

INTRODUCTION

Assistive Technology

Where Are We? Where Are We Going?

Over the last decade there has been an explosion of technology that assists us in our daily lives. It begins in the morning with our coffee machines, which we have preprogrammed to provide piping hot coffee at exactly 6:30 A.M., and then continues at the office where we are dependent on personal computers to perform our work activities. Later in the day, we whip together a quick dinner using our microwave ovens while our children play with switch-activated computer games.

The use of technology is clearly shaping our current life-style. Productivity and efficiency are cornerstones of success in this decade. One of the most exciting benefits of the current technology explosion is its effect on the lives of most individuals with disabilities. It has redefined their abilities to successfully learn, work, live, and play in their communities among their nondisabled peers.

Of course, the technologies that aid individuals with disabilities go far beyond computer technology. When a technology application is applied to an individual with a disability, the technology is commonly referred to as *assistive technology*.¹ Whether that application is especially designed for one individual and includes sophisticated technology, such as a robotics program, or is an item that is available at a technology store, such as a telephone adapter, the technology can still have a major impact on an individual with disabilities. Assistive technology supports people in the following areas:

- Positioning and seating
- Mobility
- Environmental control
- Computer access

It allows individuals with physical disabilities to gain greater control over their lives and become more independent, integrated, and productive. Unfortunately, because of a lack of community resources, the majority of people with physical disabilities do not readily have access to assistive technology.

Fortunately, several pieces of legislation have begun to remedy this situation. Beginning in 1986 with the reauthorization of the Vocational Rehabilitation Act Amendments (P.L. 99-506), Congress recognized the important role assistive technology can play in the lives of individuals with disabilities by including an important amendment to the act in the area of technology. It was hoped that this initiative, along with the amendments made to the act in the area of supported employment, would redefine the definition of employability for individuals with severe physical disabilities. Callahand's case studies and West's research demonstrate how true this is when clients receive the appropriate supports.

In the spring of 1988, Congress passed the Technology-Related Assistance for Individuals with Disabilities Act (P.L. 100-407). This historic legislation was the first bill passed by Congress whose sole purpose was to provide funds to states to improve assistive technology services. This legislation not only asked states to develop services for all individuals with disabilities across all age groups, but it mandated that services be designed to be consumer-responsive.

¹Assistive technology is defined in the Technology-Related Assistance for Individuals with Disabilities Act (P.L. 100-407).

Williams's and Gradel's articles explore this emerging concept. Twenty-three states are currently receiving funds under this act.

In 1990, Congress passed the Americans with Disabilities Act (P.L. 100-336). This celebrated legislation provides America's 42 million disabled citizens with the right to equal access to employment, transportation, and public accommodations. But in order for the ADA to truly effect such change, not only do our nation's courts and agencies need to actively enforce the law, but individuals also need access to assistive technology devices and services that can provide them with accommodations. Golden's article provides a summary of the legislation and an explanation of its requirements, with which rehabilitation professionals and consumers should be familiar.

Due to the actions of Congress and the increasing availability of affordable assistive technology for individuals with physical disabilities, many new opportunities in employment, education, and community integration are waiting to be explored. The articles contained in this issue begin to explore what consumer responsiveness means as it applies to assistive technol-

ogy services. Williams drew from his own personal experience to design a list of do's and don'ts to follow when providing assistive technology services. Gradel's article breaks new ground for rehabilitation professionals by exploring the issues of consumer responsiveness. Callahand's, West's and Sower's articles document exciting new trends in vocational rehabilitation using assistive technology services. Baker's and Fee's articles discuss current research trends in assistive technology and the impact they will have in increasing employment opportunities for individuals with physical disabilities.

It is hoped that these articles will provide the reader with a better understanding of current trends in assistive technology for individuals with physical disabilities. As more individuals gain access to assistive technology, its true liberating force will redefine the capabilities of individuals with disabilities.

*Karen S. Franklin
Project Manager
Technical Assistance Project
RESNA
Washington, DC*