TinkRBook: Shared Reading Interfaces for Storytelling

TinkRBook is an interactive platform that supports storytelling behaviors for parents reading to preschoolers (2-5 year olds). Readers dynamically explore meaning as conveyed by the relationship of text to illustrated concept during shared parent-child reading.

**PROBLEM**

How do people use books in parent-child reading? Ethnography: Identify existing storytelling behaviors that interactivity should support.

**HYPOTHESIS**

- Interactivity can be designed to support existing storytelling behaviors.
- Interactivity can prompt new storytelling behaviors that allow parents to demonstrate how words are diegetically related to concepts.

**ETHNOGRAPHY**

Classified shared book reading interactions:

- Physical proximity
- Vocal expression
- Finger pointing and hand gestures
- Shared visual referencing
- Page turning and book manipulation

**APPROACH**

Focus on the socio-cultural experience.

- By first understanding the context of use, we were able to identify the function of primer books as storytelling prompts. This influenced the design goal to support and enhance existing behaviors.
- Consulting a broad array of domain experts, many with parent-child reading experience, allowed us to draw from a wealth of thoughtful solutions and useful considerations for the design of a shared-reading interface.

**BOOKS ARE STORYTELLING PROMPTS**

Physical books enable physical proximity providing shared visual referencing. Parent and child both see the book. They might navigate the book together (using page turning or reorienting the book).

Multisensory expression: Parents and children make expressive sounds and gestures to draw attention to content. These activities act out the narrative: finger pointing, making sounds, voice acting, reading aloud, asking questions or talking while gesturing to the book. The pictures and words prompt storytelling behavior.

**PROCEDURE**

1. How do people use books in parent-child reading? Ethnography: Identify existing storytelling behaviors that interactivity should support.
2. Design vignettes to support preexisting rituals. Prototype some new interactions that provide new functionality.
3. Participatory design interviews identify the best practices for interactive storytelling, and co-invent new solutions.

**RESULTING IDEAS**

Sketches and mockups demonstrating:

- Developmental appropriateness
- Making choices through storytelling activity (dragging objects, voice acting)
- Commonsense response to input
- Multisensory interactions

**INTERVIEWEES**

24 people were interviewed:
- 12 females
- 12 males
- 16 parents

These people were from professional storytelling, digital media arts and, early literacy domains.