

Specialised Educational Services

UNLOCKING POTENTIAL

SPEECH AND DRAMA ARTS

The aim of the programme is to develop literacy, communication and presentation skills and boost the self-esteem of learners with dyslexia. Drama can be that powerful tool to help increase the self-esteem and confidence of students with learning differences.

OUR APPROACH

Using drama activities, students have the opportunity to enhance their persuasiveness and confidence in communication. Students are given the freedom to express themselves freely, using their imagination and creativity. Other vital communication skills that are fostered in the class setting includes listening and concentration. Activities ranging from role-playing to stage performances require students to understand the fundamentals of stage directions, character dialogues, music and light cues. To stage a production necessitates the child to understand and interpret the script, process the script in-depth. This allows them to work on the working memory and processing speed. Class sizes are kept to a maximum of 10 students per class and are conducted once a week in a 1.5 hour session.

The programme consists of different modules catering to different age groups:

- ◆ Creative Drama Programme
- ◆ Literacy through Drama Programme
- ◆ Educational Drama Programme

At the end of each module, parents will be invited to watch the progress of their children. This will also help in giving our students the experience and exposure of performance making. A certificate of participation and progress report will be given to students upon completion of each module.

DAS Specialised Educational Services

Speech and Drama Arts

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1. *Speech and Drama Arts Programme Manager*
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Dyslexia Association of Singapore

OVERVIEW OF THE SES SPEECH AND DRAMA ARTS PROGRAMME

We at the Dyslexia Association of Singapore (DAS) recognise Speech and Drama Arts as an effective means of developing our students' talents and self-confidence, which in turn can lead to a more positive self-concept for a student. Our goal is to provide an outlet for students to express themselves, their inner feelings and emotions and to demonstrate their talents in a fun and artistic way.

The Speech and Drama Arts Programme focuses on three main goals. The first goal is to develop drama and acting skills. The next one is to develop language skills through drama activities and the third goal is to enhance the social-emotional development of the students.

PROGRAMME DESCRIPTION

Understanding the background and characteristics of our dyslexic students has allowed the team to develop a programme that would enhance their learning journey and discover their potentials.

Develop Drama and Acting Skills

The majority of our students have difficulties in expressing and communicating their thoughts. Drama activity such as role-play provides stimulation to students to express themselves creatively using imaginative skills. Ranging from classroom lessons to stage performances, students are required to understand the fundamental of stage directions, character dialogues, music and light cues. Drama, being a multimodal

pedagogy, uses props, body language, facial expressions, sounds and images along with words to convey meaning (Palechourou and Winston, 2012).

Develop Language Skills

Within the drama experience, our students are given the opportunity to draw and make meaning not only from their spoken language but also the physical context combined with visual and aural cues. Hence, our goal is to provide an outlet for our students with dyslexia to use language in a fun, creative and engaging setting.

Through Drama, language learning is now an interactive and participatory process that engages learners emotionally and playfully (Winston, 2012). According to Winston (2012), drama is a multimodal form of pedagogy that engages students' interest at a different level of entry. A multimodal form which combines visual, aural, verbal and kinesthetic language allows students to retain a particular learning experience firmly in their minds (Chang, 2012). Also, the 'malleability' of the learning process enables teachers to swiftly respond and adapt to any student's comments, questions or ideas (Chang, 2012).

Critical Thinking

Critical thinking is an active and systematic cognitive process that requires applying the things that we learned, in order to understand ourselves and the events which occur in our environment (Noris, 1985). Creative thinking skills are vital in promoting creativity (Pekdoğan and Korkmaz, 2016). Drama activities such as role-play will promote creativity in interpreting and establishing any social situations (Heatchcode, 1991). Studies support the concept that drama provides insight on perspectives of the various characters and settings. By analysing and understanding perspectives of others in drama activities, it sharpens the skill of critical thinking as common situations are looked at from multiple angles.

Enhance Social-Emotional Development

Dyslexia does not only affect the academic component of learning – literacy but also emotional well-being of a student (Eadon, 2005, Thomson, 2009). Thomson asserted that if children with dyslexia could overcome the "I am dyslexic and I can't do it" attitude, then it would increase their self-esteem and determination to succeed. Therefore, Drama is a powerful tool for building self-confidence, which in turn can lead to a more positive self-concept for our students (Eadon, 2005, Winston, 2012).

Other than building rapport among students and teachers through drama activities, we create opportunities for students to discover their strengths and weaknesses,

re-consider their thoughts, attitudes and their feelings in the light of shared experience with their peers, learn to work together, to cooperate, to contribute, and to listen to and accept the viewpoints and contributions of others and to be a good team player.

Curriculum

There are four individual modular-based programmes, catering to different age groups, in our Speech and Drama Arts programme.

- ◆ Creative Drama Programme for ages 6-8 years
- ◆ Literacy Through Drama for ages 9-12 years
- ◆ Educational Drama for ages 13 – 14 years

Entry Criteria

The entry criteria for the Speech and Drama Arts Programme: - K2, primary school and lower secondary school students are welcome to enrol. The Speech and Drama Arts Programme is open to both DAS students and non-DAS students.

Who the Programme is for

The Speech and Drama Arts Programme is recommended for students who want to explore the learning of language through drama skills while improving their self-esteem and ability to express themselves.

Approach to Teaching

This specialised programme is planned such that students participate in both guided and self-directed activities that will engage them kinaesthetically and cognitively. The activities facilitated during lessons encourage affective aspects of reading and literacy while offering multiple opportunities for meaningful communication, social interaction, discussion and feedback.

Orton-Gillingham (OG) principles are incorporated into our lessons to ensure quality and effectiveness.

Orton-Gillingham Approach:

- ◆ **Language-based** – Exposure to different texts to enhance students' appreciation of the English language through Drama.
- ◆ **Cognitive** – the activities are crafted to engage their cognition e.g.

- creative story writing, roleplay, improvisation, memorising scripts, rehearsing and performing with movements and cues
- ♦ **Structured, Sequential and Cumulative** – includes direct and explicit instruction and has a different range of difficulty level for all activities
- ♦ **Simultaneous multi-sensory** - engage through stage and hand props, presentation of skills through multiple senses, eg. Using visual and aural cues
- ♦ **Diagnostic-prescriptive** – Drama Instructors regularly assess students' abilities and adapt activities according to the class dynamics.
- ♦ **Emotionally sound** – Drama Instructors are trained in the special needs field, hence they have a better understanding of our students' needs and strengths.

EVALUATION OF PROGRAMME

Student Number

Table 1 shows the breakdown of student enrolment in 2018. On average, 35% of our students require bursary in order to access the programme.

Table 1: Student Enrolment in 2018

	TERM 1 2018	TERM 2 2018	TERM 3 2018	TERM 4 2018
Enrolment	34	36	38	44
Actual No. of students on Bursary	10	10	14	20
% of students on Bursary	29%	28%	37%	45%

School Project

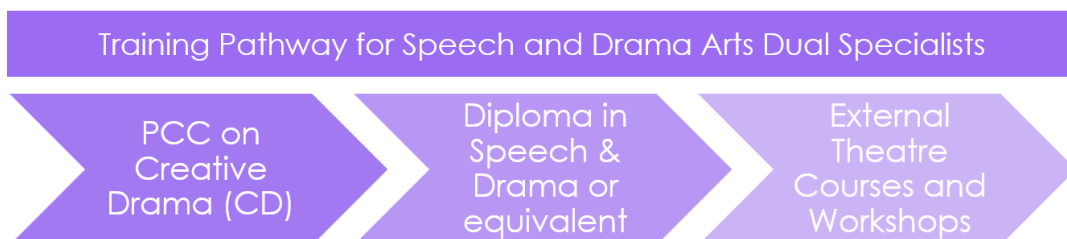
In addition to the student number above, we have served 10 Secondary 1 students from St. Theresa Convent in Term 4 (2018) through our school-based drama workshops.

