



# Technology Assisted Reading Acquisition (TARA): Children Acquiring Literacy Naturally

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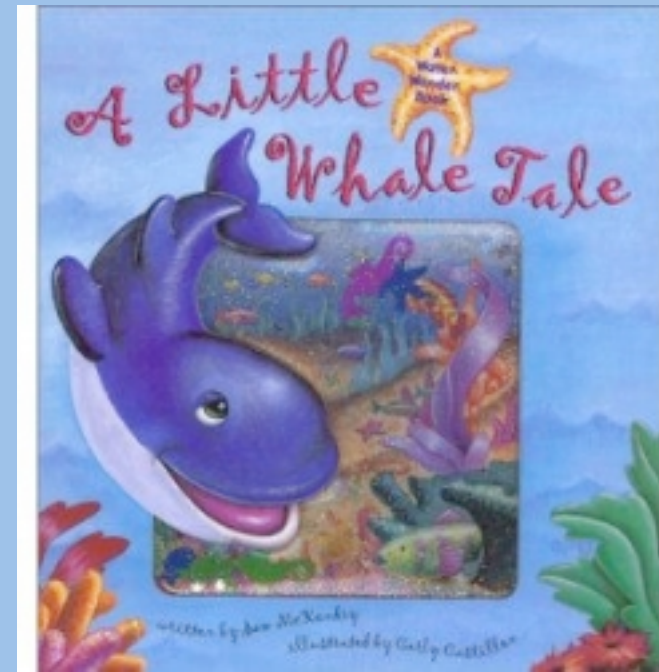
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Psyentific Mind [psyentificmind.com](http://psyentificmind.com)

UC Berkeley  
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There are now 11 dimensions for your Abstract and Peer Review. Your abstract should contain at least your research topic, research questions, participants, methods, results, data analysis, and conclusions. You may also include possible implications of your research and future work you see connected with your findings. Also quality of the writing and organization.

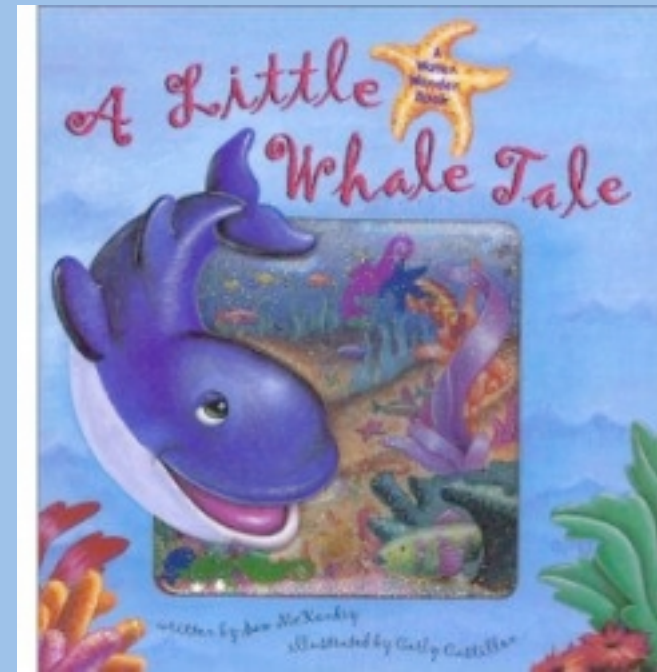
# Picture Books

- First Literature
- Integrate Children With A Culture
- Pictures Compete With Words
- Words Hard To Read
- Don't Help Reading



# Picture Books

- eye fixations of four-year-old children as they were being read picture books
- children spent about 20 times more time looking at the illustrations than at the text
  - Evans and Saint-Aubin (2005)



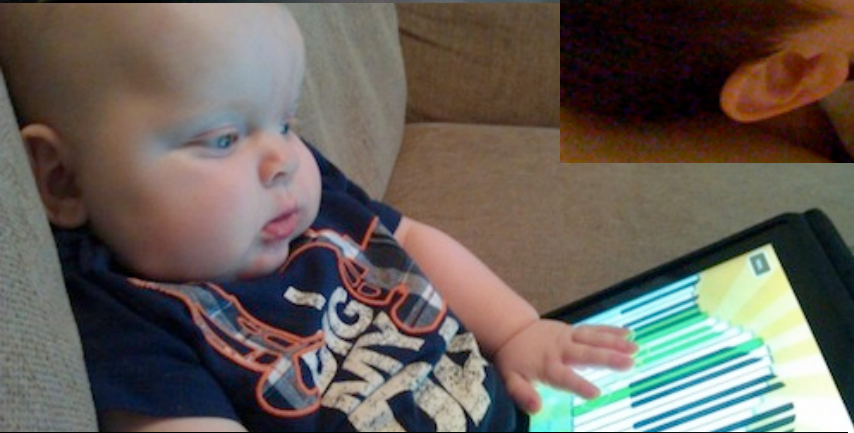
Read With

Me

## Read With Me!

- Library of Books
- Automated Speech Recognition
  - Smaller Machines
  - Faster
  - More Accurate
- Text on Portable Screen
  - Easily Read



