. Not surprisingly, technology also has the power to change and improve the lives of senior citizens who experience loss of functional abilities associated with aging and/or disabilities. A sub category of technology, known as assistive technology (AT) includes thousands of devices and products – from simple to complex items – that enable people to be more productive and independent in daily living activities such as communication, self-care, mobility, recreation, education, and employment. Assistive technology can be used at home and in the community in ways that provide creative solutions for increasing personal capabilities. Assistive technologies should be viewed as valuable tools that may facilitate a person's ability to age in place rather than be forced to move to a new environment.

Assistive technology devices work by either enhancing an individual's existing abilities or by compensating for absent or non functional skills. For example, video magnification products such as closed circuit televisions (CCTVs), allow a person with limited vision to use his/her remaining eyesight by enlarging words and pictures to a more readable or recognizable size.

When enhancement is not possible, assistive technology can offer an alternative way to accomplish a task. Use of a vibrating alarm clock (substitution of vibration for sound) will enable a deaf or severely hard of hearing person to wake up at the time desired each morning.

Captioning technology - computer assisted real time translation (CART) - allows the deaf and hard of hearing to understand what is going on around them by providing a written transcript of the words spoken during a movie, television program, or group presentation.

Wheelchairs, power scooters, ramps, wheelchair lifts and hand controls for cars are examples of assistive technologies that improve the ability to move around and travel independently for people whose mobility is compromised by arthritis, stroke, Parkinson's disease, diabetic peripheral neuropathies, and other physically challenging conditions.

Mainstream technology such as electronic organizers, also known as Personal Digital Assistants (PDAs), can assist individuals with memory, organization and/or learning difficulties to plan, sequence, and remember important daily events. Access to a computer through alternative keyboards, mouse options, and software choices is now a reality for people with limited hand function due to pain, weakness or paralysis.

It is important to understand that high cost and complexity do not necessarily make for a superior assistive technology device. To be useful, the technology must match the

individual's specific needs, do the job for which it is intended, be compatible with the environments in which it will be used and be affordable to the person who needs it.

In summary then, assistive technology is any piece of equipment or device used by a person with a functional limitation to perform specific tasks, improve functional capabilities, and become more independent. Assistive technology can help redefine what is possible and achievable!

This is the first in a series of articles designed to educate people about assistive technology and its benefits to those in their "golden years". For more information, contact Randy Collins, Training and Outreach Coordinator for the Arizona Technology Access Program (AzTAP). Randy can be reached at 602-728-9533, 602-728-9536 (TTY) or toll free at 800-477-9921. The AzTAP website is www.nau.edu/ihd/aztap.