Vital Voices

7.

for

Vital Years

Perspectives on Early Childhood Development in Singapore



Vital Voices for Vital Years 2 National Library Board, Singapore Cataloguing in Publication Data

Names: Lipponen, Lasse | Ang, Lynn, author | Lim, Sirene, author | Hilppö, Jaakko, researcher | Lin, Hongda, researcher | Rajala, Antti, researcher.

Vital Voices for Vital Years 2 Perspectives on

Early Childhood Development in Singapore Principal investigator, Lasse Lipponen

Co-principal investigators, Lynn Ang and Sirene Lim | Researchers, Jaakko Hilppö, Hongda Lin and Antti Rajala.

Description: Singapore: Lien Foundation, 2019. Includes bibliographical references.

OCN: 1097580400

ISBN: 978-981-14-1325-4 (Paperback edition) 978-981-14-1326-1 (Digitised version)

Subjects, LCSH: Early childhood education – Singapore | Education, Preschool – Singapore | Children with disabilities – Education (Preschool) – Singapore | Poor children – Education (Preschool) – Singapore | Education and state – Singapore.

Classification: DDC 372.21095957- dc23

Copyright © Lien Foundation 2019

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 written permission of the authors. Although care has been taken to ensure the accuracy and reliability of the information provided in this report, the publishers and authors do not give any warranty therefor. Public information and industry and statistical data are from sources that are deemed to be reliable. But the publishers and authors make no representation as to their accuracy or completeness and have accepted the information without further verification. The publishers and authors shall not be responsible for changes in market conditions or laws or regulations nor obliged to revise this report to reflect changes, events or conditions which occur subsequent to the writing of this report. The publishers and authors also disclaim any liability to any party for any loss, damage, or any actions taken or decisions made as a consequence of the information, advice or recommendations in the report.

Design by Couple Photography by Marvin Tang

Contents

Acknowledgements	4
Foreword	6
Prologue	9
Executive Summary 1	2

Chapter 119Key Developments in Singapore'sEarly Childhood Care and Education (ECCE)1.1Increased government
investment and governance1.2Accessibility and affordability

- 1.3 Improving quality 26

Chapter 2 41 In the Margins of Singapore's Success Story: Children from Low-income Backgrounds and those with Special Needs

- 2.1 Children from low-income 43 and under-served families
- 2.2 Educating children 50 with special needs

Chapter 3							
Towards Greater Inclusion in							
Early	Childhood Settings						
3.1	Understanding inclusion 61						
3.2	Changing mindsets 64						
3.3	Parental support and education 67						
3.4	Shaping the future of ECCE						

Chapter 4 75 Strengthening the Ecosystem of Support

4.1	Boundaries between ECCE,
	mainstream primary and
	special education78
4.2	Bridging boundaries between
	education, healthcare and
	social service systems 82
4.3	Bridging research and practice 85

Chapter 5	87
Discussion of Tensions	
and Recommendations	

Limitations of this Study 100 Epilogue 101 References, Footnotes, Appendix 104

CONTENTS

Principal Investigator

Prof Lasse Lipponen, Professor of Education, Faculty of Educational Sciences, University of Helsinki

Co-Principal Investigators

Prof Lynn Ang, Professor of Early Childhood, Department of Learning and Leadership, University College London, Institute of Education

Associate Prof Sirene Lim, Academic Lead, Early Childhood Education Programme, Singapore University of Social Sciences

Researchers

Antti Rajala, Jaakko Hilppö and Hongda Lin, University of Helsinki, Finland

An independent research study commissioned by Lien Foundation

Acknowledgements

- > Dr Jeffrey Chan, former Deputy CEO, Movement for the Intellectually Disabled of Singapore
- > Dr Rebecca Chan, Associate lecturer, Early Childhood and Art Education, National Institute of Education
- > Chan Tee Seng, CEO, NTUC First Campus
- > Agnes Chia, Senior Group Director, Care Corner
- > Chia Yong Yong, President, SPD
- Dr Chong Shang Chee, Head of the Child Development Unit,
 Development and Behavioural Paediatrics, National University Hospital
- Dr Jacqueline Chung, Senior Principal and Academic Director, St. James' Church Kindergarten
- > Dr Christine Chen, Founder and President of Association for Early Childhood Educators, Singapore
- > Beth Fredericks, former Executive Director, Wheelock College, Singapore
- Ho Yin Fong, Dean, Faculty & Leadership Development and Campus Head, National Institute of Early Childhood Development (SEED)
- > J R Karthikeyan, CEO, AWWA

VITAL VOICES FOR VITAL YEARS 2

- > Eugene Leong, CEO, Early Childhood Development Agency
- > Koh-Lim Ai Lay, Principal, Cerebral Palsy Alliance Singapore School
- > **Carmee Lim**, Mentor Principal, MindChamps
- > Iris Lim, Principal, Chiltern House Preschool

The children featured in this report are part of Superhero Me, an inclusive arts movement that brings children of different abilities together.

- > Adj Assoc Prof Lim Sok Bee, Senior Consultant, Department of Child Development, KK Women's & Children's Hospital
- > Loke-Yeo Teck Yong, Director, National Institute of Early Childhood Development
- > Loy Wee Mee, Co-founder, Preschool By-the-Park
- > Mohd Ali Mahmood, former CEO of Singapore Muslim Women's Organisation, PPIS
- > Ng Gim Choo, Founder and Managing Director, EtonHouse International Education Group
- > Ng Hark Seng, Managing Director, E-Bridge Pre-School
- > **Tan Beng Luan**, Founder and Principal, Creative O Preschoolers' Bay
- > Tang Hui Nee, Assistant Director and Head of Community Services, Department of Child Development, KK Women's & Children's Hospital
- > June Tham-Toh, former Executive Director, Rainbow Centre Singapore
- > Ku Geok Boon, CEO, SG Enable
- > Dr Jane Ching-Kwan, Director and Curriculum Founder, Skool4kidz
- > **Dr Khoo Kim Choo**, Founder, Preschool for Multiple Intelligences
- Dr Lucy Quek, Dean, Curriculum & Programmes and Campus Head, National Institute of Early Childhood Development (Ngee Ann Polytechnic)
- Narayanasamy Pushpavalli, Principal, Ramakrishna Mission Sarada Kindergarten
- > Shaireen Selamat, Lecturer and Early Childhood Consultant
- > **Dianne Seet-Swee**, Principal, Ascension Kindergarten
- > **Tan Lee Jee**, Assistant CEO, PAP Community Foundation, PCF
- > Dr Zachary Walker, Associate Professor, University College London Institute of Education
- > Dr Wong Meng Ee, Associate Professor, Early Childhood and Special Needs Education, National Institute of Education

More support is also being given to children with greater needs, for instance through the expansion of subsidised early intervention services.

In fact, the tempo of change has been swift and without precedent – more has been done to uplift the sector than ever before. The pressure on sector leaders and professionals to navigate the changes is palpable.

Vital Voices for Vital Years 2 takes a pulse check by assessing the impact of these recent policies and strategies, to establish what more needs to be done.

This time round, the study adopts a more multi-faceted approach to the early years by examining the broader notion of early childhood development encompassing more than just how a child fares at preschool.

In particular, we discuss issues related to two main groups of children who face the greatest risk of being left out of Singapore's success story - those from low-income families and those with special needs – and better outcomes can be achieved for them. The study's participants include not just educators but also health specialists, social workers, as well as academics and advocates championing change. While children today are not materially worse off than before, they are saddled with a different set of challenges. 'Modernity's paradox' in the form of chronic illnesses, developmental and learning disabilities, behavioural problems, obesity and neglect has a pervasive impact on learning and health, threatening their future prospects in an increasingly cut-throat global economy. Initiatives that connect the efforts within education, care, health and early intervention can be a powerful counterweight against the effects of poverty and adversity faced by these children.

This qualitative study reflects the range of views which we hope can improve the collective understanding of issues, inform future directions, catalyse innovations and strengthen the ecosystem of care, so that children are well supported within a system that is empowering and inclusive.

aising a child comes with great responsibility and great expectations. In an era of declining birth rates and rising income gaps, Singapore is devoting more attention and resources to ensure that every child is given a sound foundation in life, regardless of their circumstances at birth. At the same time, Singapore's formal education system is continually evolving, with efforts made to try and reduce the longstanding primary emphasis on academic results.

In 2012, the Lien Foundation initiated the first edition of Vital Voices for Vital Years - a report that studied leading practitioners' and experts' perspectives on improving the early childhood sector. Together with the Starting Well Index, which ranked Singapore 29th out of 45 countries on the provision of preschool education, this study helped shine a spotlight on Singapore's early childhood landscape, and called for the state to do more. That same year, the government announced it would invest substantial resources and play a more active role.

In the past seven years, the early childhood field in Singapore has experienced a 'growth spurt' as the government ramped up efforts to nurture the sector by boosting investment, oversight, preschool capacity as well as training.

Annual spending on preschools is set to more than guadruple from \$360 million in 2012 to \$1.7 billion in 2022.

We would like to thank all participants for their time and insights. This report is the product of a successful three-way partnership led by Prof Lasse Lipponen (Principal Investigator) from the University of Helsinki (Finland), Prof Lynn Ang (Co-PI) from University College London, Institute of Education (United Kingdom) and Dr Sirene Lim (Co-PI) from Singapore University of Social Sciences. We would like to acknowledge their hard work and collaborative spirit.

As Singapore weathers an increasingly uncertain climate, our calling to cultivate a generation that can embrace diversity and contribute to socio-economic vibrancy has never been stronger. The children in preschool today are growing up in a world of exponential change, where they will have to adapt to the evolving nature of work, co-exist with technologies like artificial intelligence and acquire new knowledge and capabilities to be well-rounded, contributing members of society.

While society cannot simply reset the starting-points each child is born with, we can all raise our ambitions and collectively do better to empower them to gain mastery over their own destinies so they can participate, belong and achieve their full potential.

Lien Foundation

Prologue by Professor Lynn Ang

As

I started to write this prologue, I recalled a conversation with my five-year-old daughter starting at Reception, the first year of primary school in England. I asked: What was her day like when she arrived at

school each morning? I remember her reply vividly: "I go to my class, put up my coat. Then I go out to play and when the bell rings I go back to class, find my desk, unpack my bag, sit on my chair and relax". As a parent, I felt relieved that my daughter had settled in so well that school was a place of fun to relax, learn and enjoy. Idealistic as it sounds, it seemed everything early childhood education should be. When I consider the children *Vital Voices* is trying to represent, I wonder what their school or preschool experience is like? These questions lie at the very heart of what early childhood educators strive to do – to seek, listen and question in multiple ways how to create a vibrant, stimulating and nurturing educational environment in which all young children, regardless of diverse backgrounds and abilities, will flourish, feel safe and belong.

In 2012, I authored *Vital Voices for Vital Years*, an independent review of Singapore's early childhood sector commissioned by the Lien Foundation, a qualitative study based on in-depth interviews with 27 leading professionals, including teachers, principals, social workers, child health specialists, academics, as well as quasi-government, private and non-profit operators and training providers. The study found the quality of preschool services highly variable and revealed the need for more cohesive governance of the sector. I made my view clear that early childhood education has to be seen as not just a national strategy to prepare children for primary schooling, but an essential public good for children and society as a whole. Seven years on, it is important to reassert that what matters most is the quality of education. The World Bank in 2015 stated unequivocally: "Investing in young children is one of the smartest investments that countries can make".

> The arguments are well-known: Early childhood education can positively enhance children's outcomes, but a lack of, or limited, care and educational opportunities can have significant, irreversible consequences in the short and longer term. For children most disadvantaged by disability or low socioeconomic status, where a poor start in life can set them on a lower trajectory course in life, research shows that early childhood services are likely to be most beneficial. The challenge is reaching these children.

The key sector developments since the Vital Voices for Vital Years study should be acknowledged. In 2013, the Early Childhood Development Agency (ECDA) was set up, with increased funding for childcare operators to raise service quality and maintain affordability at scale. The formation of the National Institute of Early Childhood Development (NIEC) for training educators was announced in 2017. In January 2019, the Ministry of Social and Family Development (MSF) increased funding from \$45 million to \$60 million a year for two new early intervention programmes for developmental needs. As one of the participants sums it up well:

"Change has happened. It is very exciting... but the journey continues." In Singapore or England, there are contrasting ideas of schooling and childhood, but we share similar concerns:

What do we value about education? What is it for? Do we want an educational system driven by and for the economy, reproducing hierarchical relationships in society? Or an educational system that seeks to redress socioeconomic inequalities? What role does early childhood education play? Will children be marked as educational failures if they do not fit into the system?

> This seems to me the crux of the problem. As this study shows, we can, and must, do more to foster more inclusive practices and attitudes in an increasingly diversified landscape. We must support and train new teachers, nurture competent sector leaders, increase public understanding of early childhood development and improve care coordination across the divisions of education, health and social wellbeing. Only then can we really effect change and improve the life chances of all children in Singapore.

Ξ

2

Professor Lynn Ang Professor of Early Childhood UCL Institute of Education

Executive Summary

VITAL VOICES FOR VITAL YEARS 2

ital Voices for Vital Years 2 was commissioned by the Lien Foundation to explore issues pertaining to how Singapore cares for, and educates, one of its most precious demographic groups. In the seven years since the publication of Vital Voices for Vital Years, the precursor to this report, Singapore's early childhood care and education (ECCE) sector has seen significant change in terms of the government's regulatory role and initiatives to improve the accessibility, affordability and quality of services for most families.

This qualitative study used in-depth individual interviews to gather the perspectives of 35 leaders who have been shaping the early childhood development sector in Singapore. They come from a range of disciplines, including health, social services and education. The interviews were conducted between April and September 2018.

The main goals of this study were to:

- > Examine the recent developments, trends and challenges in the early childhood sector;
- Review the overall ecosystem that supports young children's learning and wellbeing and unveil issues that have yet to be addressed by policies or practices; and
- > Explore ways to better connect disparate services such as health, social service, early intervention and education for children from low-income families as well as those with special needs

As the interviews revealed, there is a clear general consensus on the positive developments that have taken place in recent years. Participants acknowledge the government's more proactive stance in the sector, as reflected in policies, investment and targeted programmes for children. At the same time, the study sheds light on the following key lessons and areas for improvement. > Mainstream preschools are challenged in meeting the diverse needs of children (including those from complex home environments), and currently most of them are not equipped to provide intervention for children with special needs. Teachers in the early childhood sector do not have adequate knowledge to work with children with special needs, and with some exceptions, preschools typically do not have early interventionists or in-house therapists. It was also mentioned that ECCE centres are not sharing ideas, information and best practices. With greater awareness and a national shift towards building a more inclusive society, there is a need to improve inclusive pedagogical practices, such as modifying and adapting activities within the natural setting of preschools. The content of activities and curricula could also provide more interaction opportunities for children, and cater to their social and emotional needs beyond academics. All early childhood educators should also be empowered and continually trained to have the basic knowhow to support children with developmental variations or from socially disadvantaged or complex home backgrounds.

> There is a general lack of expertise and human resources to keep pace with the growing demand for early assessment and early intervention services. In 2018, there were more than 5,500¹ new cases of preschoolers diagnosed with developmental problems seen under the Child Development Programme at KK Women's and Children's Hospital and National University Hospital, the two main diagnostic centres which screen children aged six and below for issues. This is compared with an average of 4,362 new cases a year from 2015 to 2017. There is also much variability in the quality of early intervention services provided by different Voluntary Welfare Organisations (VWOs). To better support children and improve quality, a national database and data collection to track children's progress and reflect the results of early intervention programmes would be necessary.

Key Milestones 2012

PM Lee announced at the National Day Rally that the Government would invest substantial resources in early childhood.

- > As pointed out by interviewees, child health and early intervention service delivery is still predominantly hospital- or centre-based. The government-subsidised Early Intervention Programme for Infants and Children (EIPIC) is run by VWOs in standalone centres separate from preschools, meaning that parents have to cope with the logistics and costs of shuttling children between these two venues. About three-quarters of children aged five to six who are enrolled in an EIPIC centre are also enrolled in preschools. According to the interviewees, there needs to be more collaboration between EIPIC centres and preschools, to develop a more integrated ecosystem of support and care.
 - > There is a need to build more effective partnerships and improve collaboration between professionals working on early intervention and those in preschools. Some interviewees expressed concern that there exists a power hierarchy where teachers rely on early interventionists or therapists and defer decision-making and treatment work to them. Instead, knowledge exchange and cross-learning should be encouraged by creating opportunities and common platforms to bring together these different professionals across the traditionally separate 'mainstream' and 'special education' boundaries, and, in particular, to develop ways in which they can work better together as a team.

- > A systemic review of early childhood teachers' and early intervention teachers' requirements, salaries and career development opportunities should be considered in order to improve parity between these two professions, which often draw from the same manpower pool. For instance, currently there are no professional qualification requirements for early intervention teachers at the point of recruitment. They are recruited with a polytechnic diploma in any discipline, although training is provided subsequently, and individuals can pursue an Advanced Diploma in Early Childhood Intervention (Special Needs) to qualify as a trained early intervention teacher. Their salary scales follow the social service sector salary guidelines set by the National Council of Social Service (NCSS), unlike ECDA-registered early childhood professionals, where there are no such recommended salary guidelines published.
 - > There is an urgent need to augment the early childhood sector's workforce, due to a rapid expansion of childcare places coupled with ongoing challenges in attracting and retaining trained early childhood educators. Staff shortages were mentioned by all interviewees who are ECCE operators. Because of this constraint, preschools are unable to take in more children, even if they had childcare places available. The sector will require another 2,000 early childhood educators by 2020, in addition to the current pool of about 18,000. There were some concerns of teachers leaving to become early interventionists to specialise in supporting children with special needs, due to a more attractive pay. In addition, having more educators hired from elsewhere in Asia – about onequarter of early childhood educators are foreigners, as shared by ECDA for this report - adds a level of cultural complexity to raising the quality of early childhood practices.

