

EVALUATING THE LONGITUDINAL PROGRESS OF A LARGE SAMPLE OF DYSLEXIC CHILDREN IN READING, SPELLING AND WRITING.

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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.

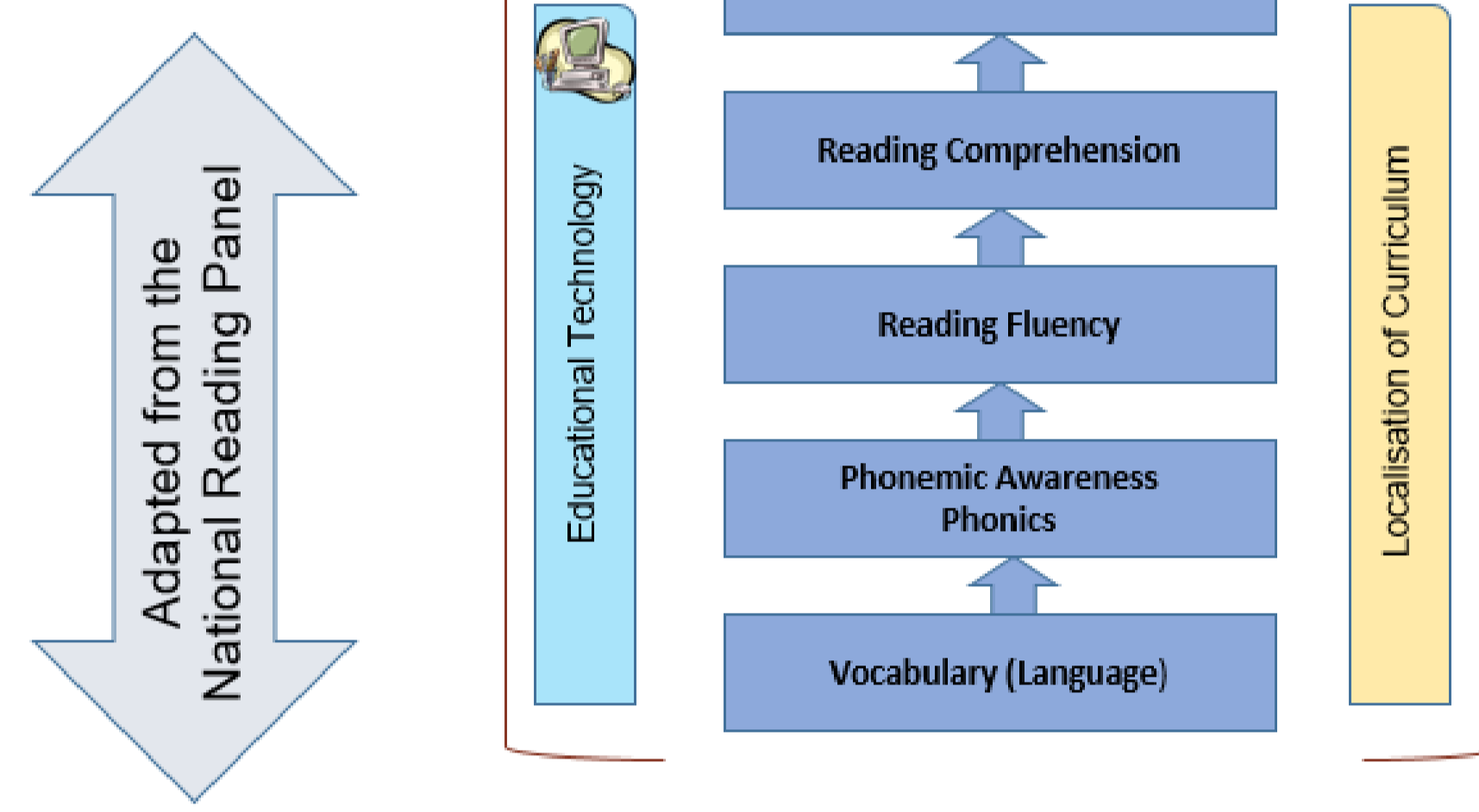
With dyslexia, students may often experience co-occurring challenges in language, motor coordination, mental calculation, concentration, and personal organisation.

PURPOSE OF RESEARCH

To demonstrate whether the reading and writing skills of dyslexic students in the DAS English Main literacy programme could be improved in a statistically significant manner using improved curriculum teaching methods.

