Digital Literacy and Accessibility

An important aspect of working with computer and Internet beginners is being aware of special needs that learners may have, including those related to disabilities. There are four general categories of disabilities:

Visual

Individuals with visual disabilities have low vision, are color blind, or are fully blind. People with visual disabilities have trouble using a mouse because it requires hand-eye coordination. Usually people with visual impairments navigate computers with the use of the keyboard. For example, the TAB key might be used in place of the mouse to move the cursor on the page. Also, the user might press the Enter key instead of clicking the mouse. There are hardware and software magnifiers available to enlarge text beyond simple font enlargements on the computer.

Hearing

Individuals who are deaf or hard of hearing benefit from visual representations of auditory information. Solutions for this problem include closed captioning, blink error messages, and transcripts of spoken audio.

Mobility

Individuals with mobility issues have physical limitations with movement, fine motor controls, lifting, walking and typing. Solutions for people with mobility limitations include switches, latches, and controls that make the computer easier to manipulate. Additional supports for mobility limitations include voice input systems.

Cognitive

Individuals with cognitive disabilities such as dyslexia and short-term memory deficit need assistance for computer usage, including consistent design and simplified language, a simplified user interface, and redundant input (provision of both audio file and transcript if necessary).

Resources for More Information

TechSoup (www.techsoup.org) provides a range of technology information and ordering options for non-profit organizations. Their learning page includes a section on accessible technology.

As part of an e-Health initiative, the **National Institutes of Health** provide materials for instructors working with seniors. Their toolkit includes tips for a senior friendly computer classroom that accommodates physical changes in hearing, vision and motor skills. Find these resources at http://nihseniorhealth.gov/toolkit/toolkit.html