2	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>			
es for vital ye	Formation of Early Childhood Development Agency (ECDA).	Enhancement of the Anchor Operator Scheme (AOP), which provides funding support to 5 selected	ECDA Fellows programme for leaders to uplift professionalism of the sector by sharing best practices was started.	Partner Operator (POP) scheme implemented to anchor industry fees. A total of 23 operators	KidSTART, a \$20-million pilot programme targeted to benefit 1,000 children from	Early Childhood Manpower Plan launched to support more meaningful and	Launch of Skills Framework for for Early Childhood Care and Education
	MOE to set up 15 pilot kindergartens over next 3 years.	preschool operators to increase access to quality and affordable ECCE.	Professional Development Programme (PDP), a 3-year upgrading initiative was launched to help early childhood teachers deepen competencies.	were appointed.	low-income families was rolled out.	rewarding careers for early childhood educators.	to support a sector- wide shift towards competency-based career progression.

- > Interviewees highlighted the need to develop the competency of leaders across both the early childhood and early intervention sectors, given the larger responsibilities and more complex job roles. Teachers are becoming principals at a younger age, given the manpower shortage and expansion of the sector - more than 350 childcare centres were added between 2014 and 2018.² The roles of leaders have also become more challenging. For instance, they have to keep up with changes in the sector, manage larger enrolments and staff teams as centres get bigger, meet increased guality demands, and, in the case of preschools, manage the profit-driven expectations of their organisations. In light of these changing expectations, a clearer consensus is required on what constitutes good leadership, and how leaders could be selected and cultivated.
 - > All interviewees were generally supportive of increased government involvement in the sector, but there were some concerns that the expansion of Ministry of Education (MOE) kindergartens (catering to children aged five to six) and government-supported preschools could curtail the diversity of the sector and create an uneven playing field for operators, particularly the smaller players. By 2023, MOE kindergartens, anchor and partner operators will provide a place for two in three preschoolers, up from one in two.
 - > Interviewees have also noted a shift in the role of early childhood care and education in Singapore. Compared to the 1980s, when the primary purpose of ECCE was to recruit mothers into the workforce, ECCE now has an added function to tackle inequality by reducing disparities from an early age so that disadvantaged children can be ready for primary school. While interviewees recognised that Singapore has done a lot to provide more preschool opportunities, including making fees affordable even for the lowest wage-earners, these families require more than financial support. The challenge on the ground is getting children from lower-income families to attend preschool regularly. These families face multiple stressors and may not have the knowhow or mental capacity to support their child's learning and development. It was also mentioned that lowincome parents who work irregular hours or weekends find it hard to adhere to standard childcare operating times.

VITAL VOICES FOR VITAL YEARS 2

- > The transition from preschool to primary school, with a highlystructured learning environment, stricter school rules and larger class sizes, can be daunting for typically developing children, let alone children with special needs. In particular, early intervention services such as EIPIC are no longer offered to children when they enter mainstream primary school, where there is even less support. As more children with special needs enrol in mainstream schools, there is a need to find ways to offer them continuity of support into the primary school years.
 - > Participants also mentioned the crucial role of parents as children's first educators and the importance of supporting parents to engage in their children's learning in more effective ways, and to understand the role of early childhood education not just as a tool for promoting social mobility but in valuing difference and individuality. Changing the mindsets of parents and wider society to support children with special education needs and children from complex home backgrounds is an important step in creating a more inclusive education system.

2017

New Early Childhood **Development Centres** (ECDC) bill passed in Parliament to ensure more consistent standards across the sector.

Professional Development Programme (PDP) for Educarers launched.

Government announced MOE to increase formation of National Institute of Early Childhood Development by 2023 to serve about (NIEC), a centralised institute to train preschool teachers.

the number of its kindergartens to 50 20% of children aged

5 to 6 years.

SUMMARY

XECUTIVE

- This study also acknowledges various kinds of tension that exist within the system's current process of change and development. A good example of such a tension can be found from the study: "Fostering educational excellence versus offering everyone equal opportunities". As researchers, we see these tension points as a positive way in which Singapore society is grappling with opposing ideals and practices, trying to figure out what it really wants and needs, given its current state as an economically advanced country. We recommend using data-informed research interventions to generate a range of solutions to:
 - 1. Develop care agreements among organisations or different groups of professionals to organise pathways for vulnerable children and their families;
 - 2. Improve inter-professional collaborations and co-creating solutions with service users:
 - 3. Support new teachers through peer mentoring;
 - 4. Improve pedagogies in ECCE centres to support all children in collaborative learning;
 - 5. Research and evaluate programmes for children with special needs and those from lower-income families; and
 - 6. Create a shared purpose of early childhood and strengthen the image of the sector.

As a multi-nation research team, we assure readers that many of these issues raised are not unique to Singapore, even if the existing circumstances and historical context might be unique to this nation. Several economically advanced nations in the world have had more time to deal with issues of inclusion, diversity, equity and quality of early years provisions, and not a single nation has the perfect formula. Singapore, as a young nation, has its own developmental trajectory to chart, by developing her own models and practices that can best meet the goals set out by its own people.

2018

An Early Childhood Industry Transformation Map will steer the sector towards innovation and productivity.

ECDA announced over \$5 million A 3-year national campaign will be set aside in the next 3 years to develop leaders in the early childhood sector.

.....

to profile the early childhood profession and enhanced training for mother tongue language teaching was launched.



igh-quality early childhood education has been demonstrated to have significant effects for children's development and learning, and, in the longer term, on life outcomes ^{(Melhuish et al, 2004; Sylva} et al, 2004; Vandell et al, 2010). In the last few decades, many

countries have also merged the education and care aspects of ECCE as well as re-examined the dichotomy of regular education and special education services through legislated inclusive educational practices, recognising the benefits that such programmes can provide for both typically developing and atypically developing children ^{(Bellour, Bartolo & Kyriazopoulou, 2017).} Research has shown that disadvantaged children benefit significantly from good quality pre-school experiences, especially where they are with a mixture of children from different social backgrounds ^{(Sylva et al, 2004).}

Singapore's education system has often been lauded as among the best in the world. Students have consistently performed better than their peers in other countries in global standardised tests such as the Programme for International Student Assessment (PISA), conducted by the Organisation for Economic Cooperation and Development (OECD). However, while Singapore students were doing well in PISA even a decade ago, preschool education has received the attention it deserves only in recent years. In fact, in 2012, the Economist Intelligence Unit ranked Singapore 29th out of 45 countries in the Starting Well Index, which evaluated the state of early childhood education in both developed and developing countries. Singapore's relatively low standing in that report, which was also commissioned by the Lien Foundation, was described by the interviewees of this study as a wake-up call for policy-makers and practitioners in the country. The report put a spotlight on what was then an entirely privatised early childhood sector that had been minimally regulated for decades. In fact, education is compulsory only from Primary 1, when a child turns seven.

1.1 <u>Increased government</u> investment and governance

In Singapore, like in many countries, ECCE is regarded as an important means to achieve national goals. In a country with no natural resources, maximising the potential of every individual is critical. In his National Day message in 2017, Prime Minister Lee Hsien Loong highlighted that the government is investing heavily in preschools so that "every child, regardless of his family background, starts well and has a bright future."

ECCE policies introduced in Singapore over the last 20 years have shown a progressive involvement of the government in the sector ^{(Sum, Lim & Tan, 2018).} However, despite increased attention and government investment, the sector still faces some challenges, which several recent studies have highlighted:

- > A largely privatised sector with a diverse range of services and uneven quality, along with the inevitability of segregating children by social class because of the stark difference in fees charged in forprofit settings and not-for-profit/non-profit settings (Lim, 2017)
- Growing demand for full-day programmes for younger children (such as infants) and parents expecting better quality (Chia, 2017; Yang, 2017)

22

- > Challenges in attracting and retaining early childhood teachers ^(Chia, 2017)
- > Changing the sector's and the general public's mindsets about not hothousing young children for primary school 'readiness' (Tan, 2017)

While the Singapore government's expenditure on education has been consistently high, increasing alongside the country's gross domestic product growth, the early childhood sector, which has been largely run by private operators, did not receive much. However, things have changed of late. The government spent about \$1 billion on the preschool sector in 2018, more than two-and-a-half times the \$360 million it spent in 2012.³ By 2022, annual spending is expected to reach \$1.7 billion.⁴

The interviewees of this study noted the government's growing interest and investment in the ECCE sector. Some of them considered the growing government involvement and coordination necessary. According to several interviewees, one of the key transformational changes in the sector is the formation of the Early Childhood Development Agency (ECDA) in 2013. ECDA is an autonomous agency jointly overseen MOE and the Ministry of Social and Family Development (MSF), and hosted under the MSF. Its vision is to ensure that every child has access to affordable and quality childcare and kindergarten services. ECDA's role was viewed to be central in implementing, coordinating, and regulating the ECCE sector, and also in overseeing key aspects of children's development below the age of seven, across both kindergartens and childcare centres. It also plays a key role in promoting professional development and raising teacher quality.



- Establishing the Early Childhood Development Centres (ECDC) Act, which sees childcare centres and kindergartens (excluding MOE kindergartens) coming under the same regulatory framework;
- Providing substantial supply-side and demand-side subsidies;
- Increasing minimum teacher qualification requirements (including those for infant educarers);
- Enhancing professional development opportunities and encouraging teacher retention with clearer career pathways;
- Introducing national curricular frameworks (for infants, toddlers and preschoolers);
- Introducing self-assessment and external assessment through the Singapore Pre-school Accreditation Framework (SPARK);
- > Providing financial grants to not-for-profit Anchor Operators (AOP) and creating the open, competitive Partner Operator (POP) scheme to increase the accessibility of affordable services and to uplift the sector's quality;
- > Setting up MOE kindergartens; and
- Creating a KidSTART programme to support disadvantaged children.

While the government has maintained that there is no intent to nationalise the early childhood sector, some interviewees were concerned that the government's increased involvement may lead to growing centralisation and a narrowing of diversity among operators.

"I feel [...] parents should be given choice... and be able to choose the kind of early childhood education, and the values they wish for their children, rather than have a one-size-fits-all approach, or [...] only go to government supported preschools, which have to abide by certain key performance indicators and requirements. "

1.2 Accessibility and affordability

With a vision of giving every child a good start, government subsidies and grants are available to make kindergartens and childcare more affordable. In 2013, the government reviewed childcare subsidies to better support low- to middle-income families. An additional subsidy was introduced to support working mothers whose monthly household incomes are \$7,500 or below, or per capita incomes are \$1,875 or below. This is on top of a basic subsidy of \$150 per month, or \$300 per month for working mothers.

One of the most important initiatives is the Anchor Operators (AOP) and Partner Operators (POP) schemes, which provide funding to selected preschool operators to keep fees affordable – monthly fees at AOPs are capped at \$720 for full-day childcare and \$160 for kindergartens, while the cap for POPs is \$800 for full-day childcare, before subsidies.⁵ This means that low-income families with a monthly income of \$2,500 or below with a child enrolled at an AOP centre could pay as little as \$3 for full-day childcare a month, after subsidies.⁶ Together, these operators account for almost half of ECCE service delivery in the sector. Median childcare fees have remained stable at \$856 between 2016 and 2018 although average fees increased from \$1,014 to \$1,087 over the same period.⁷

The number of childcare places has increased by more than 40% since 2012, helped by the expansion of five large childcare centres with capacity of 300 to 500 children each. These were developed by anchor operators in areas such as Punggol, Sengkang, Jurong West, Woodlands and Yishun to meet localised high demand.

1.3 <u>Improving quality</u>

While ensuring accessibility and affordability of earlyyears services is a practical concern in more and more countries, research has shown that high-quality ECCE brings a wide range of longer-term benefits for children as well as for families and society at large ^{(DECD, 2015a;} ^{Phillips & Lowenstein, 2011; Sylva et al, 2004; Sylva et al, 2011).} In recent years, the Singapore government, through the ECDA, has created several initiatives to raise the quality of early childhood education. According to the interviewees, among the most important quality initiatives are SPARK; MOE kindergartens, the National Institute of Early Childhood Development (NIEC) and leadership development. These are elaborated on in the following sub-sections.

1.3.1

Locally developed Quality Rating Scale

To ensure quality and to strive for greater excellence in early childhood care and education, SPARK was introduced by MOE in 2011 and continued by ECDA. The SPARK Framework encourages licensed childcare centres and kindergartens with four- to six-year-olds to conduct annual self-appraisal using its Quality Rating Scale (QRS), and to volunteer for external assessment. Through SPARK certification, ECCE centres are recognised and supported for their continued efforts in providing quality education. There is at present no full-fledged accreditation system yet, which will happen when centres have 'attained high-quality ratings' (ECDA, 2017).

The SPARK assessment provides information on a centre's strengths and areas for improvement, and centres can be rated as 'emerging', 'performing' or 'mastering'. Unlike other countries that publicly release quality rating or inspection reports, the QRS assessment reports in Singapore are not made public, hence it is

Early Childhood Landscape

2012 2018

\$360 Million Annual Government Spending on Preschool Sector









in English and Mother Tongue languages) that could be shared with the entire sector.

2012 2018



15,000 in 2019 20,000 needed by 2020 11,000 17,000 Number of Early Childhood Professionals

51,900 \$2,300 Starting Salary of Full-time

quality rating or inspection reports, the QRS assessment reports in Singapore are not made public, hence it is not known how a centre with SPARK certification has actually fared, and being SPARK-certified does not mean centres have reached high quality. Currently, almost 900 preschools out of 1,800 are SPARK-certified.⁸

While recognising the merits of SPARK, some interviewees raised concerns about the certification creating unhealthy competition among centres within similar locales (e.g. families may prefer enrolling their children in SPARK-certified centres); and an unintentional push towards focusing on visible and measurable teacher behaviours and for documentation's sake rather than guiding the sector towards a view of quality ECCE that engages young children in active and playful learning. While it is important for teachers to observe children's learning to inform their curricular decisions, there is a fear that teachers may lose sight of the original goal of child observation if their supervisors over-emphasised the need to have documentation as an end-product to impress quality assessors.

1.3.2 <u>Ministry of Education kindergartens</u>

The setting up of the MOE kindergartens (with fourhour programmes for five- and six-year-olds) was widely viewed by interviewees as a concerted effort to raise the quality of early childhood care and education in Singapore. The first five pilot kindergartens were set up in 2014, and have since grown to more than 20. The government plans to run a total of 50 such centres by 2023, catering to about 20% of children in that age group. MOE kindergartens are expected to explore and uplift the sector's teaching quality through innovative curricula and pedagogical practices by producing locally-inspired teaching resources (e.g. picture books in English and Mother Tongue languages) that could be shared with the entire sector. The setting up of MOE kindergartens received support from some interviewees who thought that they could offer a clearer sense of quality early learning, and create opportunities for the education system to provide better transitions for young children entering primary school. On the other hand, there were interviewees who saw the rapid expansion of MOE kindergartens (providing for five- and six-year-olds) as potentially divisive for the sector - with provisions for those aged below five largely remaining the responsibility of the Anchor Operators (AOPs). To cater to families who require full-day care and education for their children, MOE kindergartens provide a wrap-around 'kindergarten care' programme run by MOE-appointed service providers. With its own kindergartens, participants commented that the government is now actively involved in the ECCE sector, moving from being a regulator and coordinator to being an operator. In doing so, it could have more significant influence over the largely privatised sector, but some participants see the existence of MOE kindergartens, with its wellresourced set-ups, as creating an uneven playing field for operators. MOE kindergartens are regulated under the Education Act, along with other national schools,⁹ instead of coming under the ECDC bill, which governs childcare centres and kindergartens under the oversight of ECDA. Interviewees also highlighted the possibility of having larger-scale operators dominate the ECCE sector over smaller operators, since larger-scale chains are more likely to operate more profitably with economies of scale, or be supported by government grants and pay lower rental rates.

1.3.3

<u>Human resource – professional status,</u> <u>innovation and career development</u>

There are an estimated 18,000 early childhood educators in Singapore today.¹⁰ The sector will need to attract another 2,000 educators to reach its target of 20,000 by 2020 to cope with a rapid expansion of preschool places.¹¹ According to a response by ECDA for this report, the "sector attrition rates have improved since 2012 in tandem with efforts to strengthen the career proposition of early childhood educators. Over the past five years, around 10% of early childhood educators leave the sector each year." In 2016, the government came up with an Early Childhood Manpower Plan to provide more opportunities for individuals to join and develop their careers in the sector. The government has also developed wide frameworks to raise the quality of ECCE. Two key documents are the Skills Framework (SF) for Early Childhood Care and Education in 2016 and the Early Childhood Industry Transformation Map in 2018. Support for ECDA Innovation Projects has also been created at ground level to encourage preschools to explore new ways of learning.

