

ENHANCING ENGAGEMENT AND LITERACY SKILLS IN DYSPLEXIC LEARNERS

Sharyfah Nur Fitriya, Masters in Special Educational Needs

Educational Advisor, Dyslexia Association of Singapore (DAS)

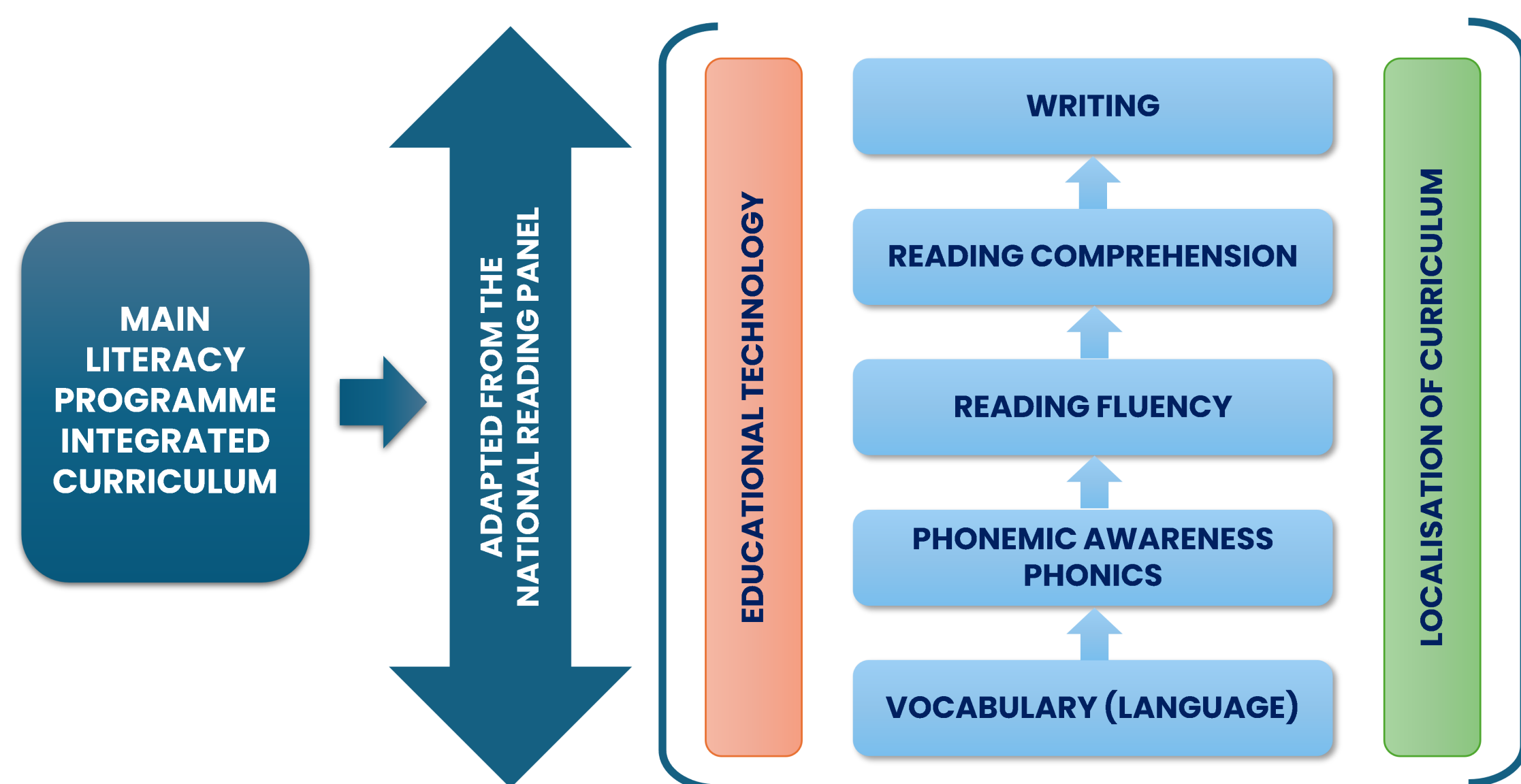


INTRODUCTION

Dyslexia is identified when a person has trouble with recognising words accurately, comprehending, writing, and spelling and is a result of deficits in the phonological component of language. Characteristic features of dyslexia include difficulties with phonological awareness, verbal memory, and processing speed. With dyslexia students may often experience co-occurring challenges in language, motor coordination, mental calculation, concentration, and personal organisation.

PURPOSE OF RESEARCH

To demonstrate whether the reading and writing skills of dyslexic students in the **DAS English Main Literacy Programme (MLP)** could be improved in a statistically significant manner using improved curriculum teaching methods. A statistically significant result would validate the improvement in the transfer of knowledge to the students due to the educational Intervention. This study also explores the impact of a preference-based teaching approach on students with dyslexia, focusing on on-task behaviours, attentiveness, and overall outcomes.



METHODS & ANALYSIS

SAMPLE: Total of 1280 students aged between 7 – 17 were sampled

SELECTION CRITERIA:

- All students had been formally assessed and diagnosed with dyslexia.
- These students were enrolled in the **DAS MLP** for two terms from 2019 to 2020, attending 2 hours per week in small groups of 3 to 5 students.
- A random sampling method was used in this study. (Ramus, Pidgeon & Frith, 2013).
- The evaluation was completed using the **DAS Curriculum-Based Assessment (CBA)** tool.

RESEARCH DESIGN AND HYPOTHESIS:

The research data was analysed using **Central Limit Theorem (CLT)**, & hypothesis testing.

In this study our hypothesis is:

- On average, the performance of students in the DAS CBA has improved over the last 3 years'

