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HOW DOES TECHNOLOGY AFFECT THE WORKPLACE TODAY?

BY:

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Promote Awareness

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Each job and its many components involve learning and understanding in order to complete its responsibilities on a daily basis.

In the past five years, there has been an influx in technology both in the workplace and in everyday activities. E-mail, the Internet, fax and other forms of technology have streamlined office tasks and made it possible to accomplish more work more quickly. In spite of their seeming "necessity," however, it is possible for most people to accomplish their workplace tasks without such technological innovations. Imagine what it would be like, then, if everyone had to use technological accommodations in order to perform the tasks that a job required, or even to complete simple, everyday tasks. Many people with disabilities are in this situation; they must use technological accommodations everyday. Many of the same advancements that have created the global market and the "dot.com" revolution have also enabled people with disabilities to become a part of working society.

With the use of technological advancements now widespread in business and industry, more and more formerly "disabled" people are entering the workplace. Prior to these advancements, many persons with disabilities had, really, only two employment options: to stay home and collect Social Supplement Income* from the government or take a job as part of a "re-training program" that was neither satisfying nor challenging. Knowledge and understanding of the existence of assistance devices, how they work, and the ease with which they can be integrated into the overall flow of everyday office tasks can simplify the transition of the "disabled" person into the accommodated, productive employee. At this time I would like to expand the information to cover in more depth the technological devices used to assist people with disabilities on the job

There are many forms of accommodating technology already in use in most offices. In many cases, the employee who has a disability may have to utilize technological accommodations to do a specific job. For example, an employee who is blind has to read memos via a scanner and voice output. Some advancement is as simple as a large screen

monitor for people who are visually impaired or a wrist or back support for those with repetitive motion syndrome. Other devices are more complex, like the computer technology that allows a person with severe physical, mobility-affecting disabilities to communicate with co-workers on an equal playing field.

From what I know there seems to be more technological accommodations available for the visually impaired, yet more and more technology is being designed for people with physical disabilities. I recently saw a lap top computer that has numerous options on the screen for a person who has a physical disability and has a difficult time communicating. They can design on the screen a number of different sub-screens to communicate. Under each sub-screen there can be as few as 3 or as many as 40 pictures or words to communicate by pushing a button or moving an infra-red symbol on the screen to point to the sentence, phrase, or picture to communicate. Fortunately, the communication boards have come a long way over the years enabling people with severe speech impediments to open up a whole new world of thoughts and communication. There's also an expensive little number costing upwards of $10,000 a throw, that translates a line on the computer into a Braille display in front of the keyboard. Braille is not a new form of communication; however, the transformation from computer into Braille is becoming more common. Therefore, this allows the Braille user to become more involved in the workplace.

The assistive computer technology system was but the first product in a line that now lends communication to assist people with visual and physical disabilities, as well as those with dyslexia. For the dyslexic and the visually impaired, for example, there are systems that can scan printed material into a computer, which then reads it aloud to the user. One of the programs name is called Jaws this program is a Windows based program. This is synthesized speech technology that makes it possible for a computer running Windows 95, 98 or NT to speak the information being displayed on the monitor. Key combinations provide access to reading, navigational and system controls for individuals with visual, learning and other impairments. Outspoken for the Macintosh is similar to Jaws. Unfortunately, there is a downside using speech-output technology via the Internet: not all websites are designed to be user-friendly for computer speech-output mechanisms.

Synthesized speech technology is not a new form of technology; however, it has continued to improve over the years, opening doors for people with disabilities in the workplace. It has also enhanced the teaching of children with disabilities in school. For people with learning disabilities, synthesized speech has enhanced their quality of life because many people who have learning disabilities may not know how to spell some words unless they hear it. Please keep in mind that each disability is different; therefore, the technology needed will change from one individual to the next, even if the disability is labeled the same.

There are a number of companies throughout the U.S. and other countries that produce augmentative communication devices. If there is someone you know who could use one of these devices, I suggest you contact a speech therapist in your area or on the

World Wide Web under data base address of:
www.admin.state.mn.us/assistivetechnology/loan

People across the globe, whether they are disabled or not, have different needs from day to day. As we continue to move ahead in the new millennium, we are more aware of what can be done with technology today and in the future in order to lower the number of people with disabilities who are unemployed. For the end user the biggest issue may be, "Will the system work for me or will there need to be adjustments made in order for me to do the job requirements? Also can the manufacture make these accommodations that will be necessary for me to use the system(s)?"

In closing, there is a form of technology that has been around for many years, which many people overlook as a form of assistive technology. Yet, many individuals, disabled and non-disabled, utilize it every day in work and home life. This technology is e-mail. You might be surprised to learn that this form of technology has been around for years and many people did not realize that this is a viable form of technologic accommodation. Many people do business over the Internet at first before meeting with their prospective client. The entire time they are communicating back and forth the ideas are strong, yet they do not have a visual perception of whom they are dealing with. The question I ask and continue to ask time and time again is - "Does e-mail serve as a viable form of communication or does it put up false images as a form of technology?" Before I elaborate, can someone give me his or her thoughts on this issue?

There are other types of technology that I cannot touch on during this presentation because of timing. However, I have covered a wide range of devices and how they assist people with disabilities in the workplace. The ever-expanding field of technology makes it almost certain the newer, more powerful assistive devices will continue to appear for use in business, education, and personal life. Engineers in the year 2000 and beyond will continue to enhance technology for people with disabilities making it more possible for them to become essential participants in the workplace, as well as, improving their own lives.