"The sector is not attracting, nor has it shown the ability to retain, quality early childhood professionals. There is still an acute shortage of infant educarers and preschool teachers. Attrition continues to be high, estimated at 25% per annum. Parents generally do not accord these professionals respect and appreciation, and they tend to 'sub-contract' the role of caring and educating their children entirely to them." 29

- Staff shortage was mentioned by all interviewees who are ECCE operators. Because the salaries and recognition are not great, motivating talented people to join the profession is challenging. According to Pek-Greer and Wallace ^{(2017),} factors such as employee remuneration, employee benefits, work environment and professional development opportunities influence childcare teachers' retention in Singapore. The two excerpts below are typical of how interviewees have described the situation in the ECCE sector:
- "Beyond training at the start, how are you going to treat the people in the field better? How are you going to develop them? What kind of mentoring programmes are going to be put in place?"

"The centres may have capacity [in terms of childcare places], but may not be able to offer places to families due to manpower constraints."

Another point mentioned by interviewees relates to Singapore's current reliance on imported manpower. Having an increased number of educators hired from the Asian region adds a level of cultural complexity to raising the quality of ECCE practices and these educators are not always treated equally in the sector. Many private for-profit ECCE centres were also said to only hire educators of European descent who speak English as a first language instead of Singaporeans so as to attract high-income or expatriate families. These educators from the region or further afield might play an important role in Singapore's current developments in ECCE. This seems to be a topic that is not yet discussed by everyone invested in the future of Singapore's ECCE.



1.3.4 <u>Teacher education and</u> professional development

Many participants talked about the importance of teacher quality. Research shows that this is one of the key elements for success in education, with teacher influence persisting in the early phases of learning (Hamre & Pianta, 2001; Taggart et al, 2015; Konstantopoulos, 2011; Konstantopoulos & Chung, 2011).

Starting in kindergarten, teachers can significantly affect students' reading and math scores in later grades, as well as their social and emotional learning. Thus, the youngest children deserve the best teachers. It is also known that higher teacher qualifications are associated with higher quality early childhood programmes. Core quality indicators include warm interactive relationships with children, having a trained teacher as manager, and a good proportion of trained teaching staff. Many interviewees also recognise the efforts of ECDA in improving teacher quality through training subsidies and continuing professional development.

The government has extended its push for quality into initial teacher preparation as well. In 2019 the NIEC, a centralised training institute for ECCE teachers set up by MOE, started operations under the ambit of the National Institute of Education. The NIEC will bring together the various ECCE teacher training programmes offered at Temasek Polytechnic, Ngee Ann Polytechnic, the Institute of Technical Education (ITE) and the SEED Institute.

The interviews revealed that several participants had high expectations that NIEC would raise teacher training standards, and play a key role in developing and shaping the ECCE teacher profession.

"I think NIEC is a good thing, in a way, because at least we know where we put our teachers... we get the standard. Before this, everyone was trained in different private agencies and institutions."

With the setting up of NIEC, there may be a further reduction in the number of for-profit private training providers in the sector. On the other hand, there were also participants who were less sanguine about the setting up of NIEC, expressing their concern that the centralisation of teacher training might narrow down, or overly standardise, early years pedagogies and curricula.

There also appears to be a need for the sector to find a balance between recruiting teachers to meet the shortfall and identifying the right kinds of people for the sector, preparing them through quality teacher education programmes, and having them committed to the profession and growing through continuous professional development.

With ECCE settings becoming increasingly diverse, all practitioners in the sector need to broaden their skillsets to cater to children with a wider range of abilities and characteristics. As pointed out also by Nonis and others ⁽²⁰¹⁶⁾. Singapore should have teachers who understand that children with developmental needs have different requirements that could be academic, social or emotional. It is important to assess the suitability of applicants to the profession as well as the quality of teacher education programmes. It is also important to consider if teachers ought to be trained to work with the diverse range of learning needs that already exist in childcare centres and kindergartens, and to be clear if ECCE ought to be more inclusive in provision. This is discussed further in Chapter 2.

1.3.5 <u>Leadership capabilities</u>

The interviews revealed the significance of leadership in advancing the ECCE sector. Research has also shown the importance of competent leadership and its relation to quality ECCE provision for young children spending long hours in centre-based services.

In Singapore, ECCE leaders and their leadership practices have not been explored to an adequate degree to be understood. Not enough is known about how principals are selected, how well they are managing, what kinds of support they need to become better leaders and the challenges they face in their workplaces (Lim & Lipponen, 2018). Singapore has rather little experience of how to support ECCE leaders' professional learning, and many principals work in very tension-laden territory – to be accountable to a broad range of stakeholders, and facing increasing guality demands and profit-driven expectations of their organisations (Lim & Lipponen, 2018). In addition, they have to manage the high expectations of parents. In Singapore, ECCE teachers are not very eager to take on leadership positions because of lack of support and clarity of roles, as well as barriers within organisational cultures towards new ideas (Ebbeck, Saidon, Soh & Goh, 2014).

The interviewees suggested that Singapore should prepare and develop thoughtful ECCE leaders who are willing to dialogue with different parties to improve programmes, rather than accept the status quo. They believed centre principals should develop leadership dispositions along with a range of professional identities, and be trained with a multi-disciplinary approach to leadership – beyond possessing the technical and administrative skills of running centres. According to the interviewees, there needs to be more collaborative discussions on the type of leadership qualities that should be developed, how leaders could be cultivated and selected across the sector, and whether ECDA could work together with operators and stakeholders to foster good practices.

Leadership in the sector should be recognised and developed by professional bodies on the ground, and not necessarily led by FCDA. For instance, it would

With **ECCE** settings becoming increasingly diverse, all practitioners in the sector need to broaden their skillsets to cater to children with a wider range of abilities and characteristics.

35

1.3.5 <u>Leadership capabilities</u>

The interviews revealed the significance of leadership in advancing the ECCE sector. Research has also shown the importance of competent leadership and its relation to quality ECCE provision for young children spending

Not enough is known about how principals are selected, how well they are managing, what kinds of support they need to become better leaders and the challenges they face in their workplaces.

whether ECDA could work together with operators and stakeholders to foster good practices.

Leadership in the sector should be recognised and developed by professional bodies on the ground, and not necessarily led by ECDA. For instance, it would be good to discuss how ECDA Fellows (a programme launched in 2015) as 'pinnacle leaders' could inspire good leadership practices, support ECDA's quality initiatives and guide leadership development within the sector. In addition, exemplary professionals from the early intervention and related special educational needs fields should be considered for such pinnacle leadership positions in the sector, to promote an inclusive practice across ECCE.

To prepare senior preschool teachers to be centre leaders, an Advanced Diploma in Early Childhood Leadership (ADECL) was introduced in 2016, replacing the previous leadership Diploma. Before that, leaders were required to have a minimum of a professional Diploma in ECCE-Teaching and a Diploma in ECCE-Leadership, and some principals would have completed their academic and professional teachingcum-leadership preparation in a three-year full-time polytechnic diploma programme before turning 21 years old. In addition to official qualifications, many principals may have been selected for the position based on their teaching competencies, not because they were administrators and managers with strategic vision (Lim & Lipponen, 2018). Despite these recent moves, early childhood leadership in Singapore is still in its early phases of development towards becoming a knowledge-based profession.

The most important non-governmental leadership development initiative that was mentioned by interviewees was the 'Principal Matters' programme. It was launched in 2016 by the Lien Foundation in 35

partnership with SEED Institute, Wheelock College, the then SIM University, and Korn Ferry Hay Group. It was possibly the first known programme to target leadership development through a unique combination of self-awareness workshops, coaching sessions and an overseas study trip. The three-year initiative was designed for 150 centre leaders who are about three to eight years into their roles. ECDA has had a leadership series of targeted skills workshops created to support principals, and in 2017, it started a new Professional Development Programme (PDP) for centre leaders and lead teachers. The PDP will provide more holistic professional learning support for principals to lead their centres better in quality practices, improving both organisational and curricular leadership.

1.4 <u>Meritocracy, commercialism</u> and 'parentocracy'

To understand education in Singapore and how education is organised and distributed, one has to understand the key principles of meritocracy, commercialisation and increasingly, a phenomenon called 'parentocracy', which have consequences for how Singaporeans in general think about equality, disability and inclusion.

The Singaporean national narrative is deeply rooted in meritocracy: If you have been successful, it is because of your own attitude, determination and efforts (Tan, 2017). "Meritocracy, as the rule of merit, may be conceived in a broad sense as a practice that rewards individual merit with social rank, job positions, higher incomes, or general recognition and prestige." (Tan, 2008). While appearing to be a fair system, Singapore's meritocracy can inadvertently perpetuate inequality, because in trying to 'isolate' merit by treating people with fundamentally unequal backgrounds as superficially the same, it is actually ignoring and concealing the real advantages and disadvantages distributed unevenly to different segments of an inherently unequal society (Tan, 2008). Since Singapore's establishment as a nationstate in 1965, the notion of meritocracy has remained a key principle of governance and educational distribution (Lee, 2018; Lim; 2013; Tan, 2017), and, to a large extent, this ideology resides in the mindsets of ordinary Singaporeans as well. A meritocratic ideology could assume that individuals reap what they sow and are in complete control of their own destinies. In 21st century Singapore, socially disadvantaged young individuals may find themselves positioned for lifelong challenges within the intersections of meritocracy and a neoliberal, marketised ECCE/education sector within a largely affluent economy.

Further, a marketised ECCE industry has the tendency to focus on market competitiveness, profit generation, business expansion and shaping consumer choice through entrepreneurial innovations (Lim & Lipponen, 2018; Lim & Tan, ^{1999).} Even with larger not-for-profit anchor operators now offering about half the sector's childcare/kindergarten places, centres are still dependent on attracting healthy enrolment to cover staff remuneration and other overheads. This means that in locales without a high proportion of young families, childcare centres run by different anchor operators may need to compete for child enrolment. Full-day childcare fees now range from about \$720 before subsidies, (a cap set by the government for anchor operators) to over \$2,000 per month. As a business-driven industry, Singapore's largely privatised ECCE sector still has a significant number of providers catering to families willing to pay high fees. Research on marketisation of education services (Lloyd & Penn, 2012; Tan, 2017) argues that marketisation possibly increases inequalities among children; for example, middle-class parents are better placed to take advantage of wider availability of resources and choices.

A commercial education landscape creates a culture in which parents with more disposable income buy

VITAL VOICES FOR VITAL YEARS 2

more private supplementary tutoring for their children. Parentocracy is a system in which families' socioeconomic capital strongly affects or even determines their children's success and educational outcomes in school and society more than the children's own effort and abilities ^{(Brown, 1990; Tan, 2017).} It involves a socio-political logic that underscores parental consumer choice and free-market mechanisms as key ingredients for educational success and school improvement.

Consumer choice in parentocracy is seen in parents' freedom to pay for private tutoring and other measures such as choosing a school and transporting their child to school (Tan, 2017). Singapore's private tutoring and 'enrichment' has become the rule rather than the exception for many middle-class families (Gee, 2012). The country has a \$1.1 billion private tuition industry: Preschoolers, on average, attend two hours per week, and primary school-aged children at least three hours per week ^{(Wise, 2016).} The debate around whether early childhood education is 'preschool or prep school' remains, as some parents have reportedly taken to hiring the services of private tutors for their children as young as age three and four to 'prep' them for admissions tests for coveted places at preschools affiliated to highly selective primary and senior schools (Ang, 2014).

Some Singaporean researchers (Tan, 2017; Teo, 2018) have expressed their concern that parentocracy is edging out meritocracy. This was also noticed by some interviewees.

It is clear that the meritocratic, commercial and competitive nature of the Singaporean ECCE landscape has consequences for parents' beliefs and choices about their children's education even at a young age. Parents are not to be blamed for their choices – they act as they do because they are realistic about the society they live in. According to Tan ^{(2017),} "rather than viewing private supplementary tutoring (or choosing which schools they send their children to) as resulting



in greater educational inequalities, most parents in Singapore perceive it as a means of promoting equal opportunity and social mobility by improving their children's test scores". Inequalities are also produced by individual choices which, in turn, are part of a macrolevel process of producing inclusion and exclusion. This process exists as an unintended consequence not only within the early education system but also in society.

One participant suggested that parents need to be educated on the importance of being actively involved in their child's upbringing:

"Parents should value the early years as a critical phase in life and not just as preparation for the primary years. Equally important is home learning. How do I tear myself away from work so that I can spend meaningful time [with my child]? Many of these parents don't realise [what is] meaningful time [with my child]. I think they need support and education about good parenting."

Chapter 2 In the Margins of Singapore's Success Story: **Children from** Low-income Backgrounds and those

with Special Needs

arly childhood services are particularly important for children with diverse learning needs, whether these stem from physical, mental or sensory disabilities or from socio-economic disadvantage. Research suggests that inclusion in universal programmes may be the most effective approach for these children and their families, and that successful inclusion requires enhanced funding, low child-staff ratios, specialist staff

and well-planned pedagogies. Participants in this study were asked whether they thought there were children who have been excluded from preschool in Singapore, and if so, what they thought were the reasons for

their exclusion. The interviewees responded that, in addition to children with special needs, the group of children who are in danger of being excluded usually came from lower-income or disadvantaged families. Poverty, inequality and marginalisation in childhood can lead to serious negative multiplier effects, the economic, social and human costs of which are considerable, both for the individuals and the whole of society.

The interviewees also highlighted systemic and societal issues that may create challenges for low-income families and those with children with special needs. They believe the social system needs to continue to improve in children's access to early intervention services, to promote inclusive practices in preschools to receive children with special needs. Members of the public and educators need to remove the stigma and shame that is currently associated with disability, and move towards minimal stratification within the school system. Interviewees also mentioned the need to educate the public about the challenges facing vulnerable and low-income families.

"Children who do not have access to good home environments, or children whose development trajectories are already different from the typical – these are the kids that probably need extra intervention on top of regular preschool."

2.1 <u>Children from low-income and</u> under-served families

Singapore is often highlighted as an example of remarkable economic success, and a country that offers equal opportunities to all. However, over the last half-century, income inequality has increased in almost all developed economies, including Singapore ^{(Smith et al, 2015).} Given the harmful effects that inequality can have on political stability, social cohesion, quality of life and security, combating inequality has been announced as a national priority. President Halimah Yacob, in an address in Parliament in 2018, highlighted the need to tackle the problem, in particular the "increasingly dissimilar starting points of children from different family backgrounds".

In line with the changes in Singapore's economy and society, the advocacy for early childhood education has evolved since the 1980s, where the primary objective then was to meet childcare needs so as to recruit female labour into the workforce. According to the interviewees, the provision of quality early childhood services is now seen as a key driver to address longterm issues of inequality so that disadvantaged children can transition more smoothly into primary school. As recognised by the participants of this study, Singapore has done a lot to provide preschool opportunities, including making fees affordable even for the lowest wage-earners. Infant and childcare subsidies as well as the Kindergarten Fee Assistance Scheme (KiFAS) provides subsidies of up to 99% for the lowest income tier (household income of \$2,500 and below), meaning families pay as little as a few dollars a month in fees. Between 2016 to 2018, the total number of Singaporean children enrolled in childcare who received additional subsidies has increased by more than 30%.¹² However, those who received maximum subsidy (lowest household income tier of \$2,500 and below; or per capita income of \$625 and below) represented just about 5% of total childcare enrolments in 2018.

As of 2016, more than 90% of Singaporean children aged five to six years were enrolled in pre-schools.¹³ ECDA works with the community to reach out to children not attending preschool by age five. However, the challenge on the ground is getting children from lower-income families to attend preschool regularly. As stated in the interviews:

"While there is government provision for those from the lower-income bracket... the challenge is to have a child turn up in school."

There are various reasons why children do not attend preschool, due either to their family's circumstances or preferences. For example, there could be parents who prefer other options for their child's development such as home-schooling or specialised interventions, and there are children from disadvantaged families with complex issues.¹⁴

The government has embarked on programmes such as KidSTART to support low-income families and their children's access to good quality ECCE programmes. KidSTART, which was piloted in July 2016 in Kreta Ayer,



Bukit Merah, Taman Jurong, Boon Lay and Geylang Serai, consists of three components – Home Visitation, Supported Playgroups and Enhanced Support to Pre-schools – catering to different stages of a child's development from birth to six years old. ECDA works with key partners such as the Social Service Offices, Family Service Centres and hospitals to identify and reach out to families with infants and young children who can benefit from KidSTART. As of May 2018, over 800 children are receiving KidSTART support.¹⁵

Unlike many other developed countries, Singapore has no official poverty line. However, at least two publications in recent years have attempted to estimate how many low-income families there are in Singapore. In 2013, a paper from the Lien Centre for Social Innovation at the Singapore Management University estimated that around 110,000 to 140,000 resident households earned less than the \$1,250-\$1,500 which was at the time the average household expenditure on basic needs (AHEBN) such as food, clothing, shelter and other essentials. The paper also estimated that a figure of \$3,000 is what one needed to avoid relative poverty and possibly social exclusion (Donaldson et al, 2013). Despite the government's efforts to tackle social and economic problems, inequality and poverty in Singapore affects children. In 2018, in her book This is What Inequality Looks Like, sociologist Teo You Yenn estimated that a good 10 to 14% of Singaporeans still faced severe financial problems and had difficulties meeting basic needs.

Interviewees pointed out that children from lowerincome or disadvantaged families may run the risk of being excluded from preschool education. Social and environmental stressors may leave people with little choice; they are time-strapped (having to juggle multiple jobs or work odd hours), depressed, or incarcerated. Some caregivers do not have enough information and knowledge to support their children's learning and attendance in school, or they may have difficulty accessing social resources. Caregivers may deny, or fail to recognise, the special needs of their children. Some other interviewees, however, said that exclusion was not common, and as long as families were hardworking and responsible, their children could become successful in life. This latter response reflects the meritocratic ideology that undergirds Singapore society.

