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Policy Digest 2017

CEO's Foreword

Yayasan MENDAKI first published our annual Policy Digest in 2001, with the conscious aim to establish open narratives on education and social issues in the Malay/Muslim community. Every year since, the publication encapsulates the voice of the community against the backdrop of national narratives illustrated in the policy scanning. Collectively, Policy Digest has witnessed the engendering of the culture of knowledge sharing in the community, and how we have continuously flourished together as a single robust unit contributing to the wider social fabric.

This year marks MENDAKI's thirty-fifth year as a community institution in pursuit of a Community of Excellence. Throughout our journey together with our community stakeholders, MENDAKI has strived to highlight the pertinent issues in the community, as well as carving a trajectory for continuous discussions on the positioning of the community in the wider society. This year, with the strategic shift towards bolstering Early Childhood Education in the national consciousness as well as in the Malay/Muslim community's mindshare, Policy Digest 2017 aims to facilitate conversations on **"Equipping our Children to be Future-Ready: Multiple Perspectives on Early Learning"**.

MENDAKI has always recognised the impact of upstream initiatives. MENDAKI continues to reinforce and deepen our pre-school efforts by having its tenets emplaced as our first organisation's strategic pillar, *School Ready*. As our first key thrust, it supports and sets forth the continuum of our journey together with Malay/Muslim families in Education – *Perform in School* to *Future Ready*. I believe our community has rich resources that would value add to the national conversations; we elevated our knowledge-sharing platform between pre-school practitioners and parents through MENDAKI's inaugural Education Symposium. The resulting Education Symposium Compendium is also a complementary artefact that manifests the pre-school leitmotif of the community this year. I hope that Policy Digest continues to be an attestation to MENDAKI's dedication in advocating the pre-school journey with the community.

Finally, I would like to take this opportunity to express my appreciation to all contributors, especially our local academia, and practitioners for dedicating their time, knowledge, and commitment to the discussions framed in the publication. I hope MENDAKI Policy Digest would continue to serve as a useful community and national reference for reflection upon the community's ongoing efforts in being part of nation building.

Rahayu Buang
Chief Executive Officer
Yayasan MENDAKI

Editor's Note

2017 may be the year for Singapore's early childhood sector with a renewed focus by the government in preparing our young for the future economy. In his National Day Rally speech in August, Prime Minister Lee Hsien Loong touched on three key areas, with early childhood given much attention. Earlier in April 2017, in conjunction with her 35th anniversary, Yayasan MENDAKI organised the inaugural MENDAKI Education Symposium themed Nurturing Young Learners Towards a Future-Ready Generation. The focus is on our growing emphasis on early learners, bringing together early childhood policy makers, academicians, practitioners as well as parents.

Therefore, Policy Digest 2017 explores early childhood issues from the perspectives of members of the community itself; demonstrating how our community has assembled our resources to ensure our children gets the quality head-start they deserve. We must believe that all children are capable of great things, and usually the limitations on what children are able to do are the limitations of the adults who serve them and the systems in which the children and adults are embedded.

It is with much hope that from the narratives shared by our contributors, they will engender thoughts and actions on how together we may define a new age of early learning that may shape future generations with digital mindsets and values critical for the known future disruptions, as well as the unknown. To build the education system that the 21st Century demands, we (school, community, and parents) have to continuously work together in new and different ways to look at how we can continue to build a holistic support system for all students, including for the disadvantaged students for their future success.

I would like to thank our guest co-editors: Dr Intan Azura, Member of Parliament (MP) for Ang Mo Kio GRC (Jalan Kayu); and Dr Hanin Hussain, Early Childhood and Special Needs Education Department of NIE, for their patience and commitment in working towards the production of this publication. Special thanks also goes to all contributors for this Policy Digest especially to the external writers, Assoc Prof Muhammad Faishal Ibrahim; Senior Parliamentary Secretary, Ministry of Education, Ministry of Social and Family Development; Ms Shaireen Marchant, Doctoral Researcher, University of Warwick; and Ms Lydia Yanti, Executive Principal, Mosque Based Kindergarten Head Quarters.

Last but not least, from MENDAKI, I would like to express my appreciation to Chairman Dr Yaacob Ibrahim, for his vision for the organisation and the community and CEO Madam Rahayu Buang, for the advice and support in the publication of this digest.

Aidaroyani Adam
Editor

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Section I

Equipping our Children to be Future-Ready: Multiple Perspectives on Early Learning

Equipping our Children for Life: A Commentary

By Associate Professor Dr Muhammad Faishal Ibrahim

Abstract

There has been growing attention on early childhood development for children in Singapore. The government has been playing a larger role and making big, broad moves over the past years to uplift the quality and improve the accessibility and affordability of early childhood services and programmes. More parents also recognise the importance of early childhood, and more are joining the sector. But as an old African proverb saying goes, it takes a village to raise a child. This commentary will: (i) revisit studies that demonstrate the importance of early childhood development and quality parent-child interactions and relationships; (ii) highlight key moves the Government has made over the last 5 years and will make over the next 5 years; (iii) the role that parents play in children's development; and finally, (iv) the role that society play in children's development.

Introduction

There has been growing attention on early childhood (EC) development for children in Singapore. The government has been playing a larger role and making big, broad moves over the past years to uplift the quality and improve the accessibility and affordability of EC services and programmes for children of ages two months to below seven years. These moves have been made in consultation with the ground and via many stakeholder engagements.

Many from the Malay community also join the sector as EC educators. Compared to the past where Malay parents did not see this as vital, more recognise the importance of EC development and send their children to pre-school.

This paper will explain the significance of the early years, and the moves that the government have been making over the past years. Then, it will mention why parents and the community play a crucial role in our children's development, well-being and future successes.

The Significance of Early Childhood Development

Early years are critical period for brain development

Brain research shows that the early years is a critical period in children's brain development. More than 1 million new neural connections are formed every second in the first few years of the child's life,[1] and 80 percent of the brain is developed by the age of three.[2] The simple neuron connections made in the early years form the basic brain architecture.[3] More complex connections are then built on top of the earlier, simpler neuron connections.[4] Therefore, it is important that these earlier, simple connections establish a strong foundation for later, more complex developments such as learning, behaviour and even health.[5]

Relationships and interactions are key to a child's development

Scientists found that a child's brain develops in the presence of an external stimuli, and that key to the developmental process is the "serve and return" interaction between children and their parents, and/or other caregivers in the family or community.[6] When an adult repeatedly and appropriately responds to a child's needs and signals and does so repeatedly, it builds and strengthens the neuron connections that form the brain architecture, especially those that support the development of communication and social skills.[7]

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[1]Centre on the Developing Child at Harvard University. (2007). *InBrief: The Science of Early Childhood Development.* Retrieved from https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

[2]Gilmore JH, Lin W, Prasatwa MW, et al. Regional gray matter growth, sexual dimorphism, and cerebral asymmetry in the neonatal brain. *Journal of Neuroscience.* 2007; 27(6): 1255-1260.

[3]Center on the Developing Child at Harvard University. (2017). *Brain Architecture.* Retrieved from https://developingchild.harvard.edu/science/key-concepts/brain-architecture/

[4]Centre on the Developing Child at Harvard University. (2007). *InBrief: The Science of Early Childhood Development.* Retrieved from https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

[5]Center on the Developing Child at Harvard University. (2017). *Brain Architecture.* Retrieved from https://developingchild.harvard.edu/science/key-concepts/brain-architecture/

[6]National Scientific Council on the Developing Child. (2004). *Young children develop in an environment of relationships. Working Paper No. 1.* Retrieved from http://www.developingchild.net

[7]Center on the Developing Child at Harvard University. (2017). *Key Concepts: Serve and Return.* Retrieved from https://developingchild.harvard.edu/science/key-concepts/serve-and-return/

Researchers have also pointed to the importance of having nurturing and stable relationships for developing children's emotional well-being and social competence.[8] Children with secure attachments during their early years tend to be more confident, resilient, have better self-regulation, and form better relationships with others.[9] Researchers have found links between these important qualities and positive future life outcomes such as academic achievements, better health, higher income, lesser financial struggles, and few criminal convictions.[10] In fact, social competence and emotional well-being provide a strong foundation for emerging cognitive abilities. Together, they are the building blocks that comprise the foundation of human development.[11]

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Attendance in quality pre-schools can have long term, positive impact on our children's lives
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Attendance in quality pre-schools can have long term, positive impact on our children's lives. One of the most renowned example is the Abecedarian Project,[12] where 111 infants born between 1972 and 1977 were randomly assigned to either the early education intervention group or the control group. Those in the early intervention group received high-quality, full-time educational intervention in a child care setting up to the age of five. Interventions focused on social, emotional and cognitive development, with an emphasis on language. Follow-up studies conducted at ages 12, 15, 21, 30 and 35 found that children in the intervention group had higher IQ scores, better grade retention, more likely to attend a four-year college or university and hold a bachelor's degree, and more likely to hold a job and have better physical and mental health.

But children from low-income and vulnerable families face greater challenges in development. They may experience trauma and persistent stress, such as physical or emotional abuse, caregiver substance abuse or mental illness, exposure to violence or poverty. Children who face such trauma and persistent stress and who are without adequate adult support are likely to suffer from disrupted development of the brain architecture and other organ systems.[13] This can lead to discrepancies in learning and behaviour with peers and increase the risk for stress-related disease and cognitive damage which last through to their adult years.[14]

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[8]Centre on the Developing Child at Harvard University. (2007). *InBrief: The Science of Early Childhood Development*. Retrieved from https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

[9] Malekpour, M. (2007). Effects of Attachment on Early and Later Development. *The British Journal Of Development Disabilities, 53*(105), 81-95. http://dx.doi.org/10.1179/096979507799103360

[10] Darling-Churchill, K., & Lippman, L. (2016). Early childhood social and emotional development: Advancing the field of measurement. *Journal Of Applied Developmental Psychology, 45*, 1-7. Retrieved from http://dx.doi.org/10.1016/j.appdev.2016.02.002

[11] Centre on the Developing Child at Harvard University. (2007). I*nBrief: The Science of Early Childhood Development*. Retrieved from https://developingchild.harvard.edu/resources/inbrief-science-of-ecd/

[12] The Carolina Abecedarian Project. (2017). *Groundbreaking Follow-Up Studies Abecedarian Project*. Retrieved from http://abc.fpg.unc.edu/groundbreaking-follow-studies [Accessed 30 Nov 2017]

[13] Center on the Developing Child at Harvard University. (2017). *Toxic Stress*. Retrieved from https://developingchild.harvard.edu/science/key-concepts/toxic-stress/

[14] Ibid.

Recognising the Significance of Early Childhood Development in Singapore

In 2012, Prime Minister (PM) Lee acknowledged in his National Day Rally Speech the significance of early years for children's development. He shared the government's plans to substantially invest in the EC sector to nurture the next generation of Singaporeans and foster social mobility:

> We now know how important the early years are for children's development. The brain is most receptive to learning certain things at that age especially languages, sounds, grammar, and pronunciation. It is an age where kids can gain confidence and curiosity about the world around them…Our objective is to level up all our students and make a positive difference to their development especially the students from the disadvantaged homes. So the government will invest substantial resources in pre-school education and play a more active role. First of all, we will establish a new statutory board to oversee pre-school education.[15]

The EC sector is also crucial for supporting parenthood and employment. It is common for both parents to work. Dual-income families have increased from 47.1 percent in 2010 to 53.8 percent in 2015.[16] Correspondingly, demand for full-day EC services have been increasing. Enrolment in full-day EC services increased by close to 50 percent, from 66,193 in 2010 to 99,175 in 2015.[17] With more dual-income families, pre-schools are an important partner in the parenting journey by caring and contributing to the formative windows of the children's development.

"With more dual-income families, pre-schools are an important partner in the parenting journey by caring and contributing to the formative windows

One major government move in 2012 was to establish the Early Childhood Development Agency (ECDA) as the regulatory and developmental authority for the EC sector in Singapore and to oversee key aspects of children's development below the age of 7 across both kindergartens and child care centres.

[15] Prime Minister's Office, Singapore. (2012). *Prime Minister Lee Hsien Loong's National Day Rally 2012 Speech (English).* Retrieved from http://www.pmo.gov.sg/newsroom/prime-minister-lee-hsien-loongs-national-day-rally-2012-speech-english
[16] Department of Statistics, Singapore. (2015). *General Household Survey 2015.*
[17] Department of Statistics, Singapore. (2015). *Yearbook of Statistics 2015.*

Significant State Investment in the Early Childhood Sector to Ensure Quality, Accessible and Affordable Services and Programmes

ECDA's vision is for every child to have a good start. The Government believes that all children in Singapore, regardless of background, deserve a positive early childhood experience through quality care and education, which nurtures holistic development and builds a strong foundation by instilling a love for learning. To achieve this, heavy investments have been made to improve the quality, accessibility and affordability (QAA) of EC services and programmes. Government expenditure for the EC sector was S$360 million in 2012, which more than doubled to S$840 million in 2017.

Progress made through QAA strategies over the last five years

Since 2012, full-day places have increased by almost 50,000 (50 percent), especially in estates with more young families like Punggol and Sengkang, making pre-school more accessible than before.

To keep quality EC programmes affordable, government-funded Anchor Operators (AOPs) and Partner Operators (POPs) are required to charge affordable fees and have fee caps. Median child care fees fell for the first time in over a decade from $900 to $856 in 2016 and has maintained around that level since. The means-tested subsidies were also enhanced in 2013 and 2015 for child care and kindergarten respectively. This has enabled around 45,000 families to benefit—doubling that of the 17,000 families in 2012.

Today, 40 percent of the pre-schools in the sector are SPARK (Singapore Pre-school Accreditation Framework) accredited, which is a significant improvement from 10 percent in 2012. SPARK sets benchmarks to ensure quality, excellence and continual improvements in education for our young children, and recognises centres that have implemented sound processes and frameworks to deliver quality EC programmes.

Teachers are at the heart of quality pre-schools. Ensuring that there are teachers well-equipped for their roles and supported in their delivery of quality child outcomes are key. To this end, ECDA has rolled out a range of initiatives to attract, retain and develop our pre-school teachers at each stage of their careers. For example, ECDA raised the minimum qualifications for pre-school teachers teaching at kindergarten levels to at least an Early Childhood Diploma. ECDA also places great emphasis on teachers' ongoing professional development and has worked with various agencies to develop many Continuing Professional Development opportunities for teachers to deepen their skills and enhance their capabilities. In October 2016, ECDA launched a comprehensive Early Childhood Manpower Plan to provide professional development opportunities for early childhood educators, a more supportive working environment, and greater respect and recognition for our educators. In tandem, ECDA introduced the Skills Framework for Early Childhood Care and Education to help teachers make informed choices on career development and skills upgrading. Pre-school teachers can identify relevant programmes to acquire new skills and upgrade existing ones or develop expertise. Anecdotal feedback we have received from the sector has been positive.

For children from low-income families who need additional support, ECDA is making special effort to level up opportunities for all through the KidSTART pilot programme since July 2016.[18] This programme goes beyond simply providing quality, accessible and affordable pre-schools. It ensures that all children, regardless of family situations, have access to basic health, learning and developmental opportunities in the critical early years. Under KidSTART, ECDA will provide new forms of support for child development, coordinate and strengthen holistic services for families where needed, and monitor the developmental progress of children from birth onwards. The three-year pilot is expected to benefit about 1,000 children living in the pilot regions of Kreta Ayer/Bukit Merah, Tamna Jurong/Boon Lay, and Geylang Serai.

Key moves to further transform the early childhood sector over the next five years
This year, plans for the EC sector took centre stage in Prime Minister Lee's National Day Rally Speech,[19] and three initiatives for the EC sector over the next five years were outlined:

First, the government will significantly expand the provision of full-day places, with greater access to the early years and Mother Tongue languages. The government will provide an additional 40,000 new full-day places over the next five years, where most new centres will be pre-built in upcoming Housing and Development Board's (HDB) developments, enabling them to be operational earlier.

This move will also address the growing demand for places for the early years, ages zero to four. AOP centres that specially cater to the early years will be called Early Years Centres, and will partner nearby Ministry of Education (MOE) Kindergartens where a place will be reserved for the child attending Early Years Centres when he reaches five and six.

Second, to further raise the pre-school education standards for ages five to six, MOE will increase the number of MOE Kindergartens to 50 over the next five years. MOE Kindergartens provide the three official Mother Tongue Languages as well as full-day care option. This would help to influence and uplift the quality of the entire EC sector.

Third, the Government aims to transform the EC profession by uplifting and providing meaningful and rewarding careers for our EC teachers. Only by doing so can we continue to attract good EC educators. Thus, the government's landmark move to set up a new centralised institute called, the National Institute of Early Childhood Development (NIEC). The NIEC will uplift the quality of teaching and strengthen the national early childhood ecosystem. NIEC will have the scale to develop curricula and do research, build up expertise in specialised areas (such as music, art and mother tongue languages), and allow for structured professional development and training opportunities. Students will also have ample training support at NIEC, and enjoy a strong start to their career. There

[18] Early Childhood Development Agency, Singapore. (2017). *KidSTART*. Retrieved from https:www.ecda.gov.sg/Parents/Pages/KidSTART.aspx.
[19] Prime Minister's Office, Singapore. (2017). *National Day Rally 2017*. Retrieved from http://www.pmo.gov.sg/national-day-rally-2017.

> **The NIEC will uplift the quality of teaching and strengthen the national early childhood ecosystem**

will be more diverse job opportunities, more opportunities for progression, and with more competitive salaries.

In summary, the government has been making big structural moves to uplift the quality and provide accessible and affordable EC services for the growing number of young families in their marriage and parenthood journey. These are necessary but insufficient without parents' commitment in their children's development journey.

The Role Parents Play in Children's Early Development

Parents are ultimately children's first and best teachers. A parent-child relationship is the first relationship an infant experiences.[20] It sets the norm for relationships, example of how to behave and contributes to an infant's emerging identity. An infant learns from these early relationships and emulate these behaviours as he develops. Thus, the quality and timing of early relationships and emotional attachments do significantly influence the quality of later development and relationships the child forms with others.[21]

Studies have shown that secure attachments and nurturing relationships between parents and children provide emotional security for their child and reduce behavioural problems. For example, a longitudinal study that tracked 544 infants' development found that children with more sensitive mothers were less likely to experience executive function problems (including problems with attention, focus, and impulse control) when they were four years old.[22] Emotionally secure children were also found to be more cooperative, independent, and confident in learning and exploring their environment.[23]

There are two basic goals that parents must cultivate with their children: (1) establish a sense of basic trust, so that children know that their parent will be there when the he or she needs him or her; and (2) allow emotional regulation, that is, "the expression of feelings, along with the underlying physiological patterning."[24] Parents can achieve this by being warm and responsive to their young children, and to hold regular interactions with them. At home, my wife and I have developed strong bonds with our children since they were born. Although both of us work, we make efforts to keep our lives relevant to the lives of our children. I observe that our relationships with our children change in the different phases of their lives, from a parent-child relationship in their early years to a partnership or friendship today. Above all, I feel that we need to develop deep trust with the children. It deepens as

[20] Malekpour, M. (2007). Effects of Attachment on Early and Later Development. *The British Journal Of Development Disabilities, 53*(105), 81-95. Retrieved from http://dx.doi.org/10.1179/096979507799103360
[21] Ibid.
[22] Kok, R., Lucassen, N., Bakermans-Kranenburg, M., van Ijzendoorn, M., Ghassabian, A., & Roza, S. et al. (2017). *Parenting, corpus callosum, and executive function in preschool children. Taylor & Francis.* Retrieved from http://dx.doi.org/10.1080/09297049.2013.832741
[23] Malekpour, M. (2007). Effects of Attachment on Early and Later Development. *The British Journal Of Development Disabilities, 53*(105), 81-95. Retrieved from http://dx.doi.org/10.1179/096979507799103360
[24] Ibid.

we interact and partner with our children when incidents occur or when decisions need to be made. We give our children the opportunity to express how they feel and what they hope to achieve. We also share our feelings and views on the issues at hand. While it may need more guidance in the early years, it will become a norm as they grow older and the family matures. This helps every party to develop their confidence in expressing their views and to respect each other's views. This has certainly helped to enhance the cohesiveness of the family and the development of our children.

Besides the home, parents also have a role in and impact on their children's development and outcomes in pre-schools. Research have found that centre-parent partnership supports positive child development outcomes.[25] It enhances a child's school readiness and social skills, reduces child behavioural problems, and promotes success in academic and non-academic areas.

Sometimes I hear Malay/Muslim parents share that "it is too early to send our children to pre-school". Such a statement comes from the parent's love for their children, in wanting the children to have more attention from their parents and grandparents at home. Some parents believe it is better for their child to stay at home, especially when there is a parent or grandparent looking after the child. While a loving, nurturing and stimulating home environment is important for children's learning and development, pre-school participation does positively influence children's learning and development. It is more than just cognitive development and preparing them for primary school. Pre-school participation is also about developing their socioemotional skills—how to relate to others and socialise with friends of a different culture and race, and to learn self-regulation skills. I would like to encourage parents to send your children to pre-schools, and to do so early. For families who do have child care arrangements, opt for a half-day programme so that your child can maximise the benefits from both the pre-school experience and familial bonding.

[25] Graue, E. *et al.* (2004). More than Teacher Directed or Child Initiated: Preschool Curriculum Type, Parent Involvement, and Children's Outcomes in the Child-Parent Centres. *Education Policy Analysis Archives, (12)*72.

The Role of Society in Children's Development

Parents do not raise their children alone. They rely on their social networks for advice and parenting information, turn to them for support, or when they need someone to look after their child while they are busy or away. These social networks and support[26] [27] and access to community resources—such as health and social services, education, parenting information—directly or indirectly influence their parenting and interaction with their children. This in turn affects the children's development, health,[28] and behaviours. Parents with strong and supportive social networks are more likely to see their children also develop positive social relationships with peers and other adults, which improves their children's development.[29]

Furthermore, a growing body of research have demonstrated a link between social capital—whereby young children and youths feel supported, safe and can trust those around them—and the likelihood of succeeding academically.[30] [31] [32] This is because social capital builds up children's resilience, which has been found to be a critical predictor of future successes.

Community players—such as the health and social service agencies, private and not-for-profit organisations, pre-schools and community organisations—are responsible for making community resources more accessible to our families, and for the building of positive relationships and strong networks with the children and their families, so that an encouraging environment for the children's growth and learning is established.

Companies too have an important role to play in supporting their employees to manage their work and family responsibilities. Firms could provide ad-hoc flexible work arrangements. The proportion of such firms has arisen from 70% in 2015 to 77% in 2016.[33] These firms employ 82% of all employees, up from 76% in 2015.[34] Employers who wish to implement flexible work arrangements can tap on various resources such as the WorkPro Work-Life Grant. The tripartite partners also published the Tripartite Advisory on Flexible Work Arrangements to help employers, supervisors and employees implement flexible work arrangements.[35]

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[26] Taylor, Z. E., Conger, R. D., Robins, R. W., & Widaman, K. F. (2015). Parenting Practices and Perceived Social Support: Longitudinal Relations with the Social Competence of Mexican-origin Children. *Journal of Latina/o Psychology, 3*(4), 193-208. Retrieved from http://doi.org/10.1037/lat0000038

[27] Homel, R., Burns, A., & Goodnow, J. (1987). Parental social networks and child development. *Journal of Social and Personal Relationships, 4*(2), 159-177. DOI: 10.1177/0265407587042004

[28] Fullilove, M., Scrimshaw, S., Fielding, J., Normand, J., Sanchez-Way, R., & Richardson, T. (2002). Community interventions to promote healthy social environments: Early childhood development and family housing. *Recommendations and Reports,* 51, 1-8.

[29] Cochran, M., & Brassard, J. (1979). Child Development and Personal Social Networks. *Child Development, 50*(3), 601-616. doi:10.2307/1128926

[30] Ainsworth, J.W. (2002). Why does it take a village? The mediation of neighbourhood effects on educational achievement. *Social Forces, 81*(1), 117-152.

[31] Gasman, M., & Palmer, R. (2008). *"It Takes a Village to Raise a Child": The Role of Social Capital in Promoting Academic Success for African American Men at a Black College*. Retrieved from http://repository.upenn.edu/gse_pubs/173

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[33] Ministry of Manpower, Singapore. (2017). *Conditions of Employment 2016*. Retrieved from http://www.mom.gov.sg/newsroom/press-releases/2016/1121-conditions-of-employment-2016

[34] Ibid.

[35] Ministry of Manpower, Singapore. (2014). *Tripartite Advisory on Flexible Work Arrangements*. Retrieved from http://www.mom.gov.sg/~/media/mom/documents/employment-practices/tripartite-advisory-on-fwas.pdf

Conclusion

Indeed, as the old African proverb goes, it takes a village to raise a child. All of us are responsible for the raising of our next generation—whether we are teachers, parents or family members, neighbour or members of the community, government officials or public officers, employers or fellow colleagues. We all want the best for our children. Let us work closer together as we bear in mind our common purpose, and to do so well.

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Building an Awareness of Culture in the Early Years: Challenges and Possibilities

by Shaireen Marchant

Abstract

The early childhood period is a critical time for identity building and self-awareness. Learning to engage with people from other races is a skill children develop through their home and school interaction. With an increase in children attending child care in Singapore, pre-school teachers have a strong role to play in influencing the social lives of young children.

The ability to learn about their own culture and understand the culture of others will contribute to the development of a sensitive cultural mindset for the future. This will require pre-schools to ensure children have equal opportunities to embrace their own cultural background within the school programme and engage with others in meaningful ways. It is also important for teachers to ensure that cultural learning extends beyond cosmetic approaches and that teachers are personally aware of their own racial biases.

This requires a review of the hidden curriculum within the school programme. It also demands an understanding of the prevailing conditions within which the pre-school industry operates. By recognising these challenges, pre-school teachers will be able to promote children's cultural identity more authentically. Financial support, effective teacher training and a recognition of family values will also be key strategies to ensure multicultural awareness will be less of a challenge in the later years.

Introduction

Singapore is well known globally for its cosmopolitan outlook and its distinct image as a multiracial society. The ability to live peacefully among a multiplicity of cultures within such a compact island is a notable achievement for such a young country. The city-state's population stands at 5.61 million of which 3.97 million are Singapore residents (Department for Statistics, 2017).This resident population is composed of 74.3 % Chinese, 13.4% Malays, 9.0% Indians with 'Other' races namely Eurasians, at 3.2%. Aside from this local group, Singapore is a magnet for global talent and boasts a wide cultural mix of nationalities among its non-resident population. This adds to the rich diversity of cultures Singaporeans are exposed to in everyday life.

Multiculturalism is embedded not just in the private lives of Singaporeans but also in its governance (Kwen, 2016). As a way of managing its ethnically diverse population, the government adopts the CMIO (Chinese-Malay-Indian-Others) model to organise society. This is most evident in the establishment of race based self-help institutions responsible for each ethnic group, the implementation of racial quotas in public housing and the establishment of the Group Representation Constituency system for elections. The effort to maintain societal control through racial lines has always been a deliberate and important consideration of the government. This was highlighted in the Prime Minister's recent speech.

