


Worksheet 3: “People with disabilities and Technology”



"Caminar por las calles de Santiago es casi un acto reflejo, le hacemos el quite a los hoyos de las aceras y sólo vamos preocupados de que no nos vayan a meter la mano a la cartera. Pero, ¿se ha puesto a pensar que pasaría si tuviese que usar una silla de ruedas para moverse? ¿Cuánto tiempo le tomaría entrar a un edificio o subirse a una micro?"

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1. Piense y responda en castellano.

- ¿Conoce usted a alguna persona discapacitada?
- ¿Qué tipo de discapacidades existen?
- Piense por un momento qué tipo de impedimentos encuentra una persona discapacitada en la vida diaria.



Lea atentamente el siguiente texto.

People with disabilities meet barriers of all types. However, technology is helping to lower many of these barriers. By using computing technology for tasks such as reading and writing documents, communicating with others, and searching for information on the Internet, students and employees with disabilities are capable of handling a wide range of activities independently. Still, people with disabilities face a variety of barriers to computer use. These barriers can be grouped into three functional categories: barriers to providing computer input, interpreting output, and reading supporting documentation. Hardware and software tools have been developed to provide functional alternatives to these standard operations. Specific products, and approaches to using them are described below.



Mobility Impairments

Some wheelchairs may not fit under standard height computer tables and some computer users do not have enough use of their hands and arms to operate a standard keyboard or mouse.

Equipment which provides flexibility in the positioning of monitors, keyboards, documentation, and tabletops is useful for many individuals with disabilities. Plugging all computer components into power outlet strips with accessible on/off switches makes it possible for some individuals to turn equipment on and off independently.

Blindness

Individuals who are blind cannot access visual material presented on the computer screen or in printed materials.

Most individuals who are blind use standard keyboards, however, Braille input devices are available. Braille key labels can assist with keyboard use.

Speech output systems can be used to read screen text to computer users who are blind. Special software programs, called screen readers "read" computer screens and speech synthesizers "speak" the text. The availability of earphones for individuals using speech output systems can reduce the distractions for others nearby.

Hearing and/or Speech Impairments

Speech and hearing disorders alone do not generally interfere with computer use. However, modern speech synthesizers can substitute voices and thus provide a compensatory tool for students who cannot communicate verbally. Students with portable systems can participate in class discussions once adapted computers provide them with intelligible speaking voices. Word processing and educational software may also help students who are hearing impaired develop writing skills.

Specific Learning Disabilities

Educational software where the computer provides multi-sensory experiences, interaction, positive reinforcement, individualized instruction, and repetition can be useful in skill building. Some students with learning disabilities who have difficulty processing written information can also benefit from completing writing assignments, tutorial lessons, and drill-and-practice work with the aid of computers. For example, a standard word processor can be a valuable tool for individuals with dysgraphia, an inability to produce handwriting reliability.

2. Lea y seleccione la alternativa correcta de acuerdo al texto.

People with disabilities...

- a. don't face any kind of barriers today.
- b. face barriers only in the technological field.
- c. meet barriers of different types.

Technology...

- a. is helping people with disabilities to reduce barriers.
- b. is increasing barriers for people with disabilities.
- c. has eliminated all the barriers for people with disabilities.

Individuals who are blind...

- a. are totally impeded to access to material presented on the computer screen.
- b. can have access to special software programs called screen readers.
- c. can only have access to Braille input devices.

3. Lea y responda en castellano.

- a. ¿Cómo pueden ser clasificados los impedimentos que enfrentan las personas discapacitadas?

b. Mencione una posible solución planteada en el texto para las siguientes situaciones:

- Sillas de ruedas que no alcanzan la altura de los escritorios de computación convencionales.

- Personas ciegas que no pueden escribir con un teclado computacional.

- Personas ciegas que no pueden leer la pantalla.

- Personas con problemas de habla.

- Estudiantes con problemas de aprendizaje.

4. Traduzca los siguientes conceptos al castellano.

a. Blindness

b. Speech and hearing disorders

c. Multy-sensory experiences

d. Positive reinforcement

e. Learning disabilities
