

Specialised Educational Services

UNLOCKING POTENTIAL

PRESCHOOL EARLY INTERVENTION

The aim of the programme is to help preschoolers who are potentially at risk of dyslexia, or has a developmental delay in early literacy, develop skills and strategies to become confident achievers when they enter primary school.

Our Approach

The SES Preschool programme helps preschoolers acquire a good foundation in alphabet knowledge and phonograms, leading up to learning sight words essential for reading. These abilities gear them towards reading and spelling readiness. In class, your child will be taught rules, facts and generalisations about the English language, enabling them to read and spell more effectively. They will also be taught strategies to cope with letter reversals. The programme follows a prescribed scope and sequence for systematic, sequential and cumulative teaching.

Components covered in a typical lesson

- ◆ Alphabet Knowledge
- ◆ Phonograms
- ◆ Learned Word Knowledge (e.g. said)
- ◆ Reading
- ◆ Spelling

Preschoolers will be advised to go for a Full Aged Psychological Assessment when they turn six. Children diagnosed with dyslexia has the option to continue with the MOE-aided DAS Literacy Programme.

Specialised Educational Services

Preschool Early Intervention Programme

Wong Kah Lai

Preschool Programme Manager

Dyslexia Association of Singapore

There is now considerable evidence from research world-wide, that early intervention is the most effective approach to help children with dyslexia and other learning difficulties. Torgesen, (2001, 2014) has shown that 8 year old children need 67.5 hours of individual intervention to bring them to the level of their peers once they have fallen behind. However, evidence from studies with young children aged 4 and 5 in the UK have shown lasting benefits for early support (Fawcett et al., 2014; Nicolson et al., 1999). Moreover studies from Singapore (See & Poay, 2014) have shown that it is possible to identify preschool children at risk of failure.

Development is a continuum. In this developmental spectrum, young children achieve their cognitive, social, emotional and physical milestones at different rate and pace.

Although there is a general guideline, in the form of attainable developmental milestones, not all children progress at the same rate nor pace arising from nature / nurture factors and issues. 'Nature' factors and/or issues refers to in-born conditions that a child is born with, while 'nurture' refers to environmental factors that stimulate and help further shape the child's developmental growth. A key issue here is home background and stimulation of language.

Literacy delay is probably one of the most common developmental problems among preschool children. This happens when a child's language is developing in the right sequence, but at a slower rate. It could be a case of not having the language environment or stimulus, and amongst many other probable causes, a result of dyslexia.

As such, early outreach and intervention is crucial. The preschool service at DAS aims to identify and work with children identified as "at risk of dyslexia" so as to help them achieve in Primary One through our early literacy intervention

programme. In the article below we outline the development and evaluation of a preschool literacy programme for early intervention in Singapore

ABOUT THE PROGRAMME

This programme is recommended for children at risk of dyslexia and those with learning differences in reading and spelling in Kindergarten 1 and 2. The preschool early literacy intervention programme framework comprises of literacy appreciation, letter knowledge, phonemic awareness, comprehension, sight words and fine motor skills acquisition within a suggested preschool scope and sequence.

Preschool education therapists formulate and devise an Individualised Intervention Plan (IIP) for students based on his/her specific learning needs obtained from the Pre-Informal Assessment at the beginning of the first remediation session with the therapist. No two learners are alike. In view of young learners with literacy delay, differentiated teaching is essential.

The lesson is delivered in an engaging and simultaneously multisensory manner based on the Orton-Gillingham (O-G) approach and principles. The O-G approach is a language-based approach where students are explicitly taught the rules, facts and generalisations about the English language.

SIX O-G PRINCIPLES GOVERN THE O-G APPROACH

Language based

It encompasses an awareness and appreciation of the features of the English language that includes reading, spelling, writing and learning strategies as appropriate to young learners' developmental needs.

Cognitive

It was noted that 85% of the English language can be made predictable with explicit instruction in rules and generalisations that govern its use. This tool enables young learners to read/spell more effectively.

Structured, sequential and cumulative

This is especially vital to a dyslexic learner. In order to achieve automaticity, content needs to be taught systematically in a sequential manner. Consistent review of previously taught/learned material fosters retention and enables the learning of new material to "spiral" upwards with each accumulation.

Simultaneously multisensory

Through visual, auditory, kinaesthetic and tactile activities, that builds a strong

and intense memory connection, young learners are more likely to be able to "retrace" and "retrieve" the memory of what-was-taught in the previous lesson/session.

Diagnostic-prescriptive

No two learners are alike. In view of young learners with literacy delay, individualised teaching through IIP (Individualised Intervention Plan) is essential.

