Design of Interactive Visual Schedules Systems

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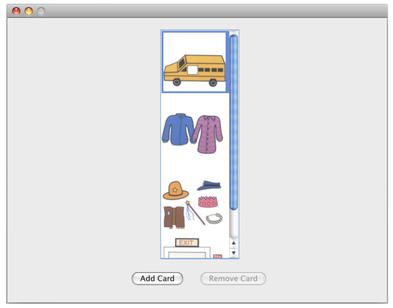
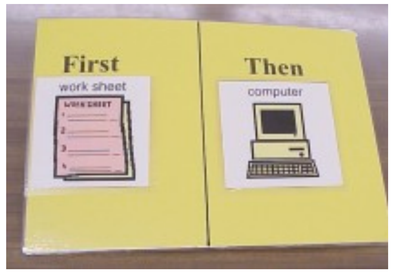




Introduction

Visual schedules are effective in supporting CWA to understand and structure time, and to predict activities.

However, they can be difficult and time-consuming for caregivers to employ, because caregivers must ensure the visual aids match volatile schedules.

Technology-enhanced visual schedules have the capabilities to ease both the:

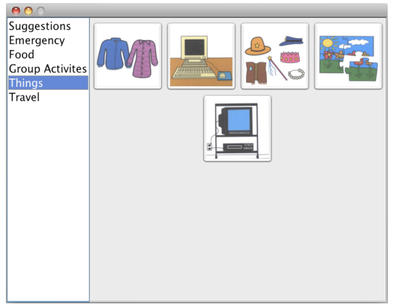
- use of these aids, and
- the data collection of activities in classrooms.

Objectives

- Understand how visual schedules are currently used and how new technologies can allow for collaboration amongst teachers and parents through these schedules.
- Design and develop technology augmented visual schedules.

Design: Nomatic*VS

- Large, touchscreen-based, classroom-facing visual schedules system.
  - Enables caregivers to make faster manual selections from a large database of activity icons, via automatic learning of appropriate cards.
  - System learns appropriate times to prompt caregivers for update
  - System learning occurs implicitly so as not to unsettle or inconvenience caregivers.
  - Collects data about the use of the system for later reference, analysis, and reporting.
- Software also helps in data analysis, visualization, production of "home notes," and explicit training of schedule.



Methods and Results

- Fieldwork and formative design
  - Conducted design sessions with three non-school based experts in assistive technology and classroom management.
  - Observed nine special education classrooms at two sites in Southern California.
  - Interviewed ten experts, staff members and teachers at those sites in small groups or individually for approximately one hour each.
- Informed analysis of requirements and constraints.
- Supports a need for new augmented visual schedules.

Acknowledgements

We thank the teachers and assistive technologies specialists who advised us on this project. Hector Parra and Mohamad Monibi provided valuable insight into the design. Funding was provided by the Autism Speaks Innovative Technologies for Autism grant program.

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