QUALITY ASSURANCE FOR SPEECH AND DRAMA ARTS PROGRAMME

We assure the quality of the programme by the appropriate placement of students. Before placing the students in our SDA classes, the Educational Therapists teaching the DAS Main Literacy Programme (MLP), are required to fill up a form indicating information such as CBA score, behaviour profile and type of learner the student is. This is so that the drama instructors have prior knowledge of the students. Next, we evaluate our students' progress after each drama module is covered, by using rubrics to evaluate four different components/ skills taught during 10th lessons. A progress report will be given upon completion of each level to the parents. Other areas we look into to assure the quality of the programme are quality of our curriculum/lesson plans, class observation by Programme Manager and obtaining feedback from parents.

TEACHER TRAINING

The training is designed for the EDTs who wish to do dual-specialisation in Speech and Drama Arts. The course provided the knowledge and skills required to teach Speech and Drama lessons. The total duration of the course is 20 hours. At the end of the course, there will be a summative assessment leading to awarding a competent learner with a Professional Certificate Course (PCC).



INITIATIVES

Trial Class

EVENTS	TERM / LC	2018
SDA Trial Class	Term 2	
	Bedok LC	19 May 2018

School Holiday Workshops

EVENTS	TERM / LC	2018
SDA Workshops	Term 1	
	Bishan LC	12-14 March 2018
	Term 2	
	Bishan LC	28, 30 & 31 May 2018

Parents' Engagement Talks

EVENTS	TERM / LC	2018
SDA Segment in Journey from Preschool to MLP Talk	Term 3	
	Bedok LC	1 st September 2018
Coffee Talk	Sengkang LC	3 rd September 2018

School Projects

CHIJ St. Theresa's Convent

SDA team had the opportunity to conduct the Speech and Drama Arts Programme to 10 Secondary One students. It was a 5-day workshop which was held on 29 October – 2 November 2018. The content of the workshop was based on the school's literature text, "The Pearl" by John Steinbeck. The workshop was designed to build their confidence, develop literacy, comprehension, communication and presentation skills.

At the end of Day 5, the teacher was given a feedback form to complete. It was a 'Yes/No' questions. She responded positively to all 6 questions pertaining to the following:

- a. Students enjoyment
- b. Workshop benefits to the students
- c. Recommendation of the workshop to new students
- d. DAS Instructors preparedness
- e. Class management & engagement with the students
- f. Overall satisfaction

ENGAGEMENT AND AWARENESS

1. SDA Performance in UNITE SpLD Conference 2018 - Monkey King

On 22nd June 2018, 19 students from Bishan Learning Centre performed for both local and international guests at the UNITE SpLD conference at Lifelong Institute of Singapore. The play titled "Monkey King" is an adaptation of Wu Cheng-En's famous novel "Journey to the West" that was published in the 16th century. The students amazed the audience with their marvellous acting skills and articulation.

2. Coffee Talks For Parents At Sengkang Learning Centre

Positive self-esteem has far-reaching effects on an individual's life. It has been linked to general well-being, quality of relationships and even one's ability to stay resilient in times of difficulty. For some children with learning difficulties, developing healthy self-esteem can be challenging. The aim of the presentation was to increase the awareness of self-esteem and how it affects a child's overall development.





3. SDA Performance in DAS Student Graduation Hang Tuah, The Great Warrior

The Speech and Drama Arts (SDA) programme did it again by presenting a remarkable year-end performance for DAS Student Graduation. On 24th November 2018, 30 SDA students graced the stage of SUTD. The 30 students were from Bedok Learning Centre, Bishan Learning Centre and Queenstown Learning centre. The legend of Hang Tuah lies close to the hearts of many in the Malay community all over the world. While there are several versions of the legend out there, SDA's adaptation focused on Hang Tuah's growing up years, his talent in Silat, his rise to fame within the royal court and the ultimate sacrifice he had to execute to hold his honour, duty and loyalty. Bishan Learning Centre students kicked off the show on a high note with a Dikir Barat performance. The students had rehearsed the play for 3 months with great effort.





SUCCESS STORY

Noah Yap

Noah Yap, a cheerful and diligent student was in the Speech and Drama Arts (SDA) programme at Dyslexia Association of Singapore (DAS) for the past 2.5 years. During this period, Noah had performed in class showcases and 2 productions - Shakespeare 400 in 2016 and The Journey of the Legends in 2017. The exposure to the elements of drama and with the great support from his family and teachers, Noah decided to pursue his passion in Theatre Arts after PSLE. He was shortlisted to attend the Talent Academy at SOTA where he had to go through auditions and interviews. We received a piece of good news from his mother informing us that Noah had gained admission into SOTA.



Noah's Reflections

"Some of the tasks of the SOTA Interview were similar to what I had done in my SDA classes, so I felt a little at ease. I also managed to use some of the skills taught at my SDA classes, such as the skills set for monologue, emotions and usage of space. Playing dual roles in the SDA performance also came in handy during the SOTA audition as I was required to play two roles, a transition from a man to a werewolf. Hence, I had to pay attention to my voice and emotion".

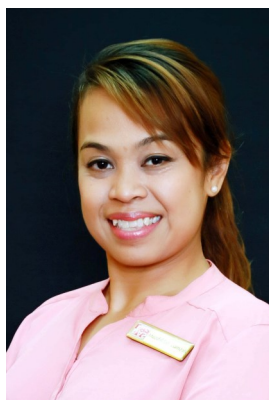
"The most memorable moment would be standing on stage in front of the huge audience; it wasn't just once but twice! It was really a memorable moment as I had the chance to express myself in a different light in front of such a big audience. That also gave me the confidence to apply for SOTA."



REFERENCES

- Baldwin, P., & Fleming, K. (2003). *Teaching Literacy through Drama: Creative Approaches*. Oxfordshire: RoutledgeFalmer
- Chang, L. S. (2012). 'Dramatic' Language Learning in the Classroom', in Winston, J. (ed.) *Second Language Learning Through Drama: Practical Techniques and Applications*. (pp. 6-14). Oxfordshire: Routledge
- Chauhan, V. (2004). Drama techniques for teaching English. The *Internet TESL Journal*, 10(10).
- Eadon, H. (2005). *Dyslexia and Drama*. London: David Fulton Publishers Limited
- Faupel, A. (2003). *Emotional Literacy Assessment and Intervention Ages 7-11*. London: GL Assessment Limited.
- Gardner, H. (2003). 'Multiple Intelligences After Twenty Years', American *Educational Research Association Annual Meeting, Chicago, 21 April*. [Online] Available at <http://howardgardner01.files.wordpress.com/2012/06/mi-after-twenty-years2.pdf>
- Heatchcode, D. (1991). *Collected writings on education and drama*. Northwestern University.
- Norris, S. P. (1985). Synthesis of research on critical thinking. *Educational leadership*, 42(8), 40-45.
- Palechorou, E., & Winston, J. (2012). 'Theatre, Language Learning and Identity (2): Empowering Additional Language Learners through Classroom Drama Projects'. In J. Winston, (ed.) *Second Language Learning Through Drama: Practical Techniques and Applications*. (pp. 42-53). Oxfordshire: Routledge
- Pearson, B. (2001). *Multiple Intelligences*. Available at <http://www.barbarapearson.com/philosophy.html> (Accessed: 27 October 2014)
- Pekdoğan, S., & Korkmaz, H. I. (2016). "An Experimental Study on Development Critical Thinking Skills via Educational Drama as a Teaching Method." *International online journal of educational sciences* 8.(3)(2016).
- Thomson, M. (2009). *The Psychology of Dyslexia. A Handbook for Teachers*. 2nd Ed. London: Wiley
- Winston, J. (2012). *Second Language Learning Through Drama: Practical Techniques and Applications*. New York: Routledge

ABOUT THE AUTHORS



MUZDALIFAH HAMZAH

*Speech and Drama Arts Programme Manager
Senior Educational Therapist and Drama Instructor*

Muzdalifah has been with the DAS since 2012. She provides intervention for learners with dyslexia on the Main Literacy and Speech & Drama Arts (SDA) programmes. In addition, she is also the Programme Manager for SDA programme. Besides teaching literacy and drama classes, her responsibilities include overseeing and leading a team in developing curriculum and teaching resources, ensuring the quality of the programme and overseeing the aspects of SDA performances in DAS events or showcases.

