

As recently as the 1990s, support for people with autism was almost non-existent. Many children went undiagnosed and struggled at school.

In 1996, a small band of passionate parents and professionals set out to change that. Their initiative, Reach-Me Project, pioneered a range of autism-specific services. Reach-Me eventually became the autonomous charity ARC(S).

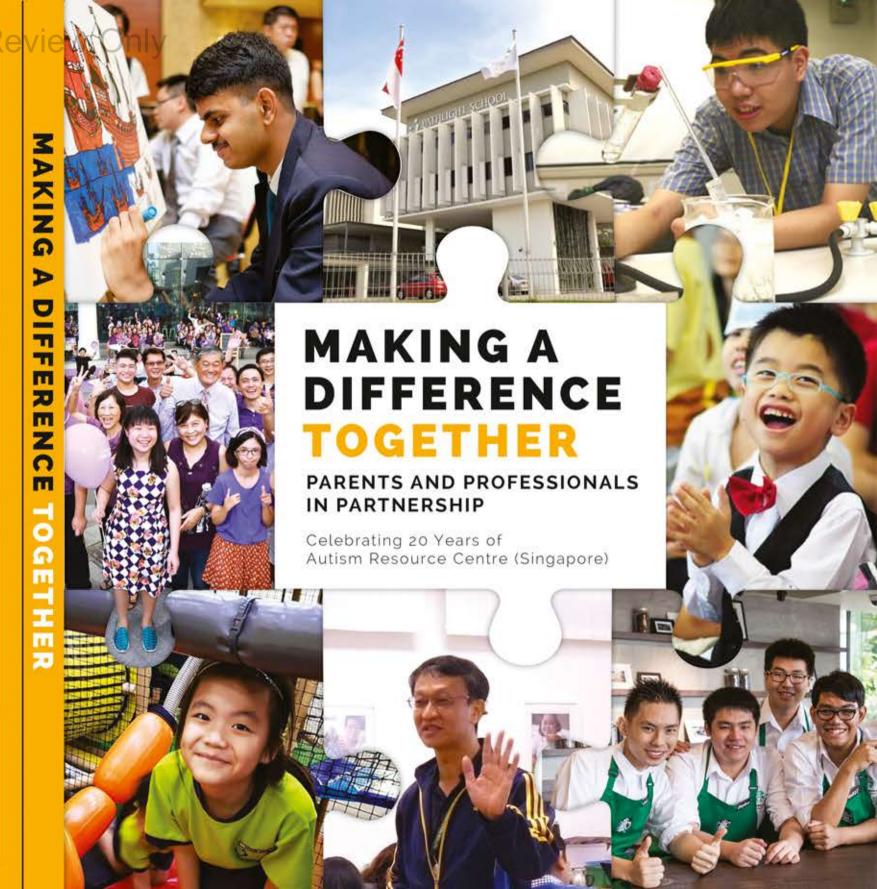
This book traces the transformations that ARC(S) has made in Singapore's autism landscape over the last 20 years, from the introduction of diagnostic, training and outreach services to the setting up of Pathlight School, Singapore's first autism-specific school.

This is the story of many helping hands and generous individuals and organisations coming together to sow the seeds of change. Together, they worked to create an inclusive society for all. Together, they made a difference.









CELEBRATING 20 YEARS OF
AUTISM RESOURCE CENTRE
(SINGAPORE)





© 2017 Trailblazer Foundation

Published for Trailblazer Foundation in 2017 by Marshall Cavendish Editions An imprint of Marshall Cavendish International



All rights reserved

No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner. Requests for permission should be addressed to the copyright holder, Trailblazer Foundation.

The publisher makes no representation or warranties with respect to the contents of this book, and specifically disclaims any implied warranties or merchantability or fitness for any particular purpose, and shall in no events be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages.

National Library Board, Singapore Cataloguing-in-Publication Data

Name(s): Tan, Theresa.

Title: Making a Difference Together : Parents and professionals in partnership \prime Theresa Tan.

Description: Singapore : Published for Trailblazer Foundation by Marshall Cavendish Editions, 2017.

Identifier(s): OCN 999395900 | ISBN 978-981-4751-54-4 (paperback) Subject(s): LCSH: Autism Resource Centre (Singapore) | Autism—Singapore. | Autistic children—Care—Singapore. | Autistic children—Education—Singapore. | Autistic children—Rehabilitation—Singapore. | Autistic people—Rehabilitation—Singapore. Classification: DDC 305.90874095957—dc23

Designed by Lorraine Aw

Printed in Singapore by Markono Print Media Pte Ltd

Contents

Foreword	d	8
Introduction		
Autism in Singapore: Milestones		17
	SECTION ONE: BREAKING NEW GROUND	
CHAPTER 1	Reach Me, Teach Me The Birth of the Reach-Me Project	24
CHAPTER 2	Time to Get Serious The Journey to Autism Resource Centre (Singapore)	36
CHAPTER 3	Yes, We Can! The Story of WeCAN Training Services	52
CHAPTER 4	Starting Early ARC(S)'s Early Intervention Programme	60

SECTION THREE: THE PATH AHEAD SECTION TWO: LIGHTING THE WAY CHAPTER 5 Shining Through Pathlight CHAPTER 9 One Dream, Many Hands 70 128 **Educating Our Young** Autism Network Singapore Combines Strengths CHAPTER 6 A Model for Inclusion 88 CHAPTER 10 Dreaming for the Future 136 Partnering Mainstream Schools Gaps to Fill, Dreams to Fulfil CHAPTER 7 We've Got Talent 94 Grooming Gifts and Talents **Appendices** A: About Autism 144 CHAPTER 8 Off to Work We Go 100 B: ARC(S) Core Services 148 Creating Job Success for Independent Living C: Autism Network Singapore (ANS) Members 149 D: History of Fundraising for ARC(S) 150 **SPECIAL SECTION** A Big Thank You 154 Insights and Interviews: Voices from the Community 112



Introduction

Koh Joh Ting spent five years of her son's early school life moving him from one school to another - two kindergartens and four primary schools.

"We finally got Sean examined when he entered his first primary school, which did not feel equipped to handle him as we had not forewarned them that Sean was not normal," Joh Ting recalled.

It was the '90s Singapore. Mainstream schools were under-equipped and not ready to accept special

needs children. Special education (SPED) schools like MINDS deemed Sean unsuitable for their limited places because he did not have an intellectual disability or multiple disabilities.

Joh Ting eventually enrolled Sean in a school for visually handicapped children that had a small number of students with autism — at least there he would have teachers who were trained in special education, if not specifically for autism.

Six schools later, in 2005, Sean was finally enrolled in the newly opened Pathlight School, the first autism-specific school in Singapore. Today, Sean has completed his education at the Institute of Technical Education and is furthering his studies at the Nanyang Academy of Fine Arts.

For parents of children with autism in the 1990s, discovering that their child had the condition was a challenge. It was nearly impossible to get a proper diagnosis, as doctors and psychologists couldn't agree what the problem was. Some diagnosed the symptoms rather than the condition. Others simply told parents there was nothing wrong with their children and that they would "outgrow" it. The word "autism" was only barely filtering into the pre-Google Singapore vocabulary.

Once diagnosed, the nightmare began, as few schools understood autism. Many feared the sometimes disruptive behaviour that they perceived to be the primary characteristic of autism.

It was thus that tiny bands of parents and professionals decided to do something about this dismal situation — to rewrite the story for those with autism and their families, to open new pathways for the better.

One such group of passionate parents and professionals formed the Reach-Me Project in 1997. This pilot project eventually became an autonomous charity, the Autism Resource Centre (Singapore) or ARC(S), in 2000.

ARC(S) worked tirelessly, alongside other organisations serving those with Autism Spectrum Disorder (ASD) — such as Autism Association (Singapore) or AA(S), St Andrew's Autism Centre, Rainbow Centre and AWWA, and a number of private and public institutions. Together, they increased public awareness and pioneered services for people with autism in Singapore.

