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MENDAKI

Policy Digest 2015

Chairman's Message

2015 has been a significant year for Singapore. We celebrate our nation's Golden Jubilee and our coming together as one people. In our journey together over the last five decades, we have transformed Singapore from a Third World country to a First World nation. We were able to do so because we share the belief that everyone is equal regardless of ethnicity and that everyone is entitled to equal opportunities to prosper. Against this backdrop, the Malay/Muslim community has made great strides, as can be seen in our progress in the education, economic and social spheres.

Many more Malay students are entering tertiary institutions. An increasing number of Malays are taking up professional, managerial, executive and technician (PMET) positions. Today, Malay/Muslim professionals and talents are represented across diverse sectors. While our challenges remain, we have every reason to be optimistic about the community's future. 'Singapore Malay/Muslim Community: The Next 50 Years', this special SG50 edition of the MENDAKI Policy Digest, encapsulates our community's reflections and aspirations as we chart Singapore's next 50 years.

With submissions by writers drawn from among community figures, thought leaders, professionals and youths, the Digest brings together our visions for the Malay/Muslim community in the coming decades. The publication also documents changes to national policies and their implications on the community, and underlines the importance of evidence-based research findings in social programmes.

'Singapore Malay/Muslim Community: The Next 50 Years' promises to be a useful resource for community leaders, policymakers, academics and students alike. I am confident that it will inspire new ideas and foster collective action for the betterment of the Malay/Muslim community.



Dr Yaacob Ibrahim

Minister for Communications and Information

Minister-in-charge of Muslim Affairs & Minister-in-charge of Cyber Security and
Chairman of Yayasan MENDAKI

CEO's Foreword

Yayasan MENDAKI aims to be at the forefront of educational and social research on the Malay/Muslim community. Towards this end, MENDAKI Policy Digest hopes to be a key resource in engaging the community on national policies, thus helping us better navigate the fast changing social landscape.

MENDAKI Policy Digest underscores our commitment to source best ideas and practices for the upliftment of our community, through commentaries and research papers. With the theme 'Singapore Malay/Muslim Community: The Next 50 Years', this year's special SG50 edition of the Digest features insightful pieces which are spread into five broad categories: Community & Governance, Education, Family & Youth, Science & Health and Business & Innovation. The publication also includes well-thought-out research papers on education, as well as a year in review of national policies by MENDAKI research and education staff. Of particular note is the SkillsFuture initiative which the government has set up to promote lifelong learning and deepen professional and technical skills. As Minister Dr Yaacob Ibrahim pointed out, SkillsFuture is set to be a "game changer" for the community.

A cross-section of the submissions reveals an eclectic mix of ideas by writers drawn from among our Malay/Muslim professionals and talents. One of the articles echoes Minister Mr Masagos Zulkifli's exhortation for young Malays to expand their social networks in order to progress professionally. Another advocates the leveraging of technology as an educational tool. There is also a piece on strengthening Malay/Muslim families, based on Islamic tenets. Urging the community to seize opportunities in the STEM (science, technology, engineering and mathematics) sector, a writer puts forth the point that Malay/Muslims should draw inspiration from the great Muslim scientists of the Islamic Golden Age. Finally, an author whose opinion piece highlights the VUCA (volatile, uncertain, complex and ambiguous) nature of the global environment presents five new types of thinking aimed at helping the Malay/Muslim community navigate the world we live in – now, and in the future.

I hope that through these diverse lenses, our readers will be inspired to act to secure a better future for the community.



Tuminah Sapawi
Chief Executive Officer
Yayasan MENDAKI

Editor's Note

I recently had the privilege to give a talk at a TEDx event. The theme, riffing on Star Trek (and Shakespeare, originally!) was “Singapore: The Undiscovered Country”.

My talk focused on the importance of what I called “the stories we tell ourselves”, and into which we invariably grow. If we tell ourselves new stories and work towards realising them, then we move a step closer towards the shores of the undiscovered future.