Null hypothesis $H_0 : \mu_{18} - \mu_{16} = 0$

$$S / \sqrt{n}$$

 Research hypothesis $H_1 : \mu_{18} - \mu_{16} > 0$

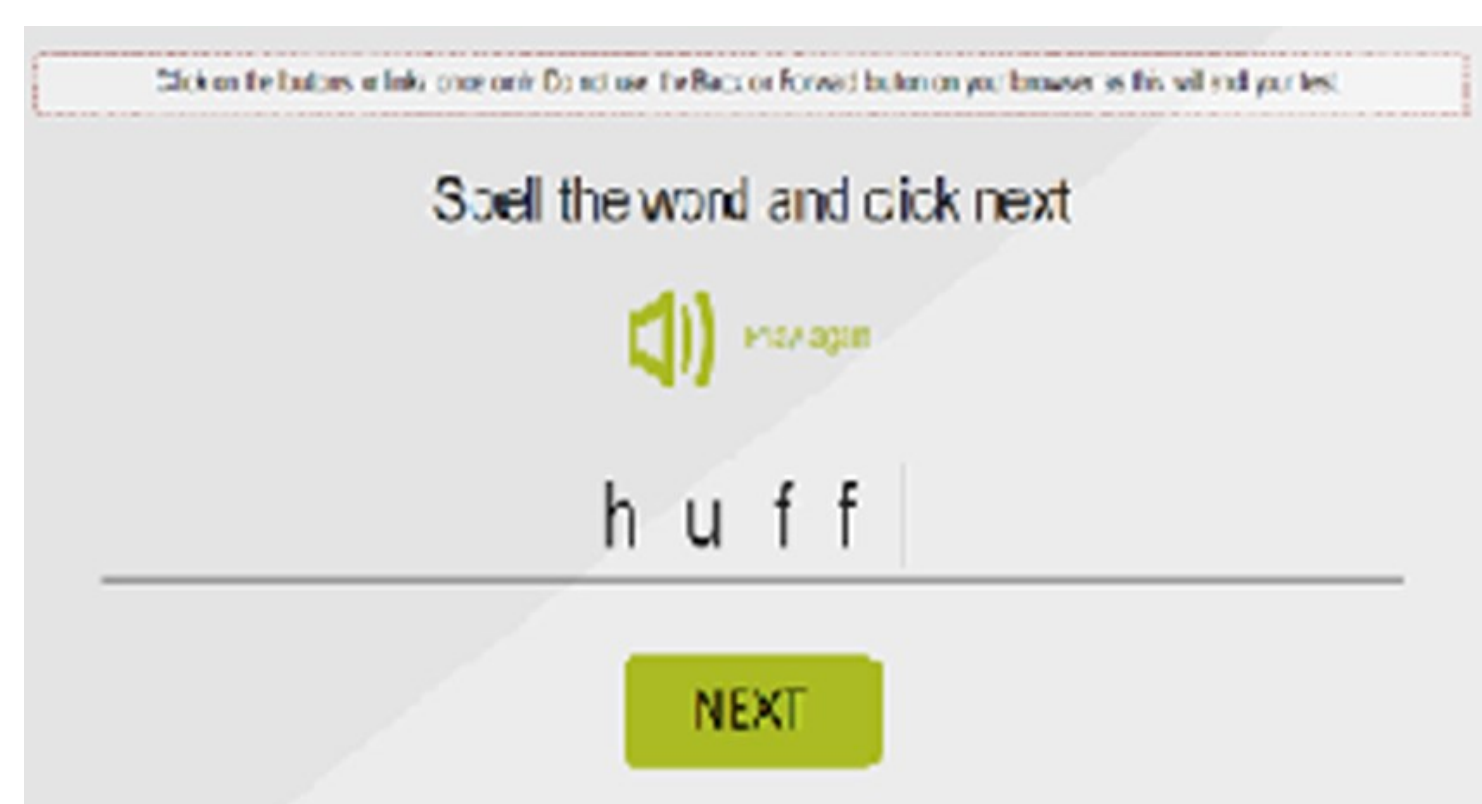
$$S / \sqrt{n}$$

DAS CURRICULUM - BASED ASSESSMENT (CBA)

Words to Read

glass	smell	stuff	jazz
brick	slick	nudge	pledge
blotch	dented	theme	rose
trace	yelled	tricked	spade
shine	broke	cite	lunge