Today, the term "autism" is familiar to many. The autism landscape in Singapore has transformed in remarkable ways, with support for children as young as two years old.

Mainstream school educators and allied educators are trained and deployed to at least support those who have mild autism. There are now three autism-focused schools in the special education space. Services for adults with autism have been developed, with three day activity centres and one employment centre.



Over the years, the media has played a big role in demystifying the condition and boosting more positive attitudes towards the autism community.

This book follows the key developments of the vibrant autism landscape in Singapore over the last 20 years. It marks the difficult early days when the Reach-Me Project was formed, and its evolution to later become ARC(S). It chronicles the journey from a barren landscape, bereft of support, each family looking out for itself, to one where there are now diagnostic and support services, as well as specialised autism-specific schools like Pathlight and Eden.

It is a story of parents and professionals coming together to sow the seeds of change for the larger special needs community. It is also the story of many helping hands, and generous organisations, public and private, coming together to give of what they can to uplift the community. Together, they began making a difference, regardless of race or nationality.

It is still a work in progress. Much more work is needed to transform our world into a kind and inclusive one. But for the autism community in Singapore, it is a dream turning steadily into reality through determined and generous people, and the passion and purpose they have embraced.

The *gotong royong* community spirit of those early parents and professionals who decided to stop complaining and start doing something sparked a transformation in society. It was a transformation that has grown beyond their initial dreams and laid the foundation for more to be done in the years to come.

Autism in Singapore: Milestones



1989

Start of the STEP (Structured Teaching for Exceptional Pupils) programme by Rainbow Centre, catering to children with autism from 6 to 12 years old.

1992

Autism Association (Singapore), or AA(S), is set up as a parent support group.



1996

Speech therapists Catherine
Pownall and Mary Yong moot the
idea, together with a group of
their clients' parents, to develop a
support system for students with
autism in mainstream schools,
modelled after that of the National
Autistic Society (NAS) in UK.

1997

Reach-Me Project (RMP), led by Leong Geok Hoon, is the first pilot programme supporting ASD children in mainstream schools, formed officially through an MOU between AA(S) and Students Care Service, a VWO, who provide office space in their Clementi Centre to incubate the initiative.

A team from NAS — comprising Chief Executive Geraldine Peacock, Eileen Hopkins and Mike Collins arrives to advise on the set-up of RMP. They meet with the Ministry of Education (MOE) and the Ministry of Health, give press interviews, and deliver the first talk on autism in Singapore at the Garden Hotel.

1998

Second visit by NAS, in conjunction with a Regional Professional Conference and a Parents' Seminar.

RMP's Autism Resource Centre is officially opened at 25 Peck Seah Street.



Milestones for Autism Resource Centre (Singapore)

1998

Beginning of RMP's Training, Diagnostic and Assessment Services.



1999

With the RMP pilot coming to an end, the management committee decide that the programme has to continue as an independent charity. Autism Resource Centre (Singapore), or ARC(S), is registered as a society in November.

MOE engages ARC(S) to train Learning Support Coordinators in managing students with autism in mainstream schools, as part of its In-service Diploma for Learning Support.

Start of the Autism Youth Centre by AA(S) for youths beyond age 12 (later catering to adults), the first government-supported youth centre for the autism community, addressing the gap in SPED schools.



2000

Denise Phua, Anita Russell, Kim Faulkner, Dr Lam Chee Meng from ARC(S) and Patricia Cheng from Rainbow Centre independently organise the first WeCAN Conference, assembling autism experts from around the world. Over 500 professionals and caregivers are trained. The event is hosted by ARC(S), and WeCAN training comes under ARC(S)'s umbrella.

ARC(S) is approved as an independent voluntary welfare organisation (VWO).



2001

Project Platinum, a blueprint for cradle-to-grave autism services, is submitted to MOE to push for an integrated education complex. The blueprint is later expanded to highlight the pivotal needs, existing landscape, key gaps and solutions for each life stage of persons with autism.



2002

ARC(S) launches its WeCAN Early Intervention Centre with the joining of speech and language therapist Anita Russell and her staff.



2004

For Review Only

Opening of Pathlight School, the first autism-specific school in Singapore. Established by ARC(S), Pathlight is the first special education (SPED) school in Singapore to provide a blend of mainstream academics and life skills. Students are given access to a curriculum leading to the Primary School Leaving Examination (PSLE) and the GCE examinations.

At his first National Day Rally, Prime Minister Lee Hsien Loong calls for a more inclusive society.



2005

Start of the first Satellite Partnership between Pathlight School and Chong Boon Secondary School, providing for the physical integration of Pathlight students into a mainstream school. The model is subsequently officially adopted by MOE and modified for other SPED schools.

MOE's Support for Special Needs initiative is launched.

- Module on special educational needs (including autism) made compulsory for all beginner teachers at the National Institute of Education.
- Teachers Trained in Special Needs (TSN) course initiated for teachers in school.
- Introduction of Special Needs
 Officers (SNOs) later renamed
 Allied Educators (AEDs) in
 mainstream schools.

Opening of Singapore Autism School, run by AA(S). It is the second autism-specific school in Singapore, providing support for students with moderate to severe ASD.



2006

Opening of St Andrew's Autism School, the third autism-specific school in Singapore, responding to the increasing need for programmes for students with more severe ASD.

The Neurobehavioral Clinic (Autism Services) is started by the Institute of Mental Health under Dr Sung Min, providing diagnosis and support for ASD children and adolescents with mental health co-morbidities, e.g. anxiety, ADHD, depression.



2007

Formalisation of the Satellite
Partnership between mainstream
and SPED schools, with official
recognition of the satellite model
started by Pathlight School with
Chong Boon Secondary School and
Townsville. The model is deployed
in Chong Boon, Bishan Park, Yio
Chu Kang, Pierce and Mayflower
Secondary Schools. SPED students
share common areas with mainstream students, and those who
are academically able join mainstream classes.

The first Enabling Masterplan (2007–11) is released, a guide for developing programmes and services for people with disabilities in Singapore, including early intervention and education for children with special needs.



2009

The WeCAN Early Intervention Centre becomes the first Asian centre to be accredited by the National Autistic Society UK outside of the European region, validating the quality of its service.



2010

Publication of "Autism Spectrum Disorder in Preschool Children — Clinical Practice Guidelines (CPG)" by the Academy of Medicine Singapore (AMS) and the Ministry of Health. This is the first-ever CPG for autism, providing consensus among clinicians and professionals on evidence-based diagnosis, assessment and interventions.



2011

Collaboration between AA(S) and ARC(S) to rebrand Singapore Autism School as Eden School, and Autism Youth Centre as Eden Centre for Adults. Enhanced service models cover early intervention to support in school and in adulthood.

World Autism Day marked for the first time in Singapore, coorganised by Duke-NUS Graduate Medical School and Rainbow Centre, at Rainbow Centre-Yishun Park School, with autism workshops open to the public.

The Institute of Mental Health launches the Adult Neuro-developmental Disorder Service (ANDS), led by Dr Wei Ker-Chiah, the first service to provide mental health services for adults with autism.

2012

For Review Only

Formation of the Employability and Employment Centre (E2C) by ARC(S) to provide job assessments, training and placements for persons with autism capable of working with training and support. E2C is the first job centre for the autism community in Singapore.



The first Purple Parade is held, in support of inclusion and in celebration of the abilities of people with special needs. Conceptualised by ARC(S), funded by the Central Singapore Community Development Council, and strongly supported by leaders like PM Lee Hsien Loong and DPM Tharman Shanmugaratnam, the parade draws over 3,000 participants.

2014

MOE sets up Disability Support Offices (later renamed Special Needs Services) in institutes of higher learning, serving special needs tertiary students, including those with ASD.



