

Technology and disability aging

This issue of *Technology and Disability* returns to a topic we covered in Volume 2, Issue 1 in 1993: Aging. We have three papers that address aging and technology, and four unsolicited manuscripts on other topics.

Our first article on aging, authored by Laura Gitlin and colleagues is titled "Bathroom Modifications for Frail Elderly Renters: Outcomes of a Community Based Program". The study sought to determine outcomes of a program that provided devices to assist frail elders with bathing and toileting. While the program had several successful outcomes, perhaps most importantly it highlights the need for professional guidance in the evaluation for, and provision of assistive devices.

Our second aging paper, authored by Phoebe Liebig and Debra Sheets, is titled "State Assistive Technology Policies and Programs for Older Adults with Disabilities: Trends and Innovations". This paper begins by reviewing the 13 studies on state initiatives in the past 10 years on assistive technology and home modifications. The authors go on to examine the results of a study of the 55 vocational rehabilitation agencies and 26 blind/visual impairment agencies relevant to assistive technology policy. They also examine a study on the home modification activities of the 53 state and territorial housing finance agencies and 47 community development agencies. Liebig and Sheets share several important conclusions relative to state policies for assistive technology and home modifications.

Greta Häggblom Kronlöf describes the use of "Elderly Women's Way of Relating to Assistive Devices". Using a qualitative approach, she studied 11 elderly women in Gothenburg, Sweden. Using interviews, she sought to determine how each of the women used assistive devices in their daily life. A major reason, she reports, for using assistive devices related to a feeling of "being able to take control" of one's performance in everyday activities.

Ming-Che Hsieh and Ching-Hsing Luo present an article on "Morse Code Text Typing Training of a Teenager with Cerebral Palsy Using a Six-Switch Morse Keyboard". Using a six-switch Morse keyboard, the subject in this study was able to significantly improve typing performance. With this setup, he was able to type more efficiently without looking at the keyboard. The importance of providing appropriate computer input alternatives is highlighted in this report.

Karin Renblad provides a thorough review in her paper "Literature Survey on Social Network for Persons with Mental Retardation". Renblad addresses the function of social networks and research on social networks. She reports that people with mental retardation have limited social networks, and identifies this as an important area for additional research. In her paper "Summary of Reliability Study of Matrices" Courtney Eagles describes the importance of matrices, or decision trees, in the effective prescription of seating, positioning, and wheeled mobility systems. Eagles discusses the reliability of the decision matrices as determined in recent tests. Gaining a better understanding of how we prescribe assistive devices, including use of matrices, will help ensure that end users acquire appropriate devices.

Ashley Craig and colleagues discuss "Alpha Wave Reactivity Following Eye Closure: A Potential, Method of Remote Hands Free Control for the Disabled". They studied alpha wave changes in 21 non-disabled and 16 neurologically disabled individuals to gain a better understanding of the relationship of alpha wave changes to visual input. They conclude that persons with spinal cord injury have "sufficient amounts of alpha wave reactivity contingent with eye closure to operate a hands free control device". We may soon see application of these findings to new assistive devices that use brain signals for activation.