

# Educational Therapists' Perceptions after Training for an Enhanced Reading Comprehension Curriculum

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## Introduction

**Reading Comprehension Intervention at the Dyslexia Association of Singapore (DAS):** The DAS provides the MOE-aided DAS Literacy Programme (MAP), a specialist literacy intervention for students with Dyslexia. The intervention is delivered by DAS Educational Therapists and includes reading comprehension instruction. In 2016, the DAS implemented an Enhanced Reading Comprehension Curriculum, which aimed to better align intervention with the mainstream school curriculum, standardize the reading comprehension curriculum at the DAS, as well as equip Educational Therapists with strategies to teach reading comprehension more effectively.

**In-service Teacher Training:** In-service training has been found to increase teachers' knowledge or practice modestly (National Reading Panel, 2000). At the DAS, in-service training was provided to Educational Therapists to train them on the enhanced curriculum, so that they are better able to deliver the curriculum to its intended effectiveness.

- Mass training was conducted over three half-day workshops for all Educational Therapists
- Training included explanation of skills, demonstrations on teaching skills, and opportunities to practice teaching during the workshops
- A resource pack was provided

## Aims

This study aimed to examine the impact of training for an Enhanced Reading Comprehension curriculum on Educational Therapists' teaching behavior and perceptions. In evaluating these changes, the effects of teaching experience on the changes were also considered.

## Significance of Project

This study adds on to existing literature in the area of teacher training for educators who work with students with a learning disability (dyslexia) on a higher order literacy skills (i.e. reading comprehension). A better understanding of factors that affect teachers' response to training will help to guide future training efforts.

## Method

Participants	47 DAS Educational Therapists (7 Male, 40 Female)
Age	23-59 years old ( $M = 35.91$ , $SD = 10.99$ )
Teaching Experience	3 weeks to >16 years ( $M = 4.57$ years, $SD = 4.26$ years)



•DAS Educational Therapists were surveyed before training (pre-training) and one year after training (post-training). They provided ratings for 3 items on 11 skills:

- Perceived Frequency in teaching reading comprehension skills
- Perceived Importance of reading comprehension Skills
- Perceived Ease in teaching reading comprehension skills

•During data analysis, DAS Educational Therapists were placed in three groups of varying lengths of teaching experience for students with dyslexia :

Group	Length of Teaching Experience	Number of Educational Therapists
Least Experienced	<2 years	16
More Experienced	2.5 to 4 years	16
Most Experienced	>4 years	15

•The survey results were analyzed using mixed between-within subject analyses of variance (ANOVAs):

**Within -subject variable:** Time (pre and post-training)

**Between -subject Variable:** Length of time the Educational Therapists taught students with dyslexia at the DAS (least experienced, more experienced, most experienced)

## Hypotheses

**Research Question One:** Does training and teaching experience affect the frequency at which Educational Therapists teach reading comprehension skills in their classes?

**Research Question Two:** Does training and teaching experience affect Educational Therapists' perceived level of importance of reading comprehension skills?

**Research Question Three:** Does training and teaching experience affect Educational Therapists' perceived level of ease in teaching reading comprehension?

## Results

**RQ1: Perceived Frequency in teaching the reading comprehension skills covered in training**

- Significant interaction between training and teaching experience
- More experienced Educational Therapists taught more of skills covered in training

Length of teaching students with dyslexia	n	Pre-training		Post-training		t
		M	SD	M	SD	
Least Experienced	16	3.13	0.52	3.35	0.51	-1.53
More Experienced	16	3.04	0.42	3.37	0.40	-2.98*
Most Experienced	15	3.55	0.66	3.28	0.70	1.45

\* $p < .05$  (significant  $p$  value  $< .0167$  after Bonferroni correction)

**RQ2: Perceived importance of reading comprehension skills covered in training**

- Significant interaction between training and teaching experience

Length of teaching students with dyslexia	n	Pre-training		Post-training		t
		M	SD	M	SD	
Least Experienced	16	4.13	0.45	4.17	0.32	-0.31
More Experienced	16	4.01	0.40	4.29	0.45	-2.44
Most Experienced	15	4.22	0.41	4.09	0.47	1.42

**RQ3: Perceived ease of reading comprehension skills covered in training**

- No significant interaction between training and teaching experience
- Significant main effect of training

Length of teaching students with dyslexia	n	Pre-training		Post-training	
		M	SD	M	SD
Least Experienced	16	3.44	0.43	3.84	0.59
More Experienced	16	3.23	0.40	3.89	0.46
Most Experienced	15	3.82	0.78	3.96	0.52
Total (All Lengths)	47	3.49	0.60	3.90	0.52

## Summary of Results

•There was a significant interaction between length of teaching experience and training on the perceived frequency in teaching the reading comprehension skills and perceived importance of reading comprehension skills taught during training.

- Least & More Experienced Educational Therapists taught more of skills covered in training
- Most Experienced Educational Therapists taught less of skills they were trained on & saw the skills as being less important after training

•Educational Therapists of all lengths of teaching experience reported increased ease in teaching the reading comprehension skills covered during training.

## Discussion & Future Directions

•In line with past research, less experienced teachers showed more positive responses to training – they taught more of skills that they were trained on, and saw those skills as being more important.

•Four years of experience was sufficient to influence changes in thinking and teaching behaviors in teachers who work with students with additional learning needs.

•When providing in-service training for educators, various factors need to be considered:

- Teaching experience of educators (need to differentiate training methods)
- Quality of training & resources/materials used
- Content of curriculum (the Most Experienced Educational Therapists reported that the reading comprehension skills covered in the Enhanced Reading Comprehension curriculum were not relevant to their students).

•Future studies could investigate other teacher characteristics (e.g., age and pre-service background, personality), student characteristics, or have a longer study duration to look at change over a longer period of time.

## References

National Reading Panel (US), National Institute of Child Health, & Human Development (US). (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. National Institute of Child Health and Human Development, National Institutes of Health. Retrieved from <https://www1.nichd.nih.gov/publications/pubs/nrp/Documents/report.pdf>