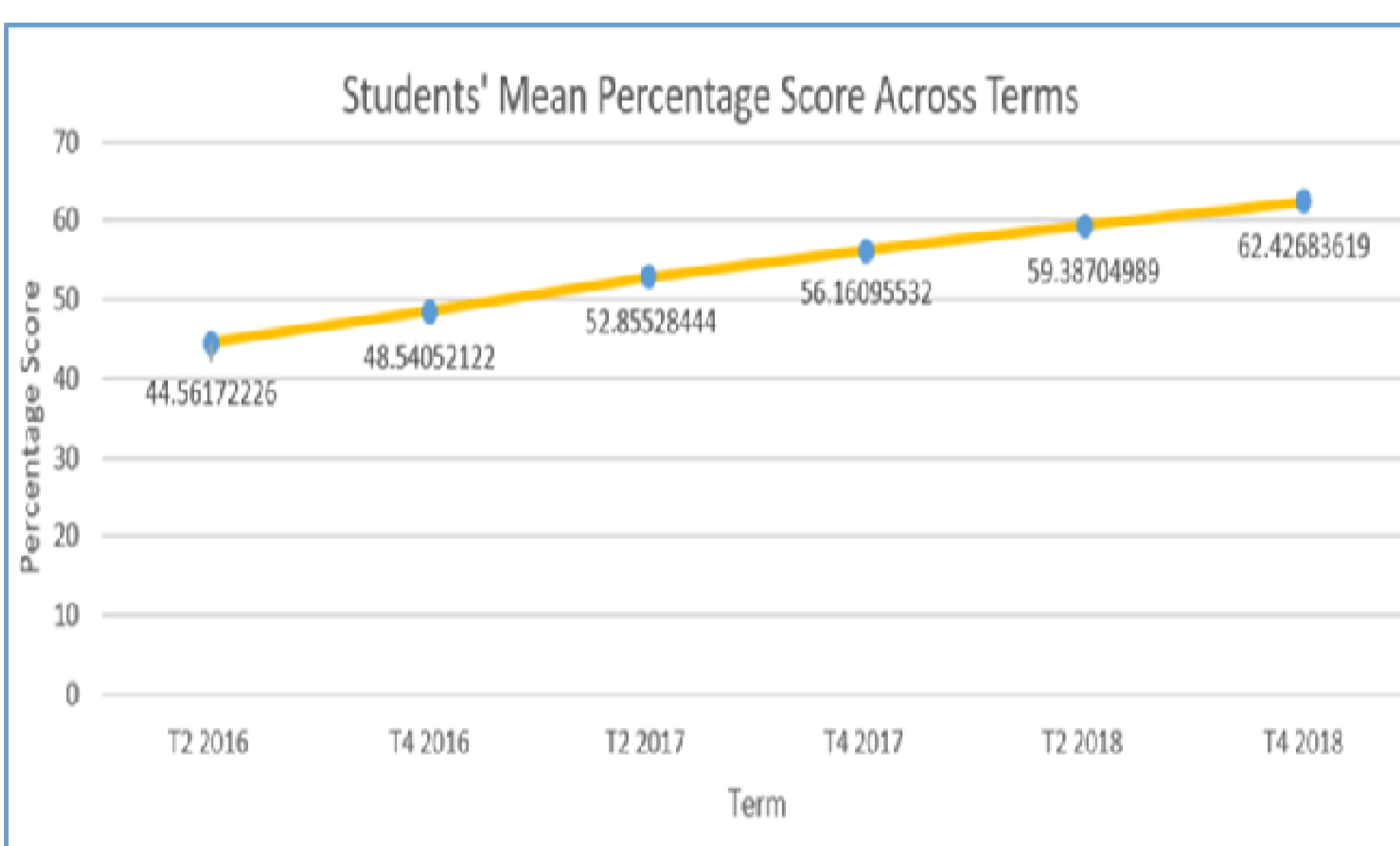
A statistically significant result would validate the improvement in the transfer of knowledge to the students due to the educational intervention.

MLP
INTEGRATED
CURRICULUM



RESULTS

Students mean % across 3 years



METHODS & ANALYSIS

SAMPLE

- Total of 1343 students aged between 7 - 17 were sampled

SELECTION CRITERIA

- All students had been formally assessed and diagnosed with dyslexia, either at the DAS or elsewhere in Singapore
- These students were enrolled in the English Main literacy programme for six terms from 2016 to 2018, attending 2 hours weekly in small groups of 3 to 4 students.
- A random sampling method was used in this study. (Ramus, Pidgeon & Frith, 2013).
- The evaluation was done using Curriculum-Based Assessment (CBA).