2015

Extension of Pathlight's Artist Development Programme to become The Art Faculty at the Enabling Village, the special needs hub set up by SG Enable under the Ministry of Social and Family Development.

E2C opens a campus at the Enabling Village.

The Autism Network Singapore (ANS) — comprising ARC(S), AA(S), Rainbow Centre and St Andrew's Autism Centre — is formed. The four VWOs work together on an Enabling MasterPlan for the autism community and on developing services for the community in the future.

2016

Pathlight School's enrolment rises to close to 1,100, with almost 300 studying at satellite classrooms in four mainstream secondary schools.

Ho Ching carries ADP artist See Toh Sheng Jie's "dinosaur pouch" on a visit to the White House, bringing international attention to autism, The Art Faculty and Pathlight School.



2017

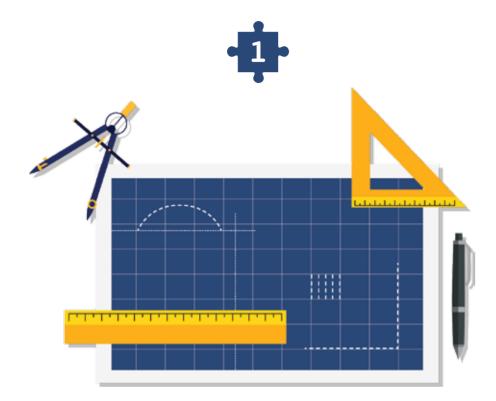
ARC(S) celebrates 20 years of impacting the autism landscape in Singapore.

The third Enabling Masterplan (2017–21) receives a government budget of \$400 million per year for five years to support individuals with disabilities.



SECTION ONE

BREAKING NEW GROUND



Reach Me, Teach Me

The Birth of the Reach-Me Project

"In the early 1990s, autism as a developmental disorder was not well known, let alone recognised. Getting information and support then was much harder.

"When we brought our son for the usual developmental check-ups in 1994 and told the paediatrician that he appeared to be developing differently from our eldest, she told us to stop comparing them and to relax. So, we left off intervention. "A year later, the paediatrician was still not convinced that there was any reason for concern, but to assure me, she gave me a referral to a psychiatrist. We were asked to send our son for a hearing test and other tests, and eventually, in 1997, we were put in touch with a speech therapist. The speech therapist was the one who first told us that Andrew might have autism.

"That marked the start of our journey with autism."

This is the story of Loh Wai Mooi and her son Andrew, now 23.

Theirs is not a rare story. Parents of children with autism could not get structured help in the early 'gos. Some parents would send their children for hearing tests, because the kids appeared deaf and indifferent to conversations around them. Tests followed tests, and yet there would be no conclusion what the problem was.

Other parents fretted about their children's unexplained tantrums or odd behaviours. Some resorted to exorcism, while others blamed each other and ended up in divorce.

Struggling to cope with the demands of caring for more severe cases of autism, a group of parents founded the Autism Association (Singapore), or AA(S), in 1994. It was essentially a self-help

In the early '90s, there were few resources for parents of children with autism. There was no existing one-stop resource that parents could turn to right away for information, direction or help.

group, the first body catering specifically to autism needs in Singapore. A voluntary welfare organisation (VWO), AA(S) served as a hybrid of support group and help centre, and provided respite care for parents and caregivers as well.

"Two main challenges faced autism at the time," recalled Dr Lam Chee Meng, a psychologist who was then working at Rainbow Centre, a VWO serving those with moderate to severe developmental needs and disabilities.

"One, there weren't enough professionals who knew about it. So diagnosis was missing. It was very hard for parents to go to a place for diagnosis. The only place was at NUS-Rainbow Centre."

At the time, a National University of Singapore (NUS) lecturer by the name of Dr Vera Bernard-Opitz was working with Rainbow Centre, providing autism assessments with the assistance of Honours year students she was then overseeing.

"But it was tough," Dr Lam said. "If you couldn't get a diagnosis, you couldn't get access to the centre."

The second problem was the poor image of autism.

"People saw the difficult behaviours, so their impression was very negative," said Dr Lam. "They failed to see the positive side, that when you put intervention in, all these behaviours can actually disappear. Therefore, schools other than special education (SPED) schools were very reluctant to take these children. This made it very tough for parents. If your child doesn't get diagnosed, he doesn't get the services. But once he gets diagnosed, he gets only this service; everybody else will reject him. In a lot of places, it was like, 'We'll accept him provided your child has no autism'."

"There was a real need to help ASD students in mainstream schools, to allow them to have a successful life there," explained Dr Lam. "A lot of them were really traumatised by their experiences. Many left school, some even left the country."

In short, the understanding of autism in Singapore was in its infancy in the 'gos. It was associated with severe behaviourial problems. Only individuals who had severe autism could be put on the waitlist for Rainbow Centre's autism programme. Parents with high-functioning children, however, were faced with a conundrum: a diagnosis of autism closed many doors, but the denial of autism would mean going through mainstream education and struggling year after year.



Enter the Professionals

In 1995, Catherine Pownall, a speech therapist from the UK, was seeing parent after parent with children who had autism and were studying in mainstream schools. These children were able to perform academically but were facing all sorts of other issues in school. They were being bullied, or being seen by teachers as "difficult" or "problem" children who were disruptive in class.

"Back then, if your kid had learning issues, you only had a few options: MINDS schools, which catered to those with intellectual disability; the Cerebral Palsy Alliance Singapore School (then the Spastic Children's Association School); or Rainbow Centre," said Catherine.

Many children, however, fell through the gaps in this system. They did not meet the requirement to enter SPED schools (which only admitted students below a certain IQ level), but at the same time, they were not coping in mainstream schools. And there was no solution for them.

Catherine saw such children at Julia Gabriel Centre, one of the very few private organisations offering speech and language therapy at that time.

Concurrently, another speech therapist, Mary Yong from Sarawak, who was Head of the Speech Therapy Department at Singapore General Hospital, also noticed a group of schoolchildren caught in the same unfortunate situation.

The two therapists knew each other professionally, having met at the Speech and Learning Association. They started up a support group for parents who were bringing their children in for therapy.

"Catherine and I both worked with ASD children," said Mary. "The group that fascinated us were the high-functioning children with autism, and those with Asperger's."

While Mary and Catherine worked with these children to improve their speech and language skills, they noticed other types of problems as well.

Mary gave the example of one 8-year-old, the son of a cleaning lady and an odd-job labourer. "He was bright," said Mary, explaining that the boy's language skills had quickly improved with therapy.

Many children fell between the gaps in the system. They did not meet the requirement to enter SPED schools (which only admitted students below a certain IQ level), but they were also not coping in mainstream schools.

"But when he tried to engage socially at school, he got beaten up."

The boy had wanted to be included in activities in school, like football. He would get behind the football players and mimic their moves. The other boys, with no understanding that this was how the boy learned, thought he was being facetious and gave him a pounding.

"His mother told me sadly, 'Improve already, still get beaten up,'" Mary recalled.

The need to support this group of children was evident and urgent.

"At that time, I was looking at the work that the National Autistic Society (NAS) in the UK was doing," Catherine recounted. "I wrote to Geraldine Peacock, who was then the Chief Executive. I said,

'I have a bunch of parents desperate for support. You've done it, can you teach us how?' I didn't really expect much but NAS wrote back."

In April 1996, the Director of Development for NAS, Eileen Hopkins, contacted Catherine to say, "We're happy to help."

Catherine spoke with her then employer, Julia Gabriel, and shared her vision of developing services for children with autism. Julia offered Catherine and the parents' group a venue to meet at the Julia Gabriel Centre at Halifax Road.