Words to Spell

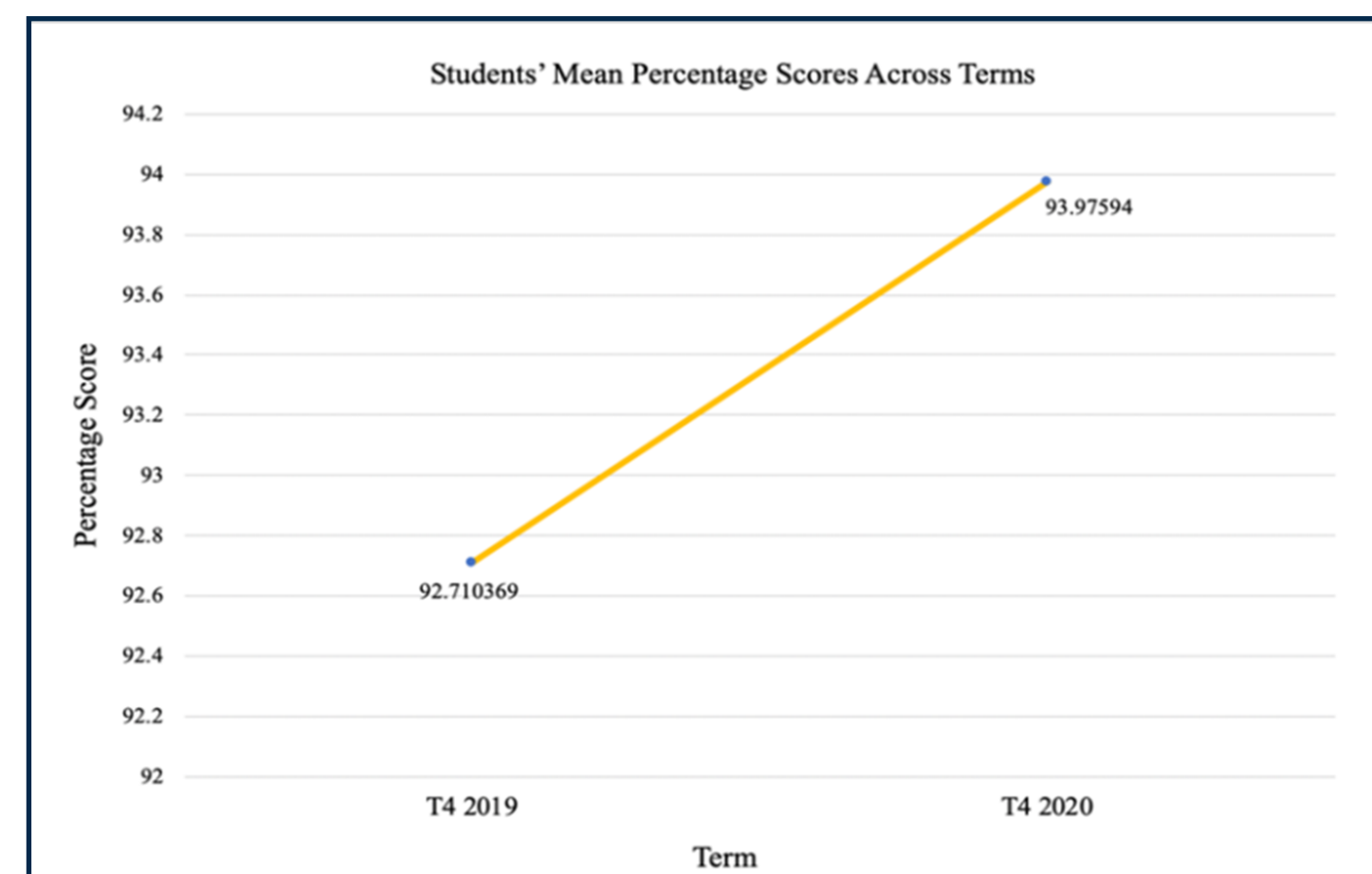


FUTURE RESEARCH

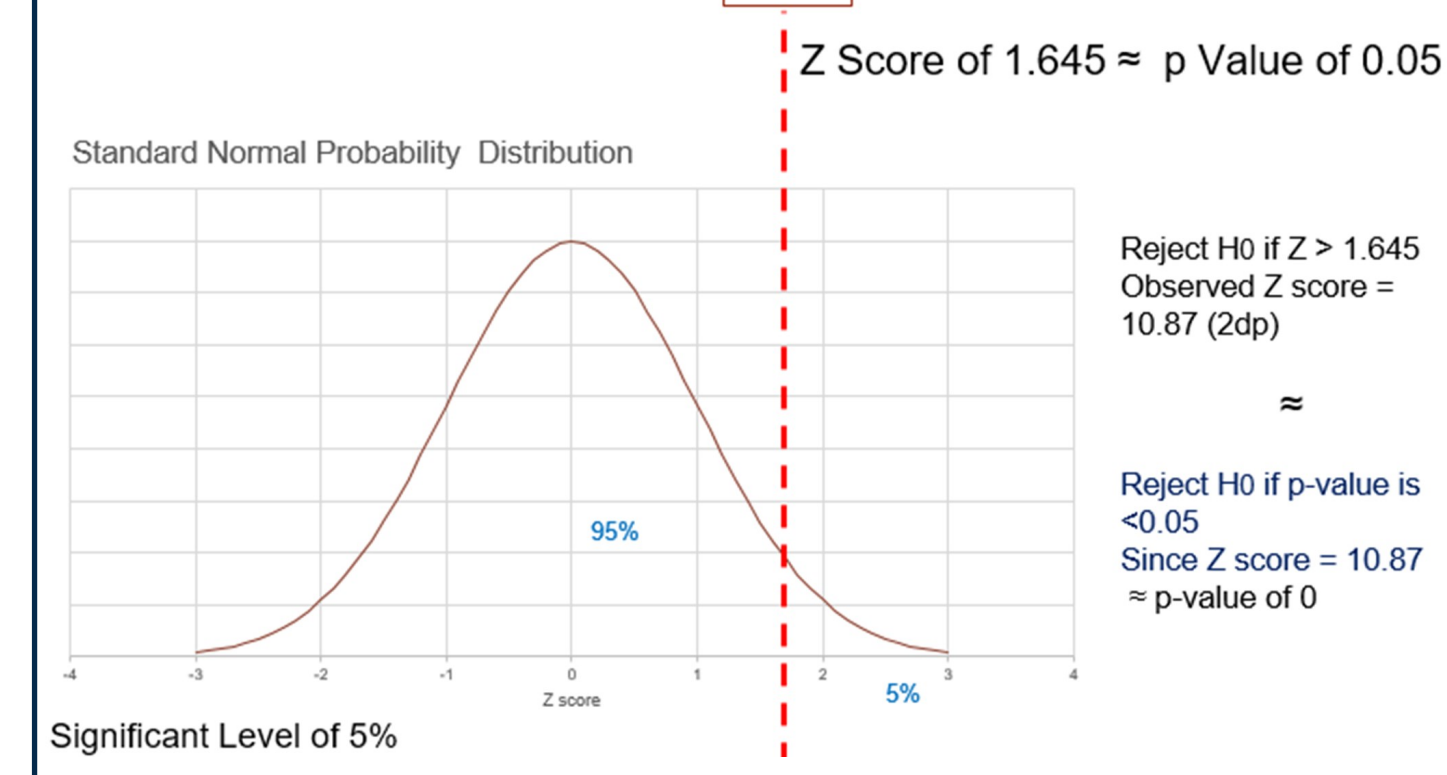
- We aim to explore different aspects of student improvement, following curriculum and intervention
- This next research will examine the number of programmes students join at the DAS and the years of experience educators have in special needs.
- A longer observation period is used to gather more data
- The ABAB design = improves the validity

RESULTS

Students mean % across 1 year



Z Score



PREFERENCE-BASED TEACHING STRATEGY WITH INTEGRATED

Student Profile

3 Students (2 Boys, 1 Girl), diagnosed with Dyslexia or Dyslexia with ADHD

General Behaviours

- Lack of interest in learning
- Low motivation
- Disengaged during lessons

Targeted Behaviour

Student A

- To not run around the class and to complete the tasks assigned

Student B

- To use indoor voice and obey the teachers instructions during the lesson

Student C

- To ask questions related to the lesson and complete the tasks assigned

CONCLUSIONS

- The research study overall shows that students' performance in the Curriculum-based assessment has improved in the last 1 year even during the most challenging times for education, COVID-19.
- The **DAS English Main Literacy Programme** and our in-house curriculum are credited towards helping the student's performance increase.
- By incorporating a combination of **Preference-based teaching approach and OG (Orton-Gillingham)** in an integrated curriculum, it becomes possible to achieve several positive outcomes in the classroom.
- These include an enhancement in on-task behaviour, increased active engagement among students, and improved scores during progress monitoring

LIMITATIONS

- 1-year gap between test dates; possible confounding factors (history, maturation)
- Scores are totals from 3 test items per student, potentially diluting skill-specific differences
- Small sample size (history, maturation)
- Short baseline and intervention
- Limited IOA training
- Pre-questionnaire not conducted

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