

INTRODUCTION

The theme of this issue is "Assistive Technology in the Workplace." This theme is timely yet premature. It is timely because the Americans with Disabilities Act (ADA) of 1990 took effect in July for private companies employing twenty-five or more people. Employers and the general public need to better appreciate the practical mandates of ADA and to discount the exaggerated claims of opponents. The ADA is practical, sensible and eminently achievable.

The workplace theme is premature because the full benefit of implementation remains in the future. The landmark International Center for the Disabled *Survey of Disabled Americans* in 1986 found that "Not working is perhaps the truest definition of what it means to be disabled: two-thirds of all disabled Americans between 16 and 64 are not working (page 4)." A follow-up survey, *Employing Disabled Americans*, described employee performance, employment conditions, and employer attitudes. Both surveys are now over five years old. Gains in the interim are unknown and the ADA has yet to impact the workplace.

So, how does assistive technology help persons with disabilities access the workplace?

The term *workplace* does not have a clear definition. For most of us the workplace is an office desk, a service counter, or an assembly line. Assistive devices supporting paperwork, point of sale or industrial jobs, are becoming more common. The literature on devices for work concentrates on the office, store, or plant. These environments have controllable tasks and the support of co-workers for persons with disabilities. Workplace integration should move forward on a broad front.

Success will dwell in the details of implementation. The typical workplace has three elements: permanent people, set equipment, and an established location. Successfully adapting the work environment to accommodate a person with a disability must consider all three elements. The article by Edward Steinfeld and Jennifer Angelo argues that successful work placement for persons with physical disabilities requires assistive devices, modifications to the task environment, and a plan for integrating the devices within the environment. They present a model process that provides a framework for both assessing the physical work-

place and for recommending specific assistive devices. The model incorporates the vertical integration of service agencies, and the horizontal integration of professionals across disciplines, within the work environment comprised of the needs of both employees and employers.

The issue's first case study illustrates many of the points raised in the adaptive work placement model. J. Roger Kimmel, Patricia Ourand, and Carol J. Wheatley described the cooperative process, involving active collaboration between the client and the multidisciplinary staff, in designing a complex workstation supporting the client's administrative position. The case divides the process into four phases: evaluation, worksite design, return to home, and return to work.

At the heart of the workplace is the worker—the person completing productive tasks at some established level of performance. There are usually other workers as well. The worker and co-workers collectively establish an internal dynamic in the workplace. Dwight R. Kauppi and Cora Dzubak's analysis reminds us that sustaining or regaining employment involves personal adjustments in addition to technology. Work adjustments are presented as a complex interaction between the individual and the work environment, in the context of overlapping psychological, social, and economic systems.

Fortunately, a person trying to gain access to the workplace is not alone. Service agencies exist to support their efforts. Sandra Berman's program spotlight presents the TECH-REACH center at the National Center for the Disability Services in Albertson, Long Island. TECH-REACH collects and evaluates information about assistive devices and work-site modifications, and organizes and disseminates the information in multiple accessible formats to enhance employment opportunities for persons with disabilities.

Support for workers extends beyond service programs. State and federal legislation is a vehicle for implementing changes in the system, to make the workplace more accessible. William C. Mann reviews current trends concerning older persons in the workplace, presents current federal legislation that separately relates to older persons, employment, or assistive technology but nowhere

combines all three in policy or practice, and recommends actions in light of the current trends and existing legislation. The issue's second case study illustrates the individual effort needed to make the available systems work for the individual. Barbara Bradford Knowlen shares her personal account of one consumer's efforts to identify an appropriate assistive device, secure the funding, and then apply the device in the workplace. Her narrative is an engaging account of the resourcefulness consumer's often need, unfortunately, to acquire assistive technology—even when there is an obvious and compelling need.

Jobs in offices, store and factories are still a subset of the full range of activities in which people pursue gainful employment. The issue's three remaining articles present a broader range of issues. A farm is a workplace where assistive technology is seeing increased applications. Farming combines physical labor, mental alertness, task variety, uncontrolled environments, and self-reliance at a level embodied for few other jobs. It is important to heed the assistive technology problems and solutions presented by farming. They are valuable lessons for applying assistive technology in less challenging fields. Therese Willkomm provides a wealth of "how to" information on farming with a disability. She traces the changes in rehabilitation in rural areas, describes the process of making adaptations to the agricultural work site, reviews various methods of service delivery, and lists materials and resources available to support persons

farming with a disability. In a companion article, Steven A. Freeman, Dean A. Brusnighan, and William E. Field present the selection criteria, the evaluation process and the results of an evaluation of mobility devices—from canes to all terrain vehicles. The user and task characteristics, and the pros and cons presented for these devices, illustrate decision criteria readily adapted devices in most any workplace.

The final article takes us home. The home is another departure from the traditional workplace. The home affords an opportunity for gainful employment when no other is available. James Vagnoni and Lisbeth Horvath explore the requirements for successful home-based employment. The authors acknowledge that working at home does not represent the full personal and social aspects of the workplace, but they argue that it may be the only viable employment option for some people at certain points in their lives. Further, working at home requires particular management skills and personal discipline different from those in public workplaces.

Regardless of the specific vocation, having a place to work matters. In Studs Terkel's book *Working*, Nora Watson said, "I think most of us are looking for a calling, not a job." This is the great hope for technology in the workplace—that it will enable persons with disabilities to pursue and attain their calling.

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