Beach Center on Disability
a resource for families and professionals

Research Highlights

Topic: Technology Use

Davies, D.K., Stock S., & Wehmeyer, M. L. (2002). Enhancing independent task performance for individuals with mental retardation through use of a handheld self-directed visual and audio prompting system. *Education and Training in Mental Retardation and Developmental Disabilities, 37,* 209-218.

BOTTOM LINE

This article describes a comparison of computer use and using a written schedule to support key skills such as time-management and scheduling for 12 adults with mental retardation. Vocational and daily living tasks were positively supported through use of a palmtop personal computer. Handheld computers and specialized software have great potential in assisting individuals with mental retardation in independent time management and personal scheduling.

TIPS

- Audio prompts and photographs are helpful cues in helping people with mental retardation complete vocational and personal tasks independently.
- Palmtop computers are widely used by the general public, so they may be less stigmatizing than some other assistive devices.

KEY FINDINGS

- Users of the *Visual Assistant* software required significantly fewer prompts from support persons to complete tasks.
- Users of the *Visual Assistant* software demonstrated improved accuracy on tasks. They made significantly fewer errors using the software than with the written schedule.
- All participants were able to complete tasks using the software, while only one participant completed all tasks with a written schedule.

METHOD

- Participants included 12 volunteers receiving community-based vocational support from a local agency providing services to adults with mental retardation and through a school district's community-based program. Ages of volunteers ranged from 19 to 46 years.

- A program called *Schedule Assistant* was used. This automated multimedia scheduling system operates on the *Windows CE* palmtop computer and assists special needs users in maintaining their own schedule. Visual and audio prompts serve as reminders to follow the schedule.

- A large-print bold-typed task list with the same task prompts and a digital clock with a large display as in the software were used for comparison.

- Each volunteer had an eight-part schedule with the first four tasks related to vocational settings and the remaining four to the residential settings.

RELATED PUBLICATIONS

Agran, M. (1997). Student-directed learning: Teaching self-determination skills. Pacific Grove, CA: Brooks/Cole.

Agran, M., & Moore, S.C. (1994). *How to teach self-instruction of job skills.* Washington, DC: American Association on Mental Retardation.

Hughes, C., & Agran, M. (1994). Teaching persons with severe disabilities to use self-instruction in community settings. *Journal of the Association for Persons with Severe Handicaps, 18,* 261-274.

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