Muzdalifah has a strong interest in the social-emotional development in children with learning difficulties. She had presented her work in conferences and hopes to inspire her students to believe in themselves as unique individuals who possess boundless capabilities.



AMRIT KAUR GILL

Senior Educational Therapist and Drama Instructor

Amrit has been with the DAS since 2012. She provides intervention for learners with dyslexia on the Main Literacy programme and the Speech & Drama Arts (SDA) programme. In addition, she is also the Core Team Member for the SDA programme. Besides teaching literacy and drama classes, she also contributes to developing the Speech & Drama Arts curriculum and teaching resources. Currently, Amrit is pursuing her Masters Degree in Education (Special Education) from Nanyang Technological University (NIE-NTU). Amrit has a strong passion for working with students with dyslexia and in helping them to achieve their goals.



CORINNE ANG

Senior Educational Therapist and Drama Instructor

Corinne has been with the DAS since 2013. She provides intervention for learners with dyslexia on the Main Literacy and Speech and Drama Arts (SDA) programmes. In addition to teaching, she is also involved in the marketing aspects of SDA and developing curriculum and teaching resources together with the team.

Corinne has a strong interest in working with children with ADHD and behavioural difficulties. She hopes to equip herself with relevant strategies to target their difficulties more effectively. Currently, Corinne is pursuing her Master's Degree in Education (Special Education) from Nanyang Technological University (NIE-NTU).



SPEECH AND DRAMA ARTS PROGRAMME



Specialised Educational Services (SES) is a division of Dyslexia Association of Singapore.

OUR AIM

The aim of the Speech and Drama Arts Programme is to develop literacy, communication and presentation skills and boost the self-esteem of learners with dyslexia. Drama can be that powerful tool to help students with learning differences.

The programme consists of three different programmes catering to the different age groups as listed below:

- Creative Drama (6-8 years old)
- Literacy through Drama (9-10 years old)
- Educational Drama (11-14 years old)

At the end of each module, parents will be invited to watch the progress of their children. This will also help in giving our students the experience and exposure of performance making. A certificate of participation and progress report will be given to students upon completion of each module.

OUR APPROACH

This specialised programme is planned such that students participate in both guided and self-directed activities that will engage them kinaesthetically and cognitively. The activities conducted during the lessons encourage the development of the affective domains of a child while offering multiple opportunities for meaningful communication, social interaction, discussion and feedback. Through stage performance, students also have the opportunity to understand the fundamentals of stage directions, character dialogues, music and light cues. The curriculum and lesson deliveries are influenced by Multiple Intelligence (MI) Theory that has a profound impact on thinking and practice in drama education and the Orton-Gillingham (OG) approach.

RECOMMENDED FOR

Students with low self-esteem or low self-confidence, students who have difficulties expressing themselves as well as students who enjoy drama.

Class sizes are kept to a maximum of 10 students per class and are conducted once a week in a 1.5 hour session.



For more info, visit www.das.org.sg



SPEECH AND LANGUAGE THERAPY PROGRAMME



Specialised Educational Services (SES) is a division of Dyslexia Association of Singapore.

OUR SPEECH AND LANGUAGE THERAPY SERVICES

Speech-language therapy services provided at the DAS include both speech and language assessment and therapy.

OUR SPEECH AND LANGUAGE THERAPY

Speech-language therapy is meant for children (pre-schoolers to secondary school students) with speech, language and communication needs, who may or may not have a diagnosis of dyslexia. Therapy focuses primarily on oral language and on improving a child's listening, understanding, speaking, and/or social skills. Therapy is conducted following an intervention model in which therapy is determined by an individual's unique needs, whereby core deficits are addressed through a diagnostic/prescriptive approach based on clinical reasoning and remediation is provided at the level of hypothesized breakdown, independent of a curriculum, using speech and language intervention principles, protocols, methods, strategies and techniques that have demonstrated efficacy in addressing the hypothesized breakdown.



SIGNS OF SPEECH AND LANGUAGE DIFFICULTIES

Some indicators that your child might have speech and language difficulties:

- Delayed speech and language developmental milestones
- Mispronounces sounds in words (e.g. says 'toap' instead of 'soap')
- Shows confusion over words with similar sounds (e.g. mishears 'key' for 'tea')
- Shows difficulty in understanding and following spoken instructions
- Shows poor understanding of age-appropriate stories
- Shows difficulty remembering things that people say
- Shows difficulty in finding the right words to say
- Relates stories or events in a disorganised or incomplete manner

SPEECH AND LANGUAGE ASSESSMENT

A speech-language assessment is conducted to evaluate a child's speech, language and communication ability and determine whether it is age-appropriate. The assessment will further identify the child's strengths and weaknesses in these areas. If required, a comprehensive report will provide recommendations for intervention and learning support for the child's education. An assessment typically takes about 2 hours, or longer depending on the complexity of the case.

For more info, visit www.das.org.sg

Specialised Educational Services

UNLOCKING POTENTIAL

SPEECH & LANGUAGE THERAPY

Children start to learn language from the day they are born. As they grow and develop, their speech and language skills become increasingly complex. Children with speech and/or language difficulties will find it difficult to express and make others understand what they want to communicate.

Children with dyslexia and other specific learning differences often have associated speech and language difficulties. These include delayed speech and language development, inaccurate articulation and poor language skills. The child may be intelligent but have a speech and language problem. This will slow down his learning and can be very frustrating for the child and his parents.

DAS Speech-Language Therapists (SLTs) are qualified professionals who assess, diagnose and provide intervention for speech, language and communication-related difficulties in children. A Speech and Language assessment helps to find out if a child's speech and language ability is age-appropriate. It also identifies individual language strengths and weaknesses. An individual intervention plan is then tailored according to the profile of the child obtained from the assessment.

Depending on the child's needs, Speech and Language therapy is conducted individually or in small groups. SLTs aim to build up the child's fundamental speech and language skills to support his learning in school. Therapy is carried out in a child-friendly, lively and bright environment. Language is aided and enhanced through fun and functional activities.

DAS SLTs also provide awareness talks and workshops in the area of speech and language difficulties.

DAS Specialised Educational Services

Speech and Language Therapy

Lee Er Ker, Shuet Lian Ho, Sharon Reutens, Elizabeth Lim Yien Yien, Tammy Wong

Speech and Language Therapists
Dyslexia Association of Singapore

INTRODUCTION

The Dyslexia Association of Singapore (DAS) recognises the importance of Speech and Language Therapy in supporting children with specific learning differences in the Singapore mainstream school population, especially with respect to the diagnosis of speech and language disorders and the provision of appropriate intervention.

The critical role that Speech-Language Therapists (SLTs) play in helping students who struggle with literacy is clearly set out in an official policy statement issued by the American Speech-Language-Hearing Association (ASHA) in 2010 which states that, “(c)urrent research supports the interrelationships across the language processes of listening, speaking, reading, and writing. SLPs contribute significantly to the literacy achievement of students with communication disorders, as well as other learners who are at risk or those who struggle in school settings.”

With this in mind, the SLTs at DAS focus primarily on oral language and work on improving listening, understanding, and speaking skills, as well as social skills, all of which are critical components in the development of speech and language in children, while Educational Therapists focus primarily on key essential learning components that are recommended for an effective literacy intervention, including language and vocabulary, phonemic awareness, phonics, morphology, reading fluency, listening/reading comprehension, and writing.

The scope of work of SLTs at DAS is based largely on the description of speech and language therapy as prescribed in the Second Schedule of the Allied Health Professions Act 2011, which states that, "Speech and Language Therapy involves the assessment, diagnosis, treatment and management of communication disorders" and that "communication encompasses spoken and symbolic representations of language (i.e. written, pictorial, signed), and takes into consideration hearing, auditory processing, understanding, expressive language, articulation, fluency, resonance, voice, prosody, non-verbal and social skills."

Speech and language therapy at DAS is consequently determined by the individual child's needs. Issues with speech and language are addressed by remediating core deficits and building up speech, language and communication skills, guided by best practice, in an interactive and multisensory learning environment so that children can be enabled to reach their full potential in accessing the DAS Main Literacy Programme (MLP) at DAS, as well as the curriculum in mainstream schools.

PROGRAMME DESCRIPTION

Entry and Exit Criteria

Speech and language therapy at DAS can be accessed by children with speech and language difficulties which slow their learning and make everyday interactions frustrating. These difficulties may take the form of delayed speech development, imprecise articulation, poor language skills, poor social communication skills, issues with the use of voice, and/or issues with speaking fluently (also known as stuttering or stammering). Speech and language therapy at DAS is open to children ranging from pre-schoolers to secondary school students, with or without a diagnosis of dyslexia, regardless of whether they are enrolled in any other DAS programme at the time of enrolment.

The SLTs at DAS are experienced in working with children diagnosed with language disorders, dyslexia, various specific learning disorders, developmental language delay, global developmental delay, and/or autism spectrum disorder, amongst others.

Children are discharged from speech and language therapy when they have achieved the goals targeted in their Individual Intervention Plans (IIP). The IIPs are decided in conjunction with parents, as well as the students themselves where applicable (i.e. for older students).

Who the Programme is for

Speech-language therapy is suitable for children who have Speech, Language and Communication Needs. These children may experience difficulties with speech (mispronunciation or distortion of sounds when speaking), language (difficulty understanding or expressing him/herself at an age-appropriate level), pragmatics (difficulty with social skills like interacting with others at an age-appropriate level), fluency (stammering/stuttering), and voice (issues with loudness and/or quality of voice used), or a combination of these.

EVALUATION OF PROGRAMME FOR 2018

Speech-language Therapy Student Numbers

Students who underwent speech-language therapy were between six and sixteen years old. They attended one-hour weekly individual or group speech and language therapy sessions at one of the DAS Learning Centres across Singapore, namely Bishan, Jurong Point, Tampines, Parkway Parade and Woodlands. Most of the speech and language therapy students were also attending the DAS Main Literacy Programme (MLP).

The breakdown of student numbers, the number of SLTs, the number of bursaries provided for beneficiaries per term in 2018 is as follows:

2018	TERM 1	TERM 2	TERM 3	TERM 4	TOTAL
STUDENT ENROLMENT (includes students from school-based SLT programmes, i.e. SLT Service @ Northlight School)	147	152	173	171	643
NUMBER OF SLTS	4	5			
NO. OF BURSARIES AWARDED TO BENEFICIARIES (DAS General Pool)	70	66	71	79	286

Speech-language Assessments Conducted

Besides conducting therapy, the SLTs at DAS conduct speech and language assessments which assess a student's speech as well as his/her receptive and expressive language abilities. These assessments seek to identify an individual's strengths and weaknesses with respect to speech and language. Each assessment includes an interview with the child's parents to obtain case history as well as the completion of both dynamic assessments and standardised assessments such as Clinical Evaluation of Language Fundamentals® - Fifth Edition (CELF-5) by the student. CELF®-5 is a comprehensive and flexible assessment used to assess a student's language and communication skills, determine the presence of a language disorder, describe the nature of the language disorder and provide directions in therapy planning.

In 2018, the DAS SLTs conducted a total of 3 speech and language assessments, with the breakdown per term as follows:

2018	TERM 1	TERM 2	TERM 3	TERM 4	TOTAL
Number of Speech-and-Language Assessments conducted	0	0	1	2	3

Workshops and Training

In addition to the provision of regular therapy and assessment services in 2018, SLTs were actively involved in conducting workshops and training, as well as raising public awareness. Workshops were run for students, and training was provided to both DAS staff, parents, education professionals and members of the general public.

The table on the following page details the training conducted by DAS SLT's in 2018

RESEARCH CONDUCTED

The SLTs followed through with the evaluative study on the effectiveness of DAS speech and language therapy that was initiated in 2017. The study utilised a small-n quasi-experimental design with a control group without random assignment of participants to conditions (i.e., an intervention/therapy condition and a control condition). A total of 12 participants with the intervention/therapy condition and 11 participants in the control group were pre- and post-tested using the core subtests of

DATE	TYPE	EVENT TITLE	PARTICIPANTS	SLT(S) INVOLVED	NO.
15 Mar 2018	Preschool Seminar 2018	Workshop: Nurturing Social Skills in the Early Years	Parents and education professionals	Elizabeth Lim and Lee EK	~ 160
21 & 28 April 2018	External Training (DAS Academy)	Certificate in Understanding Speech and Language Impairment	Parents and education professionals	Ho Shuet Lian and Lee EK	13
20 Jun 2018	UnITE SpLD 2018	Pre conference session: Overview of SLT	Parents and education professionals	Elizabeth Lim and Ho Shuet Lian	35
22 Jun 2018	UnITE SpLD 2018	Presentation: Speech Language and Communication Needs - Case Studies	Parents and education professionals	Ho Shuet Lian and Lee EK	~ 150
1 Aug 2018	In-house Inset	AET Training	DAS Educational Therapists	Tammy Wong	4
18 & 25 Aug 2018	External Training (DAS Academy)	Certificate in Understanding Speech and Language Impairment	Parents and education professionals	Sharon Reutens and Tammy Wong	11
20 Aug 2018	External Training	Classroom Support for Learners with Speech and Language Disorder at NorthLight School	Teachers from Northlight school	Ho Shuet Lian	20
21 Nov 2018	External Training (DAS Academy)	Master of Arts in Special Educational Needs - Contexts and Concepts module (Speech & Language Development & Difficulties)	Education professionals	Elizabeth Lim	10
22 & 23 Nov 2018	SES Workshop	Getting Ready and Staying Happy in Primary School for K2 - P2	K2 - P2 students	Ho Shuet Lian and Lee EK	8
22 & 23 Nov 2018	SES Workshop	Social Communication for Growing Kids	P3 - P5 students	Elizabeth Lim and Sharon Reutens	9

the CELF®-4 standardized language assessment. All participants have been recommended to seek SLT support by psychologists, medical, allied health or education professionals. Participants in the control group were on the waitlist during the period of study and are progressively being offered SLT service after the study as SLT slots become available. Only the participants in the intervention/therapy condition undergo therapy for at least a school term between the pre- and post-test. The assessment results of participants from both groups have been statistically analysed and compared to see how the language skills of those who have undergone intervention/therapy have developed compared to those who have not done so. A write-up of the study is in progress.

QUALITY ASSURANCE AND THERAPIST TRAINING

Student progress is monitored and tracked through the students' ability to meet targeted goals in their Individual Intervention Plans (IIPs) as therapy progresses. In addition, the team has completed undertaking a small evaluative study on the effectiveness of DAS speech and language therapy in 2018 and will be reporting the results in an upcoming write-up.

To ensure consistent quality in the delivery of speech-language therapy, there is considerable emphasis on therapist training. Every DAS SLT undergoes at least 50 hours of Continuing Professional Development (CPD) per year, attending in-depth training in specialised clinical-related areas and in working with the target population, engaging in case sharing on a regular basis, and participating in additional workshops for self- and professional development through teams-teaching -teams, etc. Newly qualified SLTs who join the team are mentored by more senior SLTs in strict accordance to Allied Health Professions Council (AHPC) Supervisory Guidelines.

All DAS SLTs, other than Ms. Tammy Wong who joined the team in early 2018, are registered with Full Registration with the Allied Health Professions Council (AHPC) and hold current and valid practising certificates, renewable every two years.

NEW INITIATIVES TAKEN FOR 2018

Expansion of Workshops and Training Undertaken

- ◆ Curriculum Development for New Programme: Self-Awareness and Social Communication Programme @Assumption Pathway School

In May 2018, the SLT team had the exciting opportunity to embark on a project to develop a Self-Awareness and Social Communication Programme for Teenagers, to be launched and implemented at Assumption Pathway School (APS) in January 2019. After the proposal for this programme was accepted in Term 4, Ms. Elizabeth Lim began writing up the curriculum framework, programme goals, learning outcomes and topics for the development of the 15-week programme targeting APS Year 1 teenage students. The detailed content of the programme was developed in partnership with the Speech and Drama Arts (SDA) and Main Literacy Programme (MLP) teams, making this the first inter-department programme project for SLT. The programme is scheduled to be implemented over Terms 1 and 2 in 2019 and is projected to benefit more than 100 APS students in 2019.

◆ **New Student Workshop: Social Communication for Growing Kids (for middle to upper primary students)**

Over the years, more and more parents of DAS speech-language therapy students have expressed concern over the social development and emotional regulation of their children. This has included not only children transiting from kindergarten to the early primary years, but also students who have been attending primary school for 3 or more years. Parents have expressed concern that their children continue to struggle with the formation and maintenance of friendships even during the middle and upper primary years. Additionally, these students lack the age-appropriate social skills for successful collaboration with other students in group projects, and some have evidenced difficulty exercising restraint and managing their anger when things do not go their way.

With these needs in mind, content for a new social skills workshop targeted at middle and upper primary students with more complex social communication needs was developed, focusing on social thinking behaviours, which include , consideration for others, self-awareness, perspective-taking, understanding that there are unspoken rules of behaviour when we are in the presence of others, and exercising flexible thinking, self-control and self-regulation. The 7-hour workshop was conducted over 2 days on 26 and 27 December 2018 at DAS Jurong Point Learning Centre. The workshop was fully subscribed with 9 DAS Primary 4 and 5 students participants.

◆ **Increased Involvement at UNITE SpLD 2018: UNITE SpLD 2018 Pre-Conference Session**

The SLT team conducted one of the pre-conference sessions titled “Welcome to Speech and Language Therapy in DAS” on 20th June 2018 at DAS Rex House. The training room was filled with participants. The participants had a fun and exhilarating time when they took part in language activities which gave them a taste

of speech-language therapy. The sharing of case studies allowed them to better understand the struggles that students with speech-language disorder experience in their everyday life as well as in learning. At the end of the session, participants gained an understanding that Language Disorder and Dyslexia are distinct developmental disorders. However, students can have two comorbid. They also had an appreciation of the synergy in DAS Main Literacy Programme and Speech-Language Therapy at DAS.

CONTINUED FOLLOW-UP ON PAST INITIATIVES

School-based Programme

◆ Speech-Language Service at Northlight School

Year 2018 is the fourth year that DAS brings speech-language therapy to Northlight School. The school extended the intervention period to 3 school terms as it felt that students would benefit more compared to 2 terms of intervention. An average of 14 students benefitted from speech-language therapy over 3 school terms. Most of them had poorly developed communication skills and 85% of the students seen had comorbid learning differences. At the end of the intervention period, the students became more confident individuals who were able to converse readily with the school vice-principal and/or the school principal.

Training for Parents, Education Professionals and Interns

◆ Certificate in Understanding Speech and Language Impairment (before title change approved)

A total of 24 participants attended the Certificate in Understanding Speech and Language Impairment course held twice, once on 21 and 28 April 2018, and the second on 18 and 25 August 2018. The participants consisted of special education teachers, mainstream school teachers and parents. The content covered included typical speech and language development, definition of language disorder, speech and language assessments and strategies to help children with language disorders. The course was delivered in a lecture style, with group discussions and hands-on activities. At the end of the two-day course, participants completed a test, in which 100% of participants passed.

◆ Presentation at Unite SPLD 2018: Speech, Language and Communication Needs – Case Studies

During Unite SPLD 2018 on 22 June 2019, the SLT team shared insights gleaned from case studies relating to the remediation of Speech-Sound Disorders (SSD) in a presentation. Participants came away more aware of key success factors found to determine therapy outcomes in SSD intervention at DAS, like the use of evidence-based therapy approaches / strategies, student-related factors (motivation; presence and severity of comorbidities; severity of speech disorder), therapist-dependent factors (training, skills, caseload, etc.), service delivery factors (therapy setting; treatment intensity; family support / home practice), and also of the significance of using a combination of different treatment strategies and approaches tailored to the individual context.

◆ Training conducted at Northlight School: Classroom Support for Learners with Speech and Language Disorder

One of the DAS SLTs conducted an in-house training session to 20 Northlight School teachers on 2 August 2018. This session is a sequel to last year's training session. In this session, the teachers gained a better understanding of "Selective Mutism" which was the topic hand-picked by the teachers. Overall, it was an interactive and engaging training session.

◆ Clinical placement for National University of Singapore (NUS) Master of Science (Speech and Language Pathology) students

Due to the very positive feedback received from students on clinical placement in the previous year, SLTs at DAS were again appointed Clinical Educators to two students from the NUS Master of Science (Speech and Language Pathology) programme during their final placements at DAS from 2 October to 13 November 2018. The two students were guided and mentored in conducting both speech-language therapy, as well as formal and dynamic speech and language assessments, for children with profiles typical of students enrolled at DAS speech-language therapy. They gained considerable first-hand experience conducting intervention sessions and assessments, and benefitted from the knowledge and experience of the SLTs at DAS involved.

Both students gave positive feedback that the SLTs at DAS provided solid guidance which furthered the development of their clinical skills, and they found the SLTs at DAS highly encouraging and supportive throughout the whole placement. The SLTs at DAS involved were grateful for the opportunity to be part of the clinical growth of the future generation of speech-language therapists.

♦ **Master of Arts in Special Educational Needs – Contexts and Concepts module (Speech & Language Development & Difficulties)**

On 21 November 2018, Elizabeth conducted a lecture on Speech and Language Development and Difficulties as part of the module on Contexts and Concepts in the Masters in Special Educational Needs conducted by DAS Academy. It was attended by 10 participants made up of DAS educational therapists and other professionals, including a Music Specialist, Brain Fitness Trainer, a professional from India who works with volunteers, and a Disability Support and Health Promotion Manager from China.

The lecture focused on speech and language difficulties evident in various types of Special Educational needs and presented differences and overlaps in the language and literacy learning profiles of students diagnosed with either Dyslexia or Speech and Language Disorder, or both, which have been reported by other researchers in the field of speech and language therapy. The lecture also included the complexities of assessing, diagnosing and providing intervention to children with speech and language difficulties who struggle with learning English in a multilingual environment. Classroom discussions explored how the use of colloquial English and the learning of English as a Second Language may affect the acquisition of the English language among students in Singapore, particularly those with speech, language and literacy difficulties. Finally, the lecture included practical classroom strategies for facilitating language learning in these students.

Student Workshops

▪ **Social Skills - Getting Ready and Staying Happy in Primary School for K2 - P2**

The Social Skills - Getting Ready and Staying Happy in Primary School for K2 - P2 workshop was conducted at DAS Bishan Learning Centre. It was a 2-day workshop that took place on 22 and 23 November 2018. This workshop was sold out before the registration closing date. A total of 8 students learned how to use their social smarts to stay happy in their primary schools through fun activities, games and stories. Each student received a personalised certificate of achievement at the end of the workshop.

At the end of the workshops, the speech-language therapists included an insightful sharing session with the parents of the children regarding the students' performance during the workshop.



ENGAGEMENT AND AWARENESS

Introduction of Dyslexia Association of Singapore (DAS) Speech-Language Therapy Service to Visiting Professionals from the Shenzhen Children's Hospital

Dr Yang who is the Director of Speech-Language Therapy service and his staff, Miss Yuki, from the Speech Therapy Department in Shenzhen Children's Hospital (SZCH) visited DAS Woodlands Learning Centre on 2nd October 2018. It was a fruitful exchange between Singapore DAS and Shenzhen Speech-Language Therapists (SLTs). Dr Yang and Miss Yuki gained an insight into how DAS SLTs support students with dyslexia at the association. They observed a speech-language therapy session and were given the opportunity to interact with the student who was in the session. The student was diagnosed with dyslexia and speech-language disorder. Dr Yang and Miss Yuki were impressed by the immense learning support given to dyslexic students at DAS to help them better manage their challenges.

PROGRAMME TESTIMONIALS

Subject: SLT Support at Northlight by DAS

Hi Ana

*Yes, I have met Ms Shuet Lian and she was so kind to let me sit
in to observe one of her lesson with my kid.*

*I have to say it is a very humbling experience for me.
It takes a lot of patience and skills accumulated over years
of experience to be able to work so well with the SEN kids.*

Regards
Mdm Sung Mee Har
Principal, Northlight School

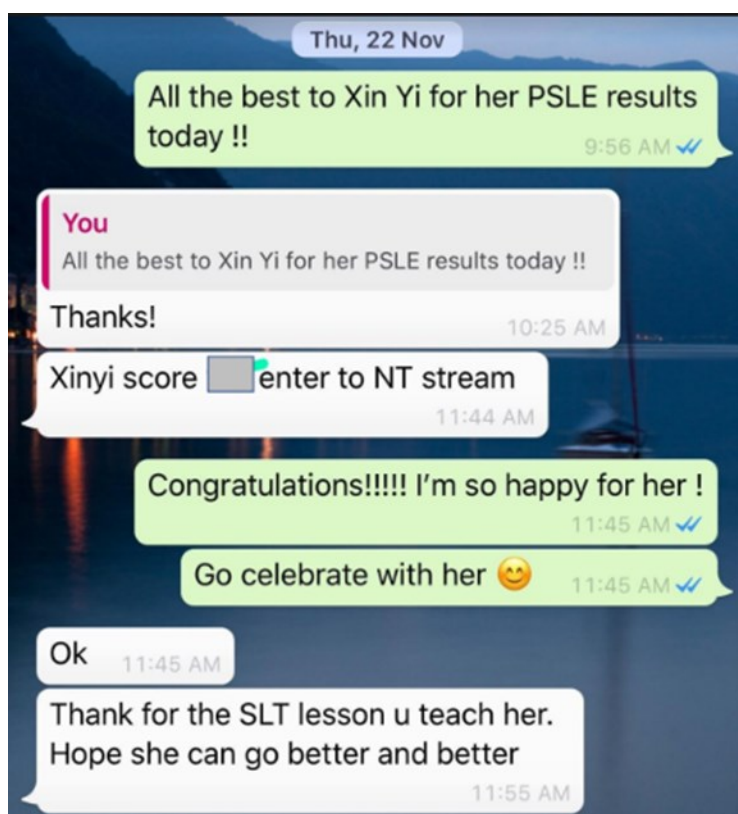
*"I have learnt about writing stories, grammar and also
to say about feelings. I like the game (sic) that Teacher Tammy
have (sic) given me and the activities that we (sic)
done together." – Ng En Ming (2018)*

*"I love you teacher Tammy, because you are the
best teacher for me, I am very thankful,
so I will be the best for you." – Hua Xin Ying (2018)*

*"Dear Teacher Liz, I would like to share a (sic) good news with
you, Yufan did well in his O level exam. I am very thankful to
have you as his teacher at DAS, thank you for coaching and
'counselling' him, I appreciate your patience and love given to
Yufan. Thank you very much"
– Parent of Yap Yu Fan (2018)*

*"... Mr Lee conducted his lessons in an interesting & engaging
way which make Cayden enjoyed his every lesson. Even before
Cayden was accepted into SLT, Mr Lee had already started to
observe the ways he talked during his DAS preschool program.*

Mr Lee had also been communicating with teacher Cheryl Yeo on Cayden's progress, so that therapy would be aligned for the benefit of Cayden. From just speaking a few words at 5 years old to understanding social norms, better pronunciation & better usage of sentence structure, we could see Mr Lee's genuine concern for a student. Cayden had improved greatly under his guidance. Besides spending time to update/advise the parents after every lesson, Mr Lee also went the extra miles to start the lesson earlier or end later, according to the student's needs. He also called to give me advice on Cayden's progress sometimes... We really appreciate his effort for all that he had done for us... (Excerpt from email)"
 - Parent of Cayden Yeo (2018)



- Parent of Zheng Xiyi (2018)

SUCCESS STORIES

RYAN KOON

Ryan attended DAS literacy classes from late 2010 to mid-2015, when he graduated from the MAP programme. However, Ryan's Mum felt that Ryan had some difficulty adapting to Secondary school, so she enrolled him in a speech-language group therapy class with Ms. Elizabeth Lim. Ryan attended speech-language therapy with Ms. Elizabeth Lim from January 2016 to May 2018. Initial therapy goals focused on self and social awareness, logical thinking and verbal reasoning.

As therapy progressed, it became evident that Ryan still needed support for advanced language learning, so therapy focus changed to include oral and written language, as well as organization of ideas. His English grades improved from 60 to 68. After making good progress in his verbal reasoning, verbal expression and writing, Ryan was discharged from SLT group therapy at the end of Term 2 in 2018, and was recommended for the trial run of the iSTUDY programme, as Ms. Elizabeth Lim felt that Ryan was ready to take up the learning of study skills for the pursuit of tertiary education.

He is currently (2019) a Year 0 Common Engineering student in Ngee Ann Polytechnic.

This is what Ryan wrote:

"Since young, I had challenges digesting, understanding and expressing myself in English. Years goes by and unknowingly, the problem continues to escalate. Having noticed my struggle, my parents brought me to a therapist psychologist to identify the cause of the problem.

The diagnosis result shows that I am dyslexic and through the dyslexic course, my parents and I became more aware of DAS and the classes it offered. Having noticed that I am still struggling in the area of communication, we had a discussion with a teacher who shares and teaches under "Speech and Language Therapy" with us.

Having and after attending Teacher Eliz's classes, I have learnt and gain more confidence in the areas of oral communication, body language and facial expression when talking to others. I have also understood myself better and learnt what can lead to anxiety and frustration, and at times anger when there is miscommunication.

On top of those, I have gained patience and reminded myself to remain calm and composed in order to express myself in a better way. Teacher Eliz also helped me to improve a lot in my academic area. She taught me guidelines on how to improve my skills in English oral, takes time to ensure that we are able to hone our abilities in writing essays, and more. Teacher Eliz goes the extra mile to make her lessons very interesting.

She would accommodate to our exam schedule to maximize the amount of time to prepare us for the exam. The topics she taught were wide and useful, thus giving me knowledge of what is happening in the world. In short, Teacher Eliz has been a good teacher and guardian mentor who dedicates all her time and resources in moulding me into the best me that I am today, academically and holistically. My heartfelt thanks for her best efforts, utmost care and dedication showered on me.

Ryan Koon
30th April 2019"



HAN FENG

When Han Feng started speech-language therapy in 2015, he was in P1 and was unable to speak even simple sentences in English. In fact, early therapy targeted single words because he had to be taught the names of body parts and common objects as well as simple verbs. He also had separation anxiety. As therapy progressed, it became clear that he had complex speech and language difficulties, as he struggled significantly with the pronunciation of many sounds and words, and he could not formulate logical sentences unless the structure had been taught and practised. Additionally, he demonstrated perspective-taking difficulties. In P1 and P2, Han Feng did not pass his English spelling and other English assessments in school.

Han Feng's mother also reported that he struggled socially in school, had difficulty forming friendships, and would experience meltdowns. Therapy continued to target Han Feng's speech and language skills, but a new focus on social interaction and communication was added. In 2017, Ms. Elizabeth Lim conducted a comprehensive assessment of his speech and language abilities, and diagnosed him with expressive language disorder and verbal dyspraxia. Today, Han Feng is a curious, confident and outspoken boy in P5 (2019), who is achieving English language grades in the high 60s.

Asked to write about how speech-language therapy has helped him over the years, this is what he wrote:

Name: Han Feng Date: 27/4/2019

How Speech and Language Therapy (SLT)
has helped me over the years:

- 1) It helped ^{me} to be more confident when I am speaking to my schoolmates and other friends that I have.
- 2) It helped ^{improve} my English by a lot ~~that~~ both socially and in ^{the} subject in a way that I felt comfortable with the way I learn English in the SLT class.
- 3) It helped me to get more friends and now I have a lot of friends that I have a good relationship with.
- 4) It helped my vocab and grammar that when I have this tuition that I joined, ^(after) in a few days/lessons I felt I made a big jump in my language (already).

REFERENCES

- American Speech-Language-Hearing Association. (2010). *Roles and Responsibilities Reflection Tool –Highlighting Language/Literacy*. Retrieved from <http://www.asha.org/uploadedFiles/Roles-Responsibilites-Reflection-Tool.pdf>
- Beck, I. L., McKeown, M.G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York. Guilford Press.
- Dodd, B., & Gillon, G. (2001). Exploring the relationship between phonological awareness, speech impairment and literacy. *Advances in Speech Language Pathology*, 3(2), 139-147.
- Hall, P.K., Jordan L.S., & Robin, D.A. (2007). *Developmental Apraxia of Speech: Theory and Clinical Practice*, 2nd Edition, Texas, US: Pro-ed Publishers.
- Liberman, I. Y., Shankweiler, D., & Liberman, A. M. (1989). The alphabetic principle and learning to read. In D. Shankweiler & I. Y. Liberman (Eds.), *Phonology and Reading Disability: Solving the Reading Puzzle*. Research Monograph Series. Ann Arbor:University of Michigan Press.

ABOUT THE AUTHORS



LEE ER KER

Senior Speech-Language Therapist

Lee is a Senior Speech and Language Therapist who has more than 9 years' working experience working with and helping children in mainstream schools with speech, language and communication needs, with or without a diagnosis of dyslexia, as well as managing speech, language, swallowing/feeding and Augmentative and Alternative Communication (AAC) issues faced by children and teenagers with special needs in both an EIPIEC centre and a Special Education (SPED) school, many of whom have multiple disabilities and complex communication needs.

Although the primary scope of his present work involves assessment and intervention, Lee has developed and conducted numerous training workshops for allied health professionals, special education and mainstream school teachers, parents and caregivers over the years. In addition, he has lectured and tutored at the university level for the National University of Singapore (NUS) M.Sc. (Speech and Language Pathology) programme, and is a regular External Clinical Educator for students from the same programme on clinical placement. Since joining DAS, he has co-conducted the Certificate in Understanding Speech, Language and Communication Needs course at the DAS Academy and presented at past editions of the DAS Preschool Seminar and UniteSPLD.

Lee joined DAS in 2016 and is currently registered with the Allied Health Professions Council (Full Registration). Prior to being



SHUET LIAN HO

Senior Speech-Language Therapist

Shuet Lian graduated from the National University of Singapore with a Master of Science degree in Speech and Language Pathology. She completed a Master of Business Administration (MBA) programme from the University of Leeds with Distinction. She is a member of Speech And Language Therapy Singapore (SALTS) and is Allied Health Professions Council registered (AHPC). Her work involves providing speech, language and communication assessment as well as intervention services to children with specific learning differences. Her clinical experience includes working with children between the ages of 5 and 16 years. She provides advice and clinical support to educational therapists and newly qualified speech-language therapists at DAS.



SHARON SANDRA REUTENS

Speech-Language Therapist

Sharon Reutens is a Speech-Language Therapist at DAS, who is registered with the Allied Health Professions Council. She is a graduate of the National University of Singapore with a Master of Science (Speech and Language Pathology) and has a Master of Social Science (Professional Counselling) from the Swinburne University of Technology. She joined the DAS in 2013 and her clinical experience involves working with preschoolers to students in mainstream primary and secondary schools, with speech and language difficulties. Formerly a Human Resource Consultant with a Multinational Corporation for 15 years. Sharon's passion lies in enabling students holistically to unlock their potential for life.



ELIZABETH LIM YIEN YIEN

Speech-Language Therapist

Elizabeth has been a Speech and Language Therapist in DAS since 2014. She works with students who have dyslexia and speech, language and communication needs, as well as other co-morbid challenges, such as global developmental delay, attention deficit and autism. She conducts individual and group therapy, and a variety of workshops, for preschool to post-secondary students. She also contributes to the training of new DAS educational therapists as well as other adult learners, such as parents and educators, by lecturing in DAS Academy on speech, language and communication needs. Additionally, being an SLT with a strong foundation in the early childhood profession, she conducts seminars and workshops for preschool educators. Early intervention and remediation with children and youth who have learning challenges is Elizabeth's lifelong passion and mission.



TAMMY WONG

Speech-Language Therapist

Tammy has been with the DAS since January 2018. She provides intervention for learners with dyslexia and/or speech, language and communication needs. In addition, she is also involved in conducting speech and language assessments and presenting at workshops for special education and mainstream school teachers, parents and caregivers.

Tammy has a strong interest in early language and speech sound development. She is also interested in the socio-emotional development of children with additional learning needs. She is currently registered with the Allied Health Professions Council.

Specialised Educational Services

UNLOCKING POTENTIAL

SCIENCE EXPLORERS

OBJECTIVES

The Science Explorers Short-Term Programmes are designed to provide support for our Primary 3 & 4 students with the Science literacy, understanding of the Science processes, vocabulary knowledge and application of the knowledge and skills to answer Science exam questions in a fun and interactive environment.

