ASSISTIVE FACTS TECHNOLOGY FACTS VISION

WHAT IS ASSISTIVE TECHNOLOGY?

Assistive technology, or AT, is any tool that allows individuals with disabilities to use their unique abilities to reach their goals. AT can range from low-cost tools such as a jar opener to more complex devices such as a power wheelchair or communication aid. Infants, children, adults and older persons with any type of disability can benefit from the use of AT.

What are visual assistive technologies?

They're devices that help people with low vision or blindness by enhancing contrast, enlarging images or substituting tactile or auditory signals for visual ones.

What is the difference between legal blindness and low vision?

Under Social Security rules, an individual is legally blind if vision cannot be corrected to more than 20/200 in the "better eye." People are also considered legally blind if their visual field is 20 degrees or less, even with corrective lenses. Low vision, which includes legal blindness, is defined as a level of vision that is 20/70 or lower and cannot be fully corrected with glasses. A person with low vision has some useful sight. In evaluating visual disability, it is important to assess how effectively individuals use the sight they have.

Who is affected by low vision and what causes it?

More than 80 percent of people with low vision are adults. The causes of low vision include disease, heredity and injury. The most



common age-related causes of low vision are cataracts, diabetes, glaucoma and macular degeneration.

What modifications are available for people with vision loss?

They span adjustments that enhance visual information to make it more useful for individuals with some residual vision to adjustments that convert visual information into auditory or tactile formats. Modifications that improve access to visual information by

enlarging it or enhancing its contrast against a background include:

Visual information on dials and control panels that can be made

accessible by adding raised marks, and products that normally produce visual signals (clocks, calculators), which are available with enlarged

numbers or auditory and/or tactile output.

The font of printed materials that can be enlarged via use of low-tech magnifiers or through the use of video (digital) magnification systems.

Access to information on a computer display that can be enhanced by using builtin software settings or screen magnification programs.

◆ Alternate access to information that can be gained on a computer monitor via screenreading technology or devices that translate the information into Braille. Likewise, print materials can be scanned into the computer using optical character recognition (OCR) technology, and the digital files that result from this scanning process can be accessed using screenreaders or Braille output devices.





What are orientation and mobility aids?

Ranging from white canes and guide dogs to personal electronic mobility devices, they help users move about and travel safely and independently.

Where can I purchase aids for low vision?

A low-vision specialist or AT specialist can help you pinpoint your needs and find equipment responsive to them. Reputable vendors and equipment demonstration-and-loan centers will allow you to sample devices before making final purchase decisions.

What are some things I should consider before making a purchase?

- What is the extent of my vision loss?
- In what setting will I use this technology?
- What am I trying to accomplish?
- Do I need my product to be compatible with other tools I use?
- What funding sources are available for this purchase?



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UNIVERSITY OF DELAWARE CENTER FOR DISABILITIES STUDIES If you are interested in learning more about Assistive Technology, please call (302) 831-6974 or visit our webpage at: www.dati.orgA

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