Catherine and Mary invited Louise Clarke, Kang Poh Sim and Tan Kheng Kheng to form the early professional team of the project They all had an idea of what was needed to move things forward, but it could only happen if parents put their weight behind the idea.

"Existing services cannot provide the number of appropriate placements for those children who are diagnosed and offer no programme that will support the child from the point of initial diagnosis to adulthood." This was by itself a challenge. Parents with special needs children face myriad struggles and a severe lack of time, so getting enough of them to commit to work with the therapists for something that might or might not directly help their own children was surely going to be a hurdle.

But the need was too great to ignore. Catherine and Mary took the bold step of calling for a meeting to propose an idea they had for moving things forward. The first meeting involved 12 people, including Leong Geok Hoon and Teo Puay Khoon, whose children were under Catherine's care, as well as Ho Ching, whose son was seeing Mary for speech therapy.

This meeting became the seed of what was to become the Reach-Me Project.

Catherine and Mary had come up with a plan to address not just the gaps in the existing educational system, but the urgent need to increase the professional knowledge and qualifications of those working in the special education field.

In her proposal to the group, Catherine identified the key obstacles faced by both parents and professionals.





Speech therapists Catherine Pownall (left) and Mary Yong (right), whose work with children with ASD prompted them to address the lack of support for these individuals and their parents.

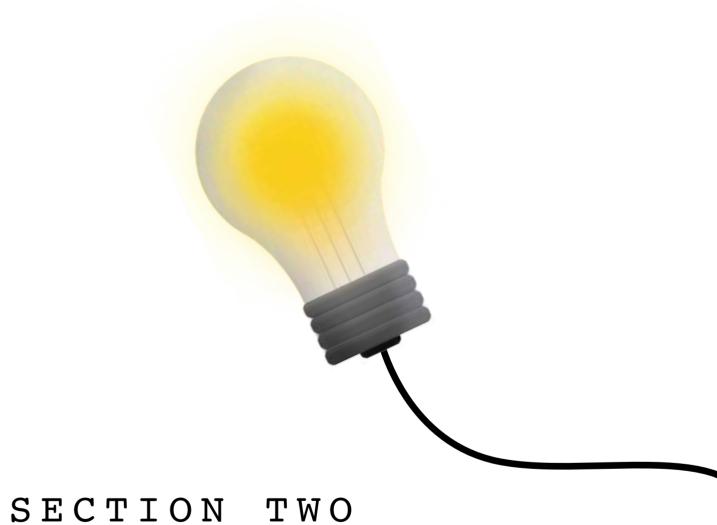
"Existing services cannot provide the number of appropriate placements for those children who are diagnosed, and offer no programme that will support the child from the point of initial diagnosis to adulthood," she wrote. "Children go undiagnosed and misdiagnosed. Professionals can often be reluctant to make the appropriate diagnosis for fear that this 'label' may exclude the child from a place in school."

Catherine acknowledged that no school at that time — whether mainstream or catering to general special needs — was able to cater to the distinctive needs of each unique child with autism.

"There was an opportunity to develop the first quality-assured, autism-specific service model for Singapore. A model designed to suit the individual needs of an 'Asian-based community'. A model that would come under the umbrella of the National Autistic Society in the UK as an accredited service," Catherine explained.

A world leader in autism, the NAS had agreed with Catherine to assist Singapore in the development of a roadmap for services for people with autism under the Reach-Me Project. The idea was to establish a link with Ministry of Education (MOE) primary and secondary schools, and develop methods for the inclusion and integration of these children, as well as tailor a curriculum based on mainstream content to help academically able children with autism succeed in school.

It was a strong, well-thought-out plan, and Catherine and Mary had the willing support of the NAS.



LIGHTING
THE WAY



Shining Through Pathlight

Educating Our Young

Ezra Chan spent his pre-school years in a mainstream kindergarten, where he received guidance from his teachers but had no friends.

In 2006, Ezra's mother Emily Lee enrolled him in Pathlight School, a school specifically tailored for students with autism, offering both mainstream academic curriculum and training in life skills.

"Ezra gets a dignified education at Pathlight," said Emily. "The school celebrates his achievements, big or small, and also helps him improve in the areas where he has challenges. When he started primary school, he did not know how to do MCQs (multiple choice questions) and he did not know that some exam papers were printed on both sides. The Pathlight teachers were always there to guide him."

The establishment of Pathlight School was a significant milestone in all that Reach-Me Project and later ARC(S) set out to do. How did this ground-breaking initiative become a reality?

Parents dream of lifelong support for their disabled children, especially those who may not be able to fend for themselves. They worry who will help look after their young ones when they themselves are no longer around. Parents of ASD children are no different.

Throughout the history of ARC(S), the idea for a cradle-to-grave support system for ASD individuals had been separately mooted at various points by different people.

In 1997, Catherine Pownall, the speech and language therapist sent to the UK to create a blueprint for autism support through the Reach-Me Project, had proposed one in her report upon her return to Singapore.

In 2002, Project Platinum was mapped out, chiefly by Denise Phua and Dr Lam Chee Meng, for a full-fledged five-stage plan for autism support from birth to death. This was an updated version of Project Legacy, proposed by Denise earlier to the Ministry of Education (MOE).

Project Platinum covered the lifelong support needs of ASD people, and included an autismfocused school that offered mainstream academic curriculum combined with life-skills readiness. Rainbow Centre and ARC(S) worked hard together to convince MOE to start an autism school.

The multiple proposals over the years for a system of lifelong multi-faceted support for ASD individuals showed the passion and commitment, perhaps desperation at times, of those who have been part of the RMP-ARC(S) journey over two decades.

A Road Less Travelled

After several rounds of discussions over a number of years, the Ministry finally agreed to give the ARC(S) and Rainbow Centre team a site for a new autism school.

Dr Ng Eng Hen, then Minister for Education, gave an interview to the *Sunday Times* that was published on 20 July 2003 and headlined "School for autistic kids to open next year". The team had five months to get the school up and running.

Throughout the history of ARC(S), the idea for a cradle-to-grave support system for ASD individuals had been separately mooted at various points by different people.

The ARC(S) team studied existing Special Education (SPED) schools and mainstream schools, but neither offered an applicable model. They would have to create something completely new.

The team had been given the site of the former Chong Li Primary School on Ang Mo Kio Street 44 as a holding school, but renovation was required and curriculum had to be specially written. Denise was tasked with coordinating the school project.

The physical execution was undertaken by a small team made up primarily of Denise, Jean Koh, Anita Russell, and Jac Ang, a volunteer. Others chipped in whenever and wherever they could.

Eventually, it was decided that ARC(S) would helm this new school — Rainbow Centre's direction had always been to serve a wide sector of the special needs population, not just autism. Rainbow's contribution was nevertheless valuable to the ARC(S) team, who had no experience running a school at that point.

The challenges came fast and furious.

Up till then, there was no school that catered to this target group of special kids. Even the financial model had no precedence.

The team started off trying to model the new school after Rainbow Centre, which was one of the oldest SPED schools in Singapore. They also studied mainstream models. But neither existing SPED schools nor mainstream schools offered an applicable model. The ARC(S) team had to create something completely new.

"The breakthrough came only when we finally found our identity," said Denise. "We were neither a typical SPED school nor a typical mainstream school. We were the first autism-focused school that offered a blended approach: mainstream academics and life skills. From that clarity in positioning, we made changes in what we taught, the way we taught, the way we selected and invited people to join us, and the way we should codify the DNA we want to see at this school."

Money was also a worry. The team had been given an old school building and \$234,000.

As the new school would offer mainstream curriculum to children with ASD, the small team discovered to their shock that mainstream teachers cost a lot more than SPED teachers to hire and train.

On top of that, time was pressing. The school curriculum had to be written in five months and teachers had to be hired and trained in autism — a task undertaken by Dr Lam and Anita.

In addition, the band of volunteers had to see to retrofitting, deal with contractors, come up with a school name, school uniform, school logo, balance budgets and canvass for money.

