NAME:KIROP ENOCK

INSTITUTION:MUST

COURSE: EDUCATION

ASSERTIVE TECHNOLOGY

Introduction;

**Assistive technology** (**AT**) is a term for assistive, adaptive, and rehabilitative devices for people with disabilities and the elderly. Disabled people often have difficulty performing activities of daily living (ADLs) independently, or even with assistance. ADLs are self-care activities that include toileting, mobility (ambulation), eating, bathing, dressing, grooming, and personal device care. Assistive technology can ameliorate the effects of disabilities that limit the ability to perform ADLs. Assistive technology promotes greater independence by enabling people to perform tasks they were formerly unable to accomplish, or had great difficulty accomplishing, by providing enhancements to, or changing methods of interacting with, the technology needed to accomplish such tasks.

Overview of assertive technology devices;

Assistive technology is technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices such as walkers and wheelchairs, as well as hardware, software, and peripherals that assist people with disabilities in accessing computers or other information technologies. For example, people with limited hand function may use a keyboard with large keys or a special mouse to operate a computer, people who are blind may use software that reads text on the screen in a computer-generated voice, people with low vision may use software that enlarges screen content, people who are deaf may use a TTY (text telephone), or people with speech impairments may use a device that speaks out loud as they enter text via a keyboard.

A formal, legal definition of assistive technology was first published in the Technology-Related Assistance for Individuals with Disabilities Act of 1988 (The Tech Act). This act was amended in 1994; in 1998, it was repealed and replaced with the Assistive Technology Act of 1998 (“AT Act”). Throughout this history, the original definition of assistive technology remained consistent. This same definition was used in the Access Board’s Electronic and Information Technology Accessibility Standards, developed as required by 1998 amendments to Section 508 of the Rehabilitation Act.

A tremendous variety of assistive technology is available today, providing the opportunity for nearly all people to access information technology (IT). However, an individual’s having proper assistive technology is no guarantee of having access. IT accessibility is dependent on accessible design. IT products must be designed and created in ways that allow all users to access them, including those who use assistive technologies.

Assistive technology can range from no and low tech solutions to high tech solutions. For example:

Using paint to help with wayfinding (“to get to the elevator follow the blue line on the floor”)

Homemade grips (wrapping duct tape around a pencil or pipe insulation around a spoon handle)

Speech generating devices that can be activated using eye gaze

Assistive technology solutions may be store bought, such as speech recognition software; modified such as placing tennis balls on a walker to make it easier to glide over carpets; and, even custom made such as creating a prosthetic hand using a 3D printer.

Throughout this site, we will use the following ten categories below to group AT solutions. It may not surprise you to learn that AT may fit into more than one category depending upon the person’s needs as well as how and where the person uses the AT.

Assertive technology services

Assistive technology refers to the need for the use of devices and services to increase,

Maintain, or improve functional capabilities of students with disabilities. An “assistive

Technology device” refers to 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 functional capabilities of students with disabilities. An “assistive

Technology service” refers to any service that directly assists a student with a disability in

The selection, acquisition, or use of an assistive technology device. Such term includes:

1. The evaluation of the needs of such child, including a functional evaluation of the

Child in the child’s customary environment;

1. Purchasing, leasing, or otherwise providing for the acquisition of assistive

Technology devices by such child;

1. Selecting, designing, fitting, customizing, adapting, applying, maintaining,

Repairing, or replacing assistive technology devices;

1. Coordinating and using other therapies, interventions, or services with assistive

Technology devices, such as those associated with existing education and

Rehabilitation plans and programs;

1. Training or technical assistance for such child, or where appropriate, the family of

Such child.

CONCLUSION

In conclusion, assistive technology can be a handy tool for those with disabilities. It can be customized to fit individual needs, and many affordable and accessible options are available. Despite its benefits, many misconceptions still need to be made sabout assistive technology and its users. By better understanding the options, benefits, and misunderstandings, we can ensure that assistive technology is available to everyone who needs it.

Understanding the true potential of assistive technology and separating fact from fiction is key to ensuring that this life-altering technology is accessible to those who need it most. With the right combination of knowledge, creativity, and perseverance, assistive technology can be a powerful tool in helping people with disabilities reach their full potential.

Assistive technology offers an invaluable service to those with disabilities, allowing them to access resources and engage in activities that may not have been possible before.

References;

Bone, E. K., & Bouck, E. C. (2017). Accessible text-to-speech options for students who struggle with reading. Preventing School Failure, 61(1), 48-55.

Dawson, K., Antonenko, P., Lane, H., & Zhu, J. (2019). Assistive technologies to support students with dyslexia. Teaching Exceptional Children, 51(3), 226–239.

Desmond, D., Layton, N., Bentley, J., Boot, F. H., Borg, J., Dhungana, B. M., & Mavrou, K. (2018). Assistive technology and people: A position paper from the first global research, innovation and education on assistive technology (GREAT) summit. Disability and Rehabilitation: Assistive Technology, 13(5), 437–444.

Goggin, G., Ellis, K., & Hawkins, W. (2019). Disability at the centre of digital inclusion: Assessing a new moment in technology and rights. Communication Research and Practice, 5(3), 290–303.