> *'… what we have here is not something natural, nor something which will stay there by itself. It is the result of very hard work, a lot of toil and sweat, and the gradual education and bringing together of people……We brought people together and consciously created common spaces and opportunities.'* (Lee, 2017)

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Amidst other national concerns, it has created greater public awareness of matters related to race among Singaporeans

The multiracialism model in Singapore is premised on the idea of 'unity in diversity'. With targeted efforts in nation building, the island has been able to enjoy relative peace and harmony in the last few decades. However, with global events related to terrorism, migration and racial conflicts, issues of race, culture and religion have been propelled to the forefront of current affairs. Amidst other national concerns, it has created greater public awareness of matters related to race among Singaporeans.

The findings from the recent Institute of Policy Studies survey on race relations have raised further concerns about the extent of multiculturalism in Singapore. The study revealed that Singaporeans exhibit an openness to other races in the public sphere but behave otherwise in their private lives (Matthews, 2014). Another finding showed that the majority Chinese race were less receptive to other races. Despite decades of effort to build a strong cohesive national identity, the research suggests that greater effort is needed to build inter-ethnic

understanding. This would have to occur strategically in the local environment where race issues are considered traditionally sensitive topics and are not openly discussed (Clammer, 1998). The current political and social milieu, however, demands such surface dealings be replaced by a deeper approach.

Recent discussions have suggested that multiracialism is not just an important element of being Singaporean but a key factor in ensuring the future strength, stability and security of the nation. In an address in 2016, the Deputy Prime Minister Mr Tharman highlighted the importance of multiculturalism as a part of the Singaporean identity.

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> *'We should instead evolve, adapt and strengthen our own cultures, and take a keen interest in each other's cultures. This will allow us to deepen our Singapore identity, and take real pride in multiculturalism in Singapore.'* (Shanmugaratnam, 2016).

The Chairman of Onepeople.sg, Dr Janil Puthucheary emphasised the need to be aware of threads of racism within society.

> *'Singaporeans should be aware of issues of racism that still persist and take steps to do something about them when necessary in their daily lives.'* (Puthucheary,2017).

The Minister for Law, Mr Shanmugam, stressed the urgency to improve multiracialism as a weapon against terrorism.

> *'We have never believed that a laissez faire approach in creating a national identity, a multiracial society will work. We were activists in this respect,'* (Shanmugam, 2017).

The call to address race issues more explicitly indicates its importance to the well-being of all communities. It is inevitable that culture will now assume a stronger place within the public sphere and managing the public discourse will be critical across all levels of Singapore society.

Multiculturalism and education in Singapore

A plethora of terminologies has often been used in the discussion of race, the most common being 'multiculturalism', 'multiracialism', and ''multi-ethnicity' . In Singapore, multiculturalism is a term often used interchangeably and unconsciously with multiracialism (Kwen, 2016). As we unpack the issues of race from an educational lens, a reference to 'multiculturalism' or 'multicultural education' will be adopted as it is more commonly used within the research literature.

Education has always been a tool for social control in Singapore. The state imposed values through the National Shared Values and National Education espouse harmony, consensus and national unity (Ho, 2017). Within the context of education, ethnic diversity is acknowledged through the implementation of a bilingual policy in the schools. Here the 'Mother Tongue Languages' or (MTL) identified as Mandarin, Malay or Tamil, are offered in the school curriculum as a recognition of the official races of Singapore.

Since 1997, multicultural education has been embedded within subjects such as Civics and Moral Education, Social Studies syllabus and now Character and Citizenship Education (Ho, 2009; Kho, 2017). The focus has largely been on the development of a national identity and the core area of the syllabus prioritises the five principles of Singapore's national ideology, known as Shared Values. National and cultural identity, socio-cultural and religious sensitivity are also addressed in the teaching of these subjects. Schools are viewed as the best grounds to develop multicultural understanding as it coincides with the critical age of identity building (Chong and Cheah, 2010). Although this effort is observed in school wide activities such as the celebration of ethnic festivals and Racial Harmony Day, the need to build more culturally sensitive dispositions has also led to the use of a critical thinking approach in the revised syllabus. The awareness of cultural Issues that emerge from diversity can have a strong impact on learning within the classrooms and it is believed that such an approach will allow for greater engagement. The emphasis given to multicultural education across the primary, secondary and tertiary institutions highlights the critical role schools play in setting the stage for a harmonious society.

"Schools are viewed as the best grounds to develop multicultural understanding as it coincides with the critical age of identity building

Multiculturalism in early childhood education

Although much has been implemented in the public schools, research suggests that multicultural education would be more effective if the process begins at pre-school. One reason is that multicultural principles are well aligned with the philosophical underpinnings

"children's attitudes toward their own and other cultural groups begin to form at an age earlier than most would expect

of early childhood education such as whole child development and the development of family bonds (Ramsey, 2009) Another extenuating need for early multicultural exposure stems from the research that show children's attitudes toward their own and other cultural groups begin to form at an age earlier than most would expect (Robles de Melendez and Ostertag, 1997). Children are first aware of differences among people from as early as age two. The process usually begins with a child's ethnic self-identification which occurs when a child realises he or she is a member of particular group. This develops into the next phase of ethnic preference which overlaps with a child's ongoing development of ethnic awareness (Nesdale, 2007). This ability to discriminate differences would be a natural progression in the development of the self. However, if not dealt with sensitively during interaction, such categorisations may be associated with stereotypes and beliefs which may sow the seeds of discriminatory attitudes later in life.

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ability to discriminate differences would be a natural progression in the development of the self
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A number of local studies already show indications of such racial bias developing in Singapore children. A study of 158 Chinese and Indian 3-to 7-year-olds showed that the Chinese children (a majority race), but not Indian children (a minority race) ,display implicit and explicit bias favouring their own race. (Setoh et al, 2017). Jesuvadian and Wright (2014) explain how Singaporean pre-schoolers are capable of excluding children and adults based on differences in their skin colour. In the ethnographic study of peer culture, Singaporean pre-schoolers show an ability to exercise exclusion within a mixed-socio-economic classroom (Lim, 2015). At the primary school level, a study conducted by Lee et al. (2004), examined children's social interactions in informal primary school settings. The study revealed that children prefer to participate in same race groups during informal settings as well as at recess. These highlight the importance of managing an understanding of multiculturalism even at a young age. The need to educate our very young on their interaction with people of different races is critical to the development of a sensitive multicultural mindset.

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Culture and the kindergarten curriculum

Multicultural education is explicitly addressed in Singapore's primary, secondary and pre-Multicultural education is explicitly addressed in Singapore's primary, secondary and pre-university schools through a developed syllabus but less so in the pre-school curriculum. The Nurturing Early Learners (NEL) framework serves as guideline for pre-schools and encourages a diverse provision of programmes to meet the needs of parents. The Nurturing Early Learners Curriculum Framework also seeks to develop children's understanding across cultures as part of socioemotional learning objectives. The framework spells this out explicitly.

'Children with social awareness are able to recognise the feelings and perspectives of others, appreciate diversity and show respect for others regardless of differences. Special events which provide opportunities for children and families to put on costumes representative of their cultures, share about ethnic food and celebrate festivals help raise children's awareness about the unique practices and values of different cultures.' (MOE, 2013, p.13)

In its effort to sustain social equality and social justice, the goals of pre-school education also clearly address the need to develop children within a multicultural, multireligious and multiracial society. (Jing, 2017)

However, in the absence of a defined approach, in reality, multicultural education in the pre-schools only exists as a practitioner-created educational practice as teachers are left responsible for the delivery of these goals. This, coupled with their already heavy workload, would mean multicultural education objectives would often be side lined in favour of academic ones. Presently, multicultural awareness concepts are incorporated in activities related to the introduction of food, costume and festival of various ethnic groups. It may even be extended to involve communities and serve as an opportunity for parent-school collaborations. Although these efforts are commendable, the emphasis on this 'tourist approach' which teaches about cultures through celebrations and artefacts of culture, comes under heavy criticism as it is both patronising and trivialising (Derman-Sparks and Force, 1989). It does little to provide a real understanding of other cultures and a deeper acceptance of differences. Unless skilfully managed, this approach can have the danger of stereotyping other cultures in the process of developing cross-cultural understanding.

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The Singapore Pre-school Accreditation Framework (SPARK) supports approaches that encourage a depth of understanding about multiculturalism. SPARK identifies the quality of multicultural practices expected within Criteria 5.7 (ECDA, 2017).The efforts of teachers to create awareness of different races and cultures in the community is marked as the lowest emerging level. The mastery level, however, requires teachers to create a culture that encourages children to show care and respect for people who are different from them which clearly requires a higher level of competency. To effectively develop a multicultural community requires a shift of thinking to promote a deeper practice where the entire school community reviews their own beliefs about culture and diversity. These principles need to be woven into the heart of programme planning and guide all aspects of operations, communication

"a shift of thinking to promote a deeper practice where the entire school community reviews their own beliefs about culture and diversity

and teaching. For schools to be truly multicultural in its approach, diversity needs to be anchored within the school philosophy and practice rather than as a topic within the curriculum.

The role of 'Mother Tongue' and culture

In Singapore, English is promoted as a 'neutral' language for inter-ethnic communication whilst Chinese, Malay and Tamil are designated as 'Mother Tongue Languages' (Dixon, 2005). One of the major goals of MTL learning is to develop awareness and nurture children's appreciation of the local ethnic culture. In relation to the Bilingual Policy in Singapore, The Nurturing Early Learners Mother Tongue Framework specifically highlights the following relationship between language and culture.

> *'The bilingual policy also promotes the study of MTLs as it plays an important part in affirming the sense of cultural identity among Singaporeans, ensuring the transmission of values from generation to generation'.* (MOE, 2013, p.19)

The framework also identifies 3 key goals of MT which are Communication, Culture and Connection (MOE, 2013). The curriculum affirms the pivotal role of language in the transmission of cultural knowledge and explicitly states that a learning goal of MTL would be *'to be aware of the local ethnic culture' and this is achieved in the form of festivals customs, traditions folk tales and stories'(MOE, 2013, p.27).* The ability to reach this goal rests on the assumption that accessibility to a child's MTL is available in all schools. Although this scenario holds true in the public school system, the context is somewhat different in the pre-school sector. At present, the predominantly privatised nature of the early childhood sector implies that programme decisions are usually market driven (Lim, 2016). Pre-schools may not have the resources to provide all the languages despite having a diverse school population. The low numbers and the cost of providing such programmes may not be able to justify its provision.

The table shows the spread of MTL and other languages provided by kindergartens and child care centres in Singapore. With the exception of the Ministry of Education (MOE) kindergartens which provide all 3 MTLs in their centres, the provision of second languages in pre-schools is highly varied. This also reveals the rich diversity of cultures that exists within our pre-schools today and that pre-schools respect diversity and recognise the need to offer children languages beyond the official 3 MTLs. It is interesting to note that less than 10% of kindergartens and less than 2% of child care centres offer all three Mother Tongue Languages. Although it would be difficult to surmise the ethnic profiles of all other centres, it does suggest a strong probability that pre-school children may not always have the option of learning a second language which is their MTL. It should be noted however that the table does not reflect the weightage given to the second language within the curriculum timetable nor does it reflect if children are required to learn two or more languages (apart from English) as part of the programme.

	Kindergarten*		Child care	
Languages	No.	%	No.	%
Chinese	229	50.8%	1058	75.3%
Chinese/ German	-	-	1	0.1%
Chinese/Hindi	7	1.6%	-	-
Chinese/Japanese	1	0.2%	5	0.4%
Chinese//Malay	95	21%	44	3.1%
Chinese/Malay/Arabic	2	0.4%	11	0.8%
Chinese/Malay/Tamil	41	9.1%	15	1.1%
Chinese/Malay/Tamil/Hindi	1	0.2%	-	-
Chinese/Malay/Tamil/Hindi/Japanese	-	-	1	0.1%
Chinese/Tamil	18	4%	5	0.4%
Chinese/Tamil/Hindi	1	0.2%	-	-
French	-	-	1	0.1%
Japanese	2	0.4%	-	-
Malay	17	3.8%	14	1%
Malay/Arabic	25	5.5%	1	0.1%
Malay/Tamil/ Arabic	2	0.4%	-	-
Tamil	3	0.7%	-	-
Tamil/Hindi	1	0.2%	-	-
NA	6	1.3%	249	17.7%
Number of centres	451		1405	

*Does not include MOE Kindergartens. Source (www.data.gov.sg)

Fig 1.Summary table of reported second languages offered by Kindergartens and Child care in Singapore.

It is common knowledge that most schools provide the language of the dominant ethnic group of their school population but include children from minority groups in the lessons. At present, only a select number of pre-schools aside from MOE kindergartens have made provisions to offer all 3 MTLs in their pre-schools. To enhance stronger cultural understanding, honouring the diversity and the language needs of the different racial communities should be a commitment that is expected of all pre-schools even if parents choose to do otherwise. Unless this can be achieved, the notion of language as a medium for cultural learning may still be challenged (Curdt-Christiansen and Sun, 2016).

The role of educators

The Reconceptualising Early Childhood Movement has long supported the need to recognise multicultural perspectives in the early years. Among its concerns has been the notion that developmental theories are often based on Western case studies and that application of such theories needs to recognise that children experience different social and cultural backgrounds. It also highlights the point that views about childhood may be contextual and the value of 'developmentally appropriate' programs should always be reviewed (Canella and Grieshaber, 2001). It encourages teachers and researchers to recognise that there are biases and complexities in society and that constant re-examination of culture linked practices need to be undertaken.

"views about childhood may be contextual and the value of 'developmentally appropriate' programs should always be reviewed"

Beyond this, the United Nations Conventions on Rights of the Child also addresses the importance of culture within education in Article 29: *'Children's education should develop each child's personality, talents and abilities to the fullest. It should encourage children to respect others, human rights and their own and other cultures. It should also help them learn to live peacefully, protect the environment and respect other people. Children have a particular responsibility to respect the rights their parents, and education should aim to develop respect for the values and culture of their parents'* (United Nations, 1989). Consequently, pre-school teachers have the responsibility to ensure that home cultures of the children are respected within the school.

Singapore's pre-school classrooms are predominantly multicultural and often taught by a team of teachers from diverse cultural backgrounds and nationalities. Consequently, a teacher's personal cultural awareness would influence their ability to develop effective multicultural activities . The ability to manage conversations and ideas demand a high level of competency from teachers. In a study on the perceptions of multicultural education among a group of pre-school teachers in Singapore, it was observed that though participants espoused the virtues of multiculturalism, in reality their practice did not go beyond the tourist approach (Karuppiah and Berthelsen, 2011). The same group of teachers also expressed concern about issues of bias and discrimination in Singapore and pre-schools. They, however, did not see themselves as having any personal prejudices and biases and disassociated themselves from racist tendencies. In another Singapore study, primary school student teachers were not able to see themselves as agents of change in developing multicultural awareness. This was attributed to the lack of a critical and reflective approach within the curriculum (Chan, 2013). Despite the support of teachers in promoting multicultural education, it is evident that a dichotomy exists between a professional perspective and personal awareness of race.

"teacher's personal cultural awareness would influence their ability to develop effective multicultural activities"

Banks (2002) explained that it is common for teachers to view themselves as 'non-cultural and mono-ethnic beings who are colour-blind and race-less'. Many researchers have noted that multicultural awareness, sensitivity and competency are essential elements of effective teacher education programmes. Zeichner and Hoeft (1996) reported that teacher education programmes seldom address teachers' own values and bias. Being culturally responsive would demand teachers to engage in potentially sensitive yet productive and mutually learning conversations with family members in the school. However it is natural for many early childhood teachers to prefer avoiding contentious issues (Connolly et al, 2006). Banks (2002) also noted that a multicultural teacher-training program could help teachers to critically analyse and rethink their notion of race, culture and ethnicity and to view themselves as cultural and racial beings so that they can teach effectively in multicultural classrooms. Therefore, it is imperative that teacher education programmes provide an opportunity for teachers to be aware of themselves before they can be expected to lead multicultural classrooms effectively. Their knowledge of their own cultural background, personal history and bias, will be pivotal in the delivery of an effective and culturally responsive programme. (Ramsey, 2009).

> **"evident that a dichotomy exists between a professional perspective and personal awareness of race**

Approaches to multicultural education

There are many models for multicultural education available although this may vary significantly in practice. There are also philosophical and principle led practices which may serve to ground multiculturalism within the programme such as The Anti Bias Curriculum, the Ethnic-Educator pedagogical model (Gonzalez, 2009) or the Te Whāriki (MOE, 2017) from New Zealand to name a few. Even without a defined whole school commitment, pre-schools can first begin by adopting a policy of responsiveness within their setting. Vedder, Bouwer and Pels (1996) list 4 simple important tasks for professionals when supporting parents

- To give information and explanation
- To offer structure
- To respond sensitively to parent's needs and perceptions
- To respect parent's autonomy and competence as educators.

For any approach to be effective, it must first recognise a distinctive characteristic of pre-school education which is the strong relationship between family values and the school. Any initiative needs to acknowledge that the home culture exerts a strong influence even in the choice of pre-school education. In the study by Yeoh and Huang (1995) Malay mothers discounted the option for child care centres for fear that their children would develop undesirable or alien socio-cultural values at these centres. The study showed that a major concern for Malay parents is the preparation of food to be 'halal' in a way prescribed by Muslim law. In another study of mosque kindergartens in Singapore, despite being aware

of the limitations of the mosque kindergarten curriculum, parents still chose to enrol their children in the programme as they placed greater importance on the socialization opportunities within an Islamic environment (Selamat and Juri, 2016). During the early

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the need for the authorities to recognise that in its effort to build an ideal multicultural society, the specific needs of communities must also be addressed

years, the child's family usually plays the leading role in socialising the child to the manners, views, beliefs and ideas held within their culture (Garbarino, 1992). With the trend of dual income families where both parents are involved in full time work, parents are more likely to choose options which closely reflect their family values. These studies highlight the need for the authorities to recognise that in its effort to build an ideal multicultural society, the specific needs of communities must also be addressed.

Rogoff (1990) highlights that children who are grounded in one system and are attempting to function in another can experience difficulties especially when the dominant culture competes with the home culture. Power relations within a society also exercise a strong influence on the development of cultural models (Foucault and Gordon, 1980). Thus, when processes of acculturation occur, it often takes place in the direction of the dominant culture.

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Although this is less of an issue in pre-school settings where there is homogeneity in the school population, most settings are diverse in reality. Pre-schools with a multicultural population operating without a clear anti-bias policy risk marginalizing minority cultures whether in operational policies or in their daily practices unknowingly.

Future of Multicultural Education

In his 2017 National Day rally speech, the prime minister stated that two in three pre-schoolers will, by 2023, have a place in a child care centre or kindergarten that is run or supported by the government, 40 000 more places will be added by 2022 bringing a total of 200 000 places in 5 years (Lee, 2017) .With the rise in the number of women going to back to work and the future establishment of early years centres, institutionalised care will be a major force of influence in the Singaporean childhood. The longer amount of time spent in child care centres also increases the influence the pre-school environment will have over the family in the child's socialisation.

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The longer amount of time spent in child care centres also increases the influence the pre-school environment will have over the family in the child's socialisation

Multiculturalism can only begin when pre-schools are encouraged to embrace diversity as a key dimension of the learning environment. Consequently, child care professionals have a great responsibility to promote the healthy development and cultural identity of the children in their settings (Gonzalez–Mena, 2008). Although it will take bold steps for improvements to be made, the importance of developing a true multicultural spirit necessitates a seamless progression of efforts throughout the entire education system. The effective promotion of multicultural values will require an honest review of current practices, assumptions and acknowledgment of the existing barriers. If there is anything to be learnt, a multicultural attitude requires us to expect more of ourselves first before we can expect anything of others, much less the children.

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Empowering Children for Life: How the Early Years Lay a Strong Foundation for Children's Lifelong Learning

By Lydia Yanti

Abstract

Being a relatively small city-state where people are our main resource, Singapore relies on he people to stay competitive in the fast-paced world of today. As a result, children are valued and nurtured as the country's greatest assets, on whom the future of the nation depends (Ebbeck and Warrier, 2008). From the recent major announcement made by the Prime Minister on the setting up of the National Institute of Early Childhood (NIEC), the local pre-school sector had made gradual progress to improve standards and training of teachers in ensuring the quality of the sector. According to Ebbeck and Warrier (2008), children in Singapore enjoy a good standard of health care and was ranked highly in the UNICEF report in 2003. The figures also showed that the country also have the lowest estimated under-five mortality rate ad high expectancy at birth.

However, the education system in our country has been criticised as putting on too much pressure on the children and that they have very little time for fun (Ebbeck and Warier, 2008). It was reported that children in Singapore have performed well on standardised tests and the country has been ranked to have topped the charts in international benchmarking studies but would these result-oriented benchmarking cultivates them into motivated, self-initiating, creative and engaged life -long learners? Zakaria (2006) wrote that even though Singapore 's children perform exceptionally well on standardised tests, a very small fraction of the students attain top rankings 10 – 20 years later. The author also pointed out how the enthusiasm towards the love and engagement to learn, is somewhat absent.

This brings us to another notion of the perspectives of the stakeholders of the child's transition to primary school. . In sharing of influences in many Asian cultures, it has been noted by Pearson and Degotardi (2009) that the early years of a child's life is being greatly influenced by others in the community and that a child's identity is construed in the relationship and interactions with other individuals. With that being said, there has been a rise in the international spotlight on the importance of children's transition to primary school (Clarke and Sharpe, 2003) along with the implication of children's successful transition to primary school. This notion brings us to the question of the role of the early years education: Does it exist just to simply play the role of preparing the child for primary school? Or does it exist to prepare the child for life?

> **"a child's identity is construed in the relationship and interactions with other individuals**

What is happening here is simply questioning our view of the 'image of the child' and what lens do we put on when we view children. There have been many lenses that adult stakeholders (teachers and parents) put on when it comes to the image of a child. When we position the early years education as being a preparatory stage leading to primary school, we are simply putting on a 'short sighted lens' to how we view the child. Referring to the image of a child as 'miniature adults' , we are moving ourselves back to the industrial revolution when children were made to work long hours in the mines and factories (Sorin, 2003)-when we implement a school curricula that push children to compete and perform well on standardised tests. It is most often that parents are the stakeholders who put too much pressure on the children to learn academic skills at a very young age (Cheng, 2003) and instead of giving children time to play, parents use that time to send their children to enrichment classes and pay tuition to improve their children's performance (Cheng, 2003). This 'stress' that has been placed on the children by parents and by the education system is also one of the concerns that make couples think twice before having children (Ebbeck and Warrier, 2008).

Our view on the 'image of the child' and the role of the early years education need to go through a perspective shift. As stakeholders in children's lives and educations, parents and teachers play a pivotal role in ensuring that a child gets the very best start in his or her life,

no matter what the background or social economic status of the child is. It is imperative that *we not only view what we want the child to be tomorrow, but instead, view the child who he or she is today.* In the provision of such view, it is vital for stakeholders to have an understanding of how pivotal their roles are in providing for the quality experiences, interactions and engagement for a child to realise his or her fullest potential. Stakeholders need to view the child as being an 'Agentic Child' (Sorin, 2007) – one who is involved in the co-creation of their learning and development. This resonates with the provision of letting the child exercise the right to play, the right to find out things, share what they think with others and also the right to give their opinion (UNCRC Singapore, 1995).

A number of policy documents allude to the agentic child- The Nurturing Early Learners Curriculum Framework by Ministry of Education (2012) states that care should be exercised so as not to put too much focus on the academic performance of children at a crucial pre-school stage. Adding to that it also stated that there should be a focus to the development of children in areas such as knowledge, skills and dispositions which will equip them for lifelong learning- education as a life long journey and not a short sprint. This then sets the pace for appropriate pedagogy for the teaching and learning in the school settings in which the teachers are the main stakeholder who are responsible for the implementation. Pedagogy for the child is co-constructed through an adult-child partnership in which adults guide the learning process, and children and adults augment their understandings of issues that are relevant to them so as to make sense of real life situations that is happening around them. This concept of 'co-creation' between adult is not new as it had been already brought forth earlier on by Vygotsky (1962) who stated that "What a child can do today in co-operation, tomorrow he will be able to do on his own". This quality and development of higher order thinking is prepared by the co-construction patters and properties of social interaction. When adult stakeholders provide for experiences such as free-choice play, allowing children to make choices, allowing children to make decisions and so on, the adult is providing the child with a certain level of empowerment. When children are provided with meaningful new learning which are embedded by mental functions such as logical argumentation, reflection and problem solving they groom the child into a more gradual and sophisticated learner who will eventually take over the responsibility of their own learning.

> **"What a child can do today in co-operation, tomorrow he will be able to do on his own"**

If children were asked to name the activities that they have thoroughly enjoyed in school, a majority of them would make references to the activities in which they were given choices and allowed to make decisions on. This simple act of letting children make their own decisions and allowing for them to make choices is of such importance as it allows the child to think of themselves as a person and as a being who is rightful enough to be heard. Though it may come across as being non-monumental to us adults but for the child, it would mean a lot. Adult stakeholders need to view the child as curious, active and competent learners who need adults to facilitate and nurture the love for learning in them through

engaging and stimulating learning experiences that pertain to the child's interest and not from the adult's interest. When we successfully move away from this traditional notion of education (teacher-centric) to a more child-centric notion of education, we are banking in on the benefits that it will bring to the child in the years to come- far and beyond formal schooling and perhaps for the rest of the child's life. In providing for choices and in facilitating a child's acquisition of knowledge and skills through activities that pertain to the child's interest, we not only empower the child to make his or her own decisions but at the same time, we are giving the child a voice and an ownership in his or her own learning and development. Children need to learn to make decisions- both good and bad decisions that would lead to either positive or negative outcomes. They need to learn the concept of how certain decisions leads to certain outcomes. Only then will they fully comprehend the cause and effect their own voice can make when it pertains to matters in their life. As future citizens who will be an active contributor to the 21st Century skills and society, we must equip our children with skills and learning dispositions which not only just prepare them for formal schooling but more importantly, for the rest of their life. As a society, we need to move beyond the notion of 'preparing' the child or 'levelling' the child so as to succeed in the transition to formal school. Instead, we need to look at a child's holistic development and how we as adult stakeholders can facilitate and support the child in becoming a 21st Century ready learner. The perception that we have on the early years is not only looked upon as a 'preparation' but it needs to be look on as a strong foundation for a much greater platform for a child to achieve success.