After many heart-stopping twists and turns, ARC(S) finally launched Pathlight School, the first autism-focused school in Singapore, on 12 January 2004.

Yew Teng Leong, a board member of Rainbow Centre, became Pathlight's first non-executive Chairman. Denise was the School Supervisor from the board. The first school principal was Peck Soo Hong, a former Senior Inspector of Schools at MOE; she was supported by a teaching staff of 10.

Loh Wai Mooi

For Review Only

Vice-President of **Management Committee** and Fundraising Chairperson, ARC(S)

"My son Andrew was one of the 41 students enrolled at Pathlight School when it started operations in January 2004. I have stayed on at ARC(S) because Andrew, once a child with autism, is now an adult with autism. Autism is a lifelong developmental disorder.

"I often refer to my ARC(S) work as my night job, with my lawyer work as my day job, and my role as wife and mother as my most important job. Well, one night in 2007, my night job was getting me very worried. We had made appeals to foundations for funds and nothing was forthcoming. I remember stopping by a nasi padang shop along Zion Road one night after my day job was done. While ordering my food to go, I received a call telling me that one foundation, which had never made a donation for a SPED school before, decided to give us a chance and promised a substantial donation if MOE would allow them to do so. The people at the shop must have wondered why I was so happy with my purchase. Believe me, sayur lodeh and curry chicken never tasted better!

"Miraculously, after that, donations started coming in. Pathlight School was built and none of us had to re-mortgage our homes."

On 13 November that year, Pathlight School was officially opened by then Minister for Education Tharman Shanmugaratnam.

Sized for 400 students, Pathlight School saw an initial enrolment of only 41.

Denise explained: "Pathlight was meant for students who were cognitively able, but not learning well in mainstream schools. But the perception at the time was that SPED schools were for the very disabled, so there was a fear of stigma. We had to give presentations to convince parents to send their children here. No one wanted to join."

But that was not the case for long.

Fruits of their Labour

When Pathlight School started, it offered only a primary school curriculum. The sons of Management Committee members Loh Wai Mooi and Choong Hui Yeeng were in the very first cohort of students.

"My son was in Primary 4 when he switched to Pathlight," Hui Yeeng said. "It was Dr Lam who suggested it. Within a very short period of time, I could see a difference. My son didn't have to handle the hundreds of kids at his old school, "Pathlight was meant for students who were cognitively able, but not learning well in mainstream schools. But the perception at the time was that SPED schools were for the very disabled, so there was a fear of stigma... No one wanted to join."

because in Pathlight the classes are smaller. And immediately I saw smiles from him. Within a week in the school, you started seeing these children smile who never used to smile."

The school did better than survive its first two years. Its second year (2005) ended on a significant note: all its first batch of Primary School Leaving Examinations (PSLE) students passed. This no doubt added to Pathlight's cachet as a special and good school.

True to Pathlight's vision, co-curricular activities like gymnastics, pottery and swimming were introduced — opportunities that would not have been possible for these children in a mainstream school because of the extra support needed.

A buddy school system was set up from the get-go with ACS Primary, Rulang Primary, and Chong Boon Secondary, and later, Townsville Primary and Ang Mo Kio Secondary School, providing inclusion experiences for the Pathlight students.

For Review Only

In its second year, Pathlight more than doubled its enrolment with 125 students.

ARC(S)'s signature fundraising event, A Very Special Walk, was launched on 29 August 2005, with proceeds going to the development of Enterprise Learning Centres (ELCs) — the start of creating meaningful employment training and opportunities for those with ASD. By 11 October 2005, the first ELC, Pathlight Café, was set up, in partnership with Starbucks.

In 2005, ARC(S) received government clearance to erect a purpose-built facility for Pathlight School at Ang Mo Kio Avenue 10, where Campus 1 now stands. This was good news, but it also meant that more funds had to be raised to make the new building a reality.

In fact, things got so intense that Denise decided to get out of corporate life that year and go full time with ARC(S). She sold off her training business, became a full-time volunteer and took on the roles of Acting Principal and School Supervisor.

The sacrifices made by those who believed in Pathlight and pulled out all the stops to make it a success have been rewarded with many significant milestones over the 13 years of the school's existence.



Significant Milestones of Pathlight School

In breaking the mould of traditional educational institutions, being both a mainstream and a SPED school, Pathlight School has accomplished many firsts and made significant contributions to the educational landscape.

• Pathlight was the first autism-focused school to offer a unique combination of mainstream academic education and life-skills training.

Opened in January 2004, Pathlight was the first autism-focused school in Singapore. Other special



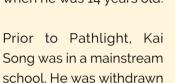
INSIGHTS AND INTERVIEWS

Voices from the Community

Pathlight Alumni

Lives Transformed

Huang Kai Song, now 26, enrolled in Pathlight School in January 2005, when he was 14 years old.





Huang Kai Song

and did not have any interest in school.

Pathlight gave him the courage he needed to progress to GCE O-Levels in 2009, and then to Temasek Polytechnic.

It was a proud moment of recognition when Kai Song was awarded the Microsoft Unlimited Potential Scholarship for People with Disabilities. He graduated with a Diploma in Mobile and Network Services, and now works at UOB's Scan Hub.

Kai Song loves to re-assemble and repair computers. During his school days, he worked for his pocket money at Khoo Teck Puat Hospital and Professor Brawn Café.

He has also served two years' national service in the Singapore Civil Defence Force. **Sherman Ho Wei Jun,** now 17, was enrolled in Pathlight School in January 2006. He was 6 and had autism and ADHD.

When Sherman first entered Pathlight, he would scream and shout whenever things were not going his way. He was only interested in Science and Mathematics and neglected other subjects. He was also not receptive to feedback from teachers.

With the support of his Pathlight teachers, Sherman overcame his early challenges to learn to take others' perspectives into account, and work with his classmates.

In May 2012, Sherman participated in the Asian Pacific Mathematics Olympiad for Primary Schools. He emerged in fourth position overall, and was the second Singaporean in the top four places.

The same year, Sherman scored an outstanding aggregate of 273 in the PSLE to become Pathlight's top scorer. He was accepted into NUS High School of Mathematics and Science, which accepts students with exceptional talent in maths and science.





Sherman Ho

Noah Si

Noah Si had speech delay and difficulty expressing his emotions when he was a toddler. He had Asperger's Syndrome and was sensitive to certain sounds like the public announcement system on the MRT.

Like many young ASD students, Noah was badly bullied when he went to a mainstream pre-school, out of ignorance and lack of support then.

The opening of Pathlight School was timely for Noah. He was among the first batch of ASD students, entering Primary 1 when the school first opened in 2004.

After completing his PSLE in 2009, Noah left Pathlight to join mainstream Sengkang Secondary School. He topped his cohort in Secondary 1, 3 and 4 and came in third in Secondary 2. He also became a Student Councillor and Peer Tutor.

Today, Noah, 20, is pursuing a double degree in Computer Science and Mathematics at the National University of Singapore.

He continues to maintain close ties with his alma mater and has even roped in his secondary school mates to support Pathlight's annual fundraising events.

Koh Joh Ting

Mother of Sean Bay, Pathlight Alumnus

Sean Bay attended two kindergartens and three primary schools before he found his niche at Pathlight School. Today, he is an ITE graduate and an Art Development Programme alumnus who held his first public exhibition in November 2016. His mother Koh Joh Ting recalled his journey through Pathlight.

When did Sean apply for Pathlight? How did you hear about Pathlight?

We applied in 2004, after Eunice Tan, the Principal of ASPN Chaoyang, where Sean was studying at the time, suggested that we did. She said it would be more appropriate for his development, as he was able to learn, and she was right.

What differences did you notice in Sean after he entered Pathlight?

