



NSW Speech Pathology Evidence Based Practice Interest Group

Critically Appraised Paper (CAP)

CLINICAL BOTTOM LINE: In children with developmental disabilities, matching pictures with the printed word above them inhibited the acquisition of sight word reading skills. However, when participants were required to actively match pictures and text, where the text was presented separately, there was improved sight word learning.

Clinical Question: In children with disabilities, does the use of pictures support literacy development?

Citation: Fossett,B. and Mirenda,P. (2006). Sight word reading in children with developmental disabilities: A comparison of paired associate and picture-to-text matching instruction. *Research in Developmental Disabilities* 27(4) 411-429

Design/Method/Materials: An adapted alternating treatments design was used to compare the effectiveness of 2 instructional techniques to teach a small corpus of sight words to 2 children with developmental disabilities who were unable to read. The instructional techniques were paired associate instruction (PA), where children were taught to actively match familiar pictures with unknown text, and picture-to-text matching (PTM), where children were taught to actively match pictures to words. The number of words correctly identified by each child was assessed across baseline, intervention, generalisation and follow up conditions. Black and white PCS were used in the PA condition.

Participants: 2 boys with developmental disabilities:

- 1st – 10 years 7 months, diagnosis of autism, functionally non-verbal, PPVT-III standard score of 40 and age equivalent score of 3 years 3 months.
- 2nd – 11 years 9 months, diagnosis of Soto Syndrome, functional speech for requests, to clarify and obtain information and for social interaction, PPVT-III standard score of 40 and age equivalent score of 3 years 9 months.

Experimental Group: Nil

Control Group: Single case study design – participants acted as own controls.

Results:

- Picture-to-text matching was more effective than paired associate instruction for developing a small sight word vocabulary.
- Follow-up data for 1 participant showed that skills developed using the picture-to-text matching strategy were maintained 4 months after intervention.

Comments:

Strengths: Well designed study. Clearly reported with sufficient detail for replication.

Weaknesses: Very small set of target words; only 5 in each instructional technique. Small number of participants.

Level of Evidence (NH&MRC): IV

Appraised By
Clinical Group: AAC EBP Group

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