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perception that we have on the early years is not only looked upon as a 'preparation' but it needs to be look on as a strong foundation

As Stacia Tauscher once said "We need to view the child for the person he is today, and not just who we want the child to be tomorrow"

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Flexing Family Involvement in Early Childhood:
A Behavioural Approach

By Fitri Zuraini Abdullah & Siti Afiyah Mustapha

Abstract

Family socioeconomic status (SES) has been conventionally investigated in relation to family involvement. While there is literature pointing to the notable variations in involvement practices amongst SES groups, others indicate that SES neither consistently correlates with involvement, nor explains why parents become involved or why those in comparable SES categories essentially diverge in involvement practices or effectiveness. In Singapore, policy makers and local commentators often focus on indicators such as income and parents' educational level to explain variations in the types and quantity of involvement, as well as the out-of-pocket investments made. This paper discusses how variations in involvement of parents in their children's education are (1) influenced by evolving societal trends (household structures and family dynamics) whose impact transcends SES lines, and are therefore (2) more meaningfully deliberated with respect to differences in parental self-efficacy and resources – such as the motivation, knowledge, and skills of parents, and time they are able to accord to their children and the family – that generally coincide with SES. The benefit of focusing on resources is that, families, schools, community partners and even policymakers, can mobilise or create involvement opportunities that are *time-sensitive* and *responsive* to such disparities over a specified schooling period or beyond, as compared to a hard-to-influence and broad characteristic like SES. In targeting these variables, we explore cost-effective behaviourally informed tools to upstream and optimise family involvement in early learning and child development, particularly in lower-resourced households. We contextualise this discussion in relation to recent developments in Singapore's Early Childhood Care and Education (ECCE) landscape.

The Criticality of Early Childhood and Singapore's Early Childhood Sector Growth

Long overshadowed by primary, secondary and tertiary education sectors, the Early Childhood Care and Education (ECCE) sector in Singapore is experiencing recent accelerated developments, gaining on decades of neuroscience, econometric and social science research outcomes advocating the benefits of early educational investment on the child. Highlighted at the National Day Rally 2017, the ECCE sectoral ramp up in the last few years to the next five years includes the establishment of a public institution dedicated to national ECCE planning and authority, the doubling of the annual national budget from $850 million in 2017 to $1.7 billion by 2022, more affordable, accessible child care and pre-school places for children, and in the pipeline, a centralised teacher training and research institute. Greater government intervention in the sector is also seen with the increase in pre-school Anchor Operators (AOP), child care Partner Operators (POP), Ministry of Education (MOE) Kindergartens, and changes to the primary school admission priority for MOE Kindergarteners. Neuro-scientific research spearheaded by Shonkoff and Phillips (2000) established that "virtually every aspect of early human development, from the brain's evolving circuitry to the child's capacity for empathy, is affected by the environments and experiences that are encountered in a cumulative fashion, beginning in the prenatal period and extending through the early childhood years". Social science data suggests that high quality ECCE programmes boost children's readiness for school and life.

Observers have been quick to point out Singapore's catch up game in the sector, since the release of Lien Foundation's *Starting Well* report (Economist Intelligence Unit, 2012). The report ranked Singapore a low 29 out of 40 countries internationally on ECCE – a position untypical of its frontrunner status in secondary and tertiary education. Despite several propositions to mandate compulsory pre-school education or to absorb it into the public education system, the Government exercised prudence in considering such suggestions, to curtail the downward pressures of a highly structured and academic-oriented curriculum directed towards academic readiness of pre-schoolers (Ministry of Education (MOE), 2010). Further, there was no strong incentive to commit, since Singapore has attained a nearly universal ECCE participation rate – with more than 99% of Singapore children attending at least a year of pre-school prior to primary school entry, despite it being non-compulsory and fee-paying (Tan, 2017; MOE, 2012). Whilst interest in early childhood is not new, recent investments are a marked departure from its long-standing position of non-interference. Lim (2017) acknowledges this positive trajectory in Singapore's pre-school education policy over the last decade across the '3A2S' – affordability, accessibility, accountability and social justice, especially for families from low- and middle-income backgrounds.

Yet, solely relying on, and raising the floor of quality, quantity and access to quality ECCE does not inoculate children, particularly disadvantaged ones, from continuing environmental deficits and learning impediments. Zigler and Styfco (2010) impressed that (brief) pre-school experiences or early intervention cannot overpower the impact of dismal

living conditions, detrimental role models and substandard schools. Whilst the government acknowledges the criticality of ECCE access, chiefly as "social-leveller" for children in disadvantaged communities, it has steered clear of complete control over curricular practices and programmes apart from a recommended Nurturing Early Learners kindergarten curriculum framework (MOE, 2012) and the Early Years Development Framework for infants and toddlers (MCYS, 2011). About 40% of Singapore's early childhood economy remains occupied by private, voluntary and independent community providers with variegated curriculum and pedagogical quality (many set up by religious and community establishments, including Malay/Muslim Organisations and Mosque Kindergartens), whilst the child care sector is largely for-profit. Propagating sufficient quality in environments *exogenous* to the (pre)school as the child continues to navigate through the education system is equally, if not more, critical to sustaining normative growth.

The importance of continuity across the education lifespan is well exemplified by Heckman's (2006, 2007, 2012) four tenets for designing ECCE social policy: (1) the interplay between genetics and individual experience shapes the brain's architecture and process of skill formation; (2) skills mastery, especially those critical for economic attainment, follows a hierarchical development – later achievement boils down to foundations laid earlier that amplify and reinforce every progressive stage. In fact, starting pre-school education at ages three and four is belated as it underestimates how 'skills beget skills' very early on 'dynamically' and 'complementarily'. For instance, a child's emotional security promotes exploration and robust acquiring of cognitive skills, which reciprocally raises the stock of cognitive skills in the next phase. Skill building processes as such are most likely observed in literacy and math, in which early academic skills form the basis upon which later skills are built (Bailey, Duncan, Odgers and Yu, 2017); (3) the experiences of the developing child profoundly fashions an interdependent web of cognitive, linguistic and socioemotional competencies which collectively contributes to societal success; and (4) though adaptation is perpetual and lifelong, there are critical and sensitive periods of development where certain characteristics or skills are more readily acquired than others, at particular childhood stages.

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Howe and Covell (2013) note that, for disadvantaged children who did not received quality ECCE, protective factors such as high quality teaching, evidence-based programming and effective policies in subsequent schools are needed to build educational resilience and sustain headway made in pre-school. In Singapore, the focus on quality of pre-school education and continuity into primary school has, to a greater extent, been reflected in

the transition practices of pre-schools, their co-location with primary schools, and the tightening of networks between key actors in both education phases. As it scales up to 50 Kindergartens (including 13 new ones) in the next five years, MOE is looking to co-locate them with primary schools to foster tighter collaboration and facilitate smoother transition into Primary 1. A holistic child care and pre-school ecosystem in Singapore, Circle of Care, has also expanded to nine pre-schools and two primary schools to create a structured transition from pre-school into primary school, at-risk children from disadvantaged families. The programme extends till Primary 3, and pulls in efforts from social workers, learning support, health services and parental involvement. For local intervention scheme KidSTART, structures to facilitate meaningful transition are also an area of consideration as it looks to expand its catchment to more families.

In recognising the cumulative, multi-period processes of early childhood development, the national shift towards a paradigm that increasingly invests in early human capital ought to, not only develop the "whole" child development in a full range of cognitive and non-cognitive skills, but consistently position familial and home investments – which precede the influence of pre-school during their first six years of life, and coexist with the school's influence during every year thereafter – at the forefront.

What is the position of the family and home in Singapore's ECCE (and broader education) narrative?

The Early Childhood Education (or education, in general) narrative in Singapore could be dichotomised into a core and the peripheries. For the purpose of this discussion, we would like to operationalise this dichotomy by looking at the two primary categories of stakeholders – micro (child and family) and macro (government and teachers). Brofenbrenner's bioecological model illustrates how the interactions between the social units (individuals) and their environment could be categorized into various systems that are nested within one another, which resultantly shape individuals' development over time. Due to the synergistic nature of the systems, one may allude the interaction at the larger macro system is an aggregate of the treatment or interactions of the individuals at the micro level. The message and interventions at the macro system between policies, schools, parents, and children are a reflection of how these social units are seen at the micro singular level (Brofenbrenner, 1998).

The first justification for the macro-micro classification is the dominant ideology embedded in our education landscape – meritocracy (largely in the public sphere, exogenous to the family unit and scope of influence) and parentocracy (endogenous to the family unit). After accounting for this locus of influence, the second parameter drawn to assess the systemic dynamics of the Early Learning scene is the *common* perceived objectives that arise from the interaction between the family unit – which is as Comte puts it, the 'smallest potentially self-sufficient unit' (as cited in Martindale, 2013) –, and the social institutions. Drawing parallels between the Eurydice (education network of European Union) (2009)

established working models of pre-primary education that looks into the social dynamics with existing ECCE systems, the family and child are significantly found at the *peripheries* of the interaction. The models describe three interactions between the parent and child, and the macro social institutions of school and teachers (by extension this also implies state interventions). The dynamics range from, essentially seeing the parent and child as central actors of change, to positioning them at the final juncture of the process as the "end unit".

Voices drawn from a study done by Ng (2009, 2011), and Yeo and Clarke (2006) imply the multiplicity of external and internal forces. Acknowledgement that the education continuum is a continuing dialectic (between various voices) is met however with the urgent need to maintain social equilibrium (mainly due to the mainstay meritocracy), externalised by the common message that grades and the "school readiness" imperative is ready for curriculum and examinations. The increasing number of "lion moms" at the peripheries of the system signing up their pre-schoolers for tuition (Mathews, 2017) also draws attention to this common perceived objective of ECCE by stakeholders which highlight the position of the family and child in the landscape.

The narrative and policies consequently, relay the message that parents are not partners of the education process, they are seen as consumers and therefore the story is complex and layered at the ends of various stakeholders (Ng, 2009). We neither in any way seek to prejudge which of these are wholesome, nor are we discrediting previous and current efforts to emplace the significance of "positive early learning home environment [that is] related to better academic and socioemotional outcomes" in policies (MCYS, 2009). Voices from practitioners as cited in Lien Foundation's study of leaders' perspectives on improving the Early Childhood sector in Singapore also undeniably underscored the presence of parents as players in the arena. However, as they have also noted, "nationally the take-up of these programmes is somewhat patchy, and it is not exactly clear as to what extent these support programmes are accessed by parents and families who need it the most" (2012). This denotes the position of the parents at the peripheries as the subject of intervention – calculated as programme populations subjected *and* limited to a set of criteria. This also begs a rethinking of how we should position parents and important caregivers at the core, actively seen as part of the solution and not a social unit in need of prescription? One way forward foreseeable at this juncture, is shifting away the focus from the family being a recipient of "mere programmes", treated in usually one-off situations, isolated in setting, or confined within a set number of years" (MENDAKI, 2017).

"new Primary 1 students revealed that as young pre-schoolers they were "cognizant that having a firm head start in school-related skills at pre-school plays a critical role

However, the pressure to perform academically at the secondary and tertiary levels has continued to influence expectations at the primary level, and then spirals down to the pre-schools. The whole system is ostensibly aimed at producing learners who would be more superior and competent at the next level of their education. In this sense, schools, and by extension teachers, are well suited for socialising children to the demands of this education system, serving as vehicles to focus students' attention in evaluating their activities not in terms of intrinsic value but in terms of their performance in their activities relative to the performance of others. Despite a paradigm shift in the larger education narrative, from "survival-driven" to "skills-based" which has trickled down to pre-schools in the form of heightened attention to play-based learning, the message relayed to parents and concomitantly the child is that pre-school is to ensure school readiness, and by "school ready" the system meant curriculum ready (if one may also add, "PISA and TIMMS-ready"). Peer interviews conducted by Yeo and Clark (2006) of new Primary 1 students revealed that as young pre-schoolers they were "cognizant that having a firm head start in school-related skills at pre-school plays a critical role in determining academic success when formal schooling begins". Similarly for the parents, as illustrated by a pre-school principal,

> If parents were not educated on the benefits of play curriculum, if primary one's academic emphasis has not changed and parents' knowledge of primary's curriculum guidelines not improved, this situation would continue. The demands from parents to see worksheets as child's work and learning and the strong emphasis for academic learning in the kindergarten will not go away (Ng, 2009).

Considerations in Flexing Family Involvement

How can families (parents and caregivers) then be facilitated to actively partake in this education process?

In scoping the discussion to the Malay community, two broad areas are suggested.

First, examine and seek better understanding of evolving family dynamics and household structures, in order to capitalise and activate parents and non-parent caregivers, in the Early Learning and broader education journey. Taking stock of current data and positioning of the community, one can draw inference that the household composition of Malays has changed in terms of the composition of nucleus family unit. The number of intergenerational households in the Malay community has also risen between 2000 and 2010 as compared to the other ethnic counterparts. Between 2010 and 2015, the shift towards smaller households was the most notable amongst Malay households, with the average household size decreasing from 4.2 in 2010 to 3.9 in 2015. However, our households continued to have larger households on average than Chinese and Indian households (General Household Survey, 2015).

Literature also indicates that smaller sibship (i.e. number of siblings to a child in a household) may hold more opportunities from social multipliers, and influenced by improved parental self-efficacy, therefore enabling children to perform based on current demands. A survey of 1,500 parents by the National Population and Talent Division in Singapore (Tai, 2016) found that more parents are opting for infant care services now with mothers and grandparents – mature workers – deciding to re-enter or remain in the workforce, whereas fewer are willing to be primary caregivers of children. A mere 10% of these parents indicated their preference for centre-based child care, revealing that most are inclined to have their babies cared for at home by family members or domestic workers. Evidentiary of this is the wane in kindergarten enrolment as more parents head back to work and need their children to be placed in care for longer hours, prompting some pre-school operators to switch to child care. In the same period, child care enrolment has surged by about 30%, from about 75,530 in 2012 to 113,133 in Q3 2017 (ECDA, 2017). Looking into this research gap can serve to inform approaches toward such family structures (considerably represented in the Malay community) and to capitalise on Malay caregivers' self-efficacy in early learning. The aforementioned household trends, including the presence of secondary caregivers, suggest the importance of better understanding of how family involvement and care can engender a more holistic early learning environment, beyond the child care and kindergarten experience. Specifically, through the inputs of parental self-efficacy, motivation and other resources that shape other non-academic elements in the child's development, such as cultivating a sense of self-identity, values and the love of learning.

Second, we propose recalibrating the focus from income- or parental education-centred arguments, towards the potential of families by optimising their resources.

Family SES has been conventionally investigated with respect to family involvement. A 2001 local National Institute of Education (NIE) study of 150 "high-income" families, for instance, was conducted to analyse resource and time allocation of well-educated parents (top 20 per cent of earners) to their children's education. Aimed at culling insights as to whether these parents' approaches toward their children could be "applied to the less well-off", it surfaced the most essential ingredients for good school performance as "family involvement, sacrifice and awareness of educational matters", and can be replicated by any other with similar efforts, suggesting that the less well-off should not feel handicapped.

Mr Viswa Sadasivan, most famously expressed his concern in his 2010 pre-school education motion in parliament that 'the education system instead of being a social-leveller could become an active contributor to the widening socio-economic gap' (as cited in Tan, 2016). Six years since, reflecting on the "arms race" consisting of pre-school tuition, enrichment classes, and "territorial competition" for a space in choice pre-schools – Mr Sadasivan may have foretold the future. But what he did not explicitly mention is the excessive look at the parent-child unit in terms of SES, and the consequent efforts and policies for the "have-nots" to ensure that the playing field (arguably) could be levelled earlier on. By looking at families through the reductive lens of only SES and insufficiency, we may fall into the fallacy of presuming their family characteristics (and thus family needs or aspiration levels as similar) to suit those standard descriptors for handing out prescriptive stopgap measures to ensure social imbalances are promptly, albeit superficially, addressed. An unintended consequence that may arise from labelling families against primarily SES would be the perpetuation of self-fulfilling prophecy, which would expose the families to possibly intergenerational cycle of internalising such labels beginning from their early education – a position that should not be started with the definition of insufficiencies. Whilst completely discrediting present interventions would definitely be myopic, there is need for a concerted effort at systems level to ensure that the families would be seen from a position of potential, moving towards engendering robust self-reliant social units.

It is also important to realise and acknowledge that the demands of education and future economy is increasingly exacting and perpetually changing, and the race that every parent is arming their children for has an untold finishing line. Hence, the concept of education as a social-leveller is more complex such that it implicitly embodies the demands of the current and future socioeconomic milieu, as well as the shifting perception and behaviour of people towards education and definitions of success. Our education ecosystem has shifted from survival-driven to a knowledge-based economy; and presently our hallmark meritocracy is shifting the focus for our future human capital from one of

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examinations meritocracy to a talent meritocracy (Shanmugaratnam, 2017). As the general upward trends in household economic indicators symptomatically show more cultural resources for children as Bordieu's cultural capital suggests, it also highlights the general upward trends in industry demands and challenges – and its positive relationship with educational demands on children (and parents). Policies may be emplaced and designed to ensure social mobility is accessible to every resident; this is evident in the positive changes in income and family structure throughout the years. For example, our monthly household income has been steadily increasing, from majority of the Malays having $1,500-$2,499 as household income in 2000 (Census of Population, 2000) to the majority earning $5,000-$5,999 in 2010 (Census of Population, 2010). However, these very demographic indicators also imply the reality of the persistence of social stratification. One notion that we should bear in mind is that our community should traverse the ECCE ecosystem, acknowledging that early learning is indeed a head start to a better socioeconomic profile – however a "catch-up" game is not an objective and should never be the endgame. The goalpost is always moving, rapidly and steadily, and we should be in tandem if not ahead of it. Arguably also, what we value for success should not be based on a single yardstick.

In policy and programme design as well as public education and outreach, there is a need to go beyond treating our target audience to the truism that "Involvement is good and necessary, therefore parents should do more", or an oversimplified "bimodal distribution" of involvement vis-à-vis socioeconomic status (i.e. wealthy parents are overly involved whilst poor parents are not doing enough) (Kohn, 2013). Just as the SES attainment gap is not a potent indicator that disadvantaged students are less academically "able" than advantaged students, lower levels of parental income and educational qualifications do not automatically mean poorer parenting, and vice versa. Heckman (2008) cautioned that 'the proper measure of disadvantage is not necessarily family poverty or parental education' but a deficiency in quality of parenting. More than just an issue of inadequate financial means – poor parenting practices and resources, lack of such stimulation and environmental deficits play a role. In disentangling the complex effects of multiple factors, Sylva et al. (2003) emphasise the powerful mediating role of family processes, particularly parenting style (e.g. calm, caring and consistent parenting versus authoritarian parenting and inconsistent discipline) and parental involvement in children's learning, through activities such as reading, painting and drawing, playing with shapes and numbers, reciting nursery rhymes and singing. *What* parents do with their children at home in the early years (e.g. provide a secure, caring and stimulating home learning environment), rather than *who* they are (e.g. income-level and parental education), matters more than any other variable susceptible to educational influence (Desforges and Abouchaar, 2003).

While some literature point to notable variations in involvement practices amongst SES groups (Lareau, 1987; Grolnick, Benjet, Kurowski and Apostoleris, 1997), others indicate that SES neither consistently correlates with involvement (Grolnick, Benjet, Kurowski and Apostoleris, 1997), nor explains why parents become involved or why parents in comparable SES classifications diverge in involvement practices or effectiveness (Xu and Corno, 2003).

Variations in involvement are more meaningfully deliberated in respect to differences in resources – such as parental self-efficacy, motivation, knowledge, skills and time – that generally coincide with SES. The merit of homing in on resources is that, families, schools, community partners and even policymakers, can mobilise or create involvement opportunities that are *time-sensitive* and *responsive* to such disparities over a specified schooling period or beyond, as compared to a hard-to-influence and broad characteristic like SES. For instance, lower-SES parents' commitment and energy for involvement are affected by inflexible work schedules and long, unpredictable hours (Machida, Taylor, and Kim, 2002; Weiss et al., 2003). Their school-related knowledge and skills are also generally influenced by less schooling, and lower access to extra-familial or professional support systems (Horvat, Weininger and Lareau, 2003). Access to involvement may seem more challenging for lower-SES than higher-SES families, as schools may occasionally assume lower involvement levels, and inadvertently limit such resources to lower-SES families (Eccles and Harold, 1993; Hoover-Dempsey, Walker, Jones, and Reed, 2002).

Above all, parents habitually seek opportunities for involvement that square with the demands they routinely encounter (Hoover-Dempsey and Sandler, 1995; Trevino, 2004) and with their perceptions of their own efficacy for helping the child learn, and their beliefs about importance of involvement in their children's education.

Targeting Behaviours to Strengthen Family (Parental and Caregiver) Involvement

Families, communities, social agencies and society need to look deeper into unconscious motivations in order to effect behavioural change. Reflecting on how norms shape communities, by how it could determine how the Malay community unit comprehends itself and its role, and how other communities comprehend the Malays, it signals the need to look at how social norms could be harnessed to facilitate parental self-efficacy for quality home environment and sustained ECCE.

Self-efficacy, a personal motivator of parent involvement, is the belief in one's capacity to act in ways that will yield desired outcomes (Bandura, 1986, 1997). Parental self-efficacy is therefore parents' or caregivers' conviction in their own capabilities to influence their children and enable their positive development and adjustment (Bandura, 1977). Parents high in efficacy are predisposed to making positive decisions about active engagement in their children's education. They are also likely to persist in the face of obstacles and work their way through them toward successful outcomes. Self-efficacy is socially constructed, and therefore amenable to change. Bandura (1997) theorises how parental self-efficacy is derived from personal experiences through four major sources: personal mastery experiences (successfully attaining goals in a defined area), vicarious experiences (observing similar others' success in attaining goals in the area), verbal persuasion (encouragement from important others of one's capability in accomplishment), and physiological arousal (physical and affective states that individuals absorb as information on the importance of the stated goals and their personal capacity to fulfil them). These sources strongly imply

the significant influence of schools, the community and important others such as family members or social groups, on parents' sense of efficacy for helping their children succeed in school. Conversely, low self-efficacy could hamper individuals from picking up new adaptive skills and diminish the execution of existing skills and strategies (Bandura, 1982). Studies suggest that parental self-efficacy has a potentially huge impact on the quality of child care and parental competence, as well as the joy of being a parent (Coleman and Karraker, 1998; Jones and Prinz, 2005). Another parental motivator – parent role construction – is defined as parent's beliefs about what they are expected to do in relation to their children's education and the parental behaviour patterns that follow those beliefs (Hoover-Dempsey and Sandler, 1995).

It has been suggested that at the tender pre-school age, the source of motivation and inspiration for a child is the parent. This changes when the child transitions to an adolescent, the influential role is passed to the friends (Pedersen, Grønhøj and Thøgersen, 2014). The premature labelling of lower SES mothers and children as not having sufficient resources for quality pre-school education, would lead to unnecessary internalisation and reduction of parental self-efficacy. Mothers, who were observed as more positively interactive and better able to solve child-rearing problems, were primary in ensuring school readiness and lesser need for early intervention (Ramey and Ramey, 2004). Two points of contention that arise from this reflection is that firstly the use of obsolete norms in categorisation and calculation of learning disability that results in intervention programmes like FLAiR would lead to insular yardstick of intelligence and "school readiness", when as indicated by the "Flynn effect", intelligence and ability to solve questions depends on the demands of the socioeconomic milieu (Trahan, Stuebig, Hiscock, and Fletcher, 2014). What we view as school ready now, may not be the same in years to come, or even weeks later. There is a need to look at more enduring yardsticks, and intervention programmes have to be sensitive in their comparison of differences based on assumed similarities. Second, intervention programmes would need to take into account the robustness and endurance of parental self-efficacy, beyond stopgap measures like free or subsidised early education.
Beyond parents, many non-parent caregivers may find themselves not doing everything they can – or everything they would like – to maximise interactions with children. Awareness of the problem and a general desire to fix it may not also be adequate; programmatic efforts to raise caregiver awareness, for instance, will only be fruitful if caregivers consistently carry out relevant behaviours (Sheeran, 2002). Maloney, Converse, Gibbs, Levine and Beilock (2015) suggest that, instead of proposing new initiatives or infrastructure, extant large-scale policy and programmatic efforts can be optimised through a widespread, parallel focus on raising the standards of caregivers' environment. Specifically, environments must engender three crucial ingredients for long-term goal pursuit — self-efficacy, planning, and feedback — to sustain caregivers' motivation and prevent "motivational sinkholes" from forming beneath good intentions. That is, if caregivers do not feel *capable* of improving their interactions, if they do not *identify and plan* for specific opportunities to actualise supportive behaviours, and if they do not receive *progress-clarifying feedback* on their efforts, they are unlikely to invest and sustain. Effective programming – supported by clear guidelines, resource allocation and accountability – can plug these sinkholes, promoting optimal operating environments that sustain caregivers' motivation.

Self-Efficacy

Beyond allaying anxieties of being "a child's first teacher", self-efficacy could be boosted by communicating accurate information about the multitude of easy things caregivers can do. For example, if caregivers hold the wrong impression that "quality math input" tantamount to advanced lessons or sophisticated toys, they may be deterred; however if they see that behaviours as simple as counting everyday objects or playing with blocks can help advance their children's math skills (Levine, Ratliff, Cannon and Huttenlocher, 2012), they could feel motivated to act on their intentions. Modelling effective interactions – where possible, involving on caregivers' peers – could boost their self-efficacy for teaching. Community organisations that work with families can act as hubs for collecting data on what caregivers are already doing and can do in various circumstances. Subsequently, the information can be shared with existing and prospective participants, and across programmes intra- and inter-organisation to support different caregiver profiles in tailoring their own attainable goals.

Planning

General motivation should be 'scaffolded' with specific plans to provide caregivers a clear sense of how and when to work with their children (Maloney, Converse, Gibbs, Levine and Beilock, 2015). Most effective are plans that provide caregivers ideas for educational opportunities and that follow an "if–then" structure, in order to minimise missed opportunities that could lead to habit formation over time (Gollwitzer and Oettingen, 2011; Wood and Neal 2007). It should also graduate beyond the first step of giving parents ideas for educational opportunities (e.g., "Try counting with your child!"), to the more constructive second step of working with them to systematically customise and infuse these tips into their daily routines (e.g., "We are having Honey Stars for breakfast, let's count the first 10!"). Initiatives that afford extensive contact with caregivers, such as home visitation can provide focused coaching on translating general desires into well-structured plans. For instance when parents receive a text containing "information nuggets" about an activity they are keen to attempt, they could be nudged to respond to the text with a specified action plan that imbues the activity into their daily routine, ideally strengthening their commitment to it (Cialdini and Trost, 1998). However, text-message outreach and home visitation programmes may need to be piloted with the target population, to test their effectiveness, and to consider cost-benefit analyses, ease and timeliness, before being rolled out in full-scale.

"self-efficacy could be boosted by communicating accurate information about the multitude of easy things caregivers can do

Feedback

Proving the benefits of caregiver–child interaction is challenging because the connection between today's behaviour and next year's outcomes is neither linear nor will immediately materialise, so a slight lapse might not feel like a compromise on their efforts. Because long-term outcomes are contingent upon the accrual of small steps and isolated decisions, people may not perceive any one decision as consequential (Converse and Fishbach, 2011). To stopper the probability of a "feedback sinkhole", parents could be given explicit, well-structured feedback that clarifies their progress toward the set goals (Maloney, Converse, Gibbs, Levine and Beilock, 2015). For example, while it is unfeasible to demonstrate the effects of today's story time on next year's literacy performance, it is still possible to show how it contributes to a monthly reading goal. Koo and Fishbach (2008) emphasise that caregivers who are new entrants into a programme will be most reassured by feedback that highlight their extent of accomplishment, whereas for caregivers with a more solid commitment, it would be feedback that articulate possible areas of improvement. Programmatic resources should then be organised accordingly.