Many of the professionals interviewed in this study acknowledged that not all families and children in Singapore have an equal starting point or similar possibilities in life. There are families that can be socially and financially vulnerable, and in many cases have low educational backgrounds. It was also acknowledged that these children and families need more than just financial help. For example, the standard childcare operating times do not meet the needs of low-income parents who work irregular hours or in shifts. As pointed out in the interviews:

"Lower-income parents may not have as much time... for all this dialogue [to understand child development], because they have bread-and-butter issues."

As a small city-state with little natural resources, Singapore has had to avoid having high tax rates and a generous welfare system so as to incentivise people to work and earn their keep (Ng. 2013a). Over time, as the economy grew and the lowest earners suffered, there have been policy efforts to expand the social safety net for such a targeted group in the population, and multiple initiatives to spur community organisations to also provide further support. Inadvertently, having 'many helping hands' may have led to an undercoordinated system that many circumstantially challenged or emotionally vulnerable individuals have found difficulty in navigating. They may need somebody to show them how to access social services and to navigate a complicated referral system. These observations made by the participants of the study are in line with the ones presented in Teo's (2018) book about inequality in Singapore. Interviewees also suggested decreasing teacher-to-child ratios especially in centres with higher proportions of children from disadvantaged families or those with special needs. This allows the teacher to give more time and attention to children who need help and build positive relationships with them.

Besides the KidSTART initiative led by ECDA, another programme to target the early development of infants and toddlers from low-income families is the Temasek Cares Kids Integrated Development Service 0-3 (KIDS 0-3), supported by a multi-disciplinary team of professionals from KK Women's and Children's Hospital and AMKFSC Community Services. The programme targets children from the time they are born till age three and goes further upstream to provide expectant mothers from low-income families with appropriate preand post-natal care. In 2018, Temasek Foundation Cares launched a three-year pilot programme in selected preschools, that trains teachers on the Abecedarian Approach (AA), created in the 1960s by American psychologists. This approach emphasises language development and quality one-to-one interactions between a child and an adult to stimulate development.

In addition to the government's initiatives, groundup organisations have also made great efforts. The interviewees especially recognised the Circle of Care (CoC) programme run by Care Corner. This is an intervention care programme that combines social work, health specialist services, learning support

"Having 'many helping hands' may have led to an under-coordinated system that many circumstantially challenged or emotionally vulnerable individuals have found difficulty in navigating."

inequality is about structure, about the system and its rules, regulations and criteria.

VITAL VOICES FOR VITAL YEARS 2

48

"It is impossible, for instance. to separate children's special needs from their everyday lives and social conditions. Just trying to 'fix' or 'equip' the children with different abilities and competencies does not solve the problem of inequality."

health specialist services, learning support

and parental involvement to render help on different fronts and smoothen the transition from preschool to primary school, where the child is supported until Primary Three. Social workers play a vital role in bringing together different aspects of care to meet the needs of preschoolers. They work with educational therapists, health specialists, teachers and principals – professionals who usually work apart – together as an interdisciplinary team, which is a key feature of the model. CoC was piloted in two preschools in 2013 and has grown to 10 preschools and two primary schools. It has plans to further expand its network to have a presence in at least 30 preschools and seven primary schools by 2023.

There appears to be a slight disagreement among experts on whether targeted interventions are enough to solve the challenge of inequality, inclusion and poverty (the term 'poverty' was not used by the interviewees), or whether more fundamental societal changes are needed. As stated by Teo (2018) there is a need to understand more deeply the lives of poor families and children, because in many cases their living conditions explain why they perform poorly. People face different social conditions, and do not all have the same choices: people do not make poor choices, but rather, they have limited options (Teo, 2018). Therefore, it is crucial to listen to families' perspectives and understand what early childhood education can do to support their everyday lives. Following this line of thought, it is impossible, for instance, to separate children's special needs from their everyday lives and social conditions. Thus, just trying to 'fix' or 'equip' the children with different abilities and competencies does not solve the problem of inequality. From a sociological point of view, inequality is about structure, about the system and its rules, regulations and criteria.

2.2 Educating children with special needs

The participants of this study had a lot to say about children/persons with special needs, their educational opportunities, and their position within Singapore society. While the government maintains that every child matters, little is said about children with special needs. There have been cases where preschools turn down families saying that they cannot provide suitable services for children with special needs or disabilities (e.g. children with autism, cerebral palsy, hearing or visual impairment).

Children aged six and below with special needs typically access services provided by a patchwork of VWOs, family community services, public hospitals and private for-profit clinical services (for families who choose to pay more and not be on a waiting-list). These modes of service delivery are usually based in the home, centres or hospitals (Yeo, Neihart, Tang, Chong & Huan, 2011), and are not found within typical ECCE settings, which are generally not equipped to provide intervention.

An important part of supporting children with special needs is the government-subsidised Early Intervention Programme for Infants and Children (EIPIC), which provides developmental and therapy services for children with moderate to severe developmental needs. EIPIC services are provided through 21 centres run by 10 VWOs, where a team of professionals (early intervention teachers, therapists, psychologists, social workers) work with the child and family. The programme is run in stand-alone centres and not in preschool, which means that parents have to cope with the logistics and costs of shuttling children between these two venues. About three-guarters of children aged 5 to 6 who are enrolled in an EIPIC centre are also enrolled in preschools, according to data shared by MSF for this report. According to the interviewees, this collaboration between EIPIC centres and preschools needs to be improved.

"We have parents who will send their child to EIPIC in the morning, and they go to a mainstream kindergarten in the afternoon, for the rigour of the academic training, so that they can eventually prepare the child for mainstream primary school."

For pre-school children aged five and six with mild developmental delays or learning needs, there are now the Development Support programmes (DSP) and Learning Support programmes (LSP) provided within selected centres run by operators such as NTUC My First Skool and PAP Community Foundation (PCF) Sparkletots. These two programmes provide targeted short-term interventions lasting between six to 15 weeks and are run by trained Learning Support Educators (LS-Eds), clinical professionals and therapists. As of March 2019, there are around 550 - or about one in three – preschools offering these programmes.¹⁶ There are also 14 ECCE centres¹⁷ that offer the Integrated Child Care Programme (ICCP), created for children with mild to moderate special needs to learn alongside their mainstream peers. No intervention services are provided in ICCP although the curriculum is modified to accommodate children with special needs.

While these programmes have been introduced, there was a general acknowledgement among interviewees that with growing demand, more of such programmes and better-quality services for young children with developmental and learning problems are needed before they enter primary school. There also appears to be an urgent need to improve the availability of inclusive pedagogical support within the natural preschool setting, where early intervention can be most effective for children. It was suggested that the government develop an ecosystem of more comprehensive services and consider inclusive models similar to those found in countries like Australia and

New Zealand, which use Individual Education Plans and provide coordinators or support staff to work alongside the child's teachers, therapists and family.

An example of an inclusive preschool model in Singapore is Kindle Garden, conceived by the Lien Foundation and the non-profit Asian Women's Welfare Association (AWWA). Opened in January 2016, up to 30% of its places are reserved for children with mild to moderate needs, who receive early intervention and therapy within a natural preschool setting. In 2017, NTUC First Campus, the second-largest preschool operator in Singapore, started to grow its own in-house capabilities by building a team of psychologists and therapists to serve its My First Skool centres.¹⁸

Over the years, efforts have been made to increase the accessibility of early intervention services. The government subsidy for EIPIC has also increased, especially for lower-income households. Announced in January 2019 after the interviews for this study were completed, the Ministry of Social and Family Development (MSF) will invest around \$60 million a year – a 30% increase from the current \$45 million – to provide two new early intervention programmes (EIPIC under-2s and Development Support-Plus) and make fees for early intervention services more affordable by 30% to 70% for most income groups. For example, a family with a per capita household income of \$1,000 will pay at most \$10 a month for a child to attend the EIPIC programme, a reduction from about \$120 a month.¹⁹ In particular the DS-Plus programme will allow children who have made sufficient progress in the programmes at the EIPIC centre to transition to receiving intervention in a preschool setting. Before this, they received continued intervention at their EIPIC centre until they were ready for primary school. This allows for more mainstream preschools to be more inclusive, enabling them to cater to children with a variety of developmental needs.



The number of children diagnosed with developmental problems (autism and speech and language delay being the most common) is on the rise, due to greater awareness and testing. According to data shared by MSF for this report, an average of 1,600 children were referred to EIPIC annually from 2015 to 2017, an increase from an average of 1,200 from 2012 to 2014. The average waiting time for enrolment in an EIPIC centre was about five months in 2018, compared to the six-month waiting time in 2016. However, depending on individual centres, this could range from three months to more than a year.

As demand for early intervention continues to grow, another area of concern pointed out by interviewees is the lack of expertise and human resources, in both early intervention and regular ECCE settings. Historically, Singapore has not really emphasised the professionalisation of those working in the area of early intervention or disability, which in the long run has led to the deficiency of local specialists, requiring institutions to recruit health professionals from overseas who would need time to become familiar with the local culture, values and systems.

"There is [now] more public action and expectation to support children with special needs and social equality... SEN services [...] are lagging behind in Singapore".

> As a result, and as interviews revealed, the VWOs, which are providers of early intervention, have to compete with MOH and other health departments to hire specialists (e.g. psychologists, occupational therapists, speech therapists). In many cases the bigger organisations are more appealing, because they can pay better salaries, and have better career development structures and working conditions.

Besides therapists, there are Early Intervention teachers, whose role is to work with infants and children below the age of seven with special needs, including those with Autism Spectrum Disorder (ASD) as well as physical, sensory, intellectual or multiple disabilities.²⁰ There are about 700 early intervention professionals in EIPIC and the Development Support and Learning Support programmes, as shared by MSF for this report. They include Early Intervention teachers, Learning Support Educators, therapists and psychologists. A systemic review of early childhood and early intervention teachers' requirements, salaries and career development opportunities should be considered in order to improve parity between these two professions, which often draw from a similar manpower pool. There are no professional qualification requirements for EIPIC teachers at the point of recruitment. They are currently recruited with a minimum of GCE 'A' levels or a polytechnic diploma in any discipline, although they will subsequently receive in-house training from their VWO and there are short courses and workshops provided by the Social Service Institute. They must pursue an Advanced Diploma in Early Childhood Intervention (Special Needs) to qualify as a trained early intervention teacher. Salary scales of EIPIC teachers follow social service sector guidelines set by the National Council of Social Service (NCSS), unlike ECDA-registered early childhood professionals. For example, the FY2018 minimum salary recommended for untrained Early Intervention teachers with an early childhood Diploma is \$2,810,²¹ while basic salaries for teachers with a professional teaching Diploma range from \$2,200 to \$3,000, according to an ECDA survey in 2016.²²

The participants also identified these other areas of concern and requiring improvement:

- Lack of research on early intervention and inclusion in ECCE and schools;
- > There is much variability in the quality of EIPIC provision across the VWOs, and there are no consistent, nationally recommended curricula for early childhood intervention;
- Lack of evidence-based practice in early intervention, and consequently, child outcomes data is not often used to improve the practice of early intervention services;
- > No data collection and research database to analyse and define screening tools for disabilities better, track children's progress post-assessment through the early years until adulthood, and demonstrate cost-benefit data. The challenge is that Singapore does not have a local database to reflect the progress and results of early intervention programmes.

The interviews also revealed that there are children with special needs who are not diagnosed early and end up in primary school, where teachers are unaware of how best to support them. There have also been cases of children (with physical disabilities and typical intellectual development) who have not been accepted

Early Intervention Services for Children with Developmental Needs



ElPIC@Centre For children aged 2-6 where El professionals provide therapy or specialised intervention.

21 Centres, 3,000 Children Enrolled

EIPIC under-2s Programme for children under 2 years old. Parents or caregivers are required to be present and will be taught intervention strategies to help the child at home. Developmental Support Plus (DS-Plus) For children who have made progress under EIPIC and

ade progress Su EIPIC and Int w receive pr ntion in ou reschools. pe ch

Development Support (DS) or Learning Support (LS) Intervention programmes carried out 1-2 hours per week for children with mild developmental or learning needs, for 3-4 months.

Offered in 550, or 1 in 3 Preschools

56

Many interviewees also hoped that professionals who work in early intervention programmes could be given more credit and career opportunities. They should be recognised by, and work alongside, other professionals in care and educational settings.

"I think, rightly so, governments are actively trying to look at data, how to create a database to be able to capture and, in some ways, quantify the benefit of early intervention.

> I think this is something we are very much lagging behind. Most [evidence-based research] publications are from the US and Europe, talking about the return of a dollar investment on [child and family] outcomes... where is the local data? Can we justify the system and investment we have?"

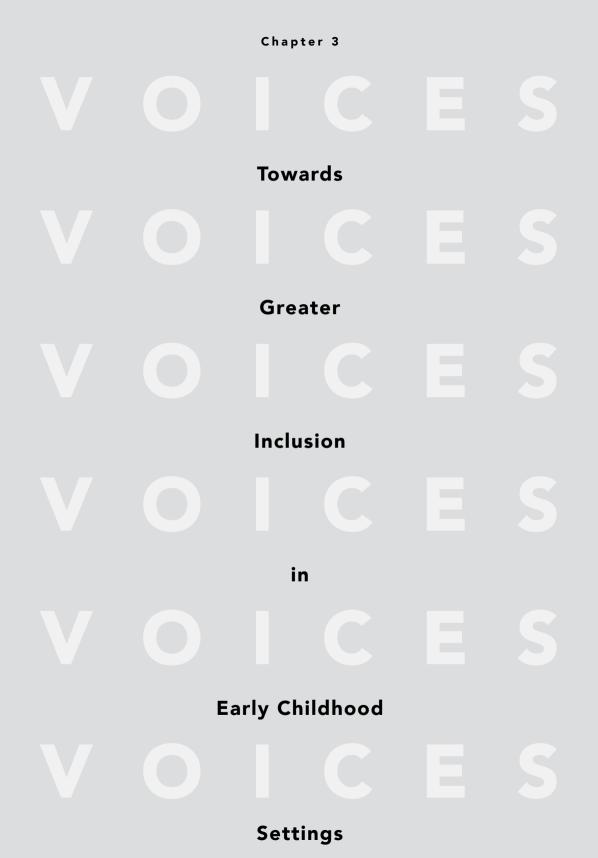
The interviews also revealed that there are children with special needs who are not diagnosed early and end up in primary school, where teachers are unaware of how best to support them. There have also been cases of children (with physical disabilities and typical intellectual development) who have not been accepted into primary schools, when the educators think they are unable to provide specific kinds of support. One of the interviewees recounted a case of a typically developing child with visual impairment (a low-incidence disability) who could not find a mainstream primary school that would admit her after she had successfully attended a mainstream kindergarten with the appropriate early intervention support from a non-profit organisation. While there are three designated mainstream secondary schools providing specialised support for students with visual impairment²³, there are no mainstream primary schools that do so. Education for primary-age children with visual impairments is offered at the Lighthouse School, formerly known as the Singapore School for the Visually Handicapped. However, its low enrolment could have a negative impact on children's social learning experience. In 2016, it admitted 11 new children and the school had a total enrolment of 55.²⁴ In 2018, the first mainstream primary school catering to children with hearing impairment was set up after the Singapore School for the Deaf had to close due to dwindling enrolment.

Research confirms observations made by the participants of this study that educating children with special needs, including those with severe developmental challenges, appears to be strongly bound to Singapore's history of having a dual school system with mainstream schools and special schools. Children entering the formal schooling system at the age of seven have to choose between 'mainstream' education, which is offered by the Ministry of Education, or 'special education' segregated special schools which are mainly provided for by charities or VWOs, and

partially supported by the National Council of Social Service and Ministry of Education (Walker & Musti-Rao, 2016).

Historically, charity organisations have been responsible for developing special schools to provide more intensive support for students with a wide range of disabilities (Lim & Nam, 2000; Poon, Musti-Rao & Wettasinghe, 2013; Walker, 2016). Consequently, the sector has become divided by disability, with each community rooting for its own 'cause' or disability group. There are 19 partially government-funded SPED schools run by 12 VWOs. Singapore is a unique example of an economically advanced country that has the resources and the vision, but needs time to create a systemic design for VWOs to complement one another's expertise and collaborate with 'mainstream settings' so as to more fully include individuals with special needs from early years through adulthood (Walker and Musti Rao, 2016). This was also acknowledged by the interviewees.

"Our [mainstream] schools can't exclude anyone if a parent wants their child to go there... If you're a parent... you have a choice between your child going to a mainstream school but they might be bullied, they can't keep up, or they don't have much support... or they can go to a special school where, in the long-term, it's not going to be the best thing... but that's the dilemma our parents are faced with."



3.1 Understanding inclusion

What does inclusion mean? This is a question that is still being grappled with in many parts of the world, without a definitive answer, and certainly no formula. It is a question that Singaporeans should also be asking themselves. In this study, participants were asked to explain how they understood 'inclusion', and whether and why they thought it was important to Singapore.

According to the interviewees, inclusion is a dynamic process, not an end, and it can be realised through education. Inclusive education was seen to be a stepping-stone towards a more inclusive society, thus expanding its scope beyond educational settings. For the study participants, inclusion is about everybody's right - a vision of a society where there will not be barriers that exclude some people from education and from participation in valued cultural activities. Inclusion is about valuing and celebrating diversity, and covers gender and ethnicity, special needs, low-income status and the elderly. Inclusion was attached with such terms as relationships, sense of hope, resilience, participation, contribution, being accepted, receiving support, and belonging. Finally, inclusion was reported to also have an economic aspect, and it can be understood in terms of human capital, requiring people from different segments crossing over. Every nation has to determine the level of inclusiveness it can afford realistically.

The interviews also revealed that there could be a deeper shared understanding between different stakeholders regarding what it means to support children with greater needs, what inclusion is about, and whether one is actually talking about integration or inclusion. In the case of Singapore, understanding the differences between integration and inclusion appears to be critical. Globally, and for more than two decades now, educationists have long distinguished

ingapore acceded to the United Nations Convention on the Rights of the Child (UNCRC) in 1995 and ratified the UN Convention on the Rights of Persons with Disability in 2013. The nation's leaders are striving to build a more inclusive education system, and a more inclusive society. To achieve these goals, different stakeholders need to build a shared understanding of what inclusion is, why it is important, and how, in practice, to achieve this worthy but elusive goal.

"If we are trying to build an inclusive society but we don't see our children with special needs in the community, people will grow up thinking this group of people doesn't exist."

Local research literature has shown that realising inclusion in Singapore requires strategic change at multiple levels. According to Walker ^{(2016),} developing an inclusive society is challenging in a country that is highly focused on educational achievement and excellence, and has a dual education system as well as people with specific mindsets, attitudes and practices.

CHAPTER 3

between the 'integration' and the 'inclusion' of children with disabilities within educational settings. In brief, integration refers to a more superficial physical placement of children with special needs during certain times of the day for certain activities, while small groups or individuals are pulled out of the main classroom community in order to for them to 'catch up' on learning pre-determined academic skills. On the other hand, a full inclusion of children with special rights is premised upon a philosophy that all children can learn to grow and learn together in non-discriminatory ways, and the education process is about having all children learn to accommodate one another, to form a collaborative learning community rather than focus on racing towards a fixed target of academic learning goals (Booth & Ainscow, 2002; Carrington, 1999; Sarromaa Hausstätter & Jahnukainen, 2014).

"Inclusion is about valuing differences, making it possible for all members of the community to contribute to learning in their own unique ways. The current approach of taking children out of classrooms to work on their individual skills does help them improve their skills, but does little to help them be included when they go back to the classroom. Inclusion is important for Singapore for long-term social stability, it benefits not just the children with special needs, but the whole cohort of children who grow up valuing and respecting differences. In order for inclusion to take place in schools, the whole society must recognise the benefits. It is not about 'helping the weaker ones', but empowering everyone to contribute in their own ways."



The participants offered several explanations for the importance of inclusion in Singapore, given the increased awareness and growing number of children diagnosed with special needs. Inclusion was considered an important value in itself, that is, a value to allow every child equal opportunities and equal access to education, as well as to offer every child with special needs a place in society. The participants also stated economic and societal reasons to advance inclusion. As stated by one interviewee:

"We need to be inclusive of everyone, not leaving people behind in policies and making sure their voices are heard and represented... It's a lofty goal, but inclusion is not letting differences hinder relationships and a sense of unity. One way is to have children with diverse needs within the same setting. The current practice has been to isolate learners by different needs... while this affords individualised care, it does not integrate segments of society – whether those with special needs, giftedness, or [are] low-income".

3.2 Changing mindsets

One of the themes that emerged from the interviews is 'changing the mindset, and changing the perceptions' on equality, disability and inclusion. Research demonstrates that changing peoples' beliefs and mindsets is not an easy process (Pintric, Marx & Boyle, 1993). Individual mindsets do not 'live' in a vacuum, but in many cases reflect societal beliefs, values and norms.

As the interviews revealed, for Singapore to be a more inclusive society, there is a need for a mindset change that is translated into policy, research and supportive resources. The change should lead to improvement of early education settings catering for all children with diverse learning needs, and building the expert pools locally, such as accrediting early intervention and special education teachers and providing them training and support in the same way that the government has been supporting the ECCE sector. There were some critics among the interviewees, concerned that key decisionmakers may not have the mindset to improve the system: The language, rhetoric, mindsets and thinking about inclusion are not consistent in expression in government communications.

An interviewee made a point that despite publicity campaigns exhorting Singaporeans to look at the abilities of those with special needs, Singapore still holds on to a traditional view of disability as defect, with a special education system that almost predetermines individuals' future according to their IQ and disability. While Singapore endorses the World Health Organisation's International Classification of Functioning, Disability and Health (ICF), the interviewee suggested that applying this classification appears limited and that there was a need to create more strength-based environments for individuals rather than reduce individuals to their medical deficits. The ICF exemplifies a biopsychosocial model of disability which defines disability as arising from a combination of factors at the physical, emotional and environmental levels, taking into consideration the environmental factors that could support or prevent an individual from attaining as high a level of health and wellbeing as possible within society.

With the way that the special education sector in Singapore has been organised by disability, we see that it remains guided by a traditional, medical view of disability that has been shaped by medical diagnosis of mental or physical inadequacy or defect. In such a paradigm, the focus is on comparing individuals to universal, normative human development milestones in ability, that is, in terms of what is lacking ^{(e.g., Carrington, 1999;} Hehir, 2002; Skrtic, 1991). This theoretical foundation has influenced educational systems, policies and practices worldwide. There has been growing recognition of how such a deficit view of human development places unfair limits on the potential of individuals with disabilities, shifts societies' attention away from respecting the strengths and dignity of all persons, prevents community-building and learning, and instead emphasises how typically developing persons should take on a charity role to help others acquire what they need.

Therefore, focusing squarely on early intervention support to children with special needs may be counterproductive towards the macro-goal of creating an inclusive society and education system. As one of the study participants stated, the crux of the issue is about the importance of visible inclusion, more than just early intervention:

"It is important to view inclusion beyond the idea of just [providing] early intervention but as a journey – this is a long-term investment. This is a life's journey [for both the individual and society]".

> For Singapore to be more inclusive, there has to be a change in the societal mindset from focusing mainly on commercialism and performance to working towards a more caring society:

"I think we need to change ourselves from a consumerist society to one that cares a little more; there is a danger that we are... a very performance-oriented society. The [society] needs to have this mindset change and believe every child actually can learn. The child needs to be respected and supported. I think it's an entire culture that needs to be cultivated to look at inclusion as a way of life." "For instance, people with so-called mild intellectual disability go to an organisation called APSN.

Then persons considered as having moderate to severe levels of intellectual disability go to MINDS. People with profound, multiple disabilities go to the Rainbow Centre, then those with autism are supported by the Autism Resource Centre.

> That's a very artificial construct... it's not productive and not beneficial to define people by their level of intellectual disability. [...] Because you [have a] moderate [disability] you end up only being in short-term workshops."

"I think something has to be done, perhaps through parent education programmes, to change the mindsets... that there is space and room for that child with special needs in our society. We need to show in practice that we accept special children, and ultimately special adults."

The [society] needs to have this mindset change and believe every child actually can learn. The child needs to be respected and supported. I think it's an entire culture that needs to be cultivated to look at inclusion as a way of life."

3.3 Parental support and education

In Singapore, it is rather common to consider disability as a personal tragedy and a private burden to bear ^{(Lim & Choo, 2002).} Some parents still neglect the special needs of their children because of shame or denial, or they do not always report the results of their child's diagnosis to schools for fear of being rejected. The interviews also revealed that there are parents of typically developing children who do not want their children interacting with those with developmental needs.

Along with professional development for teachers and other efforts to improve centre-based practices, there could also be parental education programmes informing parents and society at large that success can appear in many forms, and that human dignity is most important to preserve. This means valuing and supporting every child's potential as far as possible, that all is not lost when one's child is not high-performing or has special needs, lessening the stigma of having a child with disability and not stereotyping or limiting the definition of 'success' for persons with disabilities according to the severity of their intellectual disability ('mild', 'moderate', 'severe').

Many participants of the study brought up the challenging role of parents influenced by a marketoriented ECCE and education sector, perpetuating the status quo by paying for additional enrichment or tuition services. Interviewees felt that teachers, as professionals, should take responsibility in educating parents about supporting their child's wellbeing and adhering to what might be more developmentally appropriate for young children.

66

5

CHAPTER 3

The following quote from one interview partly captures the complexity and multidimensional nature of the challenges of inclusion and of having a child with special needs. It is not only about educating parents and changing their mindsets: parents mainly behave in accordance with the beliefs, norms and values of society. More, broader societal change is needed (in practice), if parents and children with special needs are to feel accepted as legitimate participants of society.

While government initiatives are useful to catalyse social change, societal culture can only change when individuals become more educated, reflective, selfaware and compassionate. As the interviews show, Singapore society's journey towards greater inclusivity requires critical reflection on different levels: policy, practice and individual mindsets. Every citizen has the responsibility to contribute to effecting social change towards building an inclusive society.

3.4 Shaping the future of ECCE

"The government has been promoting preschool for 'every child', and claimed that 'no child is left behind', nevertheless the definition of 'every child' is not spelt out [...] we need inclusion in early childhood centres and not just [physical] integration [of children]."

"If the teachers on the ground do not think that they can do inclusion, then they wouldn't. Or they think that inclusion is just too fuzzy or it's just too 'beyond me'. Or they need more training or someone trained to be in this school to do it. It will never happen." It is not only about changing educators' mindsets about people with disability, but also how they should be 'helped' and who is responsible for 'helping' – educators should share responsibility for the learning and development of children with greater needs, and not leave it solely to therapists.

With the nation's shift towards building a more inclusive society and ECCE settings becoming increasingly diverse, all practitioners in the sector need to broaden their skillsets to cater to children with a wider range of abilities and characteristics.

"[Singapore is] lacking the human resource and knowledge capital to realise relevant strategies [to] establish inclusive [settings]".

In particular, with a rise in the number of preschoolers diagnosed with developmental issues, there is a growing need for teachers who are trained in special needs for early childhood settings. Some interviewees suggested NIEC take the lead in offering such courses and include modules on special needs in the standardised core curriculum, so that all early childhood teachers will have the basic knowhow to screen and support children with special needs. At the moment, the Social Service Institute (SSI) and the National Institute of Education (NIE) provide professionals in the disabilities and special education sector with Continuing Education and Training (CET) programmes. These range from broad-based courses to targeted ones focusing on the skills and knowledge required to work with special needs children. In-service preschool teachers can also enrol in the subsidised NIEC Continuing Professional Development courses, such as the Specialist Diploma in Early Childhood Learning Support (SDELS), to enhance their skills in supporting children with developmental needs. ECDA seemingly has a clear idea of the importance of teachers, but perhaps it has yet to set out expectations and support for inclusive practices catering

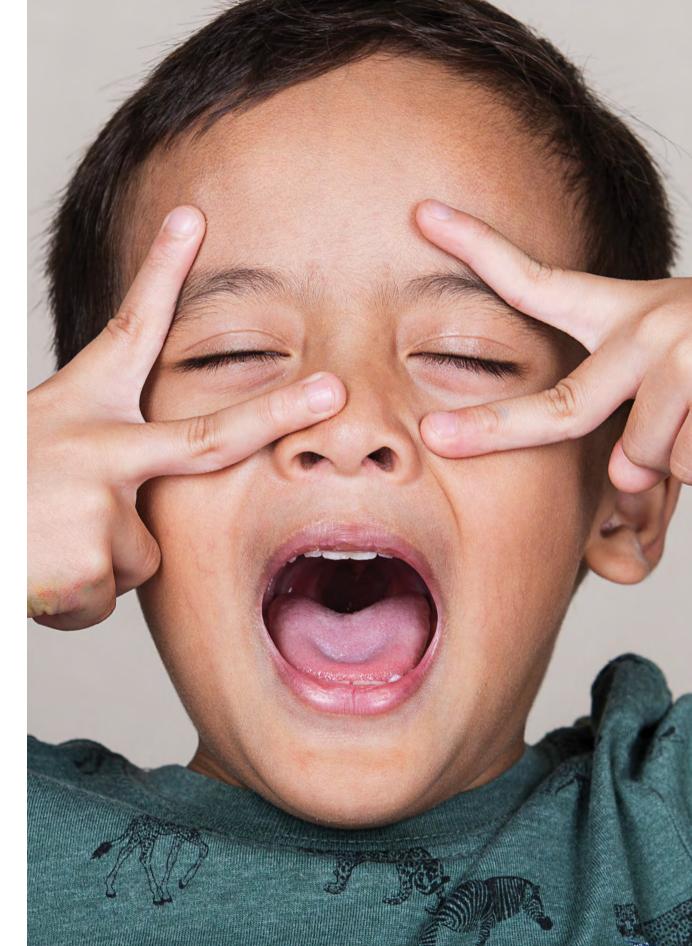
VITAL VOICES FOR VITAL YEARS 2

to children with developmental needs (e.g., assessment and referrals). Identification of special needs in children who are already in primary school – and not diagnosed yet – remains a challenge, as there is currently a long wait for the free diagnostic services offered by MOE due to the limited number of educational psychologists.

One challenge mentioned by interviewees is that smallscale ECCE centres may have difficulties supporting children with special needs because of their lack of resources, whereas the larger anchor operators have access to more government funding to hire additional support. It was also stated that ECCE centres are not sharing knowledge related to inclusion.

The participants were also asked what they thought was needed to create more inclusive early childhood settings in Singapore. Suggestions offered include:

- > Developing localised and ground-up solutions by having frequent conversations at the national and community levels, to enhance interaction and understanding between families and professionals across traditionally separate sectors of social services, education, healthcare and special education;
- Developing more community-based and comprehensive models of support for vulnerable families and children;
- Improving models of inclusive ECCE settings and classroom practices by adopting best practices and lessons from case studies of children;
- > Reviewing the current model of outsourced referrals and early intervention therapy services that are not so accessible, either because they exist apart from mainstream ECCE settings (with children commuting to a different setting for a few hours a week) or because the services are not affordable to many families or ECCE operators (for in-house provision);

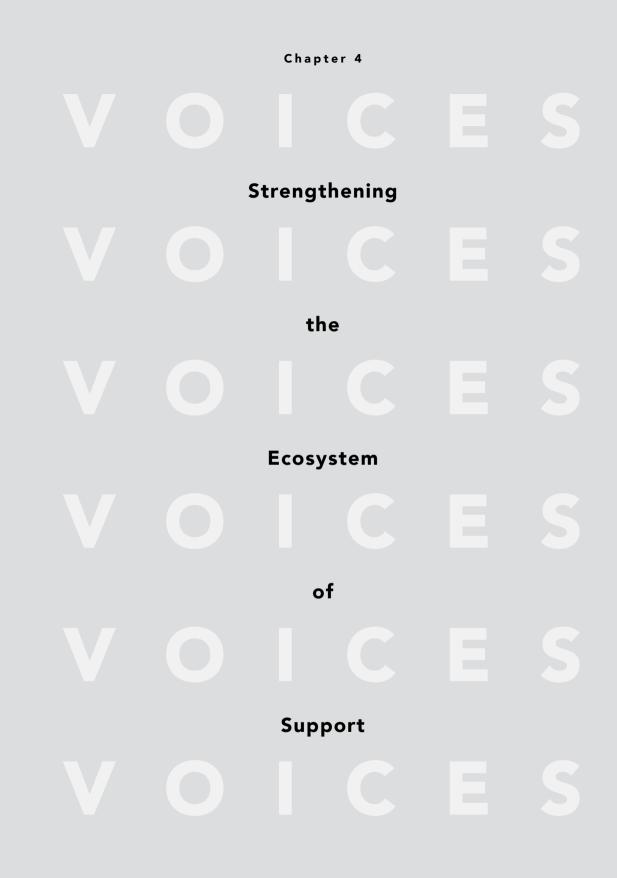


- Planning human resource development to have inclusion elements in teacher training and providing learning support educators; training more therapists, child psychologists and social workers; and addressing how to work across many professions and levels;
- Raising awareness of the characteristics of different disabilities and providing parents with educational programmes or media;
- > Government agencies taking a more active role in changing the ecosystem by reviewing funding and regulatory models to encourage community-based practices and institutional collaboration as well as supporting organisations in conducting programme evaluations; and
- > Government agencies being consistent in policy rhetoric and language use to support the growth of an inclusive culture, and to strengthen interministerial and inter-organisational coordination to support vulnerable children and families better.

In general, the interviewees see education as a way towards building an inclusive society. In Singapore, the narrative of meritocracy that uses only academic credentials to measure merit still prevails in the educational field. It is reflected in the general mindset of society. The reinforcement of the relation between academic performance and future achievements of pupils has narrowly defined learning into a focus on academic skills rather than on becoming an educated citizen who cares about bringing social change, creating social equity and other improvements in society.

In this study, the participants report that the political rhetoric and policy tools adopted to improve ECCE have even strengthened this connection between academic performance and future achievements, and may undermine initiatives that might otherwise have been committed to balancing these risks. For instance, policy tools such as the quality assurance framework SPARK are used only to control, and not to change, the pedagogical content of preschools. Political language is also inconsistent with the governmental intention of realising inclusion. Education Minister Ong Ye Kung stated that the examination PSLE was the 'most meritocratic, and probably the most fair of all imperfect systems', and 'there is no contradiction between meritocracy and fairness'.²⁵ The existing policy tools and language like this do not stimulate ECCE organisations to act differently, and public mindsets are still oriented towards competition and academic skills. For example, a recent news report pointed out that after MOE's announcement on reducing the number of exams for primary school students, tuition centres have stepped up to fill the gap felt by many parents who crave for some indicators of their children's performance.²⁶ The participants suggested having more pedagogically-grounded, play-based activities in preschools, more evidence-based programmes in caring and intervention, and more social networks to realise the values embedded in the original practices of civil society serving the ECCE sector in Singapore. Given that the Education Minister has also suggested a move away from "a narrow focus on past academic merit, to recognise and celebrate a broader range of skills, talents and strengths",²⁷ the years before formal schooling could also move towards a 'socialexperimental model' that supports new enterprises and initiatives that promote alternative perspectives of quality ECCE.

"The Prime Minister in the National Day Rally speech urged parents to let their children play. However, there is still a lot of focus amongst parents on the traditional '3Rs' [reading, writing and arithmetic] and academic outcomes take precedence over all other domains of development, like social, emotional and creative expressions. Private operators and government agencies should continue to advocate to parents the significance of inquiry and play-based learning and the long-term benefits of giving children the time and space to learn and grow at their own pace."



way of working together more closely. The current model of early intervention should be extended beyond the more medically-oriented view of children's needs. As pointed out in the interviews, early intervention is often seen as hospital- or centre-based and therapist-led, instead of being communityor family-based. Further, when making decisions, some participants in the study proposed that ECDA engage ground professionals and smaller (non-anchor operator) organisations more to:

- Find out more about the challenges faced by underresourced centres (e.g. short-term leases, high cost of leases, shortage of relief and permanent staff);
- Better clarify the purposes and intents of policy directions; and
- > Strengthen the effectiveness of ECDA Fellows as pinnacle leaders in the sector, so that quality enhancement efforts can take place more effectively across the largely privatised sector.

In the non-profit sector, several ground-up organisations have also made great efforts to develop the ECCE sector. Important stakeholders in the ecology of networks that support a child's learning that were mentioned in interviews are philanthropic organisations that have funded and initiated programmes that demonstrate new ways of addressing needs on the ground, as well as in research and advocacy. Participants also stated that ground-level organisations should work better with the government and look for new solutions. Undoubtedly, there is a need for closer collaboration between those who work in 'mainstream' early childhood education with early intervention providers.

s discussed in this report, the Singapore government has undertaken a variety of initiatives to advance the early childhood sector, to help support children with special needs and from low-income families, and, in general, to strive towards a more inclusive society.

The formation of ECDA was a major step towards creating a more harmonised ecology of education and care for children's holistic wellbeing. ECDA appears to act as a hub that connects and coordinates various actors working in the field, such as ECCE operators, associations, public education institutes, and private professional training providers. Participants remarked that, before ECDA, there was no communication and there existed more problems in a more fragmented sector in which kindergartens were regulated by the MOE and childcare centres licensed by MSF. Since ECDA was established, collaboration between kindergartens and child care centres was seen to have improved.

The interviewees pointed out that ECDA could do more to advance inclusion and early intervention for children with additional needs, even though disability services come under the purview of MSF. The government-based actors (MOE, ECDA, MSF), hospitals, early intervention providers and social service organisations need to develop a more systematic

4.1 <u>Boundaries between ECCE</u>, mainstream primary and special education

Learning and working are often defined by boundaries. A boundary can be understood as a socio-cultural difference leading to discontinuity in action or interaction ^{(Akkerman & Bakker, 2011).} As stated by Akkerman and Baker, people and organisations search for ways to connect and mobilise themselves across social and cultural practices to build continuity and avoid discontinuity. This activity – boundary crossing – is described by Katz and Shotter ⁽¹⁹⁹⁶⁾ as a "means to navigate through different languages, registers and cultural issues, as well as local worlds of meaning".

A successful transition to formal schooling, whether it is for children with or without special needs, involves crossing boundaries. According to the interviewees, co-locating preschools within primary school grounds, like most MOE kindergartens, can ease the transition to formal schooling. It is also an opportunity to foster greater understanding between preschool and primary school professionals, as well as between parents, teachers and students.

The transition from ECCE to primary schools is a major issue for parents, sometimes causing anxiety. There appears to be a need to educate parents to understand better the differences between ECCE and primary schools, and what makes a quality preschool programme, apart from just paying top dollar to prepare children for primary school.



"It is actually a continuum of experiences that a child has, as a child grows up and moves from preschool into the formal school system. So, I think it is also about enhancing parents' understanding of what is required to build a good foundation for their child such that they are ready to take on formal schooling and lifelong learning. And that cannot be interpreted just as academic readiness. Because we do know that learning is lifelong and I think the research is quite established that early childhood is about laying the foundations, the dispositions, the building of self-confidence, ability to work with others, understanding each other, and about the ability to understand the world around them".

> As stated in the interviews, MOE kindergartens also attract parents by relieving them from stressful registration to primary schools. Some interviewees fear that a competitive education system may create the pressure to start teaching academic skills at a progressively younger age at the expense of play activities that are engaging and developmentally appropriate for children's learning, in what is known as 'schoolification'. They point out that MOE kindergartens can promote exchanges with primary schools to ensure pedagogical continuity and that schoolification is not enforced. A competitive education system may create the pressure to start teaching academic skills at a progressively younger age at the expense of play activities that are engaging and developmentally appropriate for young children's learning. Some interviewees expressed their fear of schoolification in ECCE, and pointed out that there exist VWOs that have developed their own play-based pedagogies.

Interviewees pointed out the need for improved accessibility to early intervention services, and more inclusive ECCE practices to create better transitions between home, preschool and primary school for children with special needs. One challenge is that many teachers in the ECCE sector may not have the knowledge to identify children with special needs or to offer differentiated instructional support, and ECCE centres typically do not have in-house early interventionists. In some cases, children with special needs are turned down by preschools because of insufficient professional expertise or support in the classroom. In other instances, children with special needs are not diagnosed and go to primary school where teachers are not sufficiently equipped or resourced to support their learning in the classroom.

This transition to primary school, with a highlystructured learning environment, stricter school rules and larger class sizes, can already be daunting for typically developing children, let alone children with special needs. Parents and caregivers often face a dilemma when choosing between sending their child to a special education (SPED) school or a mainstream school.²⁸ A common worry among parents is that early intervention services such as EIPIC are no longer offered to children when they enter mainstream primary school. As of 2018, there are 31,000 primary and secondary school-age students with Special Educational Needs (SEN) of which 80% of them are in mainstream schools.

These students are supported mainly by Allied Educators – Learning and Behavioural Support (AED-LBS). There are about 500 AED-LBS²⁹ serving more than 180 primary and 140 secondary schools in Singapore, and the number of allied educators varies across schools. They undergo a one year, full-time foundational training programme (full-time pre-service Diploma in Special Education, DISE), the only qualification required by MOE to work with students with special needs. 2

82

In comparison, at SPED schools, there are teachers trained in special needs working alongside speech therapists, occupational therapists, physiotherapists and psychologists to support the children in their learning and development.

There is certainly a need to encourage more exchange and learning between professionals, especially teachers and therapists across the traditionally separate 'mainstream' and 'special education' boundaries, as mentioned by participants of this study.

4.2 <u>Bridging boundaries between education</u>, healthcare and social service systems

"Have a more integrated ecosystem to support all children".

The above excerpt from the interviews sums up the main challenge in supporting children's learning and wellbeing in Singapore. There appears to be an evident need to find new and more effective ways of collaborating in the field of special needs education, and for children who come from low-income families. Following Barron ⁽²⁰⁰⁶⁾ a learning ecology can be defined as "the set of contexts found in physical or virtual spaces that provide opportunities for learning. Each context is comprised of a unique configuration of activities, material resources, relationships and the interactions that emerge from them". According to Barron, a learning ecology is dynamic and subject to intervention. Its growth can be assessed, and longitudinal data should be collected.

To intentionally design activities, material resources, relationships and the interactions to build an effective 'ecology of care' is, however, challenging. The interviews revealed many problems with regard to the boundaries of education, healthcare, social service systems, as well as in policy implementation. According to the interviewees, support for children from lowerincome families and those with special needs usually cuts across the sectors of health, social and family development, and education. To make the system more integrated, child health and early intervention services

About 80% of students with special needs are in mainstream schools in Singapore.

ž

In comparison, at SPED schools, there are teachers trained in special needs working alongside speech therapists, occupational therapists, physiotherapists and psychologists to support the children in their learning and development.

"To advance ECCE and inclusion in Singapore requires new ways of collaboration and better exchange of knowledge between educational workers, medical workers and the social sector."

systems, as well as in policy implementation. According to the interviewees, support for children from lowerincome families and those with special needs usually cuts across the sectors of health, social and family development, and education. To make the system more integrated, child health and early intervention services should be a more community-centred practice.

"Specialists should move from hospital-centred to community-centred [ways] to support children with special needs."

A practical challenge seems to be the accessibility and affordability of child assessments and EIPIC programmes. The number of young children have been diagnosed with developmental problems such as autism and speech and language delays have been increasing, in part due to greater awareness and screening. In addition, EIPIC exists separately from regular childcare centres or kindergartens, and are often seen as pull-out 'therapy' for children. Such early intervention programmes for children with moderate to severe needs could be better integrated into regular preschool settings, in which children will not have to be pulled out from their regular classrooms. A communitycentred approach, where professionals move to serve children and families, can provide more effective ways of engaging children and families by breaking down barriers to access and building on local community assets and people.

Moreover, as stated in the interviews, more productive ways of crossing boundaries between professionals is needed, especially between teachers and therapists. There appears to be a contradiction nested in the interaction between professionals. The 'pecking-order', mentioned or alluded to by interviewees many times, is manifested in the ground-level practice and mentality. Teachers appear to passively rely on early intervention teachers or therapists and leave all treatment work to them. Some teachers would like to change career to become therapists because they understand therapists earn higher salaries, and they can focus on, and specialise in, supporting children with special needs. Further, there were also some concerns about the salary differences translating into a kind of 'hierarchy of professionals' and of decision-making. Below is an excerpt from an interview, demonstrating the hierarchy of professionals which may dilute the purpose of the functions of these professionals:

"But to shift to a point where teachers are in a position to [confidently support children with additional needs] is all about power, status, whether we like it or not. So, a lot of the time, there's a pecking order [...] the teachers are teachers only and then there are the therapists. Shifting or sharing of [responsibility,] removing [the barriers of] status [...] all these are barriers that need to be taken down. At the end of the day, we are all collaborating, to [provide] hope for the family of the child."

> One interviewee proposed an approach encouraging more interaction and mutual support between teachers and medical or therapy professionals. She suggested that, in some situations, teachers should lead in decision-making and initiate suggestions because they may know the child better, and teachers should share responsibility alongside therapists, and not only rely on their expertise. To do so, teachers need to be equipped with continuing professional learning and skills development.

4.3 Bridging research and practice

Interviewees mentioned the scant ECCE research in Singapore. One interviewee, in particular, felt strongly about the role of research in informing practice in special needs educational settings catering for all age groups:

"[It's] about professional accountability – applied research is just part of the day-to-day work, if you do good clinical work, you should be collecting data."

Research is about systematic data gathering and continuous professional learning; this interviewee believed that practitioners and academics alike can conduct different kinds of useful research. For a nation to continue to improve its educational endeavours, a culture of inquiry is required. There is much room for growth in ECCE research as well as the dissemination of locally-generated studies so that practitioners, academics and administrators can dialogue across their turfs and forge a united goal for local communities to keep improving their services to benefit all children. Research development and growth usually progress in tandem with a nation's development of its higher education landscape. Since the first instalment of the Vital Voices (2012) report, there has been some progress within higher educational institutions:

> The National Institute of Education (NIE), which traditionally focuses mostly on primary and secondary education, has undertaken a large-scale Singapore Kindergarten Impact Project studying the impact of teacher-child interactions on the learning and development of 1,500 five-year-olds (as they enter Kindergarten level 1) and progress through the end of Kindergarten level 2;

- > A new Centre for Research in Child Development was set up by NIE in 2017; and
- The Singapore University of Social Sciences (SUSS) introduced the nation's first full-time and part-time Bachelor of Early Childhood Education programmes. It also offers a Master's in Early Childhood Education, complementing the master's programme offered by NIE.

A quick literature search revealed just more than 80 research publications on Singapore's early childhood sector from academics' and practitioners' investigations in the last 10 years. These include journal articles, book chapters and reports that surfaced through a Google Scholar and library database search, as well as abstracts of research reports available on the NIE website. As for doctoral theses, the nation has more than 30 of these produced thus far, albeit from foreign universities, but most of these may have remained as unpublished theses and are not readily accessible to the local ECCE community.

At the practitioner level, ECDA has been encouraging the sector to engage in innovative projects and practitioner inquiry projects through the provision of small grants, with sharing of these projects being held at the annual ECDA conference. It is not known how popular these are, and the full reports are not published online for others to replicate. The Association for Early Childhood Educators Singapore (AECES), one of Singapore's oldest professional associations for ECCE practitioners, produces the Early Educators publication twice a year. This contains a varied range of practitioner reflections, action research, students' projects as well as short summaries of research.

Chapter 5 Discussion of Tensions and Recommendations

n this chapter, we will first use the idea of *tensions* as a heuristic tool to synthesise our findings on the complex landscape of Singapore's early childhood care and education. First, we will focus especially on inclusion, underserved families and special education. Second, we will apply the notion of *possibility knowledge* to orientate further actions, and to enhance transformations and the creation of new practices in the sector.

Tensions are historically accumulated structural phenomena within and between activity systems (Engeström, 2001), a moving force behind disturbances and innovations that can eventually drive the improvement of systems and organisations. We do not view tensions-within-systems in a negative light. One can think of tensions as opposing forces, pulling in different and conflicting directions because of the search for an optimal set of conditions. A good example of a tension can be found from the study: "fostering educational excellence versus offering everyone equal opportunities". One cannot have both aspects to the fullest extent, because fostering educational excellence very easily leads to a selective education system, which does not treat people equally. Tensions are not dealt with easily, because they are always deeply rooted in historical developments of the system in question: in our case, Singapore's early childhood care and education, and Singapore's education system in general.

The interviews raised a number of tensions in the ECCE sector that may hinder or catalyse progress towards a more inclusive education and society. One can presume that some of these tensions manifested in our data are not specific only to Singapore, but also occur in other highly competitive education systems and societies. A major tension characteristic of Singaporean society is "the desire to move towards an inclusive society versus keeping up with meritocracy". Having both in the fullest extent is a challenge. Participants in the study articulated the following tensions that they perceived to be manifest in Singapore's ECCE sector:

- Having a dual education system vs efforts to create more inclusive education;
- Desire to move towards inclusion vs keeping up with meritocracy;
- Pursuit of efficiency by increasing control and competition vs valuing diversity and sharing of expertise and good practices;
- > Social benefits appropriated to support disadvantaged families (helping-hands or charity model) vs recognising and alleviating their time-strapped work and lives and limited network to use the resources (enabling approach);
- Centralising teacher training programmes vs working across professional boundaries and proliferating differentiated knowhow for addressing diversity; and
- Extending the practices of mainstreaming preschools vs developing inclusive practices and pedagogies in preschools.

Recognising these tensions within Singapore's early childhood sector and making them visible through open dialogue offer opportunities for envisioning new solutions. Engeström ⁽²⁰⁰⁷⁾ highlights that structural tensions tend to be underpinned by what he calls 'stabilisation knowledge' which could oversimplify complex realities. A crude example of this would be when a society trivialises the challenges of lower-income families or children with special needs because these populations are difficult to accommodate into an existing policy or system. A productive response to structural tensions is to create 'possibility knowledge' through a collective learning process

CHAPTER 5

with those whose lives are at stake (Virkkunen & Meehan, 2013). such as centre operators, teachers, principals, other professionals, families and children. One way to do so is to use the Change Laboratory, a method from Finland where participants collaborate to create their own solutions (to transform work and organisational practices) through a process of analysing tensions, constructing new models and tools, to put them on trial. The approach has been used for teacher professional development, in schools, healthcare institutions and other businesses. Below, we list our broad recommendations, and suggest the Change Laboratory or a similar intervention method for the sector, to develop their own way forward.

Recommendations

1. <u>Develop care agreements to organise</u> p<u>athways for vulnerable children and</u> their families

> One area of focus in this report has been on those children who are disadvantaged in one way or another through their disability or socio-economic status, or both, and how to support their development, learning and general wellbeing. With the number of these children growing in Singapore, more and better organised services are needed. Most EIPIC centres provide centre-based intervention, where a team of professionals (early intervention teachers, therapists, psychologists, social workers) provides intervention as well as family support catered to the needs of each child and his family. These services often have at least a three-to-six-month waiting period and some require caregivers to be present during the child's sessions, a luxury that lower-income and multi-stressed families would not be able to afford.



Collaboration between organisations needs to be improved, and an ecosystem of support and care should be developed. One of the main challenges appears to be children and families moving between EI and ECCE centres without anyone having an overview of, and overall responsibility for, the child's 'care pathway'. This puts a heavy load on the families and also on society (Engeström, 2001). Following Engeström's idea, and to make the 'care pathway' more streamlined for vulnerable children and families, a care agreement between the parents and the different practitioners involved in a child's care could be created: to clarify the roles, responsibilities and division of labour between different stakeholders. This way, the developed care agreement might create coherence and stability in the child's and family's care and help create and navigate a pathway through the different service provider sections. For example, the Individualised Family Service Plans (IFSP) that are mandated in the United States (through its Individuals with Disabilities Education Act) function like these care agreements, where a main key coordinator is appointed and support services for the child are co-determined by the family and supporting professionals such as social workers, therapists and educators.

2. <u>Improve inter-professional collaborations</u> and co-creating solutions with service users

Civil society in Singapore has a long history in developing welfare services for the disadvantaged. It has accumulated rich expertise and motivations within a resourceful network serving diverse groups in society. However, professional learning in the new era is crucially dependent on the contributions of the clients or users. To work with children from low-income families and children with special needs, whose services appear to be fragmented between multiple providers, we suggest a 'co-configuration' way of working, where professionals with different expertise create new ways of working together through a constant process of negotiation, adaptation and learning through interactions with children and their families, who should be seen as active contributors to their own development.

Co-configuration involves crossing boundaries and requires the professionals involved to learn to create and master culturally new practices and knowledge, which may not yet exist. This form of work requires sustained periods of time; success is achieved through the collaborative efforts of every party and participant, and requires new dialogical and reflective knowledge tools as well as collaboratively constructed functional rules and infrastructures (Aarnio, Lipponen, Vahtivuori-Hänninen & Mylläri, 2014; Engeström, 2004). It could be beneficial to use the expertise and resources stored in the different organisations in the field of ECCE in developing quality services through co-configuration work. In Singapore, practical actions to advance inclusion usually cut across several sectors. For example, support for special needs usually cuts across the sectors of health, social and family development, and education. These sectors are governed by different ministries, which have their own goals, rules, ways of working and divisions of labour. Without shared goals and coordinated efforts, it is very challenging to make the multi-voiced systems work more effectively and productively together (Engeström, 2001, 2018). To improve the coordination and collaboration across organisations and sectors, and to create a denser network to serve children and families, a shared understanding of the main values and philosophy of ECCE in Singapore could be crystallised.

CHAPTER 5

3.

Have a coaching and mentoring system to support new teachers

Supporting new teachers is a well-known challenge around the world. A number of interviewees in this study talked about the critical first three years, when novice teachers are known to need a lot of support and guidance, revealing the need to find new solutions for building workforce capacity and retaining teachers in the ECCE sector. A successful induction programme within centres will reduce the risk of novice teachers guitting, and increase their commitment to the profession (Heikkinen, Jokinen & Tynjälä, 2012). Often, new teachers may find their passion challenged by a lack of ability to apply theory to practice, or resource constraints. They need support and mentoring that continues after pre-service education into the in-service stage. One solution could be to develop a mentoring and coaching system to support new teachers in the induction phase and to build a continuum between teachers' initial and in-service education. Such mentoring and coaching would need to focus on supporting new teachers' development as instructional and curricular decisionmakers as well.

For example, peer-group mentoring (PGM) is a model developed and implemented by all teacher education institutions in Finland to support new teachers in their careers, with the aim of increasing job commitment and improving occupational health. This model is implemented in small groups of four to 10 consisting of both novice teachers and their more experienced counterparts. It is also open to other professionals such as counsellors and special education teachers. The groups meet regularly about once a month to work through job-related issues, such as day-to-day challenges, through sharing of experience and practices. In the process, teachers gain new perspectives as well as strengthen their professional identity and self-confidence. The group A care agreement might create coherence and stability in the child's and family's care and help create and navigate a pathway through the different service provider sections.

activities; and

> Expanding special aids in an early childhood to lifespan model, that is, putting special needs in the broader context of the life course development of vulnerable children.

VITAL VOICES FOR VITAL YEARS 2

A successful induction programme within centres will reduce the risk of novice teachers quitting, and increase their commitment to the profession.

once a month to work through job-related issues, such as day-to-day challenges, through sharing of experience and practices. In the process, teachers gain new perspectives as well as strengthen their professional identity and self-confidence. The group

also serves as a valuable support network. While traditional mentoring involves a more senior mentor transferring 'tacit knowledge' to a younger colleague and is often one-way guidance, peer group mentoring is based on the constructivist view of learning, which suggests that people construct knowledge and meaning from their experiences. Therefore, discussion is an essential element in creating shared understanding. To implement this, a number of mentors needs to be trained in peer support to facilitate the sessions. What is also required is establishing and maintaining partnerships between teacher education facilities and the practitioner organisations. Mentors are trained in collaboration with universities' teacher education departments, continuing professional development centres and vocational teacher training institutions. With the expansion of the early intervention continuum in Singapore, a peer mentoring system should include not just preschool educators but also professionals in the early intervention field.

4. Improve pedagogies in ECCE centres

Pedagogy in ECCE centres could embrace more inclusive practices. This could be done by:

- Complementing data generated by the Quality Rating Scale with more in-depth and focused practitioner-led inquiry projects;
- Having trained special education teachers in centres to collaborate with other teachers in carrying out Individual Education Plans for specific children;
- Emphasising social-emotional learning and community building for all children;
- Implementing inclusion elements in ECCE centres' activities; and
- Expanding special aids in an early childhood to lifespan model, that is, putting special needs in the broader context of the life course development of vulnerable children.

5.

Research and evaluate programmes for children with special needs and those from lower-income families

For Singapore to continue to improve its educational endeavours, a more advanced ECCE research culture is required. The study revealed that, to date, relatively little research work has focused on special needs and inclusive education in early childhood care and education in Singapore, and preschools are not sharing knowledge related to inclusion. Most studies on this topic are conducted in primary and secondary school contexts. There is a need to improve both academic, as well as more practice-informed, research that could be undertaken by practitioners in early childhood settings. Analysing, modelling and evaluating existing practices would provide good grounds and information for assessing if scaling-up of these practices would be feasible. The National Institute of Education is collaborating with one of the childcare anchor operators, NTUC First Campus, to understand how the operator's support schemes have helped children from low-income families. This threeyear study - a first in Singapore - started this year and will track the wellbeing and learning of 100 children from low-income families, from the time they enter kindergarten all the way to Primary 1. Similarly, with a move towards providing better support for children with special needs in mainstream preschools, there is a need to document their practices and evaluate the various types of inclusion support and service delivery models, and whether programmes have achieved the desired outcomes of inclusion. In particular, outcomes of children both with and without special needs should be tracked and made public. Findings from such studies can inform key decision-makers on areas of improvement, new areas of need and even teacher training efforts.

6. <u>Strengthen the sector's image and create</u> a shared purpose of early childhood

Parents, the public and the whole of society should value the early years more as a critical phase in a child's life and not just as a preparation for the primary school years. The public should be better-informed about what quality ECCE is about, what it means to build a strong foundation for young children, and what it means to be a child in today's Singapore. Whilst ECDA regularly publishes and distributes publications such as the Grow @ Beanstalk magazine, further change can be engendered, for example through accessible parenting programmes and involving primary schools in the conversation. Efforts to increase public awareness of ECCE professionals' work and status should also continue. Teacher education institutions could take a more active role in raising public discussion about the role and importance of high-quality, play-based and inclusive ECCE for children's learning and development.

In a changing ECCE landscape, the apparent lack of a clear shared vision to guide 21st century action is a concern expressed by interviewees of this study. Policies alone will not be able to do that. To foster collaboration among different institutions and stakeholders involved in the education and care of children, a shared philosophy of the capable child and understanding of the main purpose of ECCE in Singapore could be crystallised from ground up. It should cut across the various government agencies and express what stakeholders believe about all children, childhood and how children should learn and develop. This can then be translated into institutional capacity to coordinate different players in the field, guide practice and the development of services. For instance, in the context of inclusion in early childhood and educational settings, the interviewees in this study highlighted the need to have a clearer shared vision of what inclusion means, before institutional practices can change to accommodate human diversity. Singapore's 21st century social fabric requires more than the traditional narrative of meritocracy with its focus on academic competition, and the 'many helping-hands' or 'charity' approach which could perpetuate a deficit image of children with special needs. To narrow the social gap, Singaporeans might need to move beyond dichotomous views of 'mainstream' and 'special' education to wrestle towards the ideal vision of an inclusive society with inclusive schools in ECCE settings.



Example 7 Limitations of this Study

The participants were interviewed in April, July and September 2018. The data collected were transcribed by an independent transcribing service. All transcripts were then categorised and analysed according to emergent themes. The qualitative research software NVIVO was used to conduct the analysis. The interview questions are presented in Appendix 1.

Whilst this study's interview data has provided interesting perspectives for the purpose of this study, as researchers, we are aware of the bias that is inherent in interview data that is generated from a defined number and group of participants. As far as possible, we have juxtaposed the interview data with academic literature, publicly available policy documents and media reports, so as to present a more comprehensive view of the issues that have been raised by the participants.

 \bigcirc

n my first visit to Singapore in 2013, I and my colleagues delivered a Graduate Diploma in Early Childhood Education Studies programme to future assessors of SPARK. I have since had the privilege to be involved

in education-related duties with ECCE centres, ECDA, universities, and now, Lien Foundation and *Vital Voices 2*, and all the knowledgeable people – this study's participants – who have always been willing to share expertise and knowhow.

Whether it is the economy, general living standards or education, Singapore is considered one of the most successful countries. One success factor is reliance on the 'best and brightest' citizens (Queb. 2018). Absence of natural resources is compensated for by investing heavily in education to enhance human capital. Expanding on the foundational work in Vital Voices, I hope Vital Voices 2 shows the increased, serious engagement from Singapore's government and civil society to invest further in ECCE – to raise the quality of, and access to, mainstream ECCE, and also expand the circle of care for those most vulnerable, who have not been part of Singapore's success story: children with special needs and from low-income families. From many voices in the rich picture in Vital Voices 2, my interpretation is that there exists a shared societal understanding of the need to uplift the education and lives of these two groups, and to advance inclusion. However, as reminded by Zembylas ^{(2013),} we are all vulnerable but not in the same manner. If we do not realise this, we run the danger of being a form of charity and condescension toward those systematically and institutionally oppressed. To advance the ECCE sector and especially inclusion, Vital Voices 2 offers recommendations on what to do, and suggestions of new ways of working for progress.

> As a Finn and professional in education, I find it very challenging, and also a bit unfair, to be often asked what Singapore could learn from us (we Finns could learn from Singapore too). Finland's education culture is less competitive and focused on academic performance, with research-based teacher education at university, and a culture of trust and cooperation based on professionalism. In many ways, the Finnish system is inclusive by nature: Legislation directs the system towards equality, justice of learning and the principle of inclusion. Well-organised special education and counselling attempt to mitigate socio-economic gaps. Unlike Singapore's, Finland's education practices run counter to the mainstream test-based, top-down accountability, standardisation and uniformity in education and the market economy. There is also no very strong 'investment narrative' of education, with requirements of economic impact and productivity. This gives freedom to develop the system and practices.

Education and education systems do not function in a vacuum, but are manifestations of societal values, norms and policies. One main difference is that Singapore's education system and policy have been, and are, strongly driven by meritocracy, and Finland's by democracy. Singapore's biggest challenge in becoming a truly inclusive society is meritocracy (and maybe also parentocracy, which Finland does not yet have). Having meritocracy and inclusion in the fullest is challenging. Meritocracy very likely keeps up a selective education system, in which the greatest effort is on the 'best and brightest', which also entrenches hierarchy in society. It is hard to produce true inclusion just by making small adjustments to Singapore's education system, and not changing the underlying socioeconomic structures. The critical question is how to move towards a 'social-experimental model', directing institutions and policies to support new enterprises and initiatives to develop alternative, inclusive perspectives of quality ECCE.

> The global landscape of early childhood education (and education in general) is increasingly dominated by the 'return-on-investment discourse'. However, the economic approach to education – seeing early childhood education primarily as an instrument for economic growth – is narrow and one-sided: it does not say anything about values, democracy, social justice, morality, care or empathy. We educators have a responsibility to talk more about the fundamental values and purposes of early childhood education, to feel this obligation and to put into practice, for the sake of the smallest children. I truly think Singapore is a unique country with the resources to do this, if there is the societal and political will.

Professor Lasse Lipponen University of Helsinki, Finland

02

Akkerman and Baker (2011). Boundary crossing and boundary objects. *Review* of Educational Research, 81, 132-169.

Ang, L. (2012). Vital Voices for Vital Years: A Study of Leaders' Perspectives on Improving the Early Childhood Sector in Singapore. Singapore: Lien Foundation.

Ang, L. (2014). Preschool or Prep School? Rethinking the Role of Early Years Education Volume. Contemporary Issues in Early Childhood, 15 (2).

Barab, S.A., Barnett, M., Yamagata-Lynch, L., Squire, K. & Keating, T. (2002). Using Activity Theory to Understand the Systemic Tensions Characterizing a Technology-Rich Introductory Astronomy Course. *Mind*, *Culture*, and Activity, 9, 76-107.

Barron, B. (2006). Interest and Self-Sustained Learning as Catalysts of Development: A Learning Ecology Perspective. *Human Development*, 193-224.

Bellour, F., Bartolo, P. & Kyriazopoulou, M. (eds.). (2017). Inclusive Early Childhood Education: Literature Review. Odense, Denmark.

Booth, T and Ainscow, M (2002). Index for Inclusion: developing learning and participation in school. UK: Centre for Studies on Inclusive Education. Retrieved from https://www.eenet.org. uk/resources/docs/Index%20English.pdf

Brown, P. (1990). The 'Third Wave': Education and the Ideology of Parentocracy. *British Journal of Sociology of Education*, 65-85.

Carrington, S.(1999) Inclusion needs a different school culture. *International Journal of Inclusive Education 3*(3), 257-268.

VITAL VOICES FOR VITAL YEARS 2

Chia, L. (2017, August 18). Singapore's pre-school sector: Assessing its growth amid challenges. *Channel NewsAsia*. Retrieved from https://www. channelnewsasia.com/news/singapore/ singapore-s-pre-school-sectorassessing-its-growth-amid-9134854

Donaldson, J. A., Loh, J., Mudaliar, S., Kadir, M., Biqi, W. & Keong, Y. (2013). *Measuring Poverty in Singapore: Frameworks for Consideration. Social Space*, 58-66. h?p://ink.library.smu.edu. sg/lien_research/110.

Early Childhood Development Agency (ECDA) (2015). First batch of ECDA Fellows appointed. Retrieved from https://www.ecda.gov.sg/ PressReleases/Pages/FIRST-BATCH-OF-ECDA-FELLOWS-APPOINTED.aspx

Early Childhood Development Agency (ECDA) (2017). Singapore Preschool Accreditation Framework: Quality Rating Scale. Updated edition (2017). Singapore.

Early Childhood Development Agency (ECDA) (2018a). Quarterly report statistics on child care services. Retrieved from https://www.ecda.gov. sg/Documents/Resources/Statistics_on_ child_care(STENT).pdf

Early Childhood Development Agency (ECDA) (2018b). Half of the early childhood sector now certified under the Singapore Preschool Accreditation Framework (SPARK). Retrieved from https://www.ecda.gov. sg/PressReleases/Pages/HALF-OF-THE-EARLY-CHILDHOOD-SECTOR-NOW-CERTIFIED-UNDER-THE-SINGAPORE-PRESCHOOL-ACCREDITATION-FRAMEWORK-(SPARK).aspx

Early Childhood Development Agency (ECDA) Industry Transformation Map. Retrieved from: https://www.ecda.gov. sg/Documents/ITM_7%20Mar%20 2018.pdf

Ebbeck, M., Saidon, S., Soh, S., & Soh, M. (2014). Readiness of early childhood professionals in Singapore to take on a leadership role. *Asia-Pacific Journal of Research in Early Childhood Education*, 8, 79-98.

Economist Intelligence Unit (2012). Starting well. Benchmarking early education across the world. A report from the Economist Intelligence Unit. Engeström, Y. (2001). Expansive Learning at Work: Toward an activity theoretical reconceptualization. *Journal* of Education and Work, 14, 133-156.

Engeström, Y. (2004). New forms of learning in co-configuration work. *Journal of Workplace Learning*, 16, 11-21.

Engeström, Y. (2007). From Stabilization Knowledge to Possibility Knowledge in Organizational Learning. *Management Learning* Vol. 38, 271-275

Engeström, Y. (2018). Expertise in Transition: Expansive Learning in Medical Work. Cambridge: Cambridge University Press.

Gee, C. (2012). The educational arms race: All for one, loss for all. *Institute* of *Policy Studies Working Papers, 20*. Retrieved from https://lkyspp.nus.edu. sg/docs/default-source/ips/wp-20_theeducational-arms-race-all-for-one-lossfor-all.pdf?sfvrsn=7445600a 2

Goy, P. (2017, March 23). What the new playing field for pre-school offers. *The Straits Times Singapore*. Retrieved from https://www.straitstimes.com/ singapore/what-the-new-playing-fieldfor-pre-school-offers

Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638

Heckman, J & Masterov, D. (2007). The Productivity Argument for Investing in Young Children. *Review of Agricultural Economics*, 29, 446-493.

Heikkinen, Hannu L. T., Jokinen, H. & Tynjälä, P. (2012). *Peer-group mentoring for teacher development*. New York, NY: Routledge.

Hughes, C. & Avoke, S.K. (2010). The elephant in the room: Poverty, disability, and employment. *Research & Practice* for Persons with Severe Disabilities, 35(1), pp.5-14.

Ibrahim, M. F. (2018). Senior Parliamentary Secretary for Education A/P Muhammad Faishal Ibrahim's full response at the 11 July 2018 Parliamentary motion 'Education for Our Future. https://www.moe.gov.sg/ docs/default-source/document/media/ speech/2018/sps-speech.pdf Katz, A.M. and Shotter, J. (1996), Hearing the patient's 'voice': toward a social poetics in diagnostic interviews. *Social Science & Medicine*, 43, 919-931.

Komardjaja, I. (2001). New cultural geographies of disability: Asian values and the accessibility ideal. *Social & Cultural Geography*, 2, 77-86.

Konstantopoulos, S. 2011. Teacher Effects in Early Grades? Evidence From A Randomized Experiment. *Teachers College Record* 113: 1541-1565.