The teachers used visuals to get Sean to control his behaviours. They also used art to reward him if he was able to focus. His greatest challenge was focusing and learning how to be social. It took at least two years for him to adjust. But he liked Pathlight. He had a good relationship with his teacher Loy Sheau Mei — he felt calm in her presence. He also liked his art teacher Victor Ong.

I like how the school takes the trouble to understand its students and proactively find ways to

help them fit the environment of test-taking in PSLE, despite the very predictable ways that the exam has been set up for decades. Using curtains to reduce daylight change, putting him in an exam room all by himself — these were some of the methods the teachers used to get Sean to do his best.

As parents, our anxiety levels also went down because these teachers did not call up frequently to complain about Sean, as had been the case for most of the schools that Sean had enrolled at.

How many years did Sean spend in Pathlight? What were some of the highlights of his time there?

He was there from 2006 to 2014. He got to draw and his drawings were published for the first time in the Pathlight publication, *Beautiful Minds*. We were really proud, and for him, seeing his work in print was transformative. He went on to do his PSLE, and then visited Beijing and helped out at an orphanage with Ms Loy and other teachers. He joined in the Primary 5 ritual of going to the National Day Parade rehearsal — I think it mattered a lot to him that he did that. He felt included with all the fireworks. NDP is his staple must-watch show every year.



Sean Bay at his first solo art exhibition in 2016; his mother Koh Joh Ting is on the extreme right.

In Secondary School, Sean also got to go to a satellite school. He was so thrilled to be able to clear his N-Levels and make it to ITE.

Sean went from being in Pathlight's Artist Development Programme to his own exhibition. What was his art journey like?

Sean was inspired by Dr Seuss and Geronimo Stilton and Phua Chu Kang. Painting politicians is something we did not expect him to do as my husband and I are both very apolitical by nature. Sean loves painting them because he likes the fact that they are reliable, safe, authoritative, and powerful — like superheroes.

And Sean really cares so much for these politicians. When Mr Heng Swee Keat, Mr Lee Kuan Yew and Mr SR Nathan were in hospital, he made

them all get-well cards, which he personally delivered.

What are Sean's future plans?

As long as humans judge other humans by how "weird" they are in their dressing or manners, Sean will always be seen as the odd one out. That's why I want to get him training in more art-related or computer-related fields.

He surprised me by landing a part-time job at McDonald's on his own — he is still working part-time there because he loves the job! He has been admitted to the Fine Arts Diploma programme at the Nanyang Academy of Fine Arts. He hopes to hold another personal exhibition in five years' time. Sean has also been interning with Superhero Me, teaching art to kids at MINDS.

Elliot Chia

Pathlight School Alumnus, now IT Trainer at Pathlight School

Perhaps the greatest reward of seeing a child well supported through school is when he returns to the school — as a teacher. Elliot Chia is currently a Trainer in the IT & Design Academy (ITDA) while waiting to enter university.

Before transferring to Pathlight, Elliot had been misunderstood by his teachers and friends, and had been bullied in his mainstream school. After he moved to Pathlight in 2006, with the support of his teachers, Elliot blossomed. He was given many opportunities to shine. He participated actively in school events and was a student councillor.

In 2012, Elliot was one of three students selected to represent Singapore at the 2nd ASEAN Children's Forum. The same year, he completed his GCE O-Levels with an L1R4 of 12 points, qualifying to study Digital Animation at Singapore Polytechnic. He was also offered a scholarship by the polytechnic.

When did you come to Pathlight as a student?

I came midway through Primary 4 from Tao Nan School. That would have been in 2005 when I was 10 years old.

What were your favourite things about studying at Pathlight?

The teachers were friendlier as they understood how I behaved and, as a result, I enjoyed learning. I enjoyed the deeper interactions the teachers had with me and my classmates.

Did you have a favourite teacher?

My favourite teacher back then was Mr Darren Poh in Secondary School. He was friendly but firm when teaching me. He helped me understand that I had to work towards not engaging in distracting behaviour or arguing with friends.

When did you discover you were good at IT?

I did not really discover I was good at IT - I've just liked using computers to do things since I was very young and I gradually grew accustomed to more complex programs.



Elliot Chia (left) as a teaching aide at Pathlight School.

What did you do after secondary school at Pathlight and how did you train to teach IT?

I took a three-year digital animation course at Singapore Polytechnic. I was not trained to teach IT — I just thought I would try teaching IT to Pathlighters who had potential for IT-related jobs which may include animation.

What made you decide to return to Pathlight to serve as a part-time Trainer?

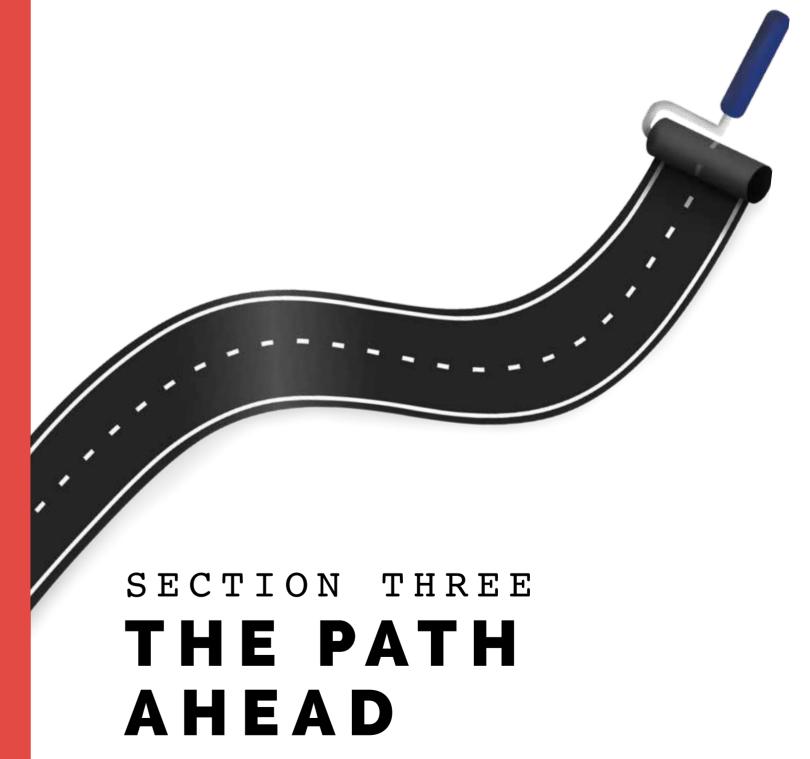
I thought I should gain some experience working before entering Digipen University in September 2017.

How long have you been an ITDA Trainer and what do you do as a Trainer?

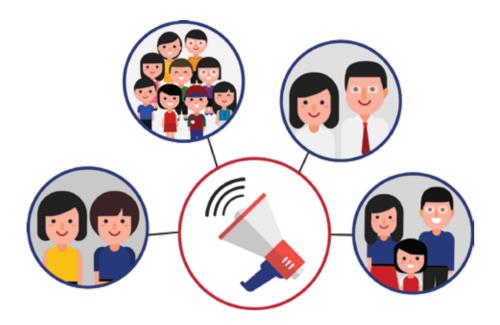
I assist the senior ITDA Trainers in preparing teaching materials and resources. I also co-taught a Robot holiday workshop for our primary school students during the December school holidays last year.

What is the thing about your job that makes you most satisfied or happy?

Potentially helping students learn IT to get a job and earn money for themselves as a step towards independent living.







One Dream, Many Hands

Autism Network Singapore Combines Strengths

In April 2015, in conjunction with World Autism Awareness Day, the autism community in Singapore reached a significant milestone. An alliance was forged, comprising four key volunteer welfare organisations that support persons with autism: Autism Resource Centre (Singapore), Autism Association (Singapore), Rainbow Centre Singapore and St Andrew's Autism Centre.