Caregivers could also be empowered through **TEACH**ing mediums – (1) **T**alk (quantity and content), (2) **E**ffort-based praise, (3) **A**nxiety reduction strategies, and (4) **CH**allenging play – to effectively support a child's learning (in reading, writing and arithmetic) beyond schools. These principles serve to provide some structure to caregivers' environments, without encroaching into a space as 'personal and culturally variable' as parenting or caregiving (Maloney, Converse, Gibbs, Levine and Beilock, 2015). Grandparents and house-helpers, who mostly are secondary caregivers, should be given the confidence and autonomy to exercise these features in daily activity. To boot, spending time with grandparents could enhance a child's sense of identity and belonging, acceptance and self-confidence, as they recognise family traits and shared interests, whilst feeling more connected to them as part of a bigger extended family.

Invitations to involvement from important others are often key motivators of parents' decisions to become involved (Hoover-Dempsey and Sandler, 1997). Whilst strong role construction and self-efficacy may precipitate involvement, invitations to involvement from children themselves and the school community (including the general climate; parental engagement in meaningful roles; offering substantive, specific, and positive feedback on the importance of parents' contributions; and positive attitudes from teachers and principals) are an integral cog in the motivation wheel because they signal to parents that their participation is expected and valued (Hoover-Dempsey et. al, 2005). Teacher invitations are compelling as they are responsive to parents' expressed desires to understand how to support their children's learning (Hoover-Dempsey, Bassler and Burow, 1995). They also encourage parents to partake in school processes, and reaffirm parents' knowledge regarding their children's learning and confidence that their involvement efforts are useful (Soodak and Erwin, 2000). Although trust and empowerment in the partnership is built reciprocally across time, invitations offer an important point of entry towards striking impactful partnership. Not forgetting invitations from children – which energise parents'

hopes of being responsive to their children's developmental needs and their intentions for children's school success (Baumrind, 1971, 1991; Hoover-Dempsey, Bassler and Burow, 1995).

Further Research

Germane to this discussion is our focus on parents who are involved, to whichever extent and capacity, in their children's early childhood education and learning. Naturally, our larger interest is in all parents and caregiver types, simply because they are the earliest, and usually fundamental, actors in the social context that shapes children's educational outcomes. Given the unique context of our education system and culture as well as societal multi-ethnic dynamic, we advocate for more local research to study approaches which galvanise uninvolved parents (of various sub-groups) to participate in their children's education. More open source research on this subject will also be useful for national agencies or community organisations working with families to learn and be better informed in the design of their early childhood family programmes, outreach and related public education initiatives.

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The Role of Early Childhood Education and Family Environment in Social Mobility

By Dhaifina Dasri

Abstract

The paper deals with the correlation between family environment and early childhood education in social mobility. A child's earliest years are the most fundamental period of their life cycle where they are the most susceptible for developing the skills and behaviours necessary for positive lifelong outcomes. Literature on effects of early childhood education has gained much traction within the last decade, contributing to the paradigm shifts in the early childhood education. While academic achievements are highly prized and an indicator of upward mobility, this paper addresses the various early childhood programmes' approaches, environment and holistic learning of the child, both in school and at home. These factors are believed to enhance or impede a child's development and potential for social mobility. On a macro level, the implications of these factors for the Malay/Muslim community, especially the low-income families will be discussed.

Introduction

Quoting Prime Minister Lee Hsien Loong's speech during the National Day Rally 2017;

> "Pre-school is important to give our children a good start and the best chance to succeed in life. In the past, we started at Primary 1, when the child is seven. But now we know we have to begin much earlier, not to give children a head-start in Primary 1, but to build sound foundations for them for life. At an early age, there are specific windows in a child's development and you must catch that window or you miss it." (2017)

Early childhood education has now become a buzzword in the education landscape of the 21st Century. Policymakers, researchers and educators are turning their attention to early childhood education as a platform to address inequality and improve the life course of the future generation. With widespread efforts and initiatives to educate the public, parents in turn are now becoming increasingly aware of the importance of early learning, especially during the first 3 years of the child's life.

Contemporary research on early childhood education suggests there are short-term and long-term gains in the child's overall development which preludes to shaping a successful adult (Barnett, Pre-school Education and Its Lasting Effects: Research and Policy Implications, 2008). These gains not only translate to academic achievements, but also include building the child's social capital. Similarly, there are evidences that show the negative impacts if a child does not attain pre-school education (The World Bank, 2013). The World Bank's framework paper on Early Childhood Development reinforces the importance of laying an early foundation for a prosperous human development.

Formal Early Childhood Education and its outcomes on social mobility

Gone were the days whereby early childhood education is synonymous with 5 years old attending kindergarten to receive the basic cognitive skills necessary to start their formal education. In today's society, early childhood programmes for children as young as 18 months old are becoming much more prevalent. Much of this can be contributed to the growing literature that shows the earliest years of a child's life cycle has the most significant impact on their intelligence, personality and behaviour (Myers, 2005). Part of a child's life cycle also includes skill formation process that begins in the womb and continues throughout life. According to Heckman (2006), the dynamic process is complementarity as the early inputs would affect the productivity of later inputs. For example, prospective attainments are dependent on the foundation that was laid down earlier through early learning. In reverse, future achievements might be few and far between. Early learning paves the way for either a robust or frail stage for what follows in a child's life (Phillips and Shonkoff, 2000).

"In today's society, early childhood programmes for children as young as 18 months old are becoming much more prevalent

Literature on early childhood education seems to suggest a connotation of policymakers looking into properly formalising early childhood education. On a political context, given the importance and benefits of early learning, early childhood programmes can act as a lever to minimise the inequalities that low-income families face and influence the child's upward social mobility (Heckman, 2006). It is viewed as an investment since sending your child to pre-school will properly equip them with the necessary skills needed for formal education and also level up the opportunities early in life (Ting, 2007). As such, many look to this platform as a way to minimise the gaps across the socioeconomic groups due to the human skills formation, abilities and motivations that will better promote their performance in school, building a stronger backbone for later life outcomes (Heckman, 2006). Studies have shown that early childhood education provide immediate gains, but long-term benefits on educational achievements, school progress, employment, social behaviour and crime rate (Barnett, 2008). Experts believe that even the modest long-term gains, early childhood programmes provide substantial economic value and would produce "better" adults.

By and large, the term "better" adults refer to those who can positively contribute back to society and is measured mainly based on their cognitive achievements, scholastic success and better employment (Currie, 2001). Numerous literature have cited cognitive skills as an

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indicator of success in retrospect of being school ready and meeting the demands of formal education efficiently (Ting, 2007). Particularly in Asian countries where nations shared a common heritage of Confucian values in the context of rapid modernisation, it is heavily implied that formal education is closely tied to social mobility (Boocock, 1995). Evidence from the Abecedarian Project show that early academic failure may lead to discouragement and further alienation (Campbell, Ramey, Pungello, Sparling, and Miller-Johnson, 2002). However, within the last decade or so, researchers have also highlighted socioemotional development as an indicator of success. There is a correlation between a child's cognitive skills, physical and socioemotional functions and how it contributes to school readiness as well (Hair, Halle, Terry-Humen, Lavelle, and Calkins, 2006). Vegas and Santibáñez (2010), who conceptualised a framework for Early Childhood Development outcomes, featured socioemotional development as one of the four key areas of development during a child's early years that would in turn impact life outcomes. These outcomes are interdependent on one another and would impede a child's overall well-being if one is not as properly developed as the other (Vegas and Santibáñez, 2009). Similarly, Singapore's Ministry of Education (MOE) has developed a curriculum framework "Nurturing Early Learners: A

Framework for a Kindergarten in Singapore" which reflects values, positive dispositions, confidence and social skills as Desired Outcomes of Pre-school Education (Ministry of Education, 2012). A study on Singapore's early education system indicated that while children are able to handle academic tasks in formal education, they have also improved skills on sharing and cooperating (Boocock, 1995). These enduring outcomes do not only ease the transition from pre-school to primary school but also provides the child with a holistic development that would produce a well-rounded individual.

However, Feinstein (2003) suggests that despite policymakers' intervention efforts to further strengthen the child's development through early childhood education, social and family background factors affect the child's development even before they enter pre-school. In Vegas and Santibáñez (2010) framework, the child's experiences are influenced by family factors at a micro level. In this case, the family of origin, mainly the parental socioeconomic status, social networks and motivations, are crucial components that shape

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a child's scholastic performance and aspirations (Breen and Jonsson, 2005). Conversely, a study measuring parental involvement found that influencing the child's development through parents was ineffective (Barnett and Belfield, 2006). However, based on a study by Boocock (1995), a theme emerged where family factors influences a child's development if the parents are supportive and engage in parent-child interactions to further boost their development. In this case, the association between family of origin and the level of mobility strengthens as the child grows older. In contrast, family influences vis-à-vis non-supportive parents does more harm to a child's development.

Perspectives on Early Childhood Education programmes: The dilemma between targeted and universal approach

For decades, early childhood programmes are a way to combat developmental and educational progress that have been hampered by poverty (Campbell, Ramey, Pungello, Sparling, and Miller-Johnson, 2002) In discussing early childhood programmes, Waldfogel (2004) advocates that intervening during the early years is crucial as it would be too late as child's development would be less responsive to change when they reach primary school. The common concepts that arise from literature with regards to early childhood programmes are the universal and targeted approach. Universal approach aims to utilise public funding to provide quality early childhood education for children no matter their socioeconomic status while targeted approach is solely for children from low-income households.

One of the most notable targeted programmes in the United States is Head Start. The programme serves 900,000 children and is publicly funded on federal-level. However, findings show that due to the limited resources and large-scale enrolment, the outcomes are not as effective as their smaller-scale counterparts (Barnett and Belfield, 2006). The Perry Pre-school Project, which only examines 123 poverty-stricken children, showed eight to ten times the improvement in cognitive and language abilities than the Head Start programme (Barnett and Belfield, 2006). Likewise, findings from the Abecedarian Project suggest that children from the programme are more likely to attain educational achievements and attend a 4-year college (Campbell, Ramey, Pungello, Sparling, and Miller-Johnson, 2002). On a more international scale, a programme in Turkey reflects similar findings where children who attended the programme outperformed those who do not (Boocock, 1995).

> **“ For decades, early childhood programmes are a way to combat developmental and educational progress that have been hampered by poverty**

On another hand, there is a debate on providing quality early childhood education to all regardless of their socioeconomic background. According to Barnett (2010), while majority of the early childhood programmes in United States are targeted to low-income households and those with a higher income are able to enrol their children in private pre-school, the median households fall through the cracks. A study in France proved that a universal programme would gain a wider traction with almost 100% of all the three to five years old attending. The nationwide pre-school expansion was to reduce disparities between families of a higher socioeconomic status and the rest of France in academic failure (Boocock, 1995). Similarly in Sweden, early childhood education is made available to all and capped at 11% of the costs regardless of income (Bennett and Tayler, 2006). In United States, some states are providing universal programmes for all such as Tulsa which has provided credible estimates of short-term effects on literacy and mathematics achievement (Barnett, 2008). Research has also shown that children from low-income households can learn from their more advantaged peers and raise their achievements (Neidell and Waldfogel, 2008). In contrast, Barnett and Belfield (2006) reiterates that universal programmes may not impact social mobility as much as a targeted programme, however, it does generate a higher public return. In addition, such programme would be providing a larger subsidy for both low and middle-income households rather than only reaching out to the neediest (Currie, 2001).

Cultivating the right environment to facilitate social mobility

Discourses on early childhood notably points to the profound influence the child's environment has on learning and development. Environmental conditions shape a child's capabilities that stay throughout their life course (Knudsen, Heckman, Cameron, and Shonkoff, 2006). As early learning would set the baseline for future life outcomes, children raised in disadvantaged environments would have gaps in cognitive and behavioural traits thus preventing any upward mobility (Conti and Heckman, 2014). Researchers have likened this concept as an ingrained blueprint for an adult welfare.

With that in mind, it is important to note that parental involvement plays a pivotal role in a child's development, especially during the earliest stages. Positive parental engagement can lead a stimulating environment for a child (Tinajero and Loizillon, 2012). Level of parental involvement is dependent on parent's expectations of the child (Davis-Kean, 2005). For example, a parent who is highly invested in their child's future would be more involved. Interestingly, social mobility is also linked to parental background. A child, despite their achievements, is more likely to attain similar origin as their parents' to avoid the risk of downward mobility (van de Werfhorst, 2002). Consequently, there is a risk of children from low-income families continuing to be part of the poverty cycle as they might be conditioned to view their status as a "norm" because their parents are in the same boat. Therefore, it is imperative that parents create a positive environment at home as there is a correlation between the parents' belief, motivations and the child's development. A supportive and highly stimulating environment can supplement the early childhood education provided and in turn, produce motivated and capable adults.

"parents create a positive environment at home as there is a correlation between the parents' belief, motivations and the child's development

Naturally, cognitive skills have always been the measurement of success as academic achievements translate to better opportunities for the future. Likewise in Singapore before the reform of early childhood practices, educators focused on a didactic teaching approach in preparation for primary school as opposed to our western counterparts with their traditional play-based methods (Ting, 2007). In today's society however, creativity and innovation as equally prized as academic achievements. Current early learning practices pedagogies inculcate play and interaction to develop a more holistic environment. Through this, children are able to develop life-skills, problem-solving skills and critical-thinking

"If the quality hinges on the price parents would have to pay, it is simply reproducing inequalities instead of minimising them

skills (Ting, 2007). These dispositions are akin to what Currie (2000) advocates as the characteristics of "better" adults. As addressed earlier, parents play a crucial role in the development of the child especially at its earliest stages. Great character and disposition can be achieved through nurturing a supportive relationship with the child through positive interactions such as engaging in educational and play activities and encouraging independence by inculcating simple everyday tasks like cleaning up after themselves. Parents' behaviours and parenting styles can also influence a child's socioemotional development and characteristics (Morris, Silk, Steinberg, Myers, and Robinson, 2007). To keep up with today's disrupted economy, families especially from the low-income group can include sensory play to facilitate exploration, craft play such as building things using items at home, and coax children to come up with ideas or solutions instead of providing them with one to encourage creativity, innovation and risk-taking. The non-academic skills a child develops during their early years supplemented with academic teachings can assist the child to embrace challenges in life as they embark towards upward mobility.

In addition to parental involvement and holistic learning, quality of early childhood programmes plays a role in a child's development as well. Low staff-to-class ratio, small groupings, sound curriculum and highly qualified teachers are the hallmarks of an effective programme (Boocock, 1995). This is especially pivotal for public programmes where majority comes from the low-income households as they would require more "help" as compared to those from a higher-income who can afford a high-quality private pre-school. A study conducted on Head Start showed that quality varies across states and quality was higher in programmes with higher family incomes (Currie, 2001). All children should have access to the same quality programmes to level the field upon entering primary school. If the quality hinges on the price parents would have to pay, it is simply reproducing inequalities instead of minimising them (Esping-Andersen, 2004). In a local context, Early Childhood Development Agency (ECDA) was established in 2013 to improve the quality of early childhood education. Singapore Pre-school Accreditation Framework (SPARK) certification is an endorsement of quality by ECDA so that parents need not fret over the calibre a centre provides. According to Barnett (2008), a child may develop more poorly from inadequate quality in early childhood centres than if they had remained at home.

Supporting our Malay/Muslim Community in Early Childhood Education

With decades of literature suggesting paradigm shifts in early childhood education, community organisations, policymakers and pre-school operators should take heed the implications research has provided to craft a holistic and meaningful programme for the community. In 2016, it was reported that 103-221 children were enrolled in pre-school, 8.1% increase from 2015 (Early Childhood Development Agency, 2017). However, children from low-income families make up a larger segment of those not receiving an early childhood education (Ting, 2007). These families might be unaware of the importance of early learning and its long-term gains or do not have the means to access early childhood education. Riding on this, ECDA has started a new initiative called KidSTART to outreach

to low-income families and create a new system for them to have early access to appropriate health, learning and developmental support, including attending quality pre-school. This upstream intervention aims to provide children with a good start by cultivating strong parent-child relationships and a holistic early childhood education (Early Childhood Development Agency, 2016).

While reaching out to low-income parents to ensure enrolment is important, the crux of the problem is regular attendance amongst those who are already enrolled. A high proportion of regular absentees come from low-income families despite the financial subsidies provided (TODAY Online, 2015). Irregular attendance might hinder a child's development as they would lag behind their peers cognitively. This might also create a causal effect on the child's socioemotional development especially if they do not have a healthy environment at home. This goes back to the theory that parents from low-income households might not view early childhood as a top priority as opposed to bringing food to the table, hence, they do not mind if their child does not attend pre-school regularly.

At a community level, outreach has to be done to the Malay/Muslim parents to emphasize on the importance of early childhood education and its impact on lifelong outcomes. Awareness must also be cultivated for expecting Malay/Muslim parents to start early in order to give their child the best possible head start in life. Beyond highlighting the importance of early learning, community organisations should also assist parents to develop a strong self-efficacy to play a more active role in creating a conducive environment at home. In 2016, MENDAKI developed a toolkit to assist parents from the prenatal stage to their transition to primary school.

On a government level, the Early Childhood Development Centres (ECDC) Bill has passed through Parliament in a bid to enhance the affordability, accessibility and quality of pre-schools in Singapore. The regulatory framework will be used to license all child care centres and kindergartens to ensure consistency and higher quality across all the pre-schools islandwide (Early Childhodd Development Agency, 2017). There is also talk to professionalise mosque kindergartens to uplift and improve their quality to meet ECDA's requirements (Yong, 2017). Singapore is also centralising its training institution for early childhood teachers called National Institute of Early Childhood Development (NIEC) which is similar to NIE but solely for the early childhood sector (Prime Minister's Office, 2017). Raising the quality of mosque kindergartens is important as the enrolment for faith-based kindergarten has been increasing, especially from the low-income households, who wish to provide their child with both religious and secular foundation. Over and above improving consistency and quality, financial support such as Kindergarten Fees Assistance Scheme (KIFAS) has been extended to families with a gross household income of up to $6000 to increase affordability of kindergarten education (Ministry of Social and Family Development, 2015). Community organisations too have provided financial subsidies to further mitigate the costs for low-income households (Ting, 2007).

Conclusion

With a target of creating 40,000 more pre-school spaces within the next five years and the multitude of readily available financial subsidies, there is really no excuse for parents to circumvent early childhood education. The overarching concept derived from discourses within the early childhood community is that early learning sets the backbone for future life outcomes that may enhance their social mobility. Empirical findings from several programmes globally have shown that a good quality early childhood programme do have a lasting effects throughout the child's life course. In addition, a holistic curriculum and healthy home environment further enhances the outcomes and paves the way for social mobility.

However, while it may seem like the most ideal solution to abolish inequalities and poverty, the current realities might differ from a theoretical concept especially within the low-income households. Systems and processes are in place and ready, the decision still lies with the parents. Parents from low-income households need to be more aware the pivotal role they play in shaping their child's adult future behaviour, responses and outcomes. There is a need for them to develop a strong conviction that their child can and will succeed in life in order for them to invest on their child's early childhood education. This self-efficacy from the parents will set the positive tone and holistic environment during the child's earliest years. Only then can early childhood programmes supplement this conditioned behaviour to produce future achievements and upward mobility. Afterall, parents are the child's first teachers.

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Parents from low-income households need to be more aware the pivotal role they play in shaping their child's adult future behaviour, responses and outcomes

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Nurturing Winners in our Early Learners: Re-Defining Success and Thriving in the Future Economy

by Johann Johari

> *"Every child counts and if we get this right, we will foster social mobility and sustain a fair and just society."*
> *PM Lee Hsien Loong, 2017.*

Abstract

Starting young has never been more important. Technological disruption is evolving how we live, learn and work, and all segments of society need to adapt or be left behind. The new world of work in the Future Economy is projected to be vastly different from what it is today and everyday developments are moving us rapidly towards that direction. Preparing our young children for this inevitability has become a priority at both the national and community levels. An upstream approach is necessary in inculcating the right skills and values early in life, providing our early learners with an important good start prior to embarking on their formal education journeys. Our community's role is clear. Through our community agencies and pre-schools, we must create an environment that helps nurture and mould our early learners, and empower parents to understand and appreciate the importance of early childhood education in preparing their children to thrive later in life. This paper will explore how we can better equip our early learners to seize the opportunities and overcome challenges in the dynamic Future Economy.

Introduction

Technological advancements are ushering the global economy into a new era of the Fourth Industrial Revolution (Schwab, 2016) and the Future Economy. This evolution has transformed how we live, learn and work; and many aspects of our daily lives are contrastingly different now as compared to only a generation ago. As an open economy as well as an agent of globalisation, Singapore is no stranger to these developments. Many of our industries have begun their transformations and will continue to do so into the future.

Alongside these rapid changes, Singapore is also witnessing the growth of the lifelong learning movement, together with a renewed focus on our early childhood sector. Lifelong learning has been reinforced through the introduction of SkillsFuture in 2015, as a means of preparing students, workers and professionals to face an ever changing economy. While SkillsFuture focuses on the three said target groups of students and above, the government has also set up the national Early Childhood Development Agency (ECDA) in 2013 to focus on our early learners and strengthen the early childhood sector. Many new initiatives have been introduced to achieve this aim.

This paper seeks to explore the various opportunities and challenges that the Future Economy presents, as well as the skills that our early learners will need to acquire from the onset in order to maximise their potential. This paper will also explore the role of our community in positively moulding our young children so that they may thrive later in life.

Exploring the Future Economy

In its report in early 2017, the Committee on the Future Economy (CFE) shared a rather grim outlook of the Future Economy. It noted that global economic and productivity growth is currently generally sluggish and that the centres of influence have begun to shift away from the West and into the East. The CFE Report also shared that society is now living in an era of swift and constant technological changes where new emerging technologies have the ability to replace entire industries. In addition to that, new business models such as Grab, Uber and Airbnb are also transforming and threatening the traditional concepts of business and how their specific industries operate.

With regard to employment, it has been predicted that at least half of American jobs are at risk of computerisation within 20 years (Osborne and Frey, 2013). This means that future workers in both routine and non-routine jobs have a 50/50 chance that they may be displaced due to automation or Artificial Intelligence (AI). Jobs that are currently at low risk of displacement are those that involve non-routine human interactions such as teachers, therapists, nurses and social workers. At the other end of the spectrum, jobs that have a higher risk of displacement are those that are more routine in nature, such as data entry clerks, assemblers, receptionists and cashiers. This particular scenario of the Future Economy is already playing itself out today as we see many everyday functions that technology is disrupting and progressively taking over. These include self-checkout counters that are replacing cashiers at

major supermarkets such as NTUC Fairprice and Cold Storage, self-check in counters that are replacing counter staff at airport terminals, private hire cars from Grab and Uber that are taking over the taxi industry, and many others.

It has to be noted that while technological advancements may be the primary game changers, other developments also play a contributing role in shaping the Future Economy. These other change drivers include developments in demographics (such as ageing population), new business models and geopolitics (such as ASEAN integration efforts).

A Renewed Focus On Early Childhood

A recent World Economic Forum (WEF) article indicated that Singapore is the world's leading country in preparing children for future work (2017). This was derived from the latest PISA (Programme for International Student Assessment) scores and it showed that Singaporean students are best at "collaborative problem solving". In spite of this achievement, Singapore is venturing further upstream to ensure our young children are off to a good start. There has been a renewed focus on the local early childhood sector recently. In his 2017 National Day Rally speech, PM Lee announced two new early childhood initiatives that Singaporeans can look forward to. The first new initiative announced was to meet growing demand by creating up to 40,000 more pre-school places by 2022. By then, the total number of pre-school places would have risen to approximately 200,000. To help increase this supply, the new Early Years Centres will be set up to cater to young children (up to four years old) in new housing estates. Children in these centres will also be guaranteed a place in nearby Ministry of Education (MOE) kindergartens. This is an upstream effort aimed at encouraging parents to give their young children a head start in lifelong learning.

The second initiative focuses on raising the standards of pre-school education. This will be achieved by setting up the new National Institute of Early Childhood Development (NIEC) in 2019. This initiative will bring together the current training programmes conducted by various institutions such as the Institute of Technical Education (ITE), polytechnics and the SEED Institute. In addition to the above, PM Lee also shared progress on the KidSTART initiative for low-income families. He added that KidSTART, which started last year, has gotten off to a promising start with 400 families and it will continue to grow to achieve its target of 1,000 children from low-income families within three years.

This renewed focus on early childhood is likely a result of two developments. Firstly, similar to many other developed economies, Singapore is facing an issue on declining birth rates and total fertility rates (TFR) (TODAY Online, 2017). Last year, local birth rates fell from 33,725 births in 2015 to 33,161 in 2016. Similarly, the TFR dropped from 1.24 to 1.2 during the same period. The decline has taken place in spite of the various pro-baby incentives that the government has rolled out over the years. In 2013, the government's National Population and Talent Division (NTPD) have projected that, as a result of these

falling rates, Singapore will witness a shrink in population by 2025 (NTPD, 2013). Hence, given the lack of critical mass, it is important for Singapore to properly nurture the quality of its population to ensure continued prosperity and economic growth. Secondly, the emergence of the Future Economy, as highlighted earlier in this paper, is changing our everyday lives. The traditional concepts of education, career and life have been disrupted by technology and the new age of automation. From the above, it has become critical for the government to focus its efforts upstream with our young children; and we have done so by strengthening the early childhood sector so as to better nurture our early learners at a young age to prepare them for the constantly evolving Future Economy.

Re-Defining Success

Amidst these developments, it is critical that we evaluate our measures of success to remain relevant to the needs of the Future Economy. The community has made great strides in its academic progress. For example, 16 percent of Malay students achieved five GCE 'O' Level passes, an indication of eligibility to higher education, in 1980 (Ministry of Community Development, Youths and Sports, 2007). By 2014, this proportion had risen to 83 percent (Ministry of Education, 2015), more than five times it was several decades before. At the polytechnic levels, the proportion of Malay graduates among all polytechnic graduates grew from 6 percent in 2000 to 11 percent in 2010 (Department of Satistics, 2011). These are clear signs of progress made by the community in the past three decades.

However, the education landscape has also evolved and success is no longer restricted or defined by the paper qualifications that the student obtains throughout his education journey. Education has become broader and more holistic, with various pathways to success, and this provides an invaluable opportunity for our students who may not be academically inclined to do well in life (Ahmad, 2016). Initiatives such as the World Skills Competition and MENDAKI's Goh Chok Tong Youth Promise Awards highlight the importance and emergence of skills-based and non-traditional academic fields that serve as drivers of success.

However, in order to allow success to be more inclusive, the community must first adapt and acknowledge that the definitions of excellence have evolved. Ahmad (2016) argued that it may be difficult for the community to adapt to these new definitions, especially when it has been ingrained in them the importance of academic achievements through national and community (via Malay/Muslim organisations) efforts. Regardless, the Future Economy is upon us and it is critical that the community adapts quickly in order to remain relevant and competitive.

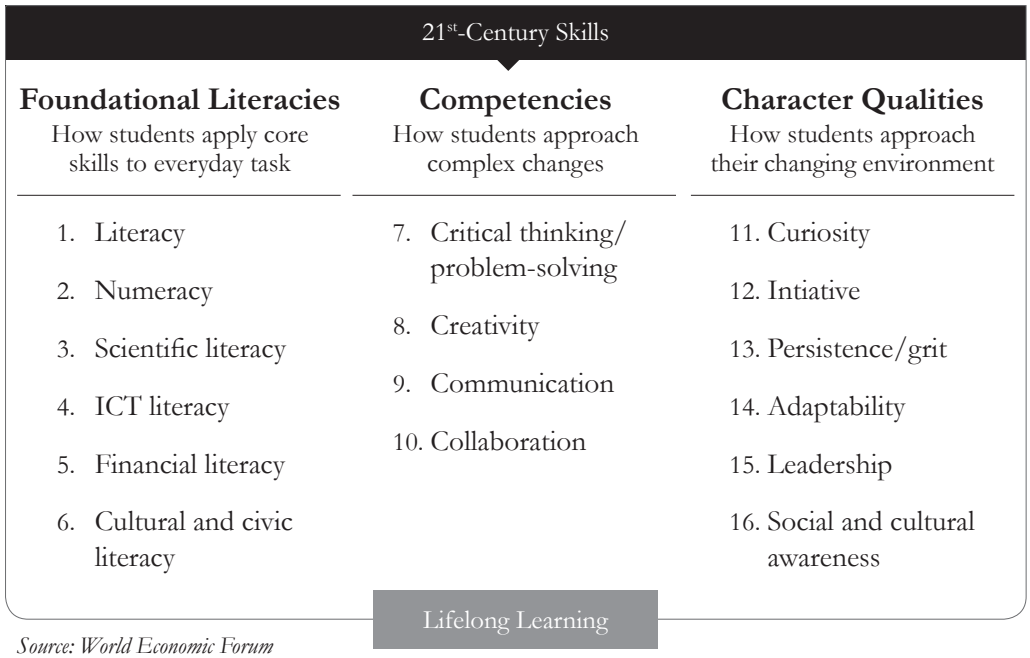
Thriving In The Future Economy

> *"It's about changing mindsets …it's about transforming our society and culture so that we value one another for our skills and contributions and constantly seek to improve ourselves."*
> *PM Lee Hsien Loong (2015)*

A WEF report (2016) shared that technological advancements and other change drivers have impacted the shelf-life of existing skill sets. This means that skills are becoming obsolete at a faster pace and it becomes critical for current and future workers to continually re-skill or up-skill themselves. As a result of technological advancements and a shorter skills shelf-life, WEF predicted that the world may see a total potential loss of up to seven million jobs, mainly coming from routine professions. However, job gains may only total up to two million, and these jobs are concentrated primarily in the Science, Technology, Engineering and Math (STEM) fields. The same report also highlighted that for the time being, technological disruptions are substituting the worker in carrying out certain tasks, rather than replacing the worker completely. This then frees up these workers to focus on other new tasks which require new skills. Thus, lifelong learning becomes more prominent in remaining relevant to the changing work demands.

Learning can no longer be restricted to formal education during the schooling years but must now extend into the work life. Constant upgrading of skills is now a necessity if one is to remain both relevant and competitive in the Future Economy. Thus, a culture of lifelong, or continuous, learning must be inculcated into our early learners as they will need to continually adapt to new transformations throughout their later lives. This is also particularly important with the emergence of the gig economy where one must have a portfolio of diverse skills in order to thrive. Given the short shelf life of skills, as well as the need for skills diversity, it then becomes a priority to equip ourselves with multi-disciplinary skills that we may update when necessary (Iswaran, 2016). The Future Economy bears semblance to Singapore's post-independence era that our future success is dependent on the quality of our people, rather than our physical might (Cheng, 2016).

It is also critical for us to expose our early learners to 21st Century competencies. Listed below is the 21st Century Skills Framework from the World Economic Forum.



Source: World Economic Forum

Each of these competencies is important to enable our early learners to thrive in the Future Economy. ICT literacy, for example, is critical especially in the face of growing technological transformations of all industries. Coding can no longer be considered a supplementary subject but a necessity in school and future work. Similarly, problems or issues are expected to be more complex in the Future Economy and as such, enhanced problem-solving skills in the form of critical thinking, creativity, communication and collaboration need to be inculcated early through play and activities. Minister Heng Swee Keat (2016) shared that the Future Economy will "be "defined more by ideas, innovation and creativity". Given the rise of Asian economies and the opportunities to work across borders, we should pay close attention to the communication (including language skills) and collaboration skills of our early learners. Finally, it is also important that our early learners have the right life skills to face the constant changes of the Future Economy. Curiosity, adaptability and grit are essential tools that can help in dealing with the frequent landscape transformations.

Role of Parents and the Community

As the saying goes, it takes a village to raise a child. Similarly in the Future Economy, it will take a concerted effort from both the parents and community organisations to help maximise the potential of our early learners. While it remains important for parents to invest in their child's continued development, it is equally critical for them to understand the developments that are taking place in the various landscapes that will impact their child's progress. This will allow parents to better appreciate the different peaks of excellence beyond academic achievements that their children can aspire to. It is also important for parents to leverage on the various opportunities at both the community and the national levels. Community programmes for early learners such as MENDAKI's Tiga M, Cahaya M and CM Tech help to expand the skills and horizons of our early learners so as to better prepare them to embark on the formal education system.

Similarly, community organisations must also continue to engage parents in inculcating the values of education. Besides running community programmes that achieve this aim, organisations also play a key role in bridging these parents to existing national efforts such as the Education and Career Guidance (ECG) services in primary and secondary schools, and the Earn-and-Learn Programme for polytechnic and ITE students. Leveraging on national initiatives helps to free up resources within community organisations that can then be utilised for other community programmes.

Naturally and inevitably, our community pre-schools will play an increasingly vital role in moulding our early learners for the future. In order to do so, our pre-schools will need to make that step up, in the areas of capacity, capability and curriculum. At MENDAKI's Education Symposium 2017, Minister Yaacob Ibrahim shared that both MUIS and MENDAKI will look into helping our mosque-based kindergartens meet ECDA's pre-school requirements, which in turn will enable them to attain the Singapore Pre-School Accreditation Framework (SPARK) endorsement (Yong, 2017). This is akin to the government's early efforts in professionalising pre-primary teaching in 1978 where it sought to set a minimum qualification standard through a centralised training course for all pre-school teachers (Barr and Skrbis, 2008). In building capacity, Minister Yaacob noted that not all local mosques have kindergartens. Ramping up capacity in mosques will help increase accessibility for our families to send their young children to attend pre-school. It is also important to build parents' trust and confidence in our mosque-based kindergartens by enhancing the capabilities of the teachers, as well as the curriculum that is taught. It is observed that mosque-based kindergartens are currently charging fees that are lower than the national kindergarten fee median of $520 a month (Goy, 2015). The low rates are presumably one of the attractions of sending children to these kindergartens. The challenge here then is to maintain similar levels of attractive fees, while revamping the talent pool by recruiting new qualified pre-school teachers, as well as upskilling and/or reskilling the older teachers.

Conclusion

The world is changing at such a rapid pace that the community can no longer afford to stand still or lag behind. While it is important for all segments of the community to ride on the waves of the Future Economy, it has become ever more critical to adopt an upstream approach to nurture our early learners from young so that they are better equipped at an early age to adapt and be resilient to the various evolutions that will take place over the course of their education and career journeys. The community must view the Future Economy as an opportunity for our young children to use their strengths and interests to now take their place at the forefront of excellence.

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The Joyful, Illiterate Kindergartener

By Sharifah Fairuz Syed Yahya Alsagoff

Abstract

A mostly fictional autobiography account of Siti, a six-year old girl, who always jumps with joy whenever she goes to her kindergarten. This fiction is a focus not only on the child but also everyone being 'ready' for school. Though Siti's mother has challenges at home with 4 children who are one year apart, she is proactive in getting guidance from the community and various organisations. She takes a lot of effort in learning to interact well with her children. As an early learner, Siti spends time playing meaningfully, interacting with her mother, peers and teachers and the environment. The article highlights on the key enablers contributing to the child's readiness to go to school.

Hello! I am Siti and I am six years old. I go to a public kindergarten and I am looking forward to Primary 1 next year.

School Ready Enabler 1 – My Proactive Mother

I am the eldest in a family of 4 children and my siblings are one year apart. Aminah, my younger sister is five years old. Her pediatrician describes her as 'small for her age and has some language delay'. My parents are concerned with her progress and wonder whether she displays some characteristics of autism including, a preoccupation with dolls. Aminah does not readily engage with her peers in school but stands by and observes interactions. She is often frustrated by tasks that she is struggling to attempt.

I have two younger brothers – 3 and 4 years of age, whose development raised no serious concerns apart from the usual array of fever, common flu and sensitive skin. The frequent rash outbreak for the two boys has caused a strain and financial burden to my parents.

My father is a personal driver who also takes on a part-time delivery job at night to supplement income for the young and expanding family and leaves a lot of the upbringing of the children to my mother. My diligent and determined mother is a housewife who takes good care of the family. Despite the mundane household chores, she makes time to interact with her children and sends them regularly to pre-school and checks their progress with the teachers. She is resourceful in getting tips from parenting talks and seminars and attends literacy workshops organised by various community organisations.

"Despite the mundane household chores, she makes time to interact with her children and sends them regularly to pre-school and checks their progress with the teachers

School Ready Enabler 2 – My Good Attendance in School and Quality Learning Experiences

I have exciting learning experiences in school and I particularly love gardening and interacting in an authentic environment. As an early learner, I spend a sizable amount of time each day playing instead of filling out worksheets. One morning at my school's playground, my peers patrolled the eco garden behind our kindergarten, unfazed by the warm July drizzle. We did not even lift our eyes from the ground; we just kept dragging and pushing our tiny shovels through the mud. Each class was given a small plot of land to grow the seeds of our favourite plant. Very diligently and gingerly each day we took turns to water the plants and even talked to our plants.

At 9:30 in the morning we were called to queue for a daily activity called Friendship Circle. We trudged across the backyard in our rubber boots, pleading with our teachers to play longer - even though we had already been outside for an hour.

“As children, we learn so well through play. I do not even realise that I am learning because I am so interested in what I am doing

As children, we learn so well through play. I do not even realise that I am learning because I am so interested in what I am doing.

The ‘wall-less’ classroom enhances children’s holistic learning as our teachers enable both individual and group learning through spontaneous and pre-planned learning objectives.

School Ready Enabler 3 – Learning and Interaction Opportunities beyond Curriculum Hours at a Community Engagement Centre

MENDAKI conducts parenting handholding programme on play-based learning for early learners and their parents. I always look forward to the Purposeful Play-based Learning especially the organised play activities and expensive toys and learning resources which my parents cannot afford to purchase for me.

On one Saturday at MENDAKI Engagement Centre, there was Shopping Time! where parents and their children collaborated to run a shop. I had a pretend $10 note to spend and went to an ice-cream shop to purchase a waffle with one scoop of ice-cream. As one of the girls served me, I handed the money to her. With a determined expression, the young ‘cashier’ stared at the price list for the plain waffle and one scoop of ice-cream. After a long pause - perhaps sensing a good opportunity, her mother stepped in to help her calculate the difference between the price of my order and the $10. Once I received my change (a few plastic coins), the girls giggled as I pretended to lick my ice cream.

Just before we left, a facilitator took out a basket brimming with children’s books. But for the 5 and 6-year-olds, “reading” looked just like how toddlers approach their books: We, sitting in different corners of the room, flipped through pages, enjoying the pictures but, for the most part, not actually deciphering the words. One or two of my peers in her class might be able to read syllable by syllable.

The facilitators assured the parents who were at the session that many of them would read soon.

“We don’t push them but they learn just because they are ready for it. If the child is willing and interested, we will help the child.”

In fact, the teacher facilitators were free to teach reading if they determined a child was “willing and interested” to learn. Nothing was forced upon the child. There were meaningful interactions with books though many of my peers had not started reading. There was a lot of pre-literacy instruction sprinkled throughout the morning - clapping out syllables and rhyming. The facilitators highlighted phonemic awareness - an ability to recognise sounds without involving written language and this was viewed as the groundwork of literacy development.

School Ready Enabler 4 – Comprehensive and Sustained Parenting Programmes for Disadvantaged Families

At one comprehensive parenting programme on play-based learning, the facilitators shared with parents that when children play, they are developing their language, math, and social-interaction skills. Over time, play benefits cognitive, social, emotional, and physical development. When play is fun and child-directed, children are motivated to engage in opportunities to learn.

MENDAKI provides parents with home-activity guide for play-based learning where there is scaffolding to offer playful learning opportunities. Play is a very efficient way of learning for children. And parents can use it in a way that children will learn with joy. Those things we learn with joy we remember. Those things we learn without joy we forget easily.

School Ready Enabler 5 – Exposure to the Benefits of Play

In purposeful play-based learning (PPL), I experienced play in various ways. I experienced play that was spontaneous and free form (like the time I was playing with shovel in the mud and growing plants in school). I also experienced more guided ways of playing (like the time I pretended to buy ice-cream during the planned shopping experience in the parenting programme).

The community education programme places a heavy emphasis on "joy," which along with play is explicitly written into the parenting programme as a learning concept. My mother picks up parenting skills fast and applies them in her daily interaction with me as she believes that those things you learn without joy, you will forget easily.

School Ready Enabler 6 – Key Parenting resources made available to Parents

> **"MENDAKI, Kandang Kerbau Hospital (KKH), the Early Childhood Development Agency (ECDA) and key community organisations provide parents with good resources to guide them on their children's early adventures**

MENDAKI, Kandang Kerbau Hospital (KKH), the Early Childhood Development Agency (ECDA) and key community organisations provide parents with good resources to guide them on their children's early adventures. There are available parenting toolkit and parent-child activity resources with tips and related activities for parents to do with their children on how to support their learning. There is also support for parents in building strong relationships with their children, through bite-sized activities that encourage sharing and spending time together. These are also good resources which promote parents' understanding and appreciation of school routines.

School Ready Enabler 7 – Dedicated Family Support Worker for the Child

I am fortunate that I have a family support worker who engages with my mother once a month. I began attending pre-school when I turned three. Prior to that, the family service worker took my mother to several pre-schools and gave her a lot of information on what to look out for a quality pre-school.

I took some time to adjust to the routine and separating from my parents, but when I became comfortable, safe and secure, my development in many areas went from strength to strength. It was not just one specific thing, the difference had been all-round…my social skills, my vocabulary, had improved.

I am a completely different little girl because of the support and encouragement of the family support worker. And I am now a happy and confident little me. I ask my parents literally every day if I am going to school because I want to interact with my friends and teachers.

Last month the family service worker guided my parents to make an individualised learning plan, shaped by my interests and levels of readiness, which included the goal of learning how to read with joy.

Once I heard my mother assuring my father about the continual support that she received for the children's development. I remember this was what she said:
"Do not worry about the children. I am happy that the partnership between the family support worker and our family is a good one. This is only possible because of mutual respect and trust, reciprocity, shared power and decision making, open communication and responsive listening, shared goals and clarity about roles and responsibilities.

The early childhood professionals, who work with families like ours, in particular those experiencing vulnerability and disadvantage, promote expectations for the children. Through the individualised plan and the progress monitoring, they have attempted to understand the sorts of skills and understandings that a child has and is ready to strengthen."

School Ready Enabler 8 – The 4Ps (Perancangan, Pelaburan, Pengetahuan and Pengorbanan) in Action

Through MENDAKI's structured parents programme and the advocacy of the 4Ps (Perancangan, Pelaburan, Pengorbanan dan Pengetahuan/ Planning, Investment, Sacrifice and Knowledge) as part of strategic and dynamic parenting approach, my resourceful mother has worked hard to engage her children well.

She has planned for my learning opportunities (Perancangan), invested in time, effort and funds for my learning through the various parenting programmes both parents and child attend (Pelaburan), made personal sacrifices to spend time well with the children (Pengorbanan) and leverage community support programme to apply strategies on nurturing an early learner. (Pengetahuan)

As an informed adult interacting with purpose, she is able to support better learning outcomes for me. This is a fundamental way in which my higher mental functions are formed. With the awareness of the value of early childhood education and engagement with MENDAKI and Government Agencies like KKH and ECDA, my mother always supports my on-going learning and development. The learning has made her more confident in interaction with their children and she is more participative in attending parenting talks organised by community organisation. Miraculously, this results in flow on effects to my siblings,

She is smart and she uses photos, posters and the home furniture to prompt me to talk about particular topics . . . . intentionally (deliberately, purposefully and thoughtfully).
One facilitator at a parenting session remarked this to my mother:
"You have learnt well from the handholding session. You understand that young children are engineers – they modify the world to satisfy their own needs and wants. Children can create, solve problems, experiment, and test, adapt, collaborate, and explain."

In introducing numeracy, my mother understands that children have the capacity, confidence and disposition to use mathematics in daily life. She has helped me explore, observe, ask questions, predict, and integrate their learning. Her sustained interaction with me has driven my behaviour.

My Reflection on early learning opportunities

I have been fortunate that as a six- year old child from a vulnerable family, I enjoy school a lot.

Even though my parents are not highly educated, they realise the value of good education. As a young child, I actively participate in school. My mother and teachers are indeed the architects of my brain.

I have friend from a family of five children. The mother has an intellectual disability and two of the children have physical disabilities and there is a host of other problems with the father in prison. I sometimes think about her and her challenges.

How can my friend ever skip joyfully to school?
With the challenges her family faces every day, it would be tough to get the children to school. There are barriers that include financial challenge when the sole bread winner is in prison and the mother's inability to interact and to prepare the children to be school ready. No wonder my friend reluctantly goes to school as she is not prepared socially and physically to be ready for school.

Very often my father returns to work at night, my mother will spend time relating to him her day's experience with her children. This is her 'smart' ways of educating my father about the support that she gets and reinforcing some good practices she has learnt.
Once I overheard my mother share her observation with my father. She said:
"Relationship-based practices with emphasis on Parent–Child, Teacher-Child, Parent- Teacher, Social Worker-Parent engagement and child-focused activities around in school, at home and at community engagement sessions have helped our at-risk children.

In essence, we have to acknowledge the following fundamental beliefs:

- That **all,** and not only some families want the best for their children.
- Families are their children's most important educators.
- Engagement in quality education and care services can improve outcomes for children and families."

My Hopes and Aspirations

I am grateful that my mother and teachers have built on my natural curiosity to introduce concepts into play-based daily activities and inspire me to develop a love for learning.
My mother is my emotional "climate":

> **"It's my personal approach at home that creates the climate. It's my daily mood that makes the weather. As a mother of an early learner, I have the power to make a child's life miserable or joyous..."**

My Mother's Voice

I echo my mother's hope that key social support for challenged families will be intensive and sustainable where community organisations are committed to supporting needy young families in the community through service provision and advocacy work.

Hopefully, vulnerable families can 'just knock at the door' of government and community organisation, knowing that there is no wrong door they can enter. These community help groups should suspend judgment and listen carefully to really hear what a family is telling us by their words and actions. In addition, community organisations should also knock on the vulnerable families' doors persistently to support them especially for those who are not comfortable in making the first move to knock on the organisation's doors.

I reiterate my mother's acknowledgement:
"There is no one-size-fits-all approach to supporting families as their needs are all so unique. Each child with vulnerability deserves resourced support to ensure the good outcomes for their needs. Each child is unique, active and engaged in their own learning and their development is shaped by their own family, culture and experience.

Early learning experience will set up disadvantaged kids for life. In addition, when parents are better able to prepare their children for school by supporting them emotionally and socially, and have good relationships with them, children will come to school happier, and more ready to learn!"

I am confident that with the approach 'it takes a village to raise a child' to be school ready, my siblings and I would not only be ready for school but will always be skipping sprightly to school.

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Cultivating Early Numeracy Skills in Young Children

By Siti Khadijah Setyo RS

Abstract

The early years of a child are a crucial time for cognitive, emotional, social and physical developments, and apart from communication and literacy skills, it is important that early numeracy skills are also cultivated from young. The importance of numeracy skills cannot be underestimated as they predict later academic performance and achievements in school. It is thus important for parents to play a proactive role in cultivating early numeracy skills as the home environment is the primary environment that young children spend most of their early years in, thus influencing the development of their mathematical skills.

This article outlines the importance of early numeracy and highlights the key "early mathematical skills" that need to be cultivated. With reference to Vygotsky's theory on the importance of social interactions on cognitive development, this article then briefly discusses the important roles of parents and the home environment in developing early numeracy skills. Using Bradley and Corwyn's (2006) concept on the "central tasks of parenting", this article also outlines several strategies on how parents can support the cultivation of strong numeracy skills for young children.

Introduction

The early years of a child are critical in laying the foundation for all that is to come. Research has proven that the human brain develops most rapidly from birth through to the age of five (Shonkoff and Philips, 2000) and that period of five years is a crucial time for cognitive, emotional, social and physical developments. Apart from building strong foundation for communication and literacy skills, the importance of cultivating strong foundations of numeracy cannot be underestimated. Research has shown that parents play a pivotal role in supporting the development of strong numeracy skills for their young children. A supportive and conducive learning environment at home is crucial to stimulate the experience of numeracy learning at a young age.

Given the huge responsibility parents have to play in cultivating early numeracy skills in their young children, this article outlines the importance of early numeracy and highlights the key "early mathematical skills" that need to be cultivated. This article then briefly discusses the important role of parents and home environment in developing early numeracy skills and finally, strategies on how parents can support the cultivation of strong numeracy skills for young children will be explored.

Importance of early numeracy

Children have their first and crucial contact with Mathematics and mathematical thinking in the very early years of their life. Wynn (1992) posited that at around the age of two and three years, children become aware of the fact that counting words represent a particular number, although they do not know exactly which number. It is important to develop numeracy skills early as they predict later academic performance in school (Duncan et al., 2007) and this was demonstrated in the longitudinal study of 212 Finnish children by Aunio and Niemivirta (2010). The study examined how children's early numeracy assessed in kindergarten accurately predicts their mathematical performance in the first grade. After controlling demographic factors, findings showed that the acquisition of counting and relational skills before formal schooling are predictive of the acquisition of basic arithmetical skills and overall mathematical performance in grade one (ibid). Hence it is important to build strong numeracy skills as early number competence serves as the foundation for subsequent mathematical learning.

> **"around the age of two and three years, children become aware of the fact that counting words represent a particular number**

Developing "early mathematics skills"

Much is often discussed about the importance of building early numeracy skills, but what does it really mean? What are the mathematics-related skills that parents need to equip their young children with and what are considered as "early mathematical skills"?

Referring to the curriculum for kindergartens in Singapore outlined in the Nurturing Early Learners guide (Ministry of Education, 2013), it is important to focus on developing essential pre-number, early number, shape and simple spatial concepts in pre-schoolers. By the end of pre-school, young children are expected to be able to:

(i) match things that are the same and sort things that are different from the rest
(ii) pair things that go together, put things in order and create simple repeating patterns
(iii) count numbers in order, recognise numbers and know the quantity of sets of things
(iv) recognise and identify basic shapes, and be aware of the spatial relationship between them and the people/things around them

Numerous research has been done to understand the home environment and activities that parents often conduct when they are "teaching numeracy". Activities that are commonly conducted by parents include naming shapes (Missall et al., 2015), counting objects in group (Skwarchuk, 2009), teaching one's child to count, Manolitsis et al., 2013) and using the words "one", "two" or "three" (Blevins-Knabe and Musun-Miller, 1996). The majority of these activities involved counting, which is the most obvious and "go-to" activity that is related to building numeracy skills.

Most research on children's early numeracy has also focused on whole number knowledge and not so much on the development of geometric and spatial thinking (Clements, Sarama and DiBiase, 2004). Mental rotation or the ability to imagine objects in different orientations, and perspective taking are two components of spatial thinking that are important and need to be developed in pre-schoolers (Newcombe and Frick, 2010). These explorations of basic shapes and understanding of simple spatial concepts are important as they lay the foundation for geometry in their future mathematics learning.

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Beyond number sense and recognition, counting, simple addition and subtraction, developing "early mathematical skills" should also focus on building young children's ability to know simple relationships through matching, sorting, comparing, ordering and patterning. These abilities help children to exercise and build on their logical thinking capabilities which are important to understand numbers and the number system.

Social interactions and cognitive development

The cognitive development and learning experience of young children do not exist in a vacuum. Vygotsky (1978) stressed the fundamental role of social interaction in the development of cognition as he believed that the community plays an important role in the process of "making meaning". He posited that cognitive development stems from social interactions and learning happens within the zone of proximal development, where children and the people around them co-construct knowledge. Vygotsky also emphasised the role of adults as an important source of cognitive development for children, as adults are able to transmit their culture's tools of intellectual adaptation which is then internalised by children. While Vygotsky put more emphasis on the transmission of information from social agents, he also acknowledged the contribution the child makes to the interaction (Tudge et al., 2008).

> **"cognitive development stems from social interactions and learning happens within the zone of proximal development**

With reference to Vygotsky's theory on the important role of social interactions on cognitive development, this article will now discuss the importance of parental involvement and the home environment in developing numeracy skills in young children.

Parents' attitudes and behaviours

Home is the first school for children and parents are their first teachers as they spend the first six years of their life at home before starting formal schooling. The constant opportunity for interaction between parents and child could translate in valuable opportunities for learning. Whether parents capitalise on the opportunity for interaction depends on factors such as their attitudes, expectations and beliefs. Eccles' expectancy-value model (Eccles et al., 1993) highlights how parents' attitudes, expectations, beliefs, behaviours and demographic characteristics influence child development outcomes. Huntsinger et al. (2000) conducted a cross-cultural study on the literacy and numeracy developments of Chinese-American and European-American children over their primary school years. The study found that Chinese-American parents emphasised teaching their children mathematics more than Euro-American parents and this translated to better Mathematics performance amongst Chinese-American children. This example demonstrates how parents' attitudes, beliefs and behaviours can predict children's mathematics performance.

> **"parents need to translate those attitudes into positive behaviours and actions that promote their children numeracy development**

A recent study by Skwarchuk et al. (2014) revealed that while both attitudes and behaviours of parents influence children's mathematics performance in school, parental attitudes are

predicted to have an indirect effect on children's numeracy performance while parents' behaviours have a direct effect. LeFevre et al., (2009) examined the home numeracy experiences and how they affect children's mathematics performance in the early school years. The study revealed that the mathematical skills of pre-school students were correlated with the frequency in which parents reported engaging in informal activities that have quantitative components such as board and card games, shopping and cooking. These studies demonstrate that beyond having the right attitude towards learning and the development of their children, parents need to translate those attitudes into positive behaviours and actions that promote their children numeracy development.

Central tasks of parenting

In trying to conceptualise the role of parents and understand what parents do to help their children thrive, Bradley and Corwyn (2006) identified six basic regulatory tasks performed by parents and they are (i) sustenance/safety, (ii) stimulation, (iii) support, (iv) structure, (v) surveillance and (vi) social integration. They called these tasks the **"central tasks of parenting"** and four of them; *stimulation, support, structure and social integration*, are relevant to the role that parents play in young children's mathematical development.

Stimulation involves parents providing contingent responses and providing children with information that attracts their attention. Support refers to the provision of social and emotional support for children and as well as motivation for learning. Structure involves making sure that the learning environment is not only conducive, but is also configured or structured to fit their children's learning and development needs. Finally, social integration addresses the child's connection to the culture and society and is very much linked to the level of social capital the child possesses.

Using the four central tasks of parenting identified above as a guide, the next section will explore how parents can play a supportive, scaffolding and inquisitive role (Tudge and Stanley, 2008) to support their young children's mathematical development.

Stimulation

One way for parents to stimulate children's learning is to engage in parental teaching, whether directly or indirectly, as it will positively impact children's mathematical development. Parents providing direct numeracy learning and experiences for their children usually involve intentional teaching about mathematics. This could take the form of parents teaching the multiplication tables to their children or even simple activities such as counting

> **"set aside some time daily to introduce mathematical learning to young children and this can be done by embedding mathematics into daily activities"**

games. Parents can also indirectly introduce numeracy concepts through informal activities that may provide opportunities for learning mathematics. Playing with board games such as *Snakes and Ladders* or playing with Lego blocks introduce children to the concepts of numbers and spatial thinking in a fun manner. Parents can also use daily activities such as grocery shopping and cooking to introduce their young children to mathematical concepts such as measurement, geometry, systems of units and money. These activities do not explicitly promote mathematical learning but they provide the stimulation for young children to develop numerical competencies. The key is to set aside some time daily to introduce mathematical learning to young children and this can be done by embedding mathematics into daily activities.

Support

The parenting task of support as described by Bradley and Corwyn (2006) focuses on the socioemotional support parents provide to children. By responding to children's emotional needs, parents help to regulate their children's emotions and build their children's self-worth and connections. Bradley and Corwyn (2004) highlighted that the main outcome of providing socioemotional support is to motivate children to engage in behaviours that are adaptive for their success in the long run. One of the key adaptive behaviours is the development of mathematical skills that are important to today's world and research has shown that adequate educational guidance and emotional support from parents are better predictor of mathematics grades than the support of siblings, friends or teachers (Azmitia, Cooper and Brown, 2009).

> **"to help their young children develop their early numeracy skills"**

To support the development of socioemotional competency in children, parents can help and give their children the S.P.A.C.E to grow (Ministry of Education, 2016).

- **Support**
  This can be achieved by being responsive to children's needs and by parents being present in their children's daily lives. Parents are also important role models for their children and being consistent in teaching and setting examples are crucial. For example, research has shown that when parents, especially mothers shared their dislike towards mathematics with their daughters, their daughter's mathematics achievement went down (Eccles and Jacobs, 1986). Thus it is important to reassure and encourage young children through encouragement and positive thinking when learning mathematics.

- **Problem solve**
  When it comes to learning mathematics or any other subjects for that matter, setbacks and failures are bound to happen. Instead of berating children for their mistakes, parents can use the opportunity to reflect on the setbacks together with their children. In doing so, parents can help and scaffold their children to learn from the mistakes and to develop strategies and alternate plans to avoid making the same mistakes again. This helps children to be resilient and to not be afraid of failures and making mistakes.

- **Affirm**
  Drawing from Dweck's theory on growth mindset (2006), it is important for parents to affirm their children's strengths and efforts. The idea is to encourage children to work hard and that intelligence, in this case numeracy competency, is malleable and can be developed through constant practice and hard work. It is also important to use effective praises such as "*I can see that you have worked so hard on this*" instead of "*you are so smart*" upon successful completion of a given task. The idea is to praise the efforts undertaken by the child rather than the final outcome.

- **Cheer**
  Parents are important cheerleaders in their children's lives. It is important for parents to be supportive and cheer their children on for every effort. Parents are encouraged to celebrate their children's successes, even the small ones. This provides children with the motivation to continue learning.

- **Empower**
  Parents can empower their children by encouraging their children to voice out their ideas and to carry out the plans made. For example, parents can let their children to take the lead in deciding on what to play, and be involved in their children's play by following their lead. Apart from allowing children to explore their interests, this also allow children to develop responsible decision making skill which is key for their socioemotional development.

Structure

Another way for parents to invest in their children's learning is to provide a learning environment that is not only conducive but also one that fits the learning needs of their children. Parents can arrange their children's activities and facilitate learning by "regulating the difficulty of the tasks" (Bransford, Brown, and Cocking, 2000) to fit their respective learning needs. What fits one child's needs may not be suitable at all for another child. For example, Skwarchuk (2009) studied the level of complexity of the number activities conducted by parents at home and found that for both four- and five-year olds, frequent exposure to lower level number activities was negatively correlated with numeracy performance while exposure to higher level number activities promotes higher numeracy performance. Hence it is important for parents to be cognizant of their children's learning progress and development.

"What fits one child's needs may not be suitable at all for another child

Social integration

Social integration refers to how parents connect their children to society through the use of social capital. Mathematics is a powerful cultural tool and parents have the tasks of helping their children succeed by helping them learn how to use it. Bradley and Corwyn (2006) highlighted that when parents engage their children in academic activities, it supports the connections children make with school and with their teachers. Nickerson (1992) also highlighted that one way parents can help children forge productive connections with schools is through modelling and sharing stories about their own involvement in learning. These stories could inspire their children and in turn translate to better levels of participation and academic performance in school.

In approaching the task of social integration with respect to equipping their children with mathematical skills, parents' attitudes and behaviours towards mathematics as discussed earlier are important. Those attitudes and behaviours guide parents to define what and how their involvements should be when it comes to teaching their children mathematics. For example, parents who place high value on mathematics and numeracy development are more likely to participate in seminars and workshops that help to equip parents with resources to support children's numeracy development. This is where parents can take the opportunity to take part in parenting programmes organised by organisations such as Yayasan MENDAKI. Such programmes include the Maju Minda Matematika (Tiga M), Brunch with MENDAKI and even networking opportunities with other parents through the Family Excellence Circle (FEC) and Parents Circle initiatives. Membership in these social networks may help parents not to only be resourceful when supporting their children early numeracy competency, but to also enhance their social capital.

"Membership in these social networks may help parents not to only be resourceful when supporting their children early numeracy competency, but to also enhance their social capital

Concluding remarks

Much emphasis has been made about the importance of developing early numeracy skills and the pivotal role parents play in supporting and scaffolding the learning experience for their young children. Using Bradley and Corwyn's (2006) concept on the "central tasks of parenting", this article explored how parents can provide adequate stimulation, support, structure and opportunities for social integration in developing their young children's mathematical competency. Ultimately, there is no one "correct" way or "gold standard" on how parents can engage their children's early years development. What is most important is the willingness of parents to spend resources; whether it is time, money, emotional and/or structural support, etc., to help their young children develop their early numeracy skills.

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Feeding the Right Skills: How Daily Meals Serve as a Significant Accidental Learning Experience for a Child

By Nursarhani Mokhitiaruddin

Abstract

As much as parents are excited about introducing solids to their little ones, mealtimes could be one of the most challenging moments in parenthood. Some parents could find the first few years not much fun for either themselves or their child. Parents struggle with common problems, whether it is getting their baby to accept lumpy food, coping with picky eaters or mealtime battles with a toddler (Rapley and Murkett, 2008). For those who have relatively fuss-free and smooth-sailing mealtimes, there is always the issue of "how healthy are my child's meals" and "how much time do I need (or have) to prepare them".

This paper intends to shed some light on how mealtime experiences could add up to something significant in a child's early years. There is a huge potential for creating significant learning moments during mealtimes that the child could really benefit from that would make mealtimes more meaningful and fun for both the parents and the child.

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Appetizer: An Introduction to Incidental and Experiential Learnings

Children learn all kinds of things at home before they start school. All of this knowledge is either useful to them in their home (learning which enables them to become a member of their home environment and culture) or is intended to be useful to them at school (learning which enables them to succeed within the school environment and culture) (Brooker, 2002).

Much of a child's knowledge is acquired almost automatically, instantaneously and unconsciously – that is, incidentally – as they watch other children and adults interact with the envi-ronment and imitate their actions. Incidental learning as (Kerka, 2000) defines, is unintentional or unplanned learning that results from other activities. It is learning that occurs in many ways such as through observation, repetition, social interaction and problem solving (Rogers, 1997). Incidental learning is situated, contextual and social.

The trick to incidental learning is not to teach the facts directly, but rather to have the facts "appear" along the way towards something the child naturally wants to know. Using the Acquisition Hypothesis (Krashen, 2003), we understand that how one learns a fact is as important as what fact one learns. Thus we could use a child's natural interest, such as putting things in their mouth or discovering new items (by introducing new types of food), so that they come across such facts incidentally, in the course of pursuing their interests.

Incidental learning is an essential strategy in the parenthood journey. It is powerful for a child who will eventually develop a clear understanding of a particular idea or concept. But when we want children to make important connections and transfer knowledge and understanding between experiences, a purely incidental approach may not be the best way. This is where parents need to take some time to think of how they can better engage their child as they learn, so that parents can support, extend and challenge their thinking. In other words, parents can be very instrumental in providing the child with opportunities to gain invaluable experience by letting their child actually do something – that is, experiential learning - through simple life experiences such as mealtimes!

"Incidental learning is an essential strategy in the parenthood journey. It is powerful for a child who will eventually develop a clear understanding of a particular idea or concept

Experiential learning focuses on the transaction between internal characteristics and external circumstances, between personal knowledge and social knowledge. It is the process of learning from experience that shapes and actualises developmental potentialities. This learning is a social process; and thus, the course of individual development is shaped by the cultural system of social knowledge (Kolb, 2015).

Some parents may think that experiential learning is a difficult method and that it needs the help of teachers – although it is true that the child's teachers will play a large role in empowering him with useful and beneficial experiences. Nevertheless, parents can apply experiential methods by themselves and apply them at home.

The experiential learning theory as described by (Kolb and Kolb, 2013) is a dynamic view of learning based on a learning cycle driven by the resolution of the dual dialectics of action/reflection and experience/abstraction. Of importance, (Kolb and Kolb, 2013) also defined learning as the process whereby knowledge is created through the transformation of experience.

The experiential learning theory is represented by a four stage learning cycle in which the learner touches all bases:

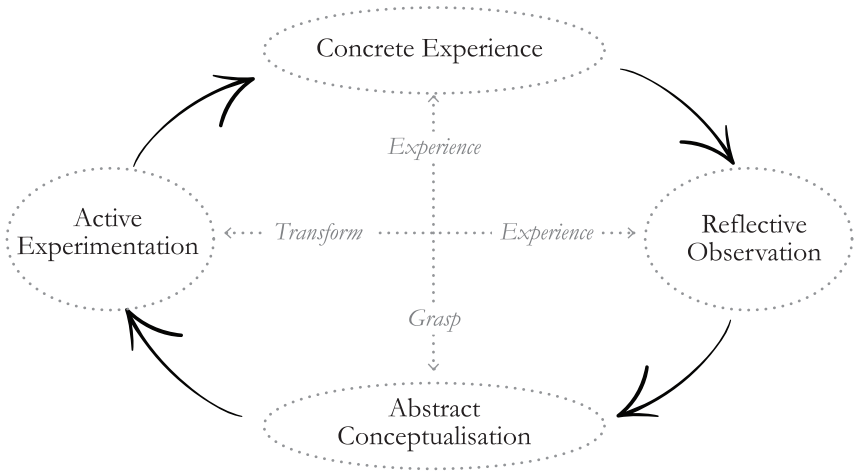

Figure 1. The Experiential Learning Cycle

The image above shows that knowledge is a result of the combination of grasping and transforming the experience encountered. Grasping experience refers to the process of taking in information, while transforming experience is how individuals, or the child for that matter, interpret and act on that information.

Learning therefore arises from the resolution of creative tension among these four learning modes:

1. Concrete Experience: A new experience of situation is encountered, or a reinterpretation of existing experience.
2. Reflective Experience: (of the new experience). Of particular importance are any inconsistencies between experience and understanding.
3. Abstract Conceptualisation: Reflection gives rise to a new idea, or a modification of an existing abstract concept.
4. Active Experimentation: The learner applies them to the world around them to see what results.

> **When parents understand how a child learns, they are more able and empowered to maximise the time spent with their child with activities that do not only provide many learning opportunities, but fun, too**

When parents understand how a child learns, they are more able and empowered to maximise the time spent with their child with activities that do not only provide many learning opportunities, but fun, too. What better way to do all these than to have an interactive and delicious mealtime with your little one?

First Main Course: Why Mealtimes?

Mealtimes could be an almost perfect learning platform for a young child. It would take time and practice, as do many other activities that involve engaging a child – something that most parents could attest to. Learning to eat is a natural part of a baby's development. Although some babies develop faster than others, the progress of all babies follows a set of pattern and new skills are acquired in more or less the same order for every baby (Aileen, 2000).

These new skills such as rolling over, crawling and feeding, develop continuously right from the moment the baby is born. Many early movements are instinctive but as the baby gains more control over its muscles, it begins to be able to do things purposefully.

All babies develop by themselves skills that are related to feeding. These are the result of the baby practising movements and putting them together. From birth right up till about nine months, babies naturally develop feeding-related skills in this order (Rapley and Murkett, 2008):

- Latch on to mother's breast
- Reach out towards interesting things
- Grab objects and take them to their mouth
- Explore things with lips and tongue
- Bite off a piece of food
- Chew
- Swallow
- Pick up small objects using 'pincer grip' (thumb and forefinger)

With all these feeding skills that a young child has developed or is still developing, parents could take the opportunity to leverage on them in imparting basic learning concepts as an introduction to a more structured and formal learning that will come in later. Furthermore,

with whatever little time that working parents have with their child these days, mealtimes could be the only time where meaningful engagements could take place between the parent and child.

In the early childhood field, there is a considerable debate about what is the best way to optimise a child's learning process. (Spodek, 1987) reminded us that early childhood education, like all education, is a deliberate intervention in the lives of young children. It results from a belief that children growing up naturally might not come to know all the things we want them to know.

Some incidental and experiential teaching techniques that parents could use during mealtimes are demonstrating, describing, and encouraging. Despite the subtlety and simplicity of such teaching techniques, they can be powerful in shaping the child's learning. They also form the foundations on which the more complex specialist teaching techniques are built on (Macnaughton and Williams, 1998).

Demonstrating

Maria Montessori believed that demonstration is a particularly useful technique for helping children to learn basic daily living skills such as preparing food and setting the table. Additionally, she also believed that learning these skills nurtured the young child's need to constantly improve their daily living skills (Oriti and Kahn, 1994).

By demonstrating, a child can be taught how to respect the environment (Wilson, 1993). When parents demonstrate to the child their enjoyment and gratefulness of the food that is served, children learn to respect that.

Toddlers have so much to do and so much to learn – they are keen to gain greater control or authority over themselves and their bodies, and to use their increasing physical dexterity to help them explore their environment. They use their hands and mouth to find out about all sorts of objects – edible or otherwise. In the flurry of processing and discovering the world around them, toddlers sometimes forget how to do something they learned just recently. With these active explorations, toddlers too would come across situations where they are required to use a skill or technique that they have not tried before. This could be using the chopsticks for the first time or peeling the skin off a banana (Macnaughton and Williams, 1998).

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Their ability to imitate the actions of others means that parents can easily provide the support that the child needs to succeed or to maintain their efforts. However, the demonstration should be kept short and simple as toddlers generally cannot remember a complex sequence of events.

Describing

Good descriptions help a child to expand her understanding of the world and her attention to the features, properties or characteristics of events, people and things that she may not have noticed or she herself may lack the language to describe. Describing something to the child only begins her process of understanding it.

A description is only useful if the child understands what is being said. Therefore as (Macnaughton and Williams, 1998) put it, language has to be used as clearly and precisely as possible. The description should also be supplemented with opportunities for the child to explore in a practical and concrete way the things being described. A parent could be describing to the child how the fish soup they are having was prepared: right from how the fisherman caught the fish, until the fish ended up in the pot along with the other vegetables. They could also talk about what other soups they could try in the future. Where possible, it would be meaningful for the child if she could be involved during the preparation of the soup.

A key developmental task for children in their first three years of life is to develop a sense of themselves as autonomous, capable and independent people (Harris, 1996). Successful accomplishment of this task means that they can tell the people around them what is happening and can understand other people's descriptions.

Encouraging

Encouragement is given to reassure or support the child when he's having difficulty with a task or experience, especially when attempting new or difficult activities. Encouragement also helps the child persevere with the task and to learn new skills or dispositions. (Schwartz, 1995) has indicated that words of encouragement should extend the child's learning rather than reduce it. Therefore, "Let's try cutting the broccoli into small pieces again, you seem to be good at it!" does not only tell the child that what they have done is worthy of interest and comment, but also encourages them to think about how to extend what has happened.

"There are certainly many moments in a child's day when an encouragement by the parent can make the difference between an enjoyable and satisfying learning outcome for the child or a frustrating and disappointing one"

There are certainly many moments in a child's day when an encouragement by the parent can make the difference between an enjoyable and satisfying learning outcome for the child or a frustrating and disappointing one.

Additionally, encouragement increases the likelihood of the child behaving in pro-social ways, such as helping each other to tidy up after a meal or sharing materials with each other (Laishley, 1983).

Second Main Course: Feeding the Right Skills

Literacy and Numeracy Skills

Without literacy and numeracy, modern life becomes almost impossible. Yet, there is always the temptation to leave literacy and numeracy for schools to worry about while parents direct their efforts elsewhere. The Early Years Learning Framework for Australia (2009) has strongly reminded parents and teachers that positive attitudes and competencies in literacy and numeracy are essential for children's successful learning. The foundations for these competencies are built in early childhood.

It is important for parents to provide opportunities for their young child to use numeracy and literacy and see them being used in real life situations. When the child is exposed to literacy and numeracy learning through hands-on, practical and play-based experiences, he is more likely to engage meaningfully and successfully with them (Holiday, 2013).

To communicate their needs and feelings, a child uses sound, gesture and body language right from infancy. Babies show us what they're interested in. They 'lead' the conversation by pointing or holding out something for us to see (Campbell, 2005). In the first two years, before a child does much talking, he is listening and learning about what language is and about. When he is around six months, he begins to become more aware about the sounds of the family language. He will then make sounds that become more and more like the ones he hears in the talk around him. It is therefore important for parents to scaffold the development of their young child's literacy journey by providing caring and responsive reactions.

The more the child hears language used and the more opportunities she has to use it herself, the more she learns about how it works. When the time comes for written literacy, this understanding of oral or spoken language is invaluable (Touhill, 2013).

Telling a story about the food that the child is having, for example the story about the fish soup, where the child will follow the pattern and sequence of the narrative, is a good start. It provides the parent an occasion to introduce to the child new letters or vocabulary, extend her horizon about what's beyond her immediate surroundings, ignite a sense of curiosity on how these morsels of food make their way to her plate, and many more.

Young children learn about numeracy as they move their bodies about in space and listen to the people around them count things, look for shapes, use words about weights and measures, talk about the volume a bucket will hold, estimate distances, and divide up and share out food (Connor, 2011).

As they grow older, they begin to recognise numerals in the world around them and discuss their purposes – numbers on the clock tell that mealtime would occur at specific junctures, digits on the oven indicate food is cooked. They also will start to talk about numbers, shapes and measurements in solving problems that involve numeracy like: Will my small

plate be able to handle all the chicken pieces from the pot? How many sets of spoon and fork needed if there are only two people at the table?

Parents should understand that numeracy is more than numbers. There are many elements around us that comprise numeracy. Some of these as provided by (Arthur, McArdle and Papic, 2010) are:

- Spatial understandings include two- and three-dimensional shapes, position (under, over) location (near, far) and orientation (turn, roll)
- Measurement understandings include concepts such as height, length, mass and temperature
- Predicting and estimating involve using 'data' or information to suggest, for example, which object will be fastest, or which will sink
- Problem solving involves investigation, questioning, trial and error, divergent thinking and decision making
- Number understandings that also involve comparing quantities and dividing objects and groups into smaller parts
- Sorting, ordering and classifying

"By providing their child with regular, ongoing opportunities to use literacy and numeracy during mealtimes – even if it means only dinner time, parents help to establish knowledge and positive dispositions and the ability to apply knowledge in practical and meaningful contexts

Children enjoy making patterns with objects and sorting them into groups defined by particular attributes – parents in turn can help them compare which plates are bigger or heavier – and to sort and order items into similar and different groups. One of the most valuable contributions a parent can make in the start of the child's numeracy journey is to provide the language to talk about maths and mathematical ideas. This means that parents need to understand general mathematical concepts and to recognise the potential of everyday situations, in this case during mealtimes, for numeracy learning.

By providing their child with regular, ongoing opportunities to use literacy and numeracy during mealtimes – even if it means only dinner time, parents help to establish knowledge and positive dispositions and the ability to apply knowledge in practical and meaningful contexts.

Social Skills

Etiquette guru Emily Post once said, "Manners are a sensitive awareness of the feelings of others. If you have that awareness, you have good manners, no matter what fork you use."

Mealtimes serve a wonderful opportunity for parents to instil basic social skills to their young children. This is especially so because children learn these skills from the adults and children in their environment who model and explain how to behave in particular circumstances (Ladd, 2005). The development of social skills lays a critical foundation for later academic achievement as well as work-related skills (McClelland and Morrison, 2003). The social skills that children learn when they are young will also form the basis for subsequent relationships that they develop in later childhood and adulthood (Ladd and Burgess, 2001).

As with any other skills it is a good idea to start simple. Developmentalists such as Lawrence Kohlberg (1984), propose that the process of attaining moral maturity occurs over time if conditions are favourable for such growth. A child's moral maturity is also directly related to the way he thinks about concepts such as justice, equality and human welfare. Over time and through his social interactions, he comes to develop his own understandings of these concepts. Being a "good" person however, involves more than the cognitive understanding of what is right or wrong. Other central aspects of moral functioning that can be highlighted during mealtimes include empathy – the hard labour of processing rice, for example; conscience – avoiding wastage of food; and altruism – remembering the poor and homeless (Berkowitz and Grych, 1998).

"Mealtimes serve a wonderful opportunity for parents to instil basic social skills to their young children"

Constructivist theory of development believe that these central aspects of moral functioning cannot be given to children – they are fostered instead. Parents can purposefully provide experiences that promote such understandings starting at a young age (Noddings, 2002). The constructivist model of moral development suggests that we should avoid giving children a list of do's or don'ts – although we know that children must learn to act in socially acceptable ways to get along well with others and uphold a healthy sense of self. Children must learn for example, certain rules of etiquette while eating.

As important as it is for children to learn and abide by these "rules", parents must remember that teaching such rules isn't what moral education is all about. Morality involves more than a set of behaviours – just because parents are able to get their child to "behave himself", that doesn't mean the child has developed a sense of goodness or morality (Coles, 1997). Morality encompasses a sense of justice, compassion and caring about the welfare of others. It also includes perspective-taking ability, the ability to discern how someone might be

thinking or feeling (Wilson, 2008). Caring behaviour is evident during the first year of life. Many infants show signs of distress when another baby cries and toddlers become uneasy when another child gets hurt or is punished. A young child is cognitively and emotionally ready to be concerned about others (Callahan, 2004). Hence, the parents' role in scaffolding this perspective-taking ability should be one of the priorities in their child's moral education during the early years.

> **"As important as it is for children to learn and abide by these "rules", parents must remember that teaching such rules isn't what moral education is all about"**

A child's sense of goodness is also fostered through encouragement offered by the significant adults in their lives – their parents and teachers. It is of importance that parents continue to motivate the child while reminding her to be kind besides saying "please" and "thank you" when engaging with others.

Dessert – Conclusion

For many families, mealtimes are the most important part of the day. All members are expected to sit and gather around the dining table especially for dinner. Conversations normally revolve around the going ons of the day and the latest news. Occasionally, the meal would be interrupted by the little one's antics. Sometimes the meal would continue and there are times when some of the adults would have to stop eating for a while or give up eating altogether to attend to the child. Whatever it is, mealtimes have a great potential to be a good family bonding time. Having the little one to join this family reunion of some sort would accord him with a sense of belonging and self worth.

In their effort to make mealtimes a platform for their child's incidental and experiential learnings, parents should not be hard on or make it difficult for themselves or it could result into a more stressful mealtime than what it already is sometimes. Another reason why mealtimes serve a significant incidental and experiential learning purposes in the early years is because there is always another mealtime for both parent and child to keep trying and practicing, and to have fun with!

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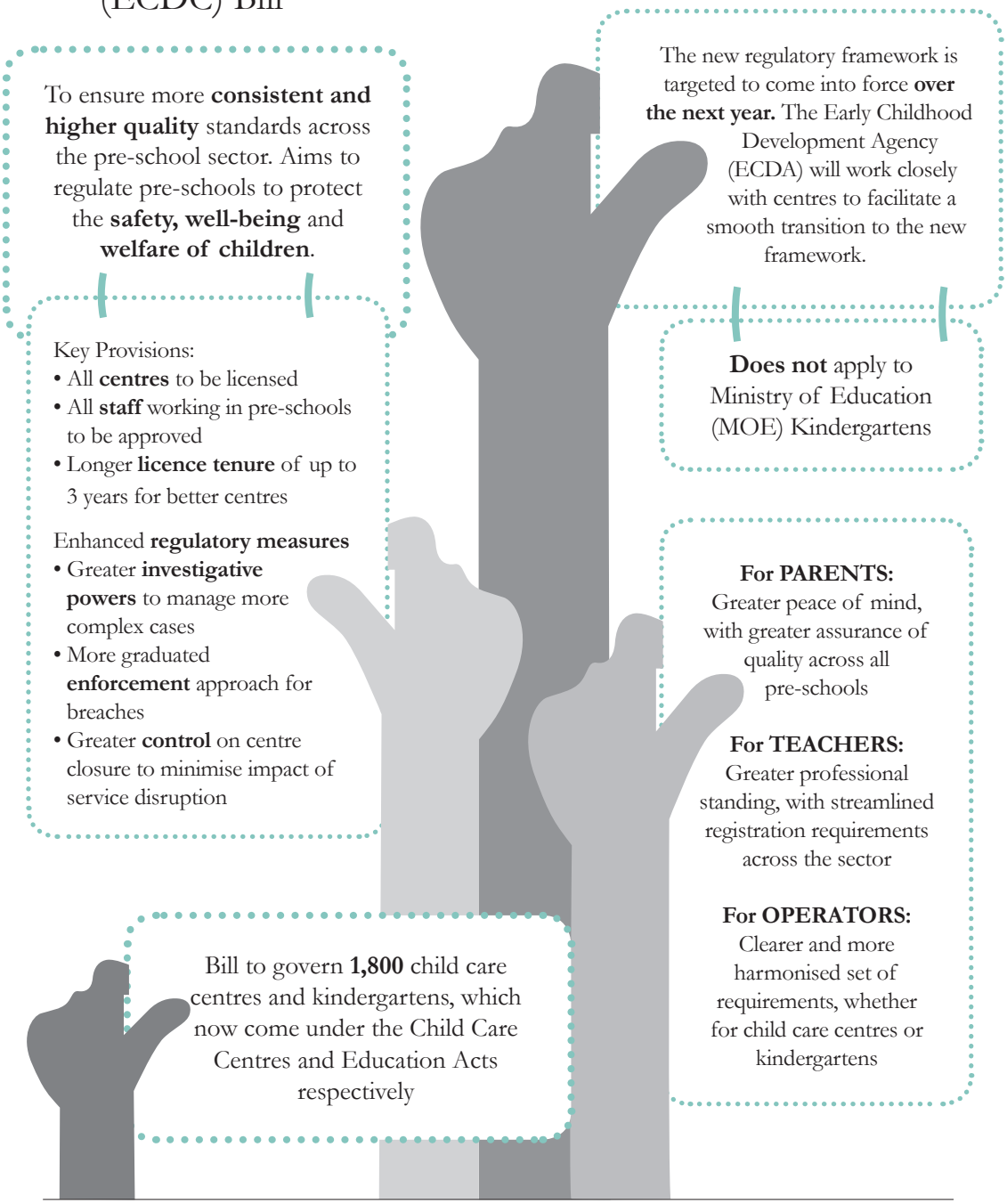
Section II

Scan of Key National Policies in Singapore and their Implications for the Malay/Muslim Community

General Scan of Education Policies

A. BUILDING UP THE PRE-SCHOOL SECTOR IN SINGAPORE – A STRONGER FOUNDATION FOR OUR CHILDREN

1 Passing of the Early Childhood Development Centres (ECDC) Bill

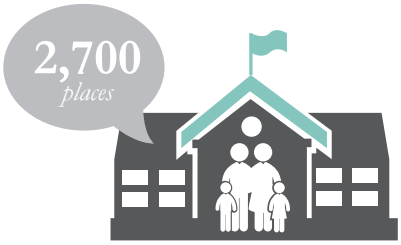


Source: Early Childhood Development Agency (ECDA), 2017.

2 Enhancing Capacity

a. Increasing the capacity of centre-based infant care to over 8,000 places by 2020 to better support young families. In the last five years, the number of child care places has increased by over 40% - this is sufficient for more than 1 in 2 children today.

*In addition to the 5 large child care centres which opened in 2016, **4 new mega child care centres** run by anchor operators will open by mid-2018 in Punggol, Sengkang and Bukit Panjang*



*Anchor operators must cap fees at **$720** a month for full-day child care.*

As at end of	2013	Q3 2017
Total no. of child care centres	1,083	1,394
Total no. of child care centre places	101,597	146,421
Total enrolment in full-day, half-day and flexi-care programmes	73,852	113,133
• Enrolment in full-day programme	65,650	105,167

Source: ECDA, 2017.

b. Increase in MOE Kindergartens (MK) (Piloted in 2014)

*including 13 new MKs in **2019** and **2020** in areas of demand*

to provide more high-quality and affordable pre-school places

c. Pilot Collaboration for Enhanced Pre-school Services in Punggol, between MOE Kindergarten (MK) and PCF Sparkletots and NTUC's MSF Early Years Centres (EYC)

- All eligible Singaporean Nursery 2 (N2) children enrolled at NTUC's MSF and PCF Sparkletots EYCs in Punggol will be **guaranteed a Kindergarten 1 (K1) place** in a nearby partner MK, in the year that they turn five.
- Increase in the number of pre-school places in Punggol for all ages to better meet localised demand.
- Registration for new large EYCs to open from the second quarter of 2017.
- All new MKs opening in 2019 and 2020 will collaborate with AOPs as part of the MK-EYC pilot.

3 KidSTART Programme

- KidSTART to be made **permanent** in efforts to break the poverty cycle in Singapore.
- **Child-enabling executives** have been posted to 10 pre-schools to monitor the development and attendance of these children.

4 Development Support Programme (DSP)

- DSP for pre-school children with mild developmental needs will be expanded to another **50 pre-schools** this year.

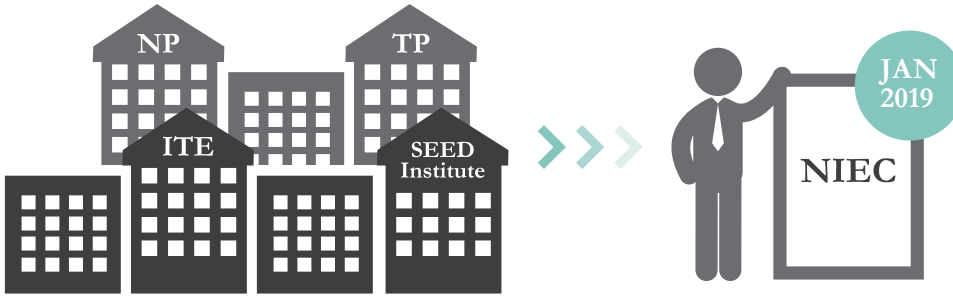
5 Improving Careers of Pre-school Professionals

- The three-year PDP will allow pre-school principals and senior teachers to go on overseas study trips and get cash incentives.
  - Aims to equip participants to lead their centres in quality practices.
  - Participants to benefit from training, professional sharing with other leaders, conferences and learning journeys.

6 Establishment of National Institute of Early Childhood Development (NIEC)

MOE will set up NIEC under the ambit of the National Institute of Education (NIE)

- NIEC will bring together Early Childhood training capabilities and expertise of the Institute of Technical Education (ITE), Ngee Ann Polytechnic (NP), Temasek Polytechnic (TP), and NTUC's SEED Institute, to become a **major player in the EC training landscape.**
- NIEC courses will continue to be conducted at ITE, the polytechnics or SEED Institute, but will bring students across the different locations together regularly.
- Professional development will be enhanced by **strengthening the training-research nexus** through NIEC's collaboration with NIE's Centre for Research in Child Development (CRCD).
- MOE will set up a Pro-Tem Board of Directors to oversee the formation of NIEC, chaired by MOE and comprising representatives from NIE, NP, TP, ITE and SEED Institute.



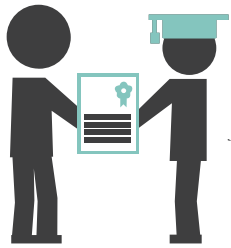
Identified as NIEC Students

First intake of NIEC students will be in 2019

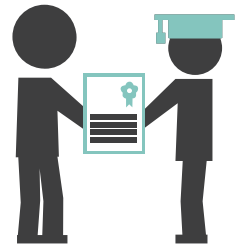
- NIEC will offer
  - Certificate-level and Diploma-level Pre-Employment Training **(PET)** courses for postsecondary students interested in joining the pre-school sector
  - Continuous Education and Training **(CET)** courses for mid-careerists
  - In-service upgrading and Continuing Professional Development **(CPD)** courses to further develop the competencies of in-service teachers and leaders

B. EDUCATION POLICIES & INITIATIVES

1 Raising the Quality of Madrasah Education



About
$100,000
for 350 new awards for students who perform well in ***secular subjects***



About
$100,000
in awards to students who excel in ***religious subjects*** *such as Islamic jurisprudence and Islamic theology*

- Singapore's six full-time madrasahs to receive an annual grant of **up to $1.5 million** to improve the quality of education in secular subjects, such as science and mathematics.
- The rest to be channelled to the 127 teachers of secular subjects, either as financial incentives or training grants.
- Government grant will be matched by the Islamic Religious Council of Singapore (MUIS), which is setting aside its own funds for religious education.
- **$1.1 million a year** in incentives and training for 112 teachers of religious subjects.

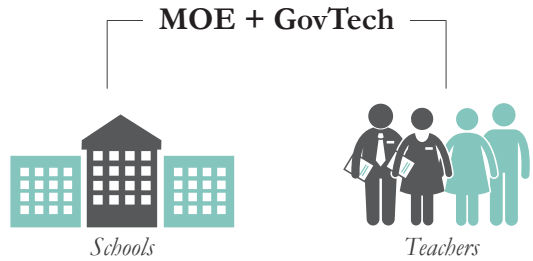
2 MUIS Academy: Islam in Context

- The research and education arm of MUIS has launched a new course that aims to help Islamic teachers read religious texts in the context of Singapore's multi-religious society.
- Titled **Islam in Context,** it will be offered by the MUIS Academy from November 2017.
- It is an abridged version of an existing course – Islamic Thought in Contemporary Plural Societies – offered by the S. Rajaratnam School of International Studies (RSIS).

3 62 Schools to Pilot Student Learning Space (SLS)

- Pilot for a new online learning portal called the Singapore Student Learning Space to support teaching and learning in all MOE schools.

Equal access to quality online learning resources for every student



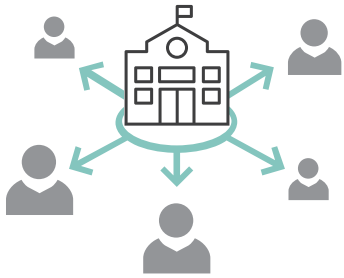
To gather feedback and develop the portal further to meet students' and teachers' needs, before it is rolled out to all schools in phases from 2018

4 Subject-based Banding in Secondary 1

- Subject-Based Banding for Secondary 1 students in **all secondary schools that offer the Normal (Academic) and Normal (Technical) courses** by 2018.
- In 2014, this flexibility was extended to the lower secondary students in 12 prototype schools. Students who have done well in specific subjects at the PSLE or in secondary school examinations have the option to take these subjects at a higher level earlier, from Secondary 1, and not only from Secondary 3.

5 Ensuring Secondary Schools Remain Open to All

- Since the 2014 Primary 1 Registration Exercise, **at least 40 places have been set aside in every primary school** for children without prior connection to the school.
- Currently, most affiliated secondary schools already admit **more than 20%** of non-affiliates.



Starting from the 2019 Secondary 1 Posting Exercise,

20%

*of places for **each course in every affiliated secondary school** will be reserved for students who do not benefit from affiliation priority, to recognise affiliation whilst ensuring open access for all students*

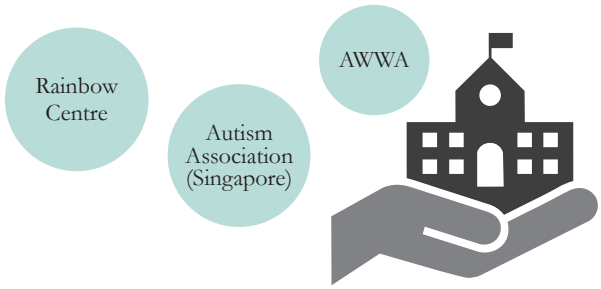
6 MOE-Outward Bound School Programme

- The 5-days programme will eventually be offered to all secondary schools, in tandem with OBS' expansion at Coney Island.
- A common experience for **all Secondary 3 students from 2020**.
- By the end of 2017, some 7,300 Secondary 3 students from 28 schools would have taken part in it.

7 Enhancing Capabilities of Teachers and Outdoor Adventure Educators (OAES)

To strengthen pre-service training for PE teachers, MOE has worked with NIE to extend an existing one-day OE workshop to a **full module of 12 hours spanning six weeks.**

8 Expanding Special Education School Places for Students with Moderate-to-Severe Autism Spectrum Disorder



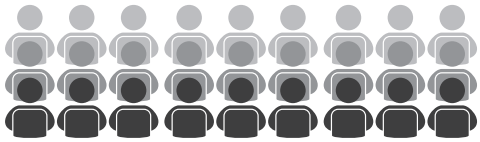
will each be opening one additional campus in the next 2 years

9 Launch of Cultural Performance Exposure Fund 2017

- The Malay Language Learning and Promotion Committee (MLLPC) has launched a cultural performance exposure fund which will be **available to all mainstream Primary and Secondary schools, Junior Colleges and Millennia Institute**.
- Enhances support to schools in encouraging students to experience and enjoy local cultural performances in Malay.

10 Direct School Admission (DSA) Exercises

Starting from 2018



number of DSA places will expand

All secondary schools can admit

up to **20%**

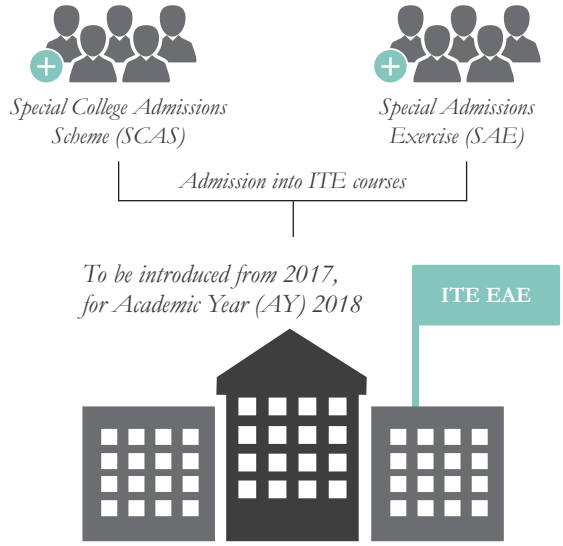
of their Secondary 1, non-Integrated Programme intake via DSA

In 2016, schools received **16,000** applications with some students applying to more than one school. Eventually, a total of **2,800** students were admitted to secondary school via DSA, half of whom were admitted to the Integrated Programme (IP). Currently, IP schools have full discretion in admission, while the majority of secondary schools can only set aside **5%, 10% or 20%** of their Secondary 1 intake for DSA places, depending on the type of school.

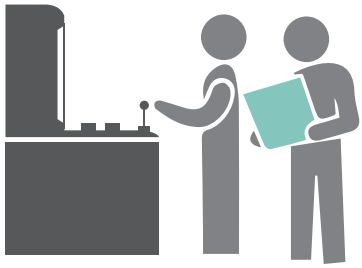
- As part of this refinement, schools will **discontinue the use of general academic ability tests** in DSA selection by 2018. Tests are used by some schools as a standardised assessment of applicants' general reasoning and problem-solving skills.
- From the 2019 DSA Exercise onwards, students will be able to submit their applications through a **centralised online application portal**, using a common application form. Currently, students have to apply to individual schools, each with their own application process.
- Currently, **27 secondary schools** offer their affiliated primary school students priority in the Secondary 1 posting. Affiliates qualify for this priority only if they indicate the affiliated secondary school as their first choice.

11 ITE Early Admissions Exercise (EAE)

- Under the ITE EAE, secondary school students will be able to apply for conditional admission to Nitec and Higher Nitec courses prior to taking their GCE N- and O-Level examinations.
- Opens a new pathway for Nitec students, allowing them to apply for conditional admission to Higher Nitec courses prior to taking their Nitec final examinations.
- At the individual course level, **aptitude-based admissions** via the ITE EAE may constitute **up to 30%** of the intake of each course.



12 Learning By Doing – **ITE Technical Diploma**



For a start, to be introduced in sectors such as Mechanical & Electrical Services Design & Supervision, Security System Engineering, Rehabilitation Therapy, and Offshore & Marine

- A new apprenticeship-based pathway for ITE students, leading to a Technical Diploma will be conferred by ITE.
- Every course will be delivered in partnership with an employer.
- ITE students will be able to apply for them after they graduate with a Nitec or Higher Nitec, or after a few years of working.

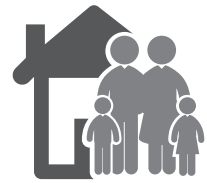
13 Financial Support for Students in ITEs, Polytechnics and Autonomous Universities

Quantum will be increased and coverage of government bursaries – namely the Community Development Council/Citizens' Consultative Committee (CDC/CCC) Bursary and MOE Bursary – will be extended.

- To take effect from AY2017 for full-time Singaporean students studying in the publicly-funded post-secondary education institutions (PSEIs).
- Introduction of **four bursary tiers across all PSEIs**. This will allow for more targeted assistance to students from lower to middle income households.
- Gross monthly household income will be considered, besides per capita income. To be eligible for bursaries, a student only needs to meet either of the two income criteria:

Family with Gross Household Income (GHI) of
$9,000 and below

OR



Gross Monthly Household Per Capita Income (PCI) of
$2,250 and below

will be eligible for a government bursary

- With the income eligibility caps revised upwards based on the latest household income data, more students will qualify.
- The annual bursary quanta will increase:

Up to **$400**
for ***undergraduate*** *students*

Up to **$350**
for ***diploma*** *students*

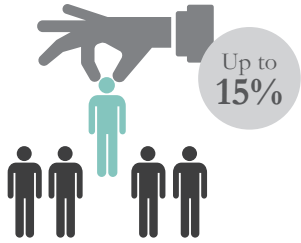
Up to **$200**
for ***ITE*** *students*

With the revisions, the projected number of students expected to tap on the government bursaries is estimated **to increase by 12,000 per year, to 71,000 per year**. The total annual budget is estimated to increase by about $50 million, to $150 million.

14 Singapore University of Social Sciences (SUSS)

- SIM University (UniSIM) has been renamed the Singapore University of Social Sciences (SUSS), as part of its restructuring into Singapore's sixth autonomous university.
- SUSS will champion **lifelong learning** and expand its programme offerings for adult learners. It will **work with SkillsFuture Singapore (SSG) and sector agencies to develop industry-relevant courses** and create new content that will support the upgrading of our industries.
- Deliver programmes that have a **strong social focus**. There is a compulsory service learning component in its full-time programmes which requires students to initiate, conceptualise, and execute a social project and champion a cause.
- To continue developing the **applied degree pathway** – like SIT, there will be strong interlacing of theoretical knowledge with real-life application.

15 Expanding Aptitude-Based Admissions in Universities



*Universities to expand **aptitude-based admissions** for their admission exercises later in 2017, for up to 15% of their intake. This will be implemented in the coming academic year*

16 New Modes of Learning in the Universities

MOE will work with institutions to offer more modular courses this year.

- It may be stacked up towards qualifications such as diplomas and degrees.
- There were 513 modular courses last year, up from 338 in 2015. On average, these courses can be completed in 3-6 months.
- NUS will start offering a slate of work-study programmes this year, including courses in **Information Security, Business Analytics, and Data Science and Analytics**.
- SMU has introduced **SMU-X**, an initiative where students get to work on real-life problems faced by companies, side by side with businesses.
- SUSS and NTU are converting all their teaching materials for online delivery, to refresh their teaching methods and inoculate themselves against possible disruption in the future.
- SIT and SUSS will introduce **seven new SkillsFuture Work-Study Degree Programmes**. They are jointly developed and delivered in partnership with companies such as Singtel and Standard Chartered.

National Lean LaunchPad

- A **10-week programme for scientists and engineers** from local universities and polytechnics to learn how to market their academic research into usable, commercial prototypes or products.
- **Co-developed and co-delivered with 12 partner companies** comprising a mix of local companies (including an SME), multi-national corporations (MNCs), and government agencies.

17 Future@Work

- SkillsFuture Singapore will roll out a new national training programme by end of 2017 called Future@Work.
- To be implemented across the island, and positioned as **an entry programme for all Singaporean workers,** to understand the future work environment.

18 Committee for Private Education (CPE)

CPE is enhancing its regulation of Private Education Institutions, mandating annual graduate employment surveys and publishing the results. This will help students make informed decisions in attending its programmes.

General Scan of CPF & Housing Policies

A. CENTRAL PROVIDENT FUND (CPF) POLICIES

To enhance retirement adequacy

Policy	Specifics
CPF Investment Scheme (CPFIS)	• A self-assessment tool will be introduced to help CPF members determine if CPFIS is suitable for them. • The cap on sales charge will be lowered to discourage financial intermediaries from proactively selling products to CPF members. • The types of asset classes offered under CPFIS will be reviewed to see if they are appropriate for growing retirement savings.
CPF LIFE Escalating Plan	• A new CPF LIFE plan with escalating payouts will be introduced in January 2018. • It gives members the option of starting with a lower initial payout which will escalate at 2% a year. • There will be a one-year period for members on other CPF LIFE plans to switch to this new plan if they wish.
CPF Retirement Planning Service	• The CPF Retirement Planning Service offers 1-on-1 sessions for members who are reaching age 55 to better understand the options available to them. • It will be available to all CPF members turning 54 this year to help them make more informed choices about their retirement.

B. HOUSING POLICIES

To help first-timer families, seniors and singles acquire housing

Policy	Specifics
Shorter Waiting Time for Some Build-to-Order (BTO) Flats	• To meet the needs of young couples and families wishing to settle down earlier, HDB will offer some Build-to-Order (BTO) flats with a shorter waiting time of about 2.5 years by starting construction ahead of the launch. • There will be 1,000 of such BTO flats in non-mature estates planned for launch in 2018. • Majority of the flats will be 3-room or larger. • At least 95% of 4-room or larger flats in these projects will be set aside for first-timer families.
Lower Rents for Parenthood Provisional Housing Scheme (PPHS) Flats	• Young couples in need of temporary housing while waiting to move into their new BTO flat can apply for a rental flat under the Parenthood Provisional Housing Scheme, at subsidised rents. • From 1 April 2017, the PPHS rents will be further reduced to help young families defray their housing costs. • 3-room rental rate: $600-$900 • 4-room rental rate: $1,000-$1,500

<table>
<tr><th>Policy</th><th>Specifics</th></tr>
<tr><td>Increased Housing Grants for Resale Flat Buyers</td><td>• With the enhanced CPF Housing Grant, first-timer resale flat buyers now have more affordable housing options.
• For young couples, buying a resale flat near their parents' home is now within closer reach.
• The grant available is up to $50,000.
<table><tr><th>HDB Resale Flats</th><th>Current CPF Housing Grant</th><th>Enhanced CPF Housing Grant</th></tr><tr><td>4-room or smaller</td><td>$30,000</td><td>$50,000</td></tr><tr><td>5-room or bigger</td><td>$30,000</td><td>$40,000</td></tr></table></td></tr>
<tr><td>Deferred Downpayment Scheme for Seniors</td><td>• Starting from the May 2017 Sales Exercise, the Deferred Downpayment Scheme lets seniors right-sizing to a new flat (3-room or smaller) defer the full downpayment of their new home until key collection.
• They will pay only the stamp and legal fees when signing the Agreement for Lease.</td></tr>
<tr><td>Temporary Loan Scheme (TLS) for Seniors</td><td>• Seniors who need bridging finance can apply for the new Temporary Loan Scheme (TLS) while waiting for the sale of their existing flat and payment for their new home to be completed.
• The TLS will be applicable to all resale transactions submitted from 8 March 2017.</td></tr>
<tr><td>Enhanced CPF Housing Grant for Singles</td><td>• HDB has been providing a steady supply of 2-room Flexi flats to meet the housing needs of singles since the introduction of the Singles Scheme in 2013.
• To further help singles own their first home, first-timer singles buying a resale flat can also enjoy up to $55,000 in total housing grants, with the enhanced CPF Housing Grant.</td></tr>
</table>

General Scan of Family & Elderly Policies

A. TO ASSIST HOUSEHOLDS WITH THEIR EXPENSES

1 Increase in GST Voucher – U-Save

- **Permanent increase in rebate** for eligible HDB households to **soften the impact of the water price increase** (depending on flat type)
- Expected to benefit about **880,000** HDB households

HDB Flat Type	Current Annual U-Save Rebate ($)	Additional Annual U-Save Rebate ($)	Revised Annual U-Save Rebate ($)
1-and 2-room	260	120	380
3-room	240	100	340
4-room	220	80	300
5-room	200	60	260
Executive/ Multi-Generation	180	40	220

Impact of Water Price Changes after additional U-Save

HDB Flat Type	Current Annual U-Save Rebate ($)	Additional Annual U-Save (per month) ($)	Increase in Monthly Water Bill ($)		Average Monthly Water Bill After Additional U-Save
			Before Additional U-Save	After Additional U-Save	
1-and 2-room	26	120 (10)	9	-1	25
3-room	33	100 (8)	10	2	35
4-room	42	80 (7)	12	5	47
5-room	44	60 (5)	13	8	52
Executive/ Multi-Generation	49	40 (4)	15	11	60

2 Personal Income Tax Rebate

20% of tax payable for tax residents for YA2017 (capped at $500), to help middle-income households with expenses

3 One-off GST Voucher (GSTV) — Cash Special Payment

- **Up to $200 more** for low-income Singaporeans, on top of regular GSTV — Cash
- GSTV — Cash **$300** + GSTV — Cash Special Payment **$200 = $500**
- Expected to benefit **over 1.3 million** Singaporeans in 2017

Assessable income for YA2016 ≤ $28,000 for S'poreans aged 21 years & above	Annual Value of Home as of 31 Dec 2016	
	Up to $13,000	$13,000 to $21,000
GSTV – Cash	$300	$150
One-off GSTV – Cash Special Payment	$200	$100
Total	**$500**	**$250**

4 Extension of Service & Conservancy Charges (S&CC) Rebate

HDB Flat Type	FY2017 S&CC Rebate (No. of Months)
1-and 2-room	3.5
3-and 4-room	2.5
5-room	2
Executive/Multi-Generation	1.5

5 Top-ups to Funds

ComCare Fund

top up by
$200 *million*

Medifund

top up by
$500 *million*

GST Voucher Fund

top up by
$1.5 *billion*

B. FAMILY & SOCIAL POLICIES

1 Additional Infant-Care Leave

- Under a pilot scheme, public servants will get an **extra 4 weeks** of unpaid infant-care leave per parent.

2 Helping the Needy and Vulnerable

- **Better integrated assistance at Social Service Offices (SSO):** Extension of pilot delivery, of both social and employment assistance by the same SSO officer, to three more SSOs.
- **Breaking the cycle of family violence:** Preventive education at different life stages and public education to urge individuals and communities to 'Break the Silence'.

C. ELDERLY POLICIES

1 Senior Citizen Concession Cards

- New Passion Silver Concession Card launched in Dec 2016 to make it more convenient for seniors to stay active and engaged in the community.
- Enables seniors to enjoy concessionary fares on public transport and access People's Association's (PA) range of courses, activities and programmes.

2 National Silver Academy (NSA)

- NSA, which caters to those aged 50 and above, will offer **more than 21,000 learning places and 900 courses** in diverse areas – ranging from information technology to art – this year, for a token fee.

3 Pioneer Generation Package

- The Pioneer Generation Package, first introduced in 2014, is intended to help pioneers with their healthcare costs.
- **Benefits include:**
  - Subsidies for MediShield Life premiums
  - Annual Medisave top-ups
  - Additional 50% off subsidised services and medications at polyclinics and Specialist Outpatient Clinics in public hospitals
  - Subsidies at CHAS GP and dental clinics
  - Cash of $1,200 a year for those under the Disability Assistance Scheme
- Seniors born on or before 31 December 1959 who do not enjoy Pioneer Generation benefits can receive **annual Medisave top-ups of $100-200 until 2018**.

4 Enhancement for Active Seniors (EASE)

- In 2012, the Housing and Development Board (HDB) introduced EASE, which subsidises home modifications so that our seniors can live at ease in their own homes.
- The programme enables i**mprovement items to be installed to make homes more elder-friendly, improve mobility and comfort** for elderly residents. These include:
  – Slip-resistant treatment to floor tiles in up to two bathrooms or toilets
  – Grab bars in the flat (eight or 10 grab bars for the first toilet, and six grab bars for the second toilet)
  – Up to five ramps in the flat, and/or at the main entrance
- Subsidies received are dependent on household size:

Singapore Citizen Households				
Flat Type	**1-, 2-, 3-Room Flat**	**4-Room Flat**	**5-Room Flat**	**Executive**
You Pay	$125 (5%)	$187.50 (7.5%)	$250 (10%)	$312.50 (12.5%)
Govt Pays	$2,375 (95%)	$2,312.50 (92.5%)	$2,250 (90%)	$2,187.50 (87.5%)

5 Levy Concession for a Foreign Domestic Worker

An elderly person in the household aged 65 years and above is eligible for the concessionary levy rate of

$60/month

(down from $120)

6 Silver Support Scheme

From July 2016, the government will give payouts of

$300 to $750

(depending on household size) every three months for the ***bottom 20%*** *of seniors who had low-incomes through life and little or no family support*

- Eligible elderly will receive Silver Support payouts depending on household size:

Live in HDB flat type	Payout per quarter
1-room and 2-room	$750
3-room	$600
4-room	$450
5-room	$300

- Elderly Singaporeans aged 65 and above on the ComCare Long Term Assistance Scheme will also receive a Silver Support payout of **$300 per quarter,** regardless of their type of residence.

7 Comcare Long Term Assistance

- From July 2016, seniors who are permanently unable to work due to old age, illnesses or unfavourable family circumstances can receive cash assistance.

Cash Assistance Rates (Primary Tier Assistance)		
Household Type		**Rates**
Household Size	1 Person	$500
	2 Persons	$870
	3 Persons	$1,130
	4 Persons	$1,450
Additional children's Assistance	Per child	$150 additional

- Those who qualify may also receive additional aid for recurring hygiene essentials or consumables such as adult diapers or nutritional milk supplements. Discretionary assistance is also available to help those with one-off special needs.

Secondary and Discretionary Tier Assistance		
Types of Assistance	**Examples**	**Frequency**
Secondary	Recurring essentials e.g. adult diapers, stoma bags, diabetic consumables, dietary supplements	Monthly
Discretionary	Once-off medical equipment e.g. commode, oxygen respirator	Once-Off
	Once-off household appliances e.g. beds, mattress	

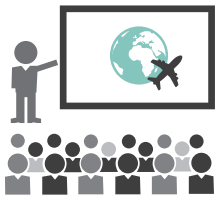
General Scan of Economy & Employability Policies

A. THE COMMITTEE ON THE FUTURE ECONOMY (CFE) STRATEGIES

1

Deepen and Diversify International Connections

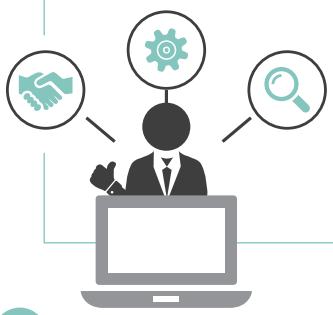
- **Strengthen trade and investment cooperation:** continue to work with similar partners to advance the liberalisation of trade and investment, and reduce tariff and non-tariff barriers through various platforms including overseas.
- **The Global Innovation Alliance:** build new networks to facilitate innovation. Support Singaporeans to build overseas experience, creating international networks and deepening skills in order to adapt to the rapidly changing world.
  - **Innovators Academy:** connects tertiary students from NUS Overseas College programmes to build connections and capabilities overseas
  - **Innovation Launchpads:** create opportunities for entrepreneurs and business owners to connect with mentors, investors and service providers.
  - **Welcome Centres:** link up innovative foreign companies with Singapore partners to co-innovate and expand into the region.



- **SkillsFuture Leadership Development Initiative and Young Talent Programme (YTP)**
  - SkillsFuture Leadership Development Initiative aims to develop 800 Singaporean leaders over the next three years to drive overseas expansion of Singaporean businesses.

2

Acquire and Utilise Deep Skills

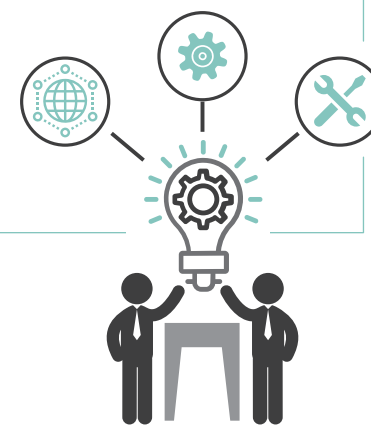


- **Facilitate acquisition of deeper skills:** modular courses, integration of different skills training and one-stop education, training and career guidance portal.
- **Strength nexus between acquisition and utilisation of skills:** training to be closely linked to job requirements, e.g. place-and-train schemes.

3

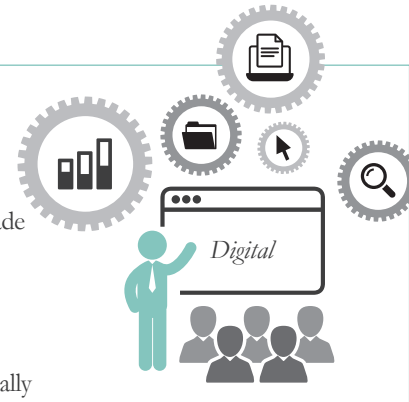
Strengthen Enterprise Capabilities to Innovate and Scale Up

- **Strengthen our innovation ecosystem:** better commercialise the research findings and intellectual property (IP) of our research institutions by establishing profit-oriented entitles with technical expertise, business networks and acumen.
- **Scaling up and internationalising high-growth enterprises:** ease of access to resources and utilise Partnerships for Capability Transformation (PACT) to encourage partnerships for expansion.



4

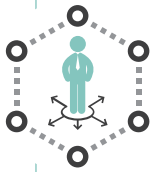
Build Strong Digital Capabilities



- As part of the Smart Nation Vision, SMEs to adopt digital technologies through national initiatives like the National Trade Platform and a National Payments Council.
- **Build deep capabilities in applied data analytics and cybersecurity:** joint partnerships with industry players and leverage on NS men to be trained in cybersecurity.
- **Harness data as an asset:** collect and share data systematically with the private sector to add value and stimulate innovation.

5

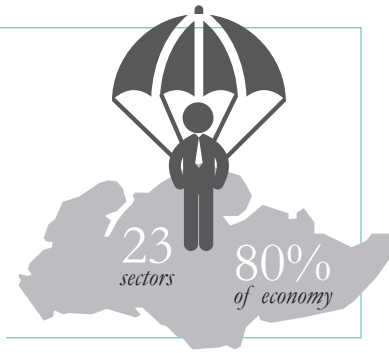
Develop a Vibrant and Connected City of Opportunity



- Significant investments in critical economic infrastructure, e.g. Changi Airport Terminal 5 & KL-Singapore High Speed Rail.
- Shared infrastructure for economic clusters for industry players to network, pool resources and share knowledge.
- Develop exportable capabilities through partnerships between government & private firms for urban solutions such as special test-bedding zones to develop and refine products.

6

Develop and Implement Industry Transformation Maps (ITMs)



- **Tailored approach for each industry:** focus on where the potential can be best realised in each case and build capacity to seize opportunities and create good jobs.
- **Clustered approach to maximise synergies across industries:** leverage on skills adjacencies between industries to support the provision of skilled manpower.
- Work with private placement firms to deliver better job matching services for professionals.

7

Partner Each Other to Enable Innovation and Growth

- **Greater role for TACs and unions:** support for both companies and workers to prepare for the rapidly-changing economy.
- Regulatory environment that supports innovation and risk-taking.
- Utilise lead demand in support of promising industries.
- Review and reshape Singapore's tax system to keep in line with global changes in tax rules and rising domestic expenditures.
- **Create a sustainable environment:** Growth of economy should go hand-in-hand with quality of environment for the use of future generations.

B. BUILDING CAPABILTIES & PARTNERSHIPS FOR ENTERPRISES

1 Innovation

- **Operation and Technology Road-mapping**
  - A*STAR to help firms identify technology to innovate and compete
  - 400 companies over the next 4 years
- **Improving Access to Intellectual Property (IP)**
  - Intellectual Property Intermediary (SPRING affiliate)
  - Headstart programme
- **Tech Access Initiative (A*STAR)**

  Advanced machine tools for prototyping and advice

2 Scaling Up Globally

- **International Partnership Fund:** Co-invest with Singapore-based firms to help scale-up and internationalise
- **Enhanced International Finance Scheme:** Private cross-border project financing to smaller Singapore-based infrastructure developers

3 Digitalisation

- **SMEs Go Digital Programme**
  - Focus on sectors, e.g. retail, food services, wholesale trade, logistics, cleaning and security, to improve productivity
  - Industry Digital Plans
  - In-person help at SME Centres and a new SME Technology Hub (specialist advice) by IMDA
  - SMEs with pilot emerging ICT solutions can receive advice and funding support
  - Strengthening capabilities in data and cybersecurity
- Introduction of the **Cybersecurity Professional Scheme** in the public sector
- Establishing the **Data Innovation Programme Office** to help businesses tap on data analytics for growth
- **Media Manpower Plan** to deepen core skills of media professionals, strengthen the support system for freelancers and enhance the attractiveness of the media profession

4 Top-Ups To Funds

$500
million top-up

to the National Research Fund to support innovation efforts

$1
billion top-up

to the National Productivity Fund to support industry transformation

5 Public Sector Construction Productivity Fund

$150m
to allow government agencies to procure innovative and productive construction solutions

6 Regulatory Sandboxes

- Promote innovation through creating space where rules can be suspended to allow greater experimentation, e.g. MAS regulatory sandbox for FinTech
- Make risk assessment for new products and services more swift and effective

C. ACCELERATING INFRASTRUCTURE PROJECTS

- $700 million worth of public infrastructure projects to begin in FY2017 and FY2018
- Upgrading of Community Clubs and sports facilities
- Firms facing structural shifts (e.g. retail) need to change business models to stay viable

D. BUILDING CAPABILTIES & PARTNERSHIPS FOR OUR PEOPLE

1 Attach-and-Train (AnT) Programmes

- An extension of the Professional Conversion Programme (PCP), and puts PMETs through conversion training to take on new careers in growth sectors.
- Mature trainees aged 40 years and above will receive 90% WSG course fee funding and training allowance of 50-70% prevailing salary and co-funding by hosting employer for additional 10% of prevailing salary.

2 Enhanced Career Support Programme (CSP)

- From April 2017, CSP will support eligible Singaporean PMETs with salary support of up to $42,000 for a maximum of 18 months. This is to encourage companies to hire middle-aged PMETs.

3 Enhanced Professional Conversion Programmes (PCP)

- Salary support caps will be raised from $2,000 to $4,000 to allow the programme to support the wages of mid-level jobs of up to $5,700. This is to encourage employers to offer more mid-level jobs.
- Mature PMETs (40 years and above) and the long-term unemployed (six months or more) will receive more support, from $4,000 currently to $6,000. This will allow the Government to support mid-level jobs of up to $6,700 of salary.

4 Enhanced Work Trial

- Additional retention incentive of $1,000 at the 6 month retention mark and salary support at 30% of the monthly salary for 6 months (capped at $600 per month) for employers hiring Singapore Citizens who had been unemployed for 12 months or more prior to taking up Work Trial.
- Work Trial will also support persons-with-disabilities.

5 National Jobs Bank

- More user-friendly to ensure professionals are matched to relevant jobs.
- Work with private placement firms to deliver better job matching services for professionals.

6 PIVOT Programme

- One-stop service by NTUC U Associate to help PMETs who are facing a transition to receive industry-based assistance in areas of career coaching, technical training and job placement opportunities.

7 Committee for Malay/Muslim PMETs

- The PMET Outreach Committee aims to help Malay/Muslim PMETs retrain and rebound from potential employment setbacks.

F. PROGRESSIVE AND INCLUSIVE WORKFORCE

1 Extension of Additional Special Employment (ASE) Credit till 2019

- Re-employment age raised from 65 to 67
- Companies hiring mature PMETs aged 65 years and older will receive **additional ASE on top of the Special Employment Credit (SEC) of up to 8%** for eligible Singaporean workers aged 55 and above. The extension will run till Dec 2019.

2 The Tripartite Alliance for Dispute Management (TADM)

In addition to mediation services, TADM will operate a **Short Term Relief Fund (STRF)** funded by the Ministry of Manpower (MOM) for local low wage workers, where employers are unable to repay salaries due to financial difficulties or business failure. The STRF is expected to cover the bottom 20th percentile of Singapore's workforce.

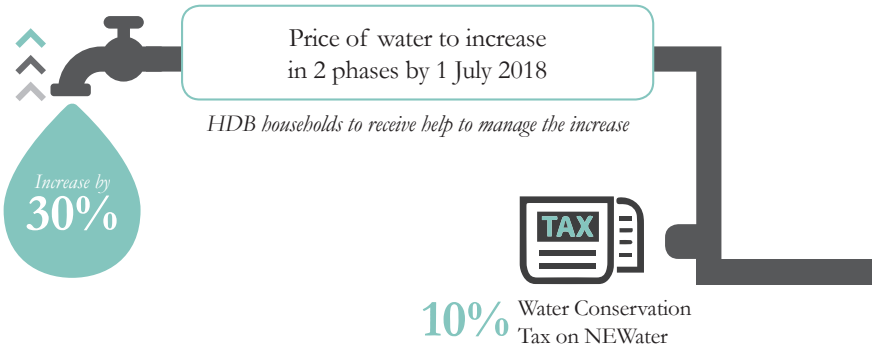
3 Low Wage Workers

*MOM will **raise the salary threshold** for a local worker to be considered as a full-time equivalent from*

- Changes to dependency ratio ceiling
- It will be done progressively, first to $1,100 from 1 July 2017 and to $1,200 from 1 July 2018.
- Tripartite Advisory on Best Sourcing Practices: new guidance on progressive remuneration and benefits for outsourced workers, and fair contracting practices.

G. QUALITY ENVIRONMENT FOR THE FUTURE

- Carbon tax on the emission of greenhouse gases (effective 2019)
- Restructuring of Diesel Taxes
- Vehicular Emissions Scheme
- Early Turnover Scheme
- Water Price Changes:



Health, Community & Cultural Policies

1 Public Healthcare System

- System to be restructured into **three integrated clusters** – SingHealth, National Healthcare Group (NHG) and National University Health System (NUHS) –, down from the **current six**, by early 2018.
- Facilities within the same region will be grouped together, including general hospitals, community hospitals and polyclinics.

2 War on Diabetes

- The War on Diabetes was first declared by the Ministry of Health (MOH) in 2016. Given the links between diabetes and other illnesses such as heart disease and stroke, the national crisis of diabetes was again given special attention at the National Day Rally 2017 which highlighted the importance of fighting diabetes, not only amongst the old but also the young.

To encourage Singaporeans to go for more regular health screenings,

MOH will offer health check-ups at ***S$5 for Singaporeans above age 40,*** *from September 2017*

In a further bid to help consumers cut down on their intake of sugar,

all soft drink producers in Singapore will have to reduce the sugar content in drinks sold locally

3 National Adult Immunisation Schedule (NAIS)

- The new NAIS, which lists who should be vaccinated and when, includes immunisation for diseases such as the flu and hepatitis B.
- It is the latest step in the country's push to encourage preventive care, and mirrors a similar schedule for children (National Childhood Immunisation Programme).
- From 1 November 2017, adult Singaporeans can use their Medisave to pay for vaccinations which MOH is recommending depending on their age and health.
- Singaporeans will be able to use **up to $400 of their Medisave per account**, under the Medisave400 scheme, for all recommended vaccinations.

4 Building Capacity in Healthcare

MOH will invest an **additional $24 million over the next three years** in various manpower development schemes to enable mid-career Singaporeans to take up new careers in healthcare, including:

- Enhancements to the **Professional Conversion Programmes for Nursing** to better support healthcare institutions to hire and train mid-career professionals for nursing.
- A two-year overseas nursing scholarship under the **Healthcare Graduate Studies Award (HGSA)** to support individuals to pursue a Graduate Entry Masters nursing programme overseas.
- Expanding **Regional Health Systems (RHSs)** programmes to help patients transit from hospital to home, by training more Care Coordinator Associates.
- Providing a **new on-the-job training support** to employers for hiring and training each community care worker.

5 Healthy Bodies, Healthy Minds: Recommendations by the Nurturesg Taskforce

- The Health Promotion Board (HPB) will provide students with **steps trackers** as part of the National Steps Challenge, to spur their interest in physical activity.
- From 2017, all mainstream schools would have started implementing the Healthy Meals in Schools Programme (HMSP) where school canteens will provide healthier food and drinks options for students.
- The Central Youth Guidance Office (CYGO) under MSF is exploring the feasibility of **mental health assessment** for clients who are on the Enhanced STEP-UP (ESU) programme.
- Tote Board has set aside up to **$10 million of grant funding** for community-based ground-up mental-health programmes for our young.

6 Strengthening Mental Health Services

Since launching the Community Mental Health (CMH) Masterplan in 2012, MOH has increased the capacity of mental health services and programmes.

MOH will launch a new five-year CMH Masterplan in 2017 to further strengthen community mental health services and better support persons with mental health conditions.

Key aspects include:

Resourcing VWOs to set up more **community-based teams** to reach out and support persons with mental health conditions

Increasing the number of **Dementia Friendly Communities**

Additional $160 *million over next five years*

Improving **early identification** of mental health symptoms

Integrating persons with mental health issues at the workplace and society

Improving delivery of care within the community, e.g. mental health care services in polyclinics

Strengthening Institute of Mental Health's (IMH) post-discharge **"after care"** support

7 Enabling Masterplan 3

- Increase support for Persons with Disabilities to **$400 million** per year.
- Set up a **Disability Caregiver Support Centre** to provide caregiver training and peer support.
- Extend training programmes to Special Education (SPED) students with moderate intellectual and multiple disabilities to prepare them for employment.
- Increase employment opportunities through **School-to-Work Transition Programme**, training and lifelong learning programmes.
- **Job Shadowing Day**, a programme by SG Enable which helps SPED students discover their job interests early, will run as an annual programme from next year to boost their employability.

8 Community Sports and Sports Excellence

Over $50 *million*

set aside for community sports — expand ***Sports In-Precinct Programme*** *so more Singaporeans can play sports near home, and scale up* ***SportCares*** *to empower disadvantaged youths*

Additional $100 *million*

for high performance sports — ***$50 million in direct grants*** *over five years to support aspiring athletes and up to* ***another $50 million for 1:1 matching*** *of sports donations*

9 Top Up to Funds & Grants

Cultural Matching Fund

top up by
$150 *million*
to continue 1:1 matching for donations to cultural institutions

VWOs-Charities Capability Fund

top up to
$100 *million*
to develop VWOs' and charities' capabilities over next five years

Self-Help Groups

top up by
$6 *million*
over next two years

10 Introduction of Strengthening Corporate Giving

Two new programmes by the National Volunteer and Philanthropy Centre (NVPC):

- **Champions of Good Programme –** Recognises companies that demonstrate best practices in corporate giving
- **Company of Good Fellowship –** Brings together a community of corporate representatives who are leaders in corporate giving

11 SG Cares

- More opportunities for citizens to contribute meaningfully, from informal and formal volunteerism, to ground-up efforts.

12 Performing Arts-Based Learning Programme

- Piloted by the National Arts Council (NAC) for lower secondary students in 2017, which includes concert lessons under the music curriculum.

OVERVIEW OF MALAY POPULATION CHARACTERISTICS (General Household Survey, 2015)

Household Size & Structure

Between 2010 and 2015, the shift towards smaller households was the most notable among Malay households

4.2 *in 2010* → 3.9 *in 2015*

Malay households nevertheless continue to have larger households on average than Chinese and Indian households

are married couple-based households with the presence of children. Of these households, most have males aged 50-64 years as the head of household

Type of Dwelling & Home Ownership

39.2% *in 2010* → 38.6% *in 2015*

Majority of Malays dwell in ***4-room HDB flats***

Increased representation in ***1-to 2-room flats*** *among the Malays from*

8.7% *in 2010* → 14.6% *in 2015*

Between 2010 and 2015, there was a decrease in home ownership for Malay households from 89.6% to 86.9%

Monthly Household Income & Resident Workforce

In 2015, majority of Malay households (8.2%) have

$5,000 – $5,999

as their monthly household income, and $1,000 – $1,499 as their monthly household income per household member

Malay resident workforce mainly represented in the following industries

17% *Public Administration & Education*

16% *Transportation & Storage*

11% *Wholesale & Retail Trade*

Early Childhood

- Total no. of Malays aged 0-4 years increased from 33,088 (6.3% of Malay residents in 2016) to 34,561(6.5% in 2017), while total no. of Malays aged 5-9 years decreased from 31,706 (6%) in 2016 to 31,212 (5.9%) in 2017 (Population Trends, 2017).
- In addition to the existing SPARK Certification, the passing of the ECDC Bill, enhanced pre-school capacity, inclusivity and teacher training will assure parents that there is more regulation in the industry in terms of quality, curriculum and standard of care. With more accessible and affordable child care facilities, transition back to work can be facilitated for mothers as well as enable them to remain in the workforce to contribute to their household income and lifetime savings.
- Aspiring M/M Early Childhood (EC) educators can look forward to the establishment of NIEC in 2019, which will see better alignment of EC training and certification across institutions. Malay/Muslim Organisation (MMO) pre-schools and Mosque Kindergartens can tap on schemes for its educators such as the PDP and SkillsFuture Study Award.
- With plans to make KidSTART permanent, more eligible low-income families and their children can benefit from the programme, beyond its five current locations.
- In recognition of the importance of EC, MENDAKI continues to outreach to M/M families and EC practitioners in terms of building a platform to share resources on Early Learning, one of which was through MENDAKI's M35 Education Symposium 2017. This platform facilitates mobilisation and sharing of knowledge amongst our Malay Early Learning practitioners and policymakers.

Secondary & Tertiary

- With increased coverage and quantum, more M/M students in Post-Secondary Education Institutions (PSEIs) will be eligible for government bursaries to help defray the cost of education.
- Normal stream (NA & NT) students and their families should be apprised of the Subject-Based Banding as an opportunity to acquire depth in their strong subjects.

B. IMPLICATIONS FOR THE MALAY/MUSLIM (M/M) COMMUNITY

ON HEALTH	• According to the National Kidney Foundation, Malays make up 30% of patients undergoing dialysis at its centres. This risk has grown to almost triple that of Chinese and more than twice that of Indians. Research suggests that this could be caused by the delay in diagnosis, resulting in more advanced complications. • M/M individuals aged 40 and above should take advantage of health screenings and the $5 health check-ups which will start from September 2017.
ON CPF, HOUSING & HOUSEHOLD MEASURES	• More outreach efforts should be undertaken to familiarise the M/M community with various CPF options to grow their retirement savings. MMOs can serve as touchpoints for information and referral on CPF policy. • Deferred Downpayment Scheme for Seniors & Temporary Loan Scheme (TLS) for Seniors: M/M seniors will benefit financially from downsizing their flat. However, they should do so only after having received sound financial advice about their suitability for downsizing.
FOR COMMUNITY-AT-LARGE	• With better integrated assistance at SSOs, MENDAKI and other MMOs like Muhammadiyah, PPIS and Jamiyah can work with MSF to enhance and streamline management of client information to benefit M/M families.

Tertiary

- The Graduate Employability Survey 2016 on 10,904 fresh graduates from NUS, NTU and SMU showed that, of the 89.7% who found work within six months of concluding their examinations, 80.2% secured permanent full-time jobs, lower than 2015. Rise in freelance and part-time jobs seem more prominent among graduates from arts and humanities courses. Experts attribute it to the shifting demands of firms, workers' mind-sets and technology (Seow, 2017).

- Greater public education and community engagement efforts are needed to inform M/M students and families of developments in the education landscape, including changes in admissions criteria, mode of instruction and learning, as well as greater opportunities for industry partnership in Institutes of Higher Learning, including:

  – The EAE for Polytechnics and ITE, which opens a new pathway for secondary and ITE students, allowing them to be admitted on criteria other than academic grades;

  – The new apprenticeship-based ITE Technical Diploma;

  – The Global Innovation Alliance and Innovators Academy, which are opportunities for our undergraduates to venture overseas and build connections in the tech sector.

M/M Community & The Future Economy

- Extensive news coverage and reports have outlined competencies required by occupations across industries in this new economy, including specific digital skills and sectoral manpower needs.

- MMOs may collaborate to streamline efforts, consolidate and bridge such information to clients – students, workers and families – on shifts within and across industries, as well as the range of (cross-functional) skills by occupation/industry, to guide their educational and lifelong learning journeys. Professional networks can be facilitated and workers can be encouraged to step up and be identified for the SkillsFuture Leadership Development Initiative.

- With increased accessibility of training, eligible M/M individuals should be encouraged to make use of SkillsFuture initiatives: out of 126,000 Singaporeans who have utilised their SkillsFuture credits, only 8.4 per cent were Malays (as at Dec 2016). Jobseekers can also benefit from the Adapt & Grow schemes which aim to help them transit into a different sector.

Elderly

- Encourage our M/M seniors to adopt a healthy lifestyle by staying active and engaged in the community through the National Silver Academy, and with the new Senior Citizen Concession Cards, which includes concessionary fares on public transport.

- Efforts to ensure a healthy lifestyle must start at home with the family. Amongst others, this means relooking at the type of ingredients, food preparation methods and means of maintaining an active lifestyle. Key initiatives to bring activities closer to the heartlands include the ActiveSG movement which aims to bring on board 1.3 million people this year. Among its target groups are those above 55 years old.
- MMOs such as the Muslim Kidney Action Association (MKAC) and Club Heal can consider partnering MOH to raise awareness on the War against Diabetes and to strengthen mental health services for the community, respectively.

- Increase in CPF Housing Grant to benefit young first-timer M/M couples who want to own their own home while living near their parents.
- GST Vouchers, extension of S&CC Rebates and Personal Income Tax Rebates can help M/M families offset their household expenses and manage the cost of living.

- VWOs-Charities Capability Fund & SG Cares: MMOs can take advantage of such funding and expand their programmes to benefit more people. Leverage the movement to create more volunteer opportunities and strengthen volunteer management capacity.

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