Konstantopoulos, S. & Chung, V. (2011). Teacher Effects on Minority and Disadvantaged Students' Grade 4 Achievement. *The Journal of Educational Research*, 104, 73-86.

Lee, H.L. (2017 August 20). National Day Rally 2017). Retrieved from https://www.pmo.gov.sg/nationalday-rally-2017

Lee H. L. (2018 May 16). PM Lee Hsien Loong at the debate on the President's Address in Parliament. Retrieved from https://www.pmo.gov.sg/newsroom/ pm-lee-hsien-loong-debate-presidentsspeech-2018

Leong, J. (2017 August 25). Pre-school sector to remain diverse despite greater MOE influence: Ng Chee Meng. Retrieved from https:// www.channelnewsasia.com/news/ singapore/pre-school-sector-to-remaindiverse-despite-greater-moe-9154768

Lim, L. (2013) Meritocracy, elitism, and egalitarianism: a preliminary and provisional assessment of Singapore's primary education review. Asia Pacific Journal of Education, 33, 1-14.

Lim, L & Tan, J. J. (1999). The marketization of education in Singapore: prospects for inclusive education. International Journal of Inclusive Education, 3, 339-351.

Lim, L. & Choo, L. H. (2002). Disability and education in Singapore: What are our implicit theories? In A. G. Tan & L. C. Law (Eds.), *Psychology in contexts: A perspective from the South East Asian societies* (pp. 145-163). Singapore: Lingzi Media Pte Ltd.

Lim, S. & Lipponen, L. (2018). Pedagogical leadership, and conflict of motives in commercial ECEC environment. In, S. Cheeseman & R. Walker (Ed.) Pedagogies for Leading Practice. Thinking About Pedagogy in Early Childhood Education.

Lim, L., & Nam, S. S. (2000). Special education in Singapore. *The Journal of Special Education*, 34, 104-109.

Lim, L., Ross, S. & Fong, P. (2018). Commentary: Can education fix inequality in Singapore? If not, what can. https://www.smu.edu. sg/sites/default/files/smu/news_ room/20180602-CNA-Spore-Can.pdf

Lloyd, E. & Penn, H. (2012). Childcare markets: Can they deliver an equitable service? University of Bristol, UK: Policy Press.

Melhuish, E., L. Quinn, K. Hanna, K. Sylva, K., Sammons, P. Siraj-Blatchford, I. & Taggart, B. (2004). *The Effective Pre-School Provision in Northern Ireland (EPPNI) Project*. Belfast: Northern Ireland Statistics and Research Agency. http://www.oecd. org/education/school/48706107.pdf

Ministry of Education (2018a) Compulsory Education. https://www. moe.gov.sg/education/educationsystem/compulsory-education

Ministry of Finance, (2018) budget 2018. https://www.singaporebudget. gov.sg/budget_2018/home

Ministry of Finance (2019): https:// www.singaporebudget.gov.sg/ budget_2019/budget-speech/d-acaring-and-inclusive-society

Ministry of Social and Family Development (MSF) Annex A Progress of the Early Childhood Sector from 2012 to 2017. Retrieved from: https:// www.msf.gov.sg/media-room/ Documents/Annex%20A%20-%20 Progress%20of%20the%20Early%20 Childhood%20Sector%20from%20 2012%20to%202017.pdf

Ministry of Social and Family Development (2014): https://www.msf. gov.sg/policies/Strong-and-Stable-Families/Nurturing-and-Protectingthe-Young/Child-and-Student-Care-Centres-and-Services/Documents/ Statistics_on_child_careSTENT.pdf Ministry of Social and Family Development (2016). Statistics On Singaporean Children Who Have Not Attended Pre-School. https://www.msf. gov.sg/media-room/Pages/Statisticson-Singaporean-children-who-havenot-attended-pre-school.aspx 105

Ministry of Social and Family Development (2016). Prevalence of children with learning disabilities per cohort: Parliamentary response. Retrieved from https://www.msf.gov. sg/media-room/Pages/Prevalence-ofchildren-with-learning-disabilities-percohort.aspx

Ministry of Social and Family Development (2016): https://www. msf.gov.sg/media-room/Pages/Early-Intervention-Review.aspx

Ministry of Social and Family Development (infographics): https:// www.msf.gov.sg/media-room/ Documents/Infographic_Enhanced%20 Early%20Intervention.png

Ministry of Social and Family Development (2019). Enhanced early intervention: Better support for children with developmental needs. Press release. Retrieved from https:// www.msf.gov.sg/media-room/Pages/ Enhanced-Early-Intervention.aspx

Muijs, D., Aubrey, C. Harris, A. & M. Briggs, M. (2004). How do they manage? A review of the research on leadership in early childhood. *Journal* of *Early Childhood Research* 2, 157-69.

Ng, I. Y. H. (2013a). Social Welfare in Singapore: Rediscovering Poverty, Reshaping Policy. Asia Pacific Journal of Social Work and Development, 23(1), 35-47, DOI:10.1080/02185385.2 012.759319

Ng, I. Y. H. (2013b). Multistressed low-earning families in contemporary policy context: Lessons from work support recipients in Singapore. *Journal of Poverty*, 17, 86-109, doi: 1 0.1080/10875549.2012.747998

Nonis, K., Chong, W. H., Moore, D. W., Tang, H. N. & Koh, P. (2016). Pre-School Teacher's Attitudes towards Inclusion of Children with Developmental Needs in Kindergartens in Singapore. International Journal of Special Education, 31.

OECD (2015). Starting Strong IV. Monitoring quality in early childhood education and care. REFERENCES

OECD. (2018a). The Framework for Policy Action on Inclusive Growth

OECD. (2018b). A Broken Social Elevator? How to Promote Social Mobility https://www.oecd.org/social/ soc/Social-mobility-2018-Overview-MainFindings.pdf

OECD. (2015). In It Together:

Why Less Inequality Benefits All

Ong, Y. K. (2018 October 25). Meritocracy and the paradox of success. The Straits Times Singapore. Retrieved from https://www. straitstimes.com/opinion/meritocracyand-the-paradox-of-success

Paananen M., Kumpulainen, K. & Lipponen L. (2015). Quality drift within the narrative of investment in early childhood education. European Early Childhood Education Research.

Paulo, D.A., Peh, Y., & Grosse, S. (2018 October 28). Why it's still so hard to have more early childhood educators in Singapore. Channel NewsAsia Retrieved from https:// www.channelnewsasia.com/news/ cnainsider/why-still-hard-get-earlychildhood-educators-singaporepreschool-10871542

Pascal, C., Bertram, T. & Veisson, M. (eds.). (2018). Early Childhood Education and Change in Diverse Cultural Contexts. New York: Routledge

Pek-Greer, P. & Wallace, M. (2017). A Study of Childcare Teacher Retention in the Childcare Service Industry. Global Business Review 18, 71-86.

Phillips, D. & Lowenstein, A.E (2011). Early care, education, and child development. Annual Review of Psychology, 62, 483-500.

Poon, K., Musti-Rao S. & Wettasinghe, M. (2013). Special Education in Singapore: History, Trends, and Future Directions. Intervention in School and Clinic 49, 9-64.

Professional Practice Guidelines (PPG) for the Psycho-educational Assessment and Placement of Students with Special Educational Needs (2018). Published by Ministry of Education, Singapore Special Educational Needs Division.

Quah, J. S. T. (2018). Why Singapore works: five secrets of Singapore's success. Public Administration and Policy, 21, 5-21.

Sarromaa Hausstätter, R & Jahnukainen, M. (2014), From Integration to Inclusion and the Role of Special Education. In, F. Kiuppis & R. Sarromaa Haustätter (eds.) Inclusive Education Twenty Years After the Salamanca. Peter Lang, pp.119-132.

Sirai-Blatchford, I. & Manni, L. (2007). Effective leadership in the early years sector: The ELEYS study. London, UK: Institute of Education, University of London.

Skillsfuture Singapore (2016), Skills framework for early childhood care and education. Retrieved from http://www. skillsfuture.sg/skills-framework/ecce

Smith, C.J., Donaldson, J. A., Mudaliar, S., Kadir M. & Yeoh, L. (2015). A handbook on inequality, poverty and unmet social needs in Singapore. A handbook on inequality, poverty and unmet social needs in Singapore. Social Insight Research Series. 1-86. Lien Centre for Social Innovation: Research.

Straits Times (March 30, 2014). Associate Professor Jason Tan. Straits Times (December 6, 2018). Three-year study to focus on needy kids and low-income families.

Sum, C. W., Lim, S. M. & Tan, C. T. (2018. Pragmatism in policy making: influencing a largely privatised early childhood education and care sector in Singapore Pragmatism in policy making: influencing a largely privatized early childhood education and care sector in Singapore. In C. Pascal, T. Bertram, & M. Veisson (Eds). Early childhood education and change in diverse cultural contexts. Routledge.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2004). The Effective Provision of Preschool Education (EPPE) Project. Technical Paper 12: the final report. Effective Preschool Education. London: Department for Education and Skills & Institute of Education, University of London

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I. & Taggart, B. (2011). Pre-school guality and educational outcomes at age 11: Low quality has little benefit. Journal of Early Childhood Research 9, 109-124.

Taggart et al, (2015). Effective preschool, primary and secondary education project (EPPSE 3-16+): How preschool influences children and young peoples' attainment and developmental outcomes over time. Research Brief June 2015, Department of Education, UK. Retrieved from https://assets.publishing.service.gov. uk/government/uploads/system/ uploads/attachment_data/file/455670/ RB455 Effective pre-school primary and_secondary_education_project. pdf.pdf

Tan, C. (2008). Globalisation, the Singapore state and educational reforms: towards performativity. Education, Knowledge and Economy, 2.111-120.

Tan, C. T. (2017). Enhancing the quality of kindergarten education in Singapore: policies and strategies in the 21st century. International Journal of Child Care and Education Policy, 11(7). DOI 10.1186/s40723-017-0033-y.

Tan, C. (2017). Private Supplementary Tutoring and Parentocracy in Singapore. Interchange, 48, 15-329.

Tan, T. (2018 January 1). Two largest pre-school chains to raise fees. The Straits Times Singapore. Retrieved from https://www.straitstimes.com/ singapore/education/two-largest-preschool-chains-to-raise-fees

Temasek Foundation Cares (2015 October 9). Media release: Launch of first-of-its-kind Temasek CaresKIDS 0-3 Centre. Retrieved from https:// www.temasekfoundation-cares. org.sg/page/8/newsroom/mediareleases?n=27

Teng, A. (2017, November 28). Private pre-schools concerned about priority admission for MOE kindergarten children. The Straits Times Singapore. Retrieved from https://www. straitstimes.com/singapore/education/ private-preschools-concernedabout-priority-admission-for-moekindergarten

Teng, A. (2018 December 5). NTUC First Campus and NIE to track progress of pre-schoolers from lowincome families over three years. The Straits Times Singapore. Retrieved from https://www.straitstimes.com/ singapore/education/ntuc-first-campusand-nie-to-track-progress-of-preschoolers-from-low-income

Teo, Y. Y. (2018). This Is What Inequality Looks Like. Singapore: Ethos Books.

Vandell, D. L., Belsky, J., Burkhinal, M., Steinberg, L. & Vandergrift, N. (2010). Do Effects of Early Child Care Extend to Age 15 Years? Results From the NICHD Study of Early Child Care and Youth Development. Child Development, 81, 737-756.

Virkkunen, J. & Meehan, D. (2013) The Change Laboratory. A Tool for Collaborative Development of Work and Education. Rotterdam: Sense Publisher.

Walker, Z. (2016). Special Education Teacher Preparation in Singapore's Dual Education System. Teacher Education and Special Education, 39, 78-190.

Walker, C. & Musti-Rao (2016) Inclusion in High-Achieving Singapore: Challenges of Building an Inclusive Society in Policy and Practice.

Wise, A. (2016, December 12th). Behind the world's best students is a soul-crushing, billion-dollar private education industry. https:// gz.com/860356/pisa-singaporescompetitive-private-tuition-systemhelps-students-ace-the-worlds-biggesteducation-test/

Wong, M. E., Poon, K. K., Kaur, S. & Ng Z. J. (2015). Parental perspectives and challenges in inclusive education in Singapore. Asia Pacific Journal of Education, 35, 85-97.

World Bank (2018). Human Capital Index. http://www.worldbank.org/en/ publication/human-capital

Yang, C. (2017 February 21). 1,000 additional infant-care places. The Straits Times Singapore. Retrieved from https://www.straitstimes.com/ singapore/1000-additional-infant-careplaces

Yeo, L. S., Neihart, M., Tang, H. N. Chong, W. H. & Huan, V. S. (2011). An inclusion initiative in Singapore for preschool children with special needs. Asia Pacific Journal of Education, 31,143-158.

Zembylas, M. (2013). The 'Crisis of Pity' and the Radicalization of Solidarity: Toward Critical Pedagogies of Compassion. Educational Studies, 49, 504-521.

- 1 According to figures provided by Prof Ho Lai Yun, Director, Child Development Programme, Ministry of Health
- https://www.ecda.gov.sg/Operators/Pages/Statistics-n-Reports.aspx 2
- 3 https://www.singaporebudget.gov.sg/docs/default-source/budget 2019/ download/pdf/FY2019 Budget Statement.pdf
- https://www.pmo.gov.sg/national-day-rally-2017 4
- https://www.ecda.gov.sg/Parents/Pages/AOP.aspx 5
- https://www.msf.gov.sg/media-room/Pages/criteria-used-to-determinechildcare-and-preschool-subsidies.aspx
- https://www.ecda.gov.sg/documents/resources/statistics_on_child_ 7 care%28stent%29.pdf
- 8 https://www.ecda.gov.sg/sparkinfo/Pages/ListingOfCertifiedCentresByYear aspx
- 9 https://www.msf.gov.sg/media-room/Pages/Opening-And-Closing-Speeches-By-Minister-Tan-At-Second-Reading-Of-Early-Childhood-Development-Centres-Bill.aspx
- 10 https://www.msf.gov.sg/media-room/Pages/Recruiting-Pre-school-Teachers. aspx
- https://www.ecda.gov.sg/PressReleases/Pages/TRANSFORMING-THE-11 EARLY-CHILDHOOD-SECTOR-TO-GIVE-EVERY-CHILD-A--GOOD-START-IN-LIFE aspx
- 12 https://www.msf.gov.sg/media-room/Pages/Childcare-Subsidies-for-Full-Day-Childcare-and-Infant-Care.aspx
- 13 https://www.msf.gov.sg/media-room/Pages/Statistics-on-Singaporeanchildren-who-have-not-attended-pre-school.aspx
- 14 https://www.msf.gov.sg/media-room/Pages/Statistics-on-Singaporeanchildren-who-have-not-attended-pre-school.aspx
- 15 https://www.ecda.gov.sg/Parents/Pages/KidSTART.aspx
- https://sprs.parl.gov.sg/search/sprs3topic?reportid=budget-1148 16
- 17 https://www.sgenable.sg/uploads/iccp%20service%20matrix.pdf
- 18 https://www.ntucfirstcampus.com/AR2017/home/?lang=en
- https://www.msf.gov.sg/media-room/Documents/Annexes%20and%20 19 supplementary%20FAQs.pdf40
- https://www.ncss.gov.sg/Social-Service-Tribe/CareersDetail/education 20
- 21 https://www.ncss.gov.sg/NCSS/media/NCSS_SMD/Salary%20Guidelines/ FY2018_SocialServiceSector_SalaryGuidelines.pdf
- 22 https://www.msf.gov.sg/media-room/Pages/Recruiting-Pre-school-Teachers. aspx
- 23 https://www.moe.gov.sg/education/special-education/mainstream-schools
- 24 Lighthouse Annual Report 2016 https://savh.org.sg/wp-content/ uploads/2016/10/Lighthouse-School-Annual-Report-2016.pdf
- https://www.todayonline.com/commentary/broad-agreement-meritocracy-25 and-inequality-key-developing-better-education-system
- https://www.todayonline.com/big-read/big-read-no-exams-no-problem-26 tuition-centres-rush-fill-gap-soothe-parents-anxiety
- Ong, Y. K. (2018 October 25). Meritocracy and the paradox of success. The 27 Straits Times Singapore. https://www.straitstimes.com/opinion/meritocracyand-the-paradox-of-success
- https://www.moe.gov.sg/docs/default-source/document/media/ 28 speech/2018/sps-speech.pdf
- https://www.channelnewsasia.com/news/singapore/more-support-for-allied-29 educators-help-special-needs-students-10053202

10

VITAL VOICES FOR VITAL YEARS

- **Interview** questions
- > How would you describe the current state of the early years sector in Singapore?
- > If you think back to when the first edition of *Vital Voices* was launched, how has Singapore's ECCE developed over the last six years?
- > Which of the recent initiatives (government, private or other) do you think have impacted on Singapore's ECCE the most? Why that/those? How have they impacted?
- > What do you think are the most important areas in which Singapore's ECCE still needs to improve? Why?
- > Which in your view are the most important institutions and organisations in Singapore that are working to improve ECCE? What are they doing? Do they collaborate, and if so, how?
- > Some policy documents have raised inclusion as an important goal for Singapore. How do you understand inclusion and is it important for Singapore, in your opinion?
- > Do you think there are children who are excluded from ECCE in Singapore?
- > What do you think needs to happen in Singapore to create more inclusive early childhood settings?
- > Is there something else that you would like to add that you feel is important to raise in the forthcoming Vital Voices report?



108

Appendix