This alliance, Autism Network Singapore (ANS), was formed to enable the community to be proactive and strategic in dealing with gaps in the support for those with autism — a number estimated at around 30,000 persons.

Each organisation has its own direction and priorities, yet they face similar issues and challenges.

It makes sense to collaborate in seeking solutions to common issues. To that end, ANS is open to other VWOs, even government and other related stakeholders.

The formation of ANS dovetailed with the government's drive to create a more inclusive society.

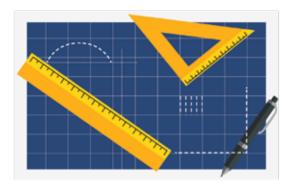
"As Singapore aspires to be more inclusive," noted Yew Teng Leong, President of Rainbow Centre, "there is a greater need for key service providers to collaborate and ensure better life outcomes for the special needs community. ANS is our way of adopting a more strategic approach to pro-actively identify and address sector-wide issues and gaps, increase public awareness of autism, and mobilise the village for the autism cause."

Ho Swee Huat, Chairman of AA(S), explained that "ANS was set up so that the four VWOs on the front-line of serving those with autism can coordinate our efforts, reduce duplication and share experiences. I hope that ANS will be a unified and significant voice to help raise the standard of support and services for people with autism in Singapore."



Formation of Autism Network Singapore (ANS), April 2015.

In the words of Denise Phua, "The four VWOs all have different cultures and expectations, but we have commonalities: we share the message of people being part of the solution. We all want government and society to not see the special needs community as charity, but as part of the nation. To include them as family, not footnotes. There needs to be a shift. They've been treated as pity projects for a long time. This can help society mature."



Part of the Masterplan

The top priority for ANS in 2017 is to plan for the next five years.

"ANS will consult with the community to develop an Enabling Masterplan to maximise the potential of persons with autism in Singapore," said Denise. "The plan will cover early intervention, lifelong education, employment, residential, caregiving and independent living skills, in addition to raising awareness, supporting inclusion and celebrating the abilities of persons with autism."

This will be part of the third Enabling Masterplan, a national roadmap to guide initiatives for the disability sector from 2017 to 2021. In December 2016, 20 recommendations were released, centred on three key trends: the longer lifespan of people with disabilities, an increasing number of persons with autism, and an ageing population.

These recommendations were made by a 22-person expert panel comprising government agencies, service providers, and persons with disabilities and their caregivers. The recommendations were based on feedback gleaned from interviews with 400 people.

Among the recommendations, which included a dedicated government office to meet the needs of the disabled comprehensively and across life stages, was a call for stronger partnerships within and across the sectors of social service, education and health, to reduce duplication of services and maximise resources for quality services. This is what ANS was set up for.

Other recommendations included more opportunities for interaction between students in mainstream and SPED schools, the promotion of inclusive hiring, and educating and involving employers in the training process to ensure

Autism Network Singapore (ANS) was formed to enable the community to be proactive and strategic in dealing with gaps in the support for those with autism — a number estimated at around 30,000 persons.

greater success of the disabled person — something that ARC(S)'s E2C is already doing and could potentially be a model for the larger community.

One key concern that the Enabling Masterplan deals with is the lifespan of the disabled person, a concern shared by ANS.

"Autism has no cure and is a lifelong disability," explained Swee Huat. "The greatest shared concern is the long-term care for adults with autism once their parents are no longer around. The majority of people with autism are not capable of living independently. Expecting siblings to care for them, especially those who are more severe, will impose a burden which will make it difficult for the siblings to lead a normal life and set up their own families."

Hence the need for ANS, and society at large, to collaboratively map out solutions.

Eddie Koh

For Review Only

Founding President, Autism **Association (Singapore)** and current Chairman of **Eden School**

"Autism Association (Singapore) was formed in 1992. All of us were parents of children

with autism. That was our main difference from ARC(S), which was started by both professionals and parents.

"AA(S) and ARC(S) are in the same family, doing different but complementary work. Denise is School Supervisor for both Pathlight and Eden. There are now Eden Schools for different age groups. We also have an Adult Centre offering a programme for those who have reached 18 or 19, but we do accept those above that age. Right now we are looking at students who can learn a skill, whom we can help to develop that skill.

"Back in the '90s, people didn't know what autism was. One day when my son was sick with the flu, I took him to a general practitioner. The doctor told me, 'Your son is very unhelpful, maybe he's autistic.' I didn't know what autism was; I thought it was just another temporary sickness. So I replied, 'Okay, so give him a pill.'

"Sebastian is now 30 years old. He is independent and working. He is very good at certain aspects of life — for example, he never gets lost. He has skills I don't have!"



The Purple Parade celebrates the abilities of people with special needs, including those with autism.

Creating a Culture of Inclusion: The Purple Parade

Building inclusion is a key strategy to continued support in the future for those with disabilities, including persons with autism. Autism Network Singapore (ANS) is a community within a larger special needs community.

In 2013, the Central Community Development Council, of which Denise Phua is Mayor, launched The Purple Parade to "support inclusion and celebrate the abilities of people with special needs". This special carnival and parade is held each year in November to promote awareness of the special needs community and showcase the abilities of those with special needs.

Co-organisers of The Purple Parade 2016 included AA(S), ARC(S), Association of Persons with Special Needs (APSN), Movement for the Intellectually Disabled of Singapore (MINDS), SG Enable, Muscular Dystrophy Association Singapore (MDAS), National Council of Social Service, Singapore Association of the Visually Handicapped (SAVH), SPD and Singapore Association for the Deaf (SADeaf).

The Purple Parade has received strong support, including that of Prime Minister Lee Hsien Loong. In 2016 and 2017, Deputy Prime Ministers Tharman Shanmugaratnam and Teo Chee Hean were the guests of honour, respectively.

From 3,000 participants in 2013, The Purple Parade has steadily grown. Its 2016 edition saw over 10,000 attendees at the event grounds at Suntec Singapore.



Deputy Prime Minister Tharman Shanmugaratnam, guest of honour at the 2016 Purple Parade.



APPENDICES

ces 1

APPENDIX A: ABOUT AUTISM

What is Autism?

The word "autism" comes from the Greek *autos*, which means "self". A person with autism is often described as one who lives in a world of his own.

Autism Spectrum Disorder (ASD) — which includes conditions previously described as autism, Asperger's syndrome, autism disorder, and so on

 affects how a person communicates with and relates to other people, and how they experience the world around them.

For Review Only

According to a widely used international classification system called the Diagnostic and Statistical Manual (Version 5), or DSM-V for short, ASD is a

Social Communication and Interaction

Differences

Individuals with ASD often have difficulty understanding other people's feelings and intentions. This difficulty can sometimes make it hard for them to navigate the social world.

Individuals with ASD may behave in "strange" or inappropriate ways when they interact with other people because they do not pick up on abstract social rules naturally. As such, some of them find it difficult to form friendships.

Some individuals with ASD have limited (or no) speech, and may benefit from using other forms of communication, e.g. sign language or visual symbols.

Some individuals with ASD have a very literal understanding of language. They may find it difficult to integrate tone of voice, social context and body language with speech during communication. As such, they may struggle with understanding jokes and sarcasm.

Strengths

Some individuals with ASD may therefore prefer to devote themselves to their assigned tasks, which may lead to greater efficiency and productivity.

Others have shared that they appreciate the refreshing perspective, honesty and sincerity that individuals with ASD bring to their social relationships.

The preference for visual over auditory channels for communication is often beneficial to the wider community — visual information gives us more time to process what is being communicated.

For individuals with ASD with strengths in language, their messages are often clear and direct. They mean what they say — others don't have to second-quess their intentions.

developmental disorder that is characterised by two groups of impairments. The first involves difficulties in social communication and interaction. The second involves restricted or repetitive patterns of behaviour, interests or activities, including hypo- and hyper-sensitivity.