RESEARCH DESIGN AND HYPOTHESIS

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

In this study our hypothesis is

'On average, the performance of students in the Curriculum- Based - Assessment has improved in the last 3 years'

$$\text{Null hypothesis } H_0: \frac{\mu_{18} - \mu_{16}}{S/\sqrt{n}} = 0$$

$$\text{Research hypothesis } H_1: \frac{\mu_{18} - \mu_{16}}{S/\sqrt{n}} > 0$$

Curriculum - Based Assessment (CBA)

Words to Read

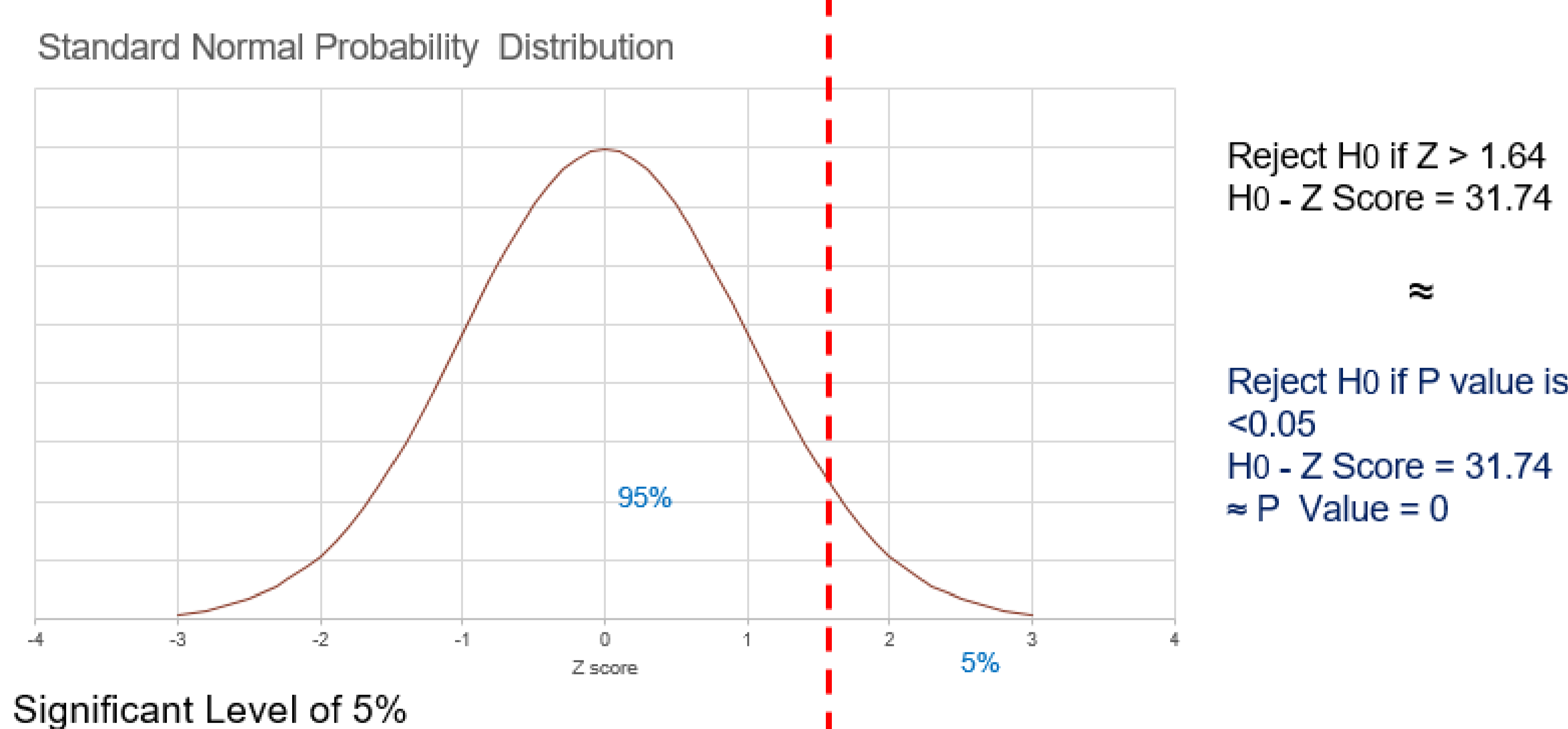


Words to Spell



Z SCORE

Z SCORE



CONCLUSIONS

- The research study's overall shows that student's performance in the Curriculum-based assessment has improved in the last three years.
- The DAS English Main literacy programme and our in house curriculum are credited towards helping the student's performance increase.
- Through the intervention programmes, students and teachers interact, which allows the teachers to understand the reading challenges faced by dyslexic students.

LIMITATIONS

- There was a difference of 3 years between the 2 test administration dates, possible confounding factors of history and maturation.
- The scores are a "total" score derived from adding up all the 3 test items from each student. The differences in progress on the different skills measured may dilute the actual differences in scores on each of the skills.

FUTURE RESEARCH

- We aim to explore different aspects for students improvement, following curriculum and intervention
- This research seek to understand the number of programmes the students joins in the DAS and explore on the number of years the educators have been in the special needs field.

REFERENCES

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