



State-of-the-Art in Rehabilitation Engineering Research & Application

RESNA 2007

Karen Milchus



Center for Assistive Technology & Environmental Access • *College of Architecture*

Workplace Accommodations

Strategies, environmental modifications or AT that help a person with a disability perform a job task that he/she might not be able to perform otherwise, or might not be able to perform as efficiently



Who Needs Accommodations?

- Employees: 4.17 million people (3% of the U.S. workforce \leq 65 years) have a disability
- Potential employees: Approx. 70% of people with disabilities (under age 65) are unemployed
- Aging workers: By 2012, 19% of employees will be 55 or older

Sources: *Current Population Survey 2002* and “*Labor force projections to 2012: the graying of the U.S. workforce*”, Bureau of Labor Statistics

Need for Work Accommodations

National survey conducted by the Work RERC:

- 75% could not perform all of their job duties without workplace accommodations
- 15% had been fired or laid off in the past because they had not been able to get the accommodations they needed

Mission

To identify, develop and promote new assistive and universally designed technologies that maximize independence and participation of people with disabilities in the workplace.

What We Do

- Focus on research and development, not service delivery
- Focus on broad-based needs rather than needs of one individual
- Multi, not uni-disciplinary efforts to problem solving
- Universal approach to workplace accommodations, not one-of-a-kind designs

Research Challenge

- There is a lack of research evidence on workplace accommodations
 - Literature review: 19 of the 30 articles were single subject case studies (Butterfield & Ramseur, 2004)

Work RERC Research

- 1) Develop Body of Knowledge about Workplace Accommodations and User Needs
- 2) Understand Impact of Policies and Practices

CATEA Consumer Network

- Over 1000 in initial data set
- A need to maintain communication
- Updating contact list; expanding search capabilities

Work RERC Development Projects

Assessment Tools

- Remote Assessment Protocol

Universally Designed Technologies

- Supine Computer Workstation
- AudioMORPH - Screen Reader Customization Tool
- Access to CNC Equipment
- Universal Retail Checkstand



Development Challenge

- Most accommodation development has focused on the needs of an individual



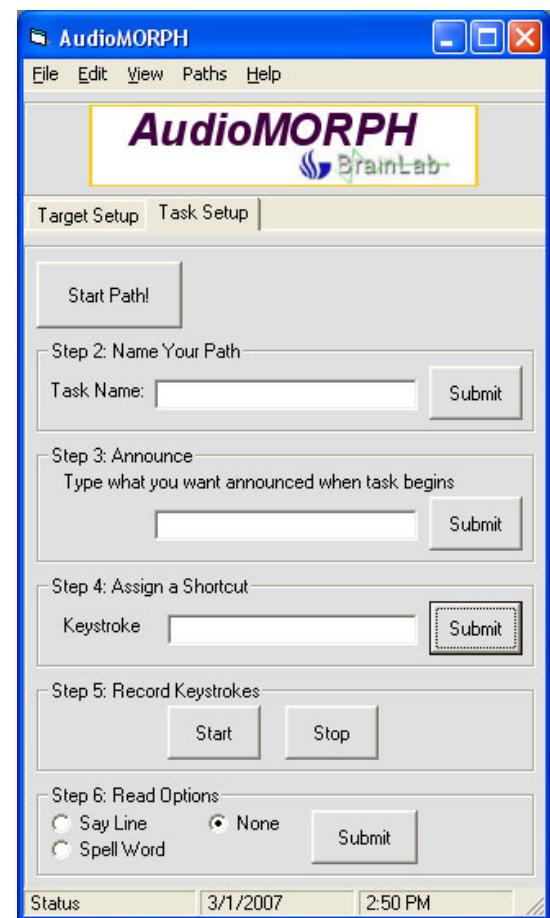
Supine Computer Workstation



Permits computer use from reclined positions to place less stress on the back and minimize low back pain

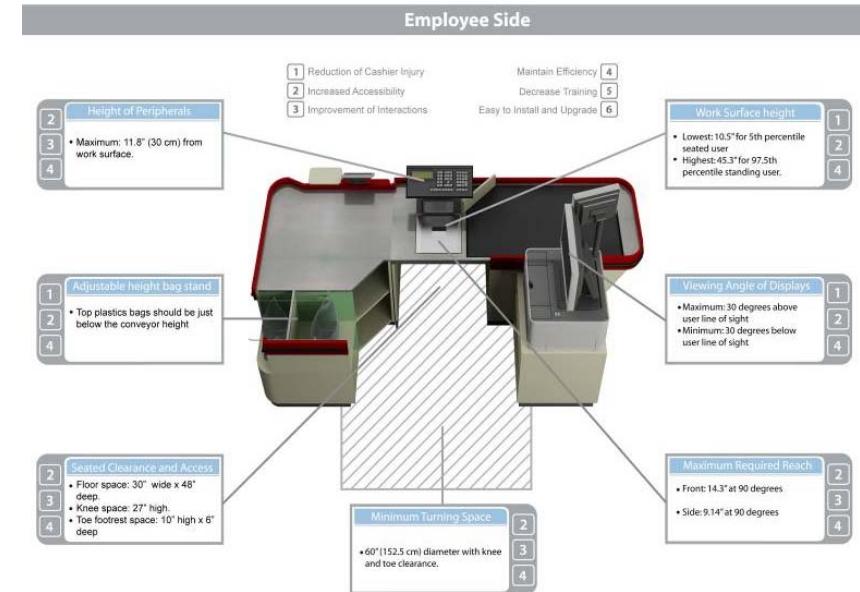
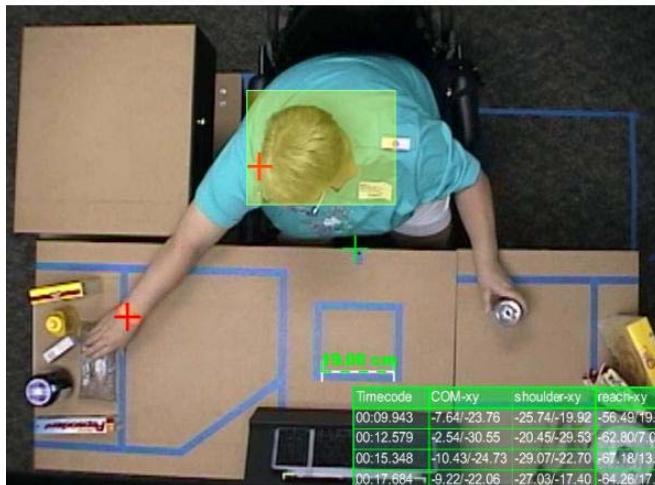
AudioMorph

Software tool that automates the process of customizing screen reading interfaces (e.g., JAWS scripts) for business applications



Universal Retail Checkstand

Designed to accommodate seated users and reduce workplace injury among grocery cashiers



Future R&D Issues

- Collect more / better evidence upon which to base practice (inc. needs over time; aging workers; impact of accommodations)
- Explore ways to apply new technologies to workplace accommodations
- Address employees with unmet accommodation needs (e.g., cognitive & communication disabilities)
- Apply the expertise of researchers and service providers from other focus areas to workplace accommodations



**Thank you for your
attention**

www.workrerc.org

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