Restricted, repetitive patterns of behaviours, interests or sensory needs

Differences

Individuals with ASD often show a preference for routines, sameness and the familiar.

It can be difficult for individuals with ASD to develop the motivation to study topics that they are not interested in.

Individuals with ASD can sometimes find it difficult to grasp the "big picture", such as when learning new content or during conversations.

Some individuals with ASD may be over- or undersensitive to sounds, touch, tastes, smells, light, temperature, etc.

Strengths

There are tasks and jobs that require a high standard of routine and maintenance of consistency. While some people may easily get bored with these jobs, some individuals with ASD will like them and find them motivating.

Some individuals with ASD develop strong interests from a young age, resulting in an encyclopedic knowledge of their interest areas. Their interests can sometimes be channelled into meaningful occupations, greatly increasing their quality of life.

Individuals with ASD often show great attention and care to details. This strength stands them in good stead in activities such as quality control and data entry.

Sensory strengths can also be an advantage: sensitive ears can be useful for a musician, sensitive tastes can be useful in the food industry, and a sensitive nose is sought after in the perfume industry.

Common Myths about ASD



FACT ASD individuals are often keen to make friends but may find it difficult.



MYTH ASD individuals do not have feelings and thus are unable to show affection.

FACT ASD individuals can and do give affection. However, due to differences in sensory processing and social understanding, the display of affection may appear different from typical people. Understanding and accepting these differences is key.



MYTH ASD people do not make eye contact

FACT When ASD persons feel relaxed and confident with their communication partner, eye contact can be quite spontaneous. It is never a good idea to force a person with autism to have eye contact

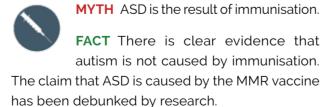
MYTH ASD people cannot talk.

FACT Communication is more than talking. Some ASD individuals will develop speech seemingly effortlessly, but require help or training to communicate appropriately with their peers. Others will require assistance to communicate their basic needs and wants, using a combination of words, gestures, and augmentative communication systems.



MYTH ASD individuals cannot lead independent and successful lives.

FACT Given appropriate education, many ASD students can grow up to be successful contributors to society, though others with severe disabilities may need lifelong support.



MYTH Autism can be cured. FACT There is currently no documented cure for autism. Individuals with autism respond very well to structured early intervention, education and vocational programmes that leverage on the unique learning style of ASD students.



For Review Only

MYTH ASD people can outgrow their condition

FACT Children do not "outgrow" ASD but symptoms may lessen or change as they develop and receive appropriate learning interventions.

MYTH All ASD individuals have a special talent or savant skills.

FACT ASD individuals have a range of abilities, from the severely disabled to the mildly disabled. The majority may perform very well in their area of interest, far exceeding their capabilities in other areas of development, or the skills of their cohort. An estimated 10 percent of ASD individuals may have special abilities in areas like art, mathematical calculation and memory.



MYTH ASD is the result of bad parent-

FACT There is clear evidence from research that autism is not caused by bad parenting.

What Causes Autism?

Research has shown that autism is a lifelong disability linked to the development of the brain, which may occur before, during or after birth. Research has also shown conclusively that autism is not the result of bad parenting or immunisation programmes.

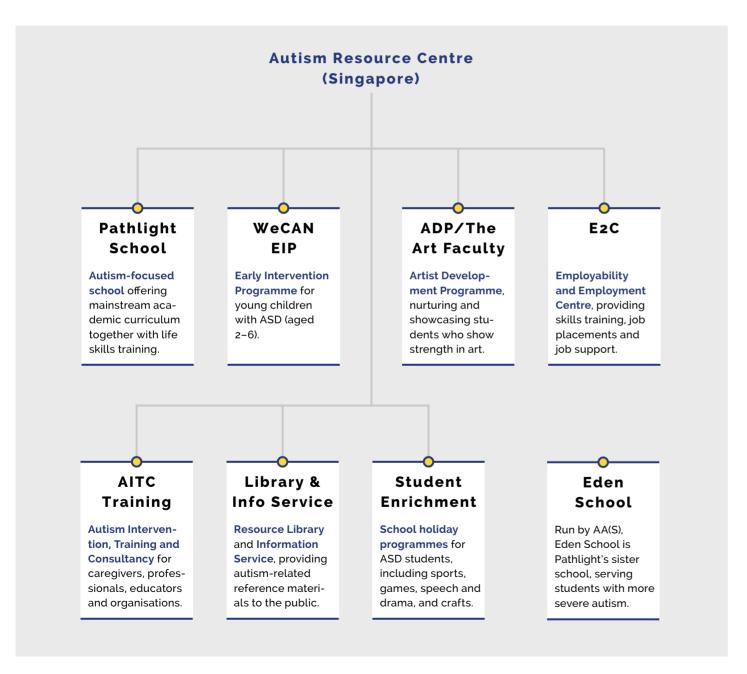
While the causes of autism are not yet fully understood, research suggests a biological correlation affecting the parts of the brain that process language and sensory information.

Other research findings suggest that in individuals with autism, there may be an imbalance in certain chemicals in the brain. Genetic factors may be involved, with boys four times more likely to be affected than girls.

In reality, autism may develop from one or a combination of several "causes", and is often hard to diagnose.

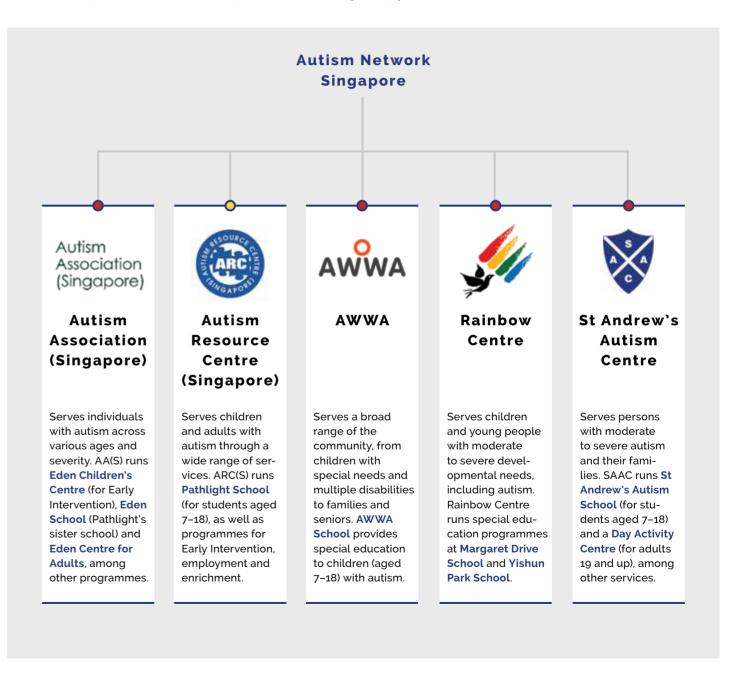
KK Women's and Children's Hospital and the National University Hospital estimate that one in 150 persons has autism.

APPENDIX B: ARC(S) CORE SERVICES



APPENDIX C: AUTISM NETWORK SINGAPORE (ANS) MEMBERS

For Review Only





As recently as the 1990s, support for people with autism was almost non-existent. Many children went undiagnosed and struggled at school.

In 1996, a small band of passionate parents and professionals set out to change that. Their initiative, Reach-Me Project, pioneered a range of autism-specific services. Reach-Me eventually became the autonomous charity ARC(S).

This book traces the transformations that ARC(S) has made in Singapore's autism landscape over the last 20 years, from the introduction of diagnostic, training and outreach services to the setting up of Pathlight School, Singapore's first autism-specific school.

This is the story of many helping hands and generous individuals and organisations coming together to sow the seeds of change. Together, they worked to create an inclusive society for all. Together, they made a difference.