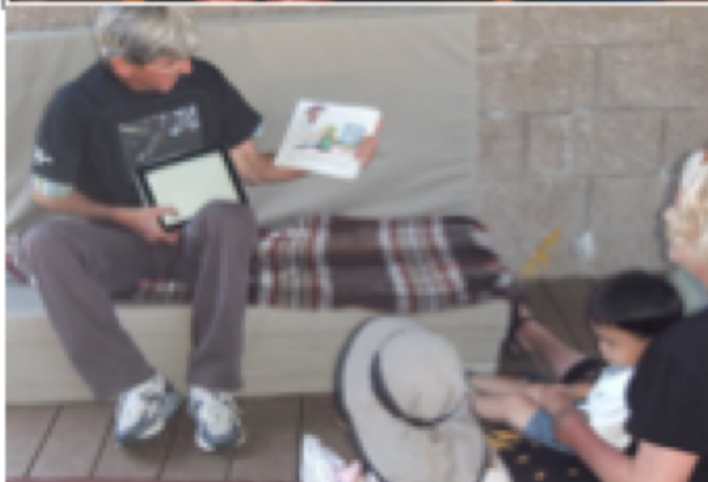


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Read With

Me



Read With

Me



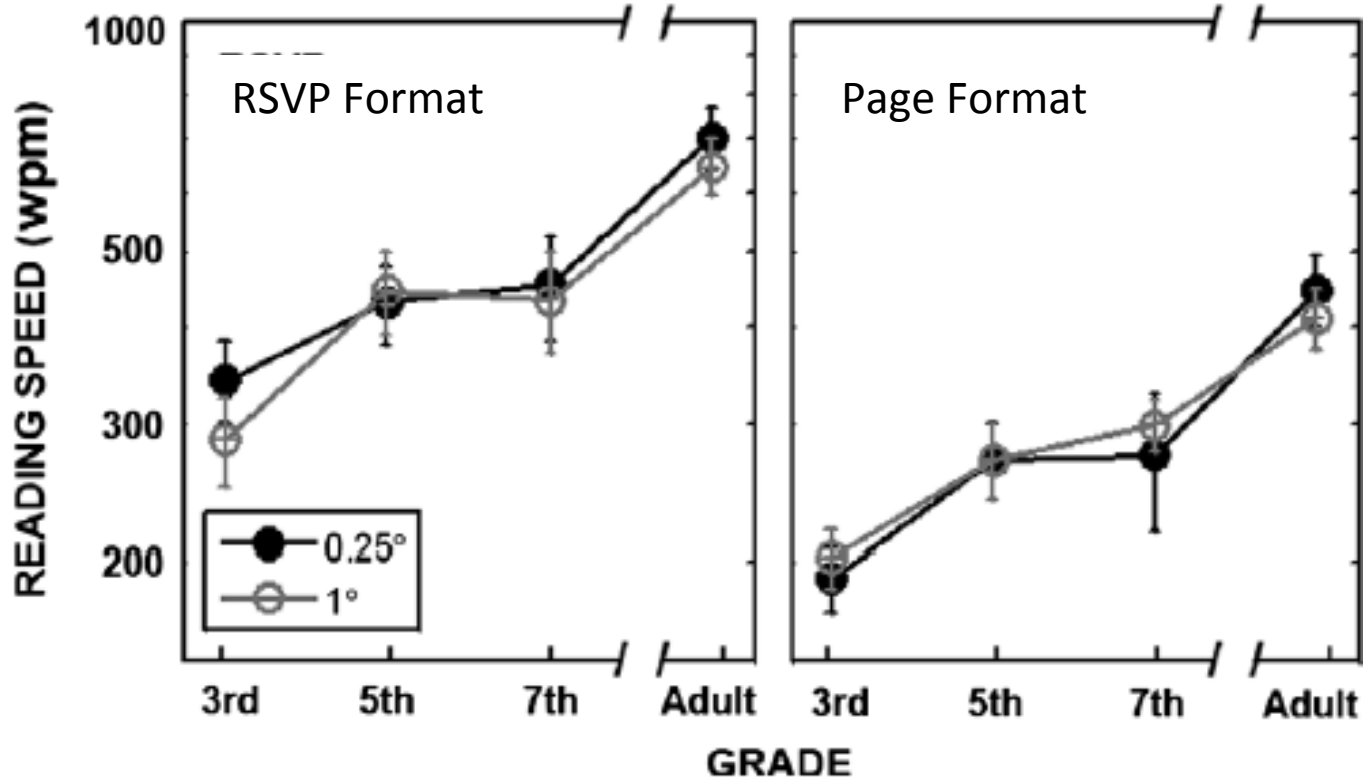


# Visual Languages

- More Challenging than Speech
- Sign Language
  - Need recipient to see the signs
    - Grab their attention
    - Sign in from of the object
- Written Language
  - Analogous to Sign
- Spoken Language also Requires Shared Attention

Others might question whether a toddler can negotiate processing written language simultaneously with their typical social interactions. Spoken language is easier in this regard because the child can attend to an object or event while simultaneously hearing language. Written language requires the child to initiate consecutive attention to the object or event and then the written language or vice versa. One source of guidance on this issue involves sign language. Deaf or hearing kids manage to seamlessly learn sign language, such as ASL, when it is used in their home and caregiver environments. Caregivers learn to guide the child's attention to the sign language by time-sharing between focus on the object or event and the sign (Lieberman et al., 2011). They will often sign in front of the object or event that the child is attending to. This situation is basically identical to our general approach to the presentation of the written language in testing our second research objective. The ease of learning sign language even given this "constraint" has generated considerable interest in Baby Signs (2011) as a supplement for speech because infants and toddlers are able to sign many words and intentions before they are able to say them.

# Optimizing Displays



Kwon, M-Y., Legge, G.E. & Dubbels, B. (2007). Developmental changes in the visual span for reading. *Vision Research*, 47, 2889-2900.