

[Insert Snappy Project Name Here]

Game-Based System for Memory Assistance in
Traumatic Brain Injury Patients

Michael Ang, Kate Bauer, Rhys Filmer, Jennifer Shub, Gabriella Stiefbold
Assistive Technology | Fall 2006

Cognitive Development

- Reasoning Skills
- Problem-Solving Skills
- Memory & Attention (Working Memory, Long-Term Memory & Very Long Term Memory)

Current Treatment



Intervention Programs



Memory Aids

Source: <http://www.salttillo.com/products>

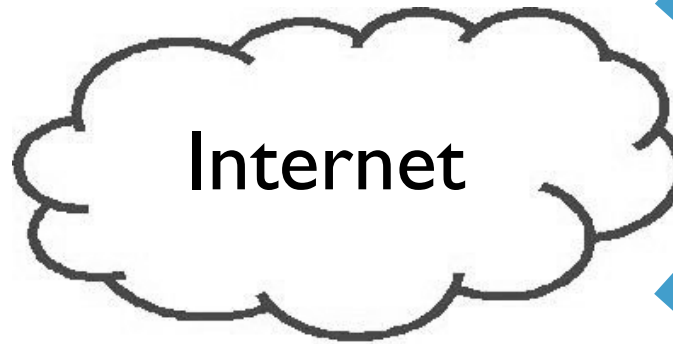
A little story...



Network



Tea Time
with Isabelle



Print



Digital

Description

- system for translating memories (photos, text, voice) into a game
- computer-based, web-based
- printable option for non-computer users
- multi-modal
(more than one outlet for feedback)

Choice of Two Games

“Solitaire”

- faces of family/ friends appear on cards
- most people are familiar with the game
- ability to add or subtract; adjusts to fit size

“Memory Builder”

- grid of names/ faces that user must match
- sound indicates whether right or wrong
- can be interchanged with other information

Primary Users

- Stroke Patients with Cognitive Defects
- Traumatic Brain Injury (TBI)

Secondary Users

- Developmentally Disabled Children
- Individuals with Dementia & Alzheimer's
- Age-associated memory impairment

Contraindications

(people it is NOT meant for)

- Under the age of 5 years old
- People with significant agitation
(individuals with mod - severe cognitive deficits should not be appropriate)

Benefits

- Reinforce memory skills of patient
- Minimize progression of cognitive decline
- Allow patients to connect to loved ones during treatment

Next Steps

- What is most important for people to remember? (incorporating that into game)
- Visit to RUSK and/or TBI Center in NJ to speak with clinicians/ therapists
- Continue research/ literature review
- User testing with Rob Faludi's memory game: Social Genius

Potential Project Names

My Baby Mamma
Hello my name is...
Who's your Daddy?