STRUCTURE

The Science lesson will be focused on student-centred learning. The Educational therapist is the facilitator who will be responsive to the students' learning needs and knows when and how to introduce students to ideas that will move them forward in their inquiry with multi-sensory activities. The lesson will be structured and organized with inbuilt reinforcements.

DAS Specialised Educational Services

Science Explorers Short-Term Programme

Kavitha Thiruchelvam

Programme Leader of Science and Lead Educational Therapist

Dyslexia Association of Singapore

SCIENCE EXPLORERS SHORT-TERM PROGRAMME (STP)

In line with MOE syllabus, the Science themes for Primary 3 and Primary 4 students such as Diversity, Systems, Interactions, Cycles and Energy, are included in the respective Science Explorers Short-Term Programmes during school term. Through the inquiry-based learning (IBL) approach, students will learn to engage, explore, extend, elaborate and evaluate Science as an Experiential Learning in their daily lives, society and the environment.

Science lessons will be focused on student-centred learning. The educational therapist is the facilitator who will be responsive to the students' learning needs and knows when and how to introduce students to ideas that will move them forward in their inquiry with multi-sensory activities. The lesson will be structured and organized with inbuilt reinforcements.

Entry Criteria

- ◆ The programme accepts both DAS and Non-DAS Primary 3 and Primary 4 students who are diagnosed with dyslexia in their valid psychological assessment report.
- ◆ Students must score below 75%.
- ◆ Students must have basic reading abilities.

Exit Criteria

- ◆ Students will exit when 10 lessons have been completed in the Science Explorers Short-Term Programme of a specific Science theme(s).
- ◆ However, students can sign up for another Science Explorers Short-Term Programme of a different Science theme in the next term.

Who The Programme Is For

The Science Explorers Short Term Programmes are designed to provide support in a fun and interactive environment for our Primary 3 & 4 students who face challenges with the Science Literacy, understanding of the Science Processes, Science vocabulary knowledge and application of the knowledge and skills to answer Science Exam questions.

EVALUATION OF PROGRAMME FOR 2018

A total of 25 Students who had joined the Science Explorers Short-Term Programmes in both Term 3 and Term 4 in 2018, were evaluated for their progress in their ability to apply their Science knowledge and conceptual understanding in the Pre & Post Assessments. These Pre & Post Assessments were developed for each Science Explorers Short-Term Programme of different Science theme(s). Overall, these students showed great improvement in the Post- Assessments compared to the Pre-Assessments. It is evident that students were able to retain the learned Science concepts upon completion of 10 lessons in a term.

QUALITY ASSURANCE

An annual programme evaluation measuring the progress made by the students is carried out to ensure that the programme is of high quality and its effectiveness. Progress of students is also shared with their parents upon completion of the 10 lessons in the Science Explorers Short-Term Programme.

NEW INITIATIVES FOR 2018

The Science STP is a new initiative that started out off as workshops. In 2017, we had conducted 11 Holiday Science Explorers Workshops and 69 students participated in these workshops. Therefore, due to the high demand and feedback from both students and parents, we decided to launch our first Science Explorers Short-Term Programmes in Term 3 and Term 4 respectively in 2018. The Science Explorers Short-Term Programmes were conducted during school term at 3 DAS Learning Centres

and each term included 10 1-hour lessons. In-line with MOE syllabus, a quality yet a holistic curriculum was developed for both Primary 3 & Primary 4 students.

Table 1: Science Themes conducted in Term 3 & Term 4 in 2018.

TERM/YEAR	SCIENCE THEMES	DAS LEARNING CENTRES
Term 3 / 2018	Interactions Cycles	DAS Woodlands DAS Bishan DAS Parkway Parade
Term 4 / 2018	Systems Energy	DAS Woodlands DAS Bishan DAS Parkway Parade

ENGAGEMENT AND AWARENESS

We invited parents for the 'Coffee and Conversations' event in Term 2, 2018 at DAS Woodlands Learning Centre. It was an informal session with parents and we shared on the latest updates of our programmes at the DAS especially the upcoming launch of Science Explorers Short-Term Programme in Term 3 and Term 4, 2018.

In addition, more awareness of Science Explorers Short-Term Programmes was shared with our fellow colleagues at the DAS during the Full-Staff Meeting so that they could share with our DAS students and their parents.

TESTIMONIALS / SUCCESS STORIES

Parent from DAS Parkway Parade:

Thank you for teaching my son science in a fun and most interactive way possible. Not only his understanding got better, but he has also learnt to love this subject the most. His teachers gave feedback that he did better than what they had expected for SA2 and encouraged me to celebrate his achievement. It'll be wonderful if DAS PARKWAY PARADE continues these Science classes on weekends in 2019. Kids could benefit a lot from it. A very big thank you to you. Appreciate much.

Parent from DAS Chinatown Point:

Thank you for the updates. Our son really enjoys your lessons. He wishes to continue with the program next term and I have already paid for it.

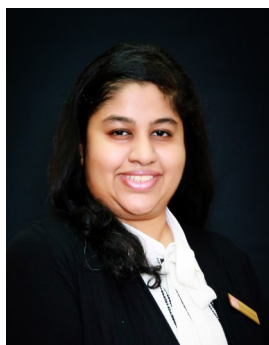
Parent from DAS Yishun:

Dear Teacher, thank you for your patience in teaching my child for the Science Programme. He received his Term 4 results for Science and he passed it. There was a big gap in his Term 4 marks compared to Term 2 which he failed. I hope that DAS would consider having a Science Programme just like Maths & Literacy for kids in Primary 5 & 6. My child benefited and enjoyed the Science programme a lot.

Parent from DAS Bedok:

I would like to commend that your science class has made an impact on our son's learning. He is already struggling with English and Maths so I wanted him to be more prepared for Science in P3. And thank you for taking him in. And it turned out very well! He enjoyed the science classes very much. Somehow, he managed to remember what you had taught him. When I asked him to share what he had learnt when his cousin was around, he turned to ask his cousin about the life cycle of a cockroach. When his cousin made a mistake on the life cycle, he could actually correct her. I was impressed. Thank you for your patience and hard work. Please continue to make science interesting for these kids.

ABOUT THE AUTHOR



KAVITHA TIRUCHELVAM

Lead Educational Therapist

Kavitha Tiruchelvam is a Lead Educational Therapist and a Programme Leader for Specialised Educational Services (SES) Science Programme. Kavitha joined the Dyslexia Association of Singapore in 2007 and has been teaching and working with students with Dyslexia and other co-morbidities such as Speech & Language Impairment and Attention Deficit Hyperactivity Disorder. As Kavitha spearheads the Science Programme at DAS, she has conducted 11 SES Science Explorers Workshops for primary students and will be conducting the SES Science Explorers Short-Term Programmes in 2018. She is also a Triple Specialist who teaches the English Exam Skills Programme as well as the DAS Main Literacy Programme. In addition, Kavitha continues to train and give support to her colleagues by sharing her wealth of experiences, especially when working with students who struggle with specific learning difficulties. Kavitha holds a Masters in Inclusive & Special Education from Monash University, a Bachelor of Arts (Hons) with Double Majors in Mass Communication & Marketing and a Cambridge International Diploma for Teachers and Trainers in Dyslexia Studies.

Professional philosophy: The mediocre teacher tells, the good teacher explains, the superior teacher demonstrates but a great teacher inspires. It is indeed the supreme art of the teacher to awaken joy in creative expression and knowledge - quoted by William Arthur Ward