

Student's Name

Professor's Name

Course

Date

Exploring Assistive Technology

The Technology-Related Assistance Act of 1988 defines assistive technology as "Any item, piece of equipment, or product system, whether acquired commercially, modified or customized that is used to increase maintain, or improve functional capabilities of individuals with disabilities." (GSA Government). Irrespective of the design or size, these instruments are aimed at promoting safety, flexibility, and autonomy by allowing users to execute actions that they cannot accomplish on their own or experience difficulties with altogether.

Intel Reader



Source: <https://www.fastcompany.com/1520074/intels-read-aloud-reader-breakthrough-dyslexics-vision-blind>.

Purpose. The invention of this device was inspired by Ben Foss's severe dyslexia, promoting him to develop a literacy aid for people with his condition and other reading-complications.

Incorporating a high-resolution camera, the device not only converts printed materials to digital texts but reads the output aloud. In this way, it accomplishes the following purposes:

Convenience

With extreme portability, the gadget incorporates all the functionalities of a bulky scanner and PC in an expedient size for home, work, and on the road reading. Fitting easily in a backpack or purse, the reader is ideal for mobility. The point-shoot-listen feature allows users to operate in a number of locations and makes it easy to comprehend product labels, guidebooks, signs, and others texts on the go (Tischler n.p). Equipped with earphones, they can perform the various functions disjointedly without disturbing others. More importantly, USB connectivity boosts storage by enabling file transfer from personal computers or flash drives.

Boost Productivity

The Intel Reader is aimed at achieving more through seamless access to printed information that is needed for school or work. The robust movable stand enables quick capturing of texts from newspapers, books, magazines, and other publications. With the ability to store and play a wide assortment of content, users have an unlimited access to DAISY (Digital Accessible Information System) books, MP3, and WAV audio files as products of text conversion. At the same time, it increases comprehension through audio preferences such as gender, speed, or pitch.

Freedom

Through powerful content management, the device gives people the freedom to organize their information and accomplish tasks faster. Illustratively, the library function allows bookmarking of favorite documents to hasten access. In addition, sentence, page, words, or page navigation mechanisms provide greater autonomy in access. By highlighting the text during playback, users have the liberty to pause and spell out the underscored writings. The application

displays each character alongside a percent marker that activates the play button to commence reading at that point. Another exciting component is the ability to customize the languages by purchasing supplementary engines. According to Tischler, the language, volume, and speed settings can be changed anytime so that each document processes with a voice of choice. Additionally, every language incorporates its own pronunciation database for exceptions and phonetic outputs.

Who can Benefit. The Intel Reader introduces complete flexibility for those with reading disabilities such as low vision, blindness, or dyslexia through unimpeded access to printed manuscripts.

Accessibility. Designed as a hand-held device, the gadget entails hand use to aim, shoot, and retrieve audio outputs. Easy-to-locate buttons and straightforward menus make it easy to identify and navigate the different functions. A single tap displays the text window either in partial or full screen, while concealing the controls for incessant reading. Prompting the context menu, the tap-and-hold gesture allows blocks of texts to be copied as well as add new pronunciations to the fly. For readability, one can use the zoom feature by shrinking the text window down to single lines, displaying documents in desirable fonts and sizes spontaneously. Whereas the travel case protects the apparatus, it allows complete reading and listening capabilities. More important in this aspect is the magnesium case that is embedded in the portable capture station to accommodate large chunks of texts.

Cost. A random check among leading online vendors reveals a base price of \$ 1,499 for the reader alone. The portable capture station retails separately at \$399. However, the price variations are majorly due to geographical differences and shipping preferences.

Terms of Use. The hardware vendors for devices that interface with this product as well as other interchangeable components are solely responsible for the sale, design, and functionalities of their products. In this regard, Intel is not liable for any product warranties or infringement arising from use. Whereas information about third-party products may be provided alongside the reader, they are for educational purposes only and Intel is not responsible regarding quality, reliability, or compatibility of such devices. Moreover, the product is subject to change in design and other descriptions any time without notice; therefore, consumers cannot rely on the underlined exceptions in the course of use. By reserving these confines for subsequent definitions, Intel has no responsibility in case of conflicts or inconsistencies emanating from future renditions. To the vendors, this educational solution remains their sole responsibility; as such, intellectual property infringements abound. While these terms bind right from the purchase of the gadget, the chipmaker does not reference any affiliate products together with all their terms and conditions of use.

Works Cited

GSA Government. "Assistive Technology Act of 1998." *Commission on Labor and Human Resources*, <https://www.section508.gov/assistive-technology-act-1998>. Accessed 11 November 2017.

Tischler, Linda. "Intel's Read-aloud Reader: Breakthrough for Dyslexics, Vision for the Blind." *Fast Company*, 2010, <https://www.fastcompany.com/1520074/intels-read-aloud-reader-breakthrough-dyslexics-vision-blind>. Accessed 11 November 2017.