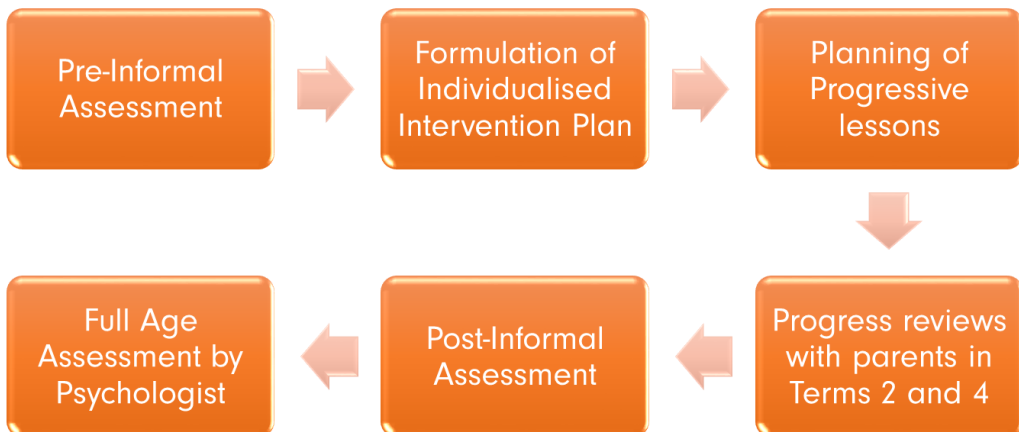
Emotionally-sound

Stress, anxiety and negative emotions can act as an affective filter that comes between learning and what-is-being-taught. Emotionally-sound delivery fosters and promotes learning and acquisition.

The programme was carried out in three tiers. Remediation by Educational Therapists and both the Preschool Screening Assessment (at point of admission into programme) and the Full Age Psychological Assessment (point of exit of the programme) by our qualified DAS psychologists. Children were grouped according to Assessment results/profiles. Each class consisted of 2 to 4 children, each having their own individualised educational plan. Children who completed the programme and were diagnosed as dyslexic may continue on with DAS in its main literacy programme at Primary One.

MEASUREMENT OF STUDENT ATTAINMENT

The process of measuring student attainment is summarised as follows: Student progress is carefully monitored through observations made during each intervention session as appropriate. Based on the diagnostic-prescriptive nature of the O-G principle, the education therapist adjusts the lesson content for the



next session by addressing the areas of uncertainty, weakness and strength. Thereby, shoring up against weaknesses in foundation concepts, addressing gaps in foundation knowledge and leveraging on student's achievement and strength, promoting further interest and progress in learning.

THE PROGRAMME AIM

To help preschoolers potentially at risk of dyslexia achieve school readiness through our early intervention programme.

Outcomes of/Key takeaways from Preschool Programme

- ◆ Confidence to execute skills without fear, worry and anxiety
- ◆ Ability to self-regulate, self-motivate and self-discipline
- ◆ Ability to use literacy skills as an active tool in real time

STUDENT ACHIEVEMENT

Overview

This was based on the results of 40 bursary students whose learning progress was formally tracked since the beginning of the school year. According to research studies, if a dyslexic child is identified and given effective teaching before 7 years old, he/she may improve to a point where there is little disadvantage. After 7 years old, a sharp fall in the effectiveness of teaching interventions. After 9 years old, the effects of intervention seems to stabilise rather than remedy the relative deficit in reading skill. As such, the Preschool Programme views and celebrates the individual success of children "Assessed and no longer showing signs of dyslexia".

Success Indicators of student achievement

Success indicators were based on a child's improvement in one of five categories:

- ◆ Alphabet knowledge - able to sequence the alphabet, write lower case letters and write upper case letters
- ◆ Phonogram knowledge - letter to sound correspondence
- ◆ Learnt word knowledge - able to read learned words
- ◆ Reading - cvc, ccvc, cvcc, th, ch, and wh
- ◆ Spelling - as above

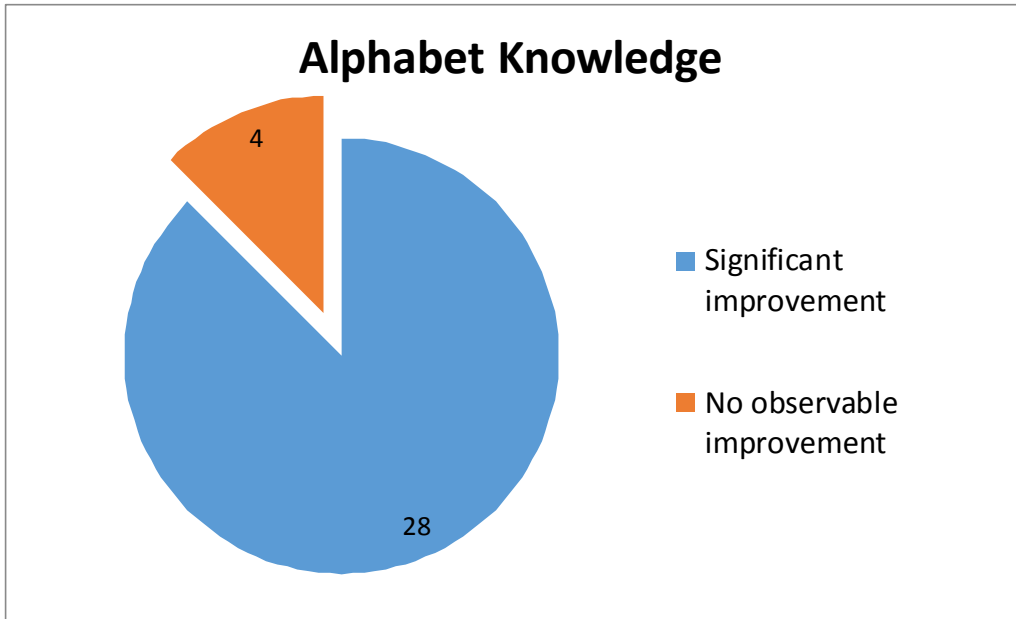


Figure 1.1 – Pie Chart of Student Improvement in Alphabet Knowledge

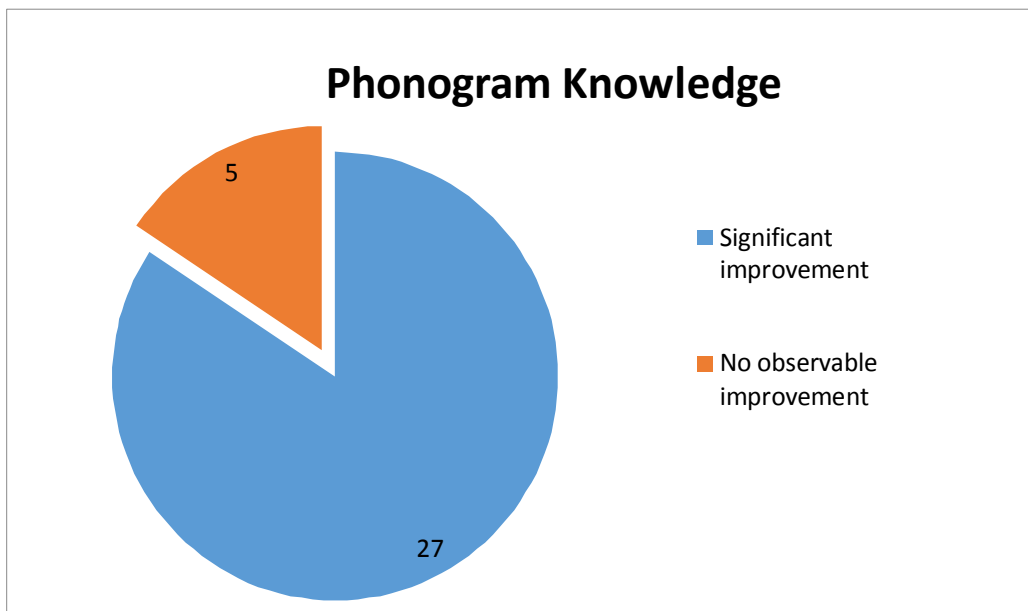


Figure 1.2 – Pie Chart of Student Improvement in Phonogram Knowledge

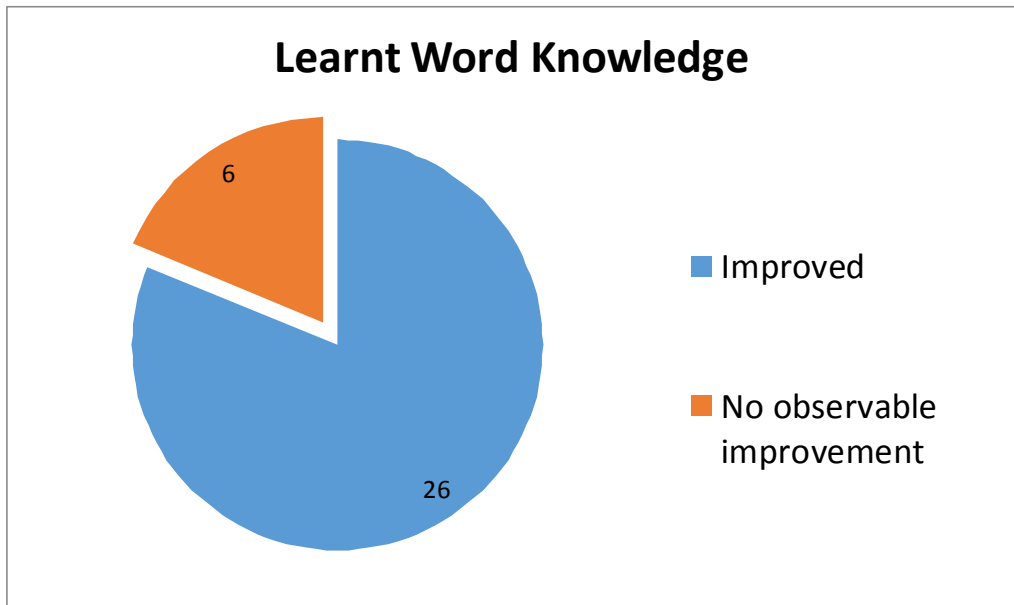


Figure 1.3 – Pie Chart of Student Improvement in Learnt Word Knowledge

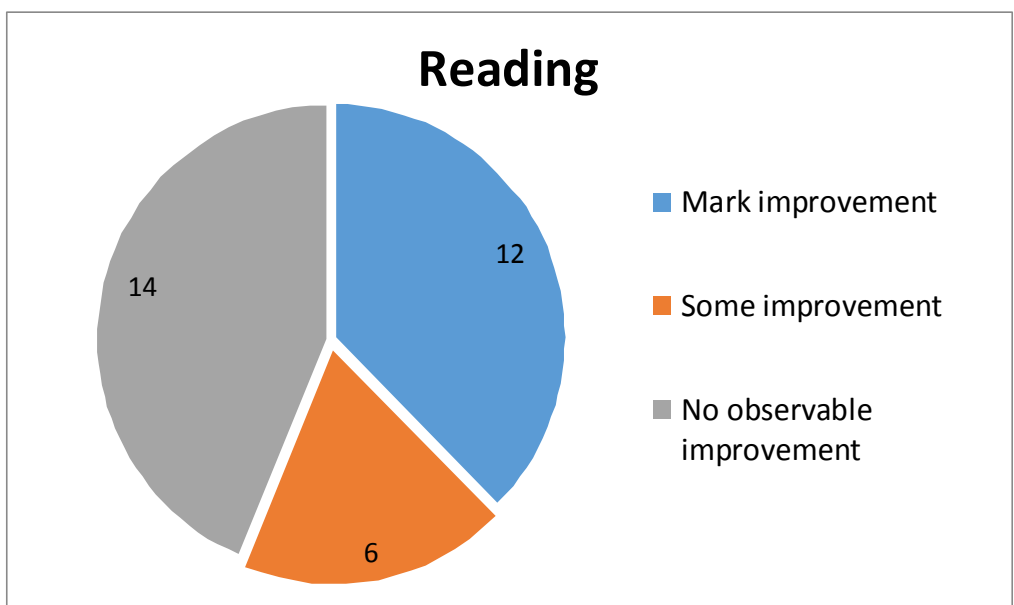


Figure 1.4 – Pie Chart of Student Improvement in Reading

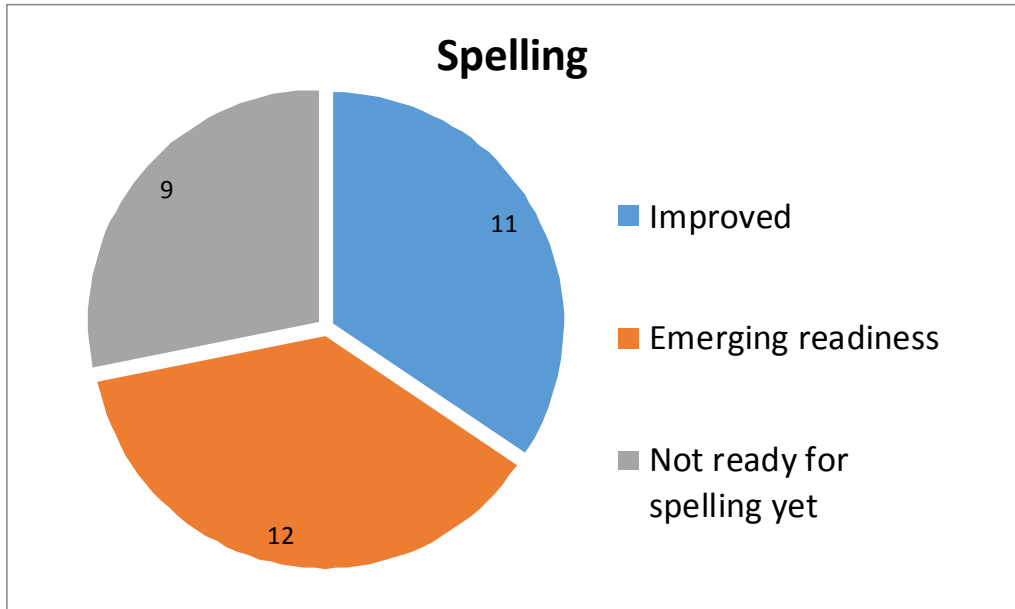


Figure 1.5 – Pie Chart of Student Improvement in Spelling

Results from the pre and post-assessment worksheets were used as the basis for comparison. A child was considered to have made an improvement if he/she achieves their Individualised Education Plan (IEP) or shows an improvement in their weak areas as listed above. Figures 1.1 to 1.5 above show the percentage of pupils showing an improvement in each aspect (statistics based only on students who have completed 20 hours or more of intervention):

Knowledge is progression based, with alphabet knowledge and phonograms being one of the cornerstones of early literacy, leading up to proficiency in reading and spelling. In early childhood education, development is viewed as a spectrum and the focus is always on **the process** and the gains along the journey of learning, not the product which is usually represented in a form of an assessment at the end. It is through **the process** that young children gain the tools and skills necessary to decipher printed text and craft writing at later stages.

As such, findings represented in Figures 1.1 to 1.5 suggested that most students had acquired a good foundation in alphabet knowledge and phonogram, leading up to learning sight words essential for reading, building a foundation towards reading and spelling readiness.

Although children may show improvement in their learning, those diagnosed as dyslexic will continue to remain on the DAS programme as they enter P1. One of the success indicators here is that we continue to enrol and diagnose dyslexic children correctly at their young age.

THE PRESCHOOL PROGRAMME: MOVING FORWARD INTO 2014

In the course of programme evaluation, several challenges came to light. Preschoolers joining our intervention classes came with the following problems.

1. Very little or a poor grasp of spoken English to begin with. This has a direct impact on our lesson delivery as English is our medium of instruction. It also impact upon children's learning through the inability to comprehend the concept taught
2. Weak fine motor skills – not deliberately targeted nor addressed through explicit teaching
3. Weak executive functioning – somewhat lacking and in need of explicit teaching of specific strategies that promote memory, and activities that stimulate memory development
4. Noticeable disparity in developmental levels e.g. Global Developmental Delay
5. Social-emotional development lagging behind their peers

In response to the above concerns, we plan to:

1. Consider incorporating a deliberate oracy element/component into our existing programme. Perhaps developing some sort of oracy package, consisting of a teacher's resource guide book, complete with picture cards and suggested activities that busy educational therapists can simply grab-and-use with students. Language is a tool for communication (Vygotsky cited in Bodrova & Leong 1996). In a pragmatic sense, the content should be contextualised to our Singaporean setting, and its lesson delivery adapt some ESL/EFL (English as a second or foreign language) approaches to expedite learning
2. Consider having fine motor skills activity integrated more firmly into our programme, executed with deliberation and purpose. Students' poor handwriting should attain a level that is close to, if not better than, their peers in readiness for P1

3. Consider equipping teachers/therapists with teaching resources necessary to carry out activities that target and foster executive functioning issues. This may include INSETs on the creative use of teaching resources
4. Course leaders should be available (alongside the SPD team) to counsel and support teachers/therapists with children who may need short term, intensive, one-to-one remediation
5. Consider blending in elements of SEL (Social Emotional Learning) into the existing preschool curriculum so that children are better equipped to meet their challenges ahead, building resilience

Prime Minister Lee Hsien Loong recently emphasised, in the news, the importance of education and the need for our children to grow up and be capable of critical and creative thinking. Our students are capable of that and more. Let us level our students' playing field through the preschool's early intervention programme.

REFERENCES

- Bodrova, E., & Leong, D. J. (1996). *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. New Jersey: Prentice Hall.
- Fawcett, A., Lee, R., & Nicolson, R. (2014). Sustained benefits of a multi-skill intervention for preschool children at risk of literacy difficulties. *Asian Pacific Journal of Developmental differences*, 1, 62-68.
- Nicolson, R. I., Fawcett, A. J., Moss, H., Nicolson, M. K., & Reason, R. (1999). An Early Reading Intervention Study: Evaluation and Implications. *British Journal of Educational Psychology*, 69, 47-62.
- See, S. J., & Poay, P. S. (2014). The identification of Dyslexia in Pre-school Children in a Multilingual Society. *Asian Pacific Journal of Developmental differences*, 1, 44-61.
- Torgesen, J. K. (2001). The Theory and Practice of Intervention: Comparing Outcomes from Prevention and Remediation Studies. In A. J. Fawcett (ed). *Dyslexia: Theory and good practice*. London: Whurr.
- Torgesen, J. K., Forman, B. A., & Wagner, R. K. (2014). Dyslexia: a brief for parents and educators. *Asian Pacific Journal of Developmental differences*, 2, 118-136.

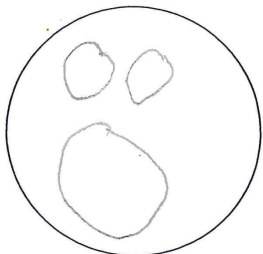
ACKNOWLEDGEMENT

Sincere appreciation to all preschool teachers for their contribution towards making this programme evaluation possible. Special thanks to Lynette Ong for collating all the pre-and-post test results.

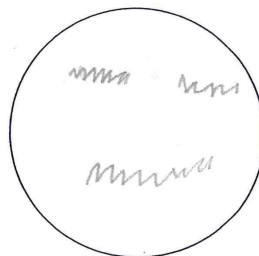
Name.

Date: 14 September 2015

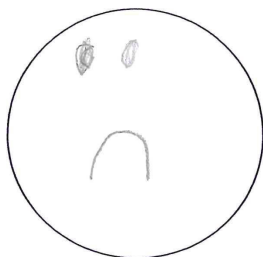
Draw a face in the circle that shows the emotion.



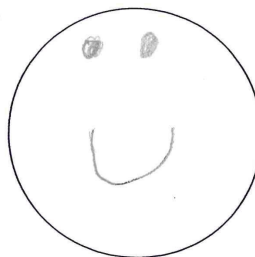
Shock



Frighten

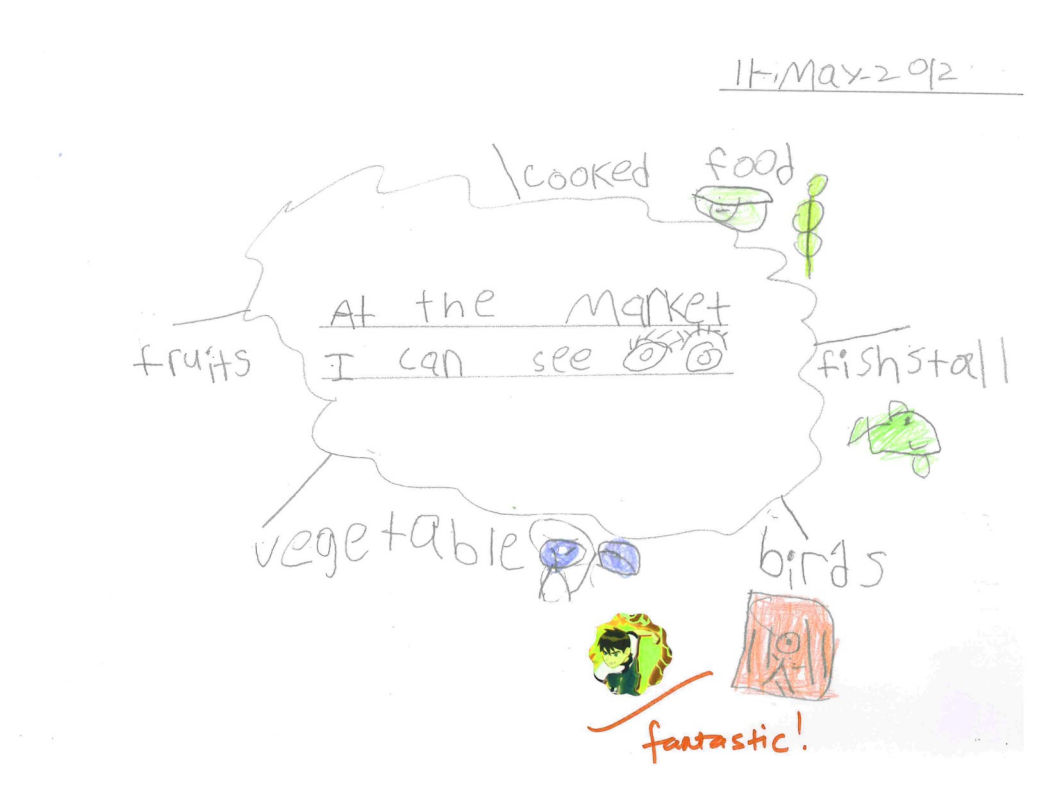


Upset



Happy







The house on the hill.



Finish the picture and colour it in.

The house has a red door and a brown roof.
The curtains are pink.
There are two chimneys.
A big, black bird is on the roof.
In the garden there are yellow flowers.
There is a tree next to the house.

Photocopy Master 1989 LEARNING MATERIALS LTD., Dixon Street, Wolverhampton, WV2 2BX.

FEEDBACK ON THE PROGRAMME



DYSLEXIA ASSOCIATION OF SINGAPORE PRESCHOOL PROGRAMME EVALUATION 2013

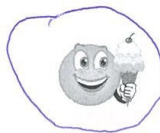




Student's Feedback

Name : _____

EdT Joanne

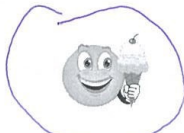




Question 1:.....How do you feel about coming to DAS Preschool Programme for classes?

Rating

				
I love it	Happy	"It's ok" (neutral)	Angry	Sad






Question 2:.....How easy is it for you to sequence of the alphabet?

Rating

				
I love it	Happy	"It's ok" (neutral)	Angry	Sad

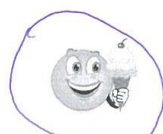




Question 3:.....How easy is it for you when you write (e.g. your name, copy writing)?

Rating

				
I love it	Happy	"It's ok" (neutral)	Angry	Sad

Question 4:.....How much do you enjoy doing "words-to-read"?

Rating

				
I love it	Happy	"It's ok" (neutral)	Angry	Sad

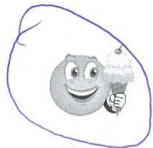






DYSLEXIA ASSOCIATION OF SINGAPORE
PRESCHOOL PROGRAMME EVALUATION 2013

Question 5:..... How much do you enjoy doing "words-to-spell"?

Rating






Rating scale for Question 5:

-  I love it
-  Happy
-  "It's ok" (neutral)
-  Angry
-  Sad

Question 6:..... How much do you enjoy doing "card drill" (letter-sound review)

Rating


Rating scale for Question 6:

-  I love it
-  Happy
-  "It's ok" (neutral)
-  Angry
-  Sad

Question 7:..... How easy is learning in school now or is it a "struggle" (i.e. I-don't-know-what-teacher-teaches)

Rating

Rating scale for Question 7:

-  I love it
-  Happy
-  "It's ok" (neutral)
-  Angry
-  Sad

Question 8:..... Other comments, suggestions, or feedback, if any. (e.g. What do you like most about coming DAS class? What do you like least? What is your favourite activity?)

I get to play and learn



DYSLEXIA ASSOCIATION OF SINGAPORE
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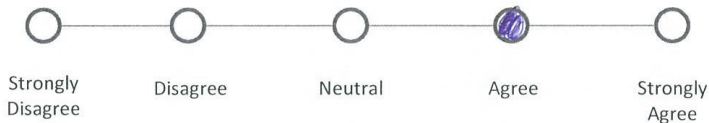
Parent Feedback Form

Name of Child: _____ Level : K1/K2

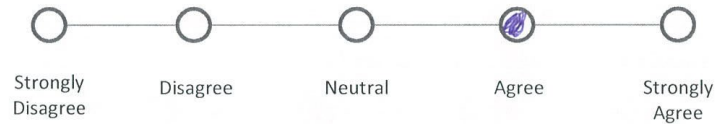
Indicate your response by shading the circle that which most corresponds to your evaluation.

Since/After attending the preschool intervention program:

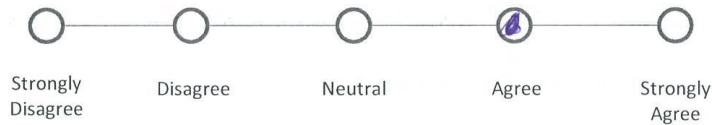
1. My child appears more confident, happier.



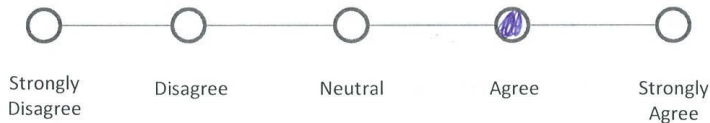
2. My child's school teacher(s) tells me that my child is generally doing much better in class.



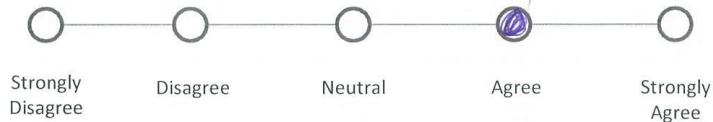
3. I can see and/or my child's school teacher(s) tells me that my child's most significant/observable improvement is in **alphabet knowledge**



4. I can see and/or my child's school teacher(s) tells me that my child's most significant/observable improvement is in **sight word recognition**



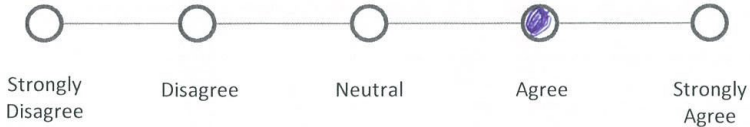
5. I can see and/or my child's school teacher(s) tells me that my child's most significant/observable improvement is in **reading phonetically**



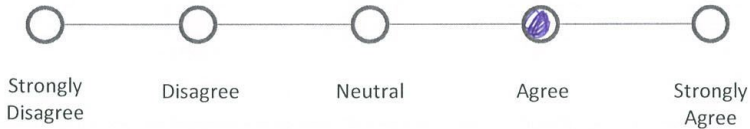


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PRESCHOOL PROGRAMME EVALUATION 2013

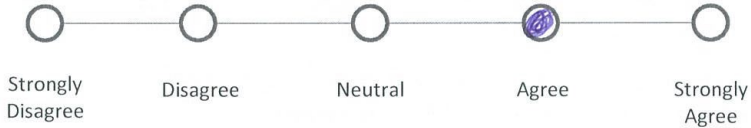
6. I can see and/or my child's school teacher(s) tells me that my child's most significant/observable improvement is in **writing** – less laboriously as compared to before



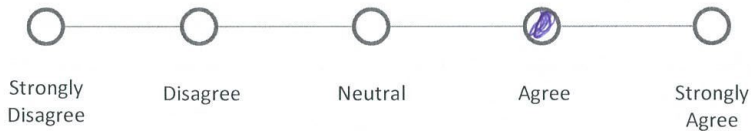
7. My child is able to apply what he has learned.



8. My child has benefitted from the preschool programme.



9. I am happy with the Preschool intervention programme.



10. Other comments, suggestions, or feedback, if any.



**DYSLEXIA ASSOCIATION OF SINGAPORE
PRESCHOOL PROGRAMME EVALUATION 2013**

Teacher Feedback Form

Name of Child: _____ Level : ^{in 2013} K1 / K2 Date: _____

Using the zero-to-ten rating scale, indicate your response by shading the circle that which most corresponds to your evaluation.

Question 1:.....How would you rate your student's general confidence level now?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 2:.....How would you rate the progress made by your student in terms of **alphabet knowledge**?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 3:.....How would you rate the progress made by your student in terms of **writing**?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 4:.....How would you rate the progress made by your student in terms of **sight word knowledge**?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 5:.....How would you rate the progress made by your student in terms of **reading**?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 6:.....How would you rate your student's overall achievement?

Rating 0 1 2 3 4 5 6 7 8 9 10

Question 7: Other comments, suggestions, or feedback, if any.

ABOUT THE AUTHOR



WONG KAH LAI

Preschool Programme Manager

Wong Kah Lai is the Preschool Programme Manager at DAS. An enthusiastic and passionate educator with more than twenty years' experience in the field of early childhood education, Kah Lai taught young children, mentored teachers, supported parents and caregivers in a wide range of setting, from within the classroom to community outreach, while juggling her Diploma in Early Childhood Education from Wheelock College, and subsequent Bachelor of Education in ECCE from the University of South Australia. She completed her Masters in Teaching English to Young Learners from the University of York through distance learning whilst working full time as head teacher of a bilingual kindergarten in China.

NTUC INCOME ORANGEAID FUND

Supporter of SES Preschool Programme

Through the support of NTUC Income OrangeAid Fund, DAS has been providing preschool bursaries to families in need of financial assistance since 2011. Unlike bursaries for other programmes, the OrangeAid bursary ensures that your child receives all of the necessary support at the preschool level in preparation for Primary One.

The advertisement features a large circular graphic on the left with a white hand in the center, surrounded by several smaller hands in shades of orange and yellow. The background of the graphic is a gradient of orange and red. To the right of the graphic, the text reads:

Give Equal Opportunities

NTUC Income continues to stay true to its social purpose of helping the less privileged live better lives. OrangeAid hopes to level the playing field for children and youth from disadvantaged circumstances.

We give 1% of our profits to children in need through OrangeAid.

You can partner us by Rounding Up your GIRO premium payments or donate at www.orangeaid.sg

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