Many of the pieces in this collection tell new stories for the Malay/Muslim community in Singapore. These are stories of possibility, epitomised by what psychologist Carol Dweck calls a “growth mindset” rather than a “fixed mindset”, focused on how the community can build on its assets and strengths rather than fixate on gaps and weaknesses. As befits pieces written in the year of Singapore’s 50th Jubilee, several look back to the audacious aspirations of the country’s founding leaders, while also calling for no less expansive new visions to meet the challenges of a globalised, complex, turbulent and unpredictable world.

Editing these pieces was a pleasure in more ways than one. The pieces have a delightful diversity about them. Each draws on its writer or writers’ particular disciplinary or professional background, which has resulted in many interesting juxtapositions and counterpoints between ideas and arguments. Most of the pieces are op-eds, but you will also find a few that adopted a more academic approach and delved deep into their chosen subjects.

The editorial team and I were glad to welcome this range of approaches. We figured, after all, that the multi-faceted challenges facing our community and nation needed responses that were at least equally varied nuanced, textured and encompassing.

I hope you find that the stories in this publication - and their underlying methodological pluralism - provide as much pleasure and insight for you as they did for us. 50 years hence, as we stand in a country and society that is for now undiscovered, I also hope that we can look back on the community’s progress and see that some of our successes had their seed and source in the narratives found in the following pages.

Aaron Maniam
Editor

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I

Singapore Malay/
Muslim Community:
The Next 50 Years

Community & Governance

“

I stand by this vision as
our community braces
itself for the challenges
of the future.

The community's
transformation from
independence in 1965
till today has indeed
been remarkable.



Our Place in History:

Journey Towards a Community of Excellence

By Yaacob Ibrahim

In my first speech as Minister in 2002, I spoke at a National University of Singapore Malay Studies Seminar on my vision. My vision was, and is still, that of a Community of Excellence. To convey this vision, I borrowed a quote from Antoine de Saint-Exupery, the French author of the famous book, the Little Prince:

“

If you want to build a ship, don't drum up the men to go to the forest to gather wood, saw it, and nail the planks together. Instead, teach them the desire for the sea.

}

Adapting from this quote, I came up with another to guide our path to achieve a Community of Excellence:

“

If you want our community to do well in school and life, don't merely speak to them of the need to study, work, and raise a family. Instead, instil in them the desire to learn, the aptitude and resilience to tackle challenges, and the boldness to lead.

}

I stand by this vision as our community braces itself for the challenges of the future. The community's transformation from independence in 1965 till today has indeed been remarkable. Progress, though varying, can be seen across all key areas including education, housing, employment, health care and income.

More importantly, this progress would not have been possible without the community's determination and resilience in adapting to urban living. In a single generation, we have adapted to life in a modern multi-racial, multi-religious, secularly-governed state, while still holding true to our culture and religion.

When challenges arose, our community leaders, with the support of the Government, responded promptly through various ways – creating new organisations such as Yayasan MENDAKI and LBKM (Prophet Muhammad's Birthday Memorial Scholarship Fund Board), proposing new legislation like the Administration of Muslim Law Act (AMLA) to guide our socio-religious needs, and setting up the Mosque Building Fund (MBF) to build well-planned mosques for our community in our new neighbourhoods.

Our families have also become increasingly economically more resilient as many women received an education and joined the workforce. Most of our children attended the English-medium government schools, where they grew up along fellow Singaporeans to be knowledgeable and skilled individuals. These were just some of the actions the community had taken to forge its place in a new nation.

We have come a long way since then. Today, we celebrate the diversity of talents and achievements in our community, with many highly sought after both at home and abroad. Today, our past concerns have largely been addressed and we stand proudly with others as Singaporeans, while remaining true to our traditions and culture.

But we can never be complacent. We must continue to strive to overcome the challenges facing our community. New and more complex problems will emerge in the future. Global economies are becoming more volatile, rapidly evolving technology has an impact on the way we work, live, and interact with one another. Our identities have become more fluid due to globalization and the borderless world. How do we prepare for such a world? How do we ensure the Singapore we know continues to grow and strive for the next 50 years? Will the strong institutions and foundations we have built continue to see the community and nation through?

“
In truth, diversity is nothing new – the taxonomy of a “Malay/Muslim” in our local context has always consisted of various ethnicities and even schools of Islamic thought.

To me, our community faces two crucial challenges that will determine our path in the future: diversity and disruption. In truth, diversity is nothing new – the taxonomy of a “Malay/Muslim” in our local context has always consisted of various ethnicities and even schools of Islamic thought. We may also differ in our views on what the priorities for our community should be and how it should

move forward. But the goal remains clear – for the betterment of our people. However, recently, some quarters in the community have adopted different religious orientations and more are starting to hold stronger, if not intractable, views on complex issues; they are increasingly uncomfortable or uncertain when dealing with diversity.

We have lived and managed diversity within our midst. Our community has never been entirely homogenous, but our differences may only now be more apparent because of online media, migration, new centres of knowledge, and regional/global influences. There are growing tensions and tussles over influence and theology overseas.

One only needs to think of how the Muhammadiyah or Dawoodi Bohra communities have co-existed within the wider local Muslim community, contributing actively through both official institutions and voluntary movements, without having to compromise on their beliefs. Our community has to continue to promote and foster an environment of mutual respect and understanding, so that we can continue to live in

“

Our community has to continue to promote and foster an environment of mutual respect and understanding, so that we can continue to live in harmony.



harmony. We can learn, understand and respect the views and beliefs of others without having to subscribe to them. We are all Muslims sharing similar sources of inspiration for our faith, mainly the Quran and the Prophetic traditions. If we should be intolerant of anything at all, it would be against the intolerant, particularly those who incite hatred and spark disunity.

The second, but related, challenge is that of disruption. Typically, we speak of disruption brought about by technology such as our modes of human interaction, its impact on the economy like increased automation in the workplace, or even new forms of service delivery in various sectors. Technology will cause some jobs to disappear especially when it fundamentally changes the business models. But new jobs will be created as these disruptions will call for new skill sets needed in the economy. The new skills will not lend themselves to classification that we are familiar with. For example, in a smart nation environment, one needs not only skills in data mining but also the ability to analyze different streams of data sets, structured and unstructured, in order to gain new insights. It is in the intersection of different knowledge streams that opportunities will be created. To reap this benefit, our community must be confident to leave safe shores and venture into new areas of knowledge.

But beyond disruption brought about by technology, we are also facing many social forces of disruption such as changing social values, new streams of religious thought, growing inequality and different family structures. The danger of disruption lies not in having to “embrace” or adopt these new forces. In fact, nothing dictates that we change our own beliefs. However, if groups take confrontational stances to defend their singular idea of what they hold to be true, divisiveness and intolerance will pose a threat to the community. We see such a disruption in modern Sunni-Shia relations, when dominant communities led by influential, political figures

try to enforce a superficial divide. To further their cause, these groups attempt to gather more followers and support across countries, creating cracks and disharmony within the wider Muslim world.

Another disruption is brought about by demographic changes to the community. We will see far more inter-marriages in the community due to a more mobile workforce, new media (facilitating longer distance relationships), and migration. Our cultures and traditions may evolve with time; already, many old practices have either changed or been replaced over the years. Demographically, the Muslim population may expand, but declining birth rates and an aging society suggest that the Malay population may not grow in tandem. What does it mean then for the largest minority community in Singapore?

Historically, the Malay community has always been an open, inclusive one. Hence, the challenge is whether we are able to embrace Muslims from abroad, who over time adopt the practices of the Malay community, the same way we saw early Muslim migrants from South Asia and Middle East co-existing with some indigenous Muslims from further parts of South East Asia becoming part of the community. Even if the Malay population was to shrink, the concern is not one of size. The question is whether the community is able to stay relevant at the national level.

Many minority communities around the world exert their influence at the national level in varying degrees. Some do so due to convenient political arrangements while others because of the power they wield in the socio-economic sphere. For our community, the challenge is whether we have the wherewithal to hold our own at the national level arising solely from our own internal strengths and resourcefulness. If we are able to do so, then size does not matter.

I do not have the answers to the above. But these are trends unfolding in the future that must occupy the best of minds to have the boldness to lead, and find some resolutions for the benefit of all in the community and nation. I believe we can find some faith and assurance from history – if we once were able to adapt to urban living, we must now find in us the resilience and strength of mind to adapt to these changes without losing our core – our heritage, our language, our culture, our values. Whatever our differences, we need to stay together so that we can tackle pertinent issues that matter, whether it may be in education, employability, or better helping the vulnerable. This is what a Community of Excellence is all about. It is community that is driven from within to find the best for its members. It is about individuals rising above others in order to lead and guide towards a better future for all. It is about a community confident of its place both in history and the future.

“

Here I am, in my office
penning my reflection
piece on gratitude. I am
grateful for the silence
except for the low droning
of the air conditioner at
24 degree Celsius.



What Are You Grateful For Today?

By Tuminah Sapawi

My 25-year-old daughter returned from a humanitarian trip in Cambodia vowing she would eat every single grain of rice on her plate. That was after a visit to a rice plantation and seeing the amount of effort needed to harvest the grain. Back home, all she needed to do was scoop a cup of rice into the rice cooker, wash it, add water and turn on the power. Within minutes, your staple is on the table complete with other dishes.

Here I am, in my office penning my reflection piece on gratitude. I am grateful for the silence except for the low droning of the air conditioner at 24 degree Celsius. I am grateful for the cool air I am in, while the sun is piercing outside. I am grateful for modern technology where I can delete, copy and paste within seconds. And I am able to multi-task by toggling my writing with researching on the Internet and answering emails. I remember my first job as a scriptwriter back in 1982. We used a typewriter and the only way to delete the wrong word was to go back to the word and use the white tape to retype the same word and in the process, erase it.

“

If the only prayer you say in your life is ‘thank you,’ that would suffice.” In the Holy Qur’an, it is stated “...and Allah will give reward to those who are grateful (3:144).”



Of late, so much has been written about gratitude. Eckhart von Hochheim (c. 1260 – c. 1328), a German theologian, poet and mystic said: “If the only prayer you say in your life is ‘thank you,’ that would suffice.” In the Holy Qur’an, it is stated “...and Allah will give reward to those who are grateful (3:144).”

A trainer whom I met at a course shared on how she laughed when someone asked her to jot down five things she is grateful for every day. The spunky trainer from Beijing shared how difficult it was initially to write just one thing. She forced herself to think and wrote about her comfortable sports shoes. The next day, she added another item and within two weeks, it became second habit to her to jot down the things she was grateful for. She admitted unashamedly that all these years, she had taken all of these for granted. And after she felt grateful for all those things, her life took a change for the better.

My life took a change for the better when I started accepting things that I cannot change but are here to stay. Indeed, I manoeuvred the changes around my life and realised that I become a happier person. While I do not jot down the things I am grateful for, I make a mental note of these things and that makes me feel at peace.

My blessings are abundant. I have a family who, despite insurmountable challenges, still feel a lot and care for each other. I have children who have become my friends whom I can engage with intellectually and even crazily. I have a career I am passionate about and inspiring bosses who have enriched my life journey. I have true friends who are there for me at every call or WhatsApp and a career coach who will bounce off ideas when I need a second opinion.

I live in a house surrounded by greeneries. Just plucking leaves from the basil, rosemary or mint plant from my backyard gives me immense pleasure as I savour the freshness of the herbs which add flavour to the aglio olio that I cook. I turn grocery shopping every Sunday from being a chore to an exciting outing as it provides me with the me-time to indulge in a fantasy of what the menu is going to be for the whole week.

Researchers like Martin Seligman, Robert Emmons and Michael McCullough are turning their attention to the study of gratitude and its relationship to health and mental well-being. According to them, people who keep gratitude journals on a weekly basis have been found to exercise more regularly, have fewer physical symptoms of illness, feel better about their lives as a whole, and feel more optimistic about their upcoming week as compared to those who keep journals recording the stressors or neutral events of their lives.

What is interesting is that daily discussion of gratitude results in higher reported levels of alertness, enthusiasm, determination, attentiveness, energy, and sleep duration and quality. I do this daily discussion with my eldest daughter who is in the healthcare profession and she meets patients with the most serious of wounds – but the latter remain cheery and positive. The wound is obviously only in their foot but not in their hearts. I shared with her the heartwarming stories of our beneficiaries.

Emerging research suggests that daily gratitude practices may have some preventative benefits in warding off coronary artery disease. For someone whose only means of exercise is the daily housework and walk from the home to the main road, I have to have abundant gratitude to be free from heart disease.

The recent 8th ASEAN Para Games in December 2015 is a showcase of the spirit of gratitude at its best and most meaningful. At the closing ceremony, Minister Grace Fu noted how the Games were not just about sporting excellence but also about resilience and the indomitable human spirit.

The human spirit without any feeling of gratitude is like an empty vase. But fill the vase with water and several stalks of lily, you will have the whole room filled with fresh aroma which would set the emotion on a positive note.

A daily gratitude practice, when done right and with a sincere heart, can change one's life in incredible ways. To me, it has inspired, empowered and strengthened me to live each day full of hopes and meaning. It has made me feel at peace and able to overcome challenges.

Come 2065, when Singapore turns 100, I hope my children and grandchildren together with other Singaporeans will continue to be grateful for something, anything and everything. For only gratitude can shift one's mindset from negative to positive, with the acceptance that the human race comes in all forms and that it is possible to achieve a peaceful coexistence.

“

This was a class that had been dismissed by many in the school as a ‘lazy lot’. They appeared ‘exhausted’ most of the time and disinterested in their studies.



Hendak Seribu Daya¹ - Motivating Malays and Building a Motivated Community

By Mohamed Heikal Mohamed Yusope

Realisation

After spending nearly 3 years lecturing as well as holding a managerial position in a local Polytechnic, I journeyed back to a local government secondary school. I was to head a department, and teach English Language to a class of Secondary Four Normal Academic students about to sit for a major public examination that year. Armed with 'new' pedagogical knowledge from my Polytechnic experience and having recently graduated from the Master of Science programme at the National Institute of Education in Nanyang Technological University, I felt prepared and utterly confident that I would be able to become that effective, 'model' teacher that my students so deserved. Little did I realise that my actual experience would take a different turn.

It was only after I stepped into the classroom that I realised there was a lot more work to do. As I started to interact with my charges by building rapport and setting aside time to understand their concerns, aspirations and inclinations, I soon realised that apart from the need to instil in them skills and competencies in the English Language, there existed a more pressing need. It was the need to ameliorate a *sine qua non*, that if left unattended or worse, trivialised, would render my good efforts in the classroom futile. This was none other but the issue of motivation, or to be more specific, a lack thereof.

¹'Hendak seribu daya, tak hendak seribu dalih' is a Malay proverb which carries a similar meaning to the English proverb of 'When there's a will, there's a way.' Both proverbs state that if you really want to do something, you will find a way to do it. However, in the Malay version, it goes on to inform that, conversely, if one does not want to do something, one will give a thousand excuses not to do it.

This was a class that had been dismissed by many in the school as a ‘lazy lot’. They appeared ‘exhausted’ most of the time and disinterested in their studies. The students had successfully amassed an almost infinite list of disciplinary offences over the years (both as individuals and collectively as a class). They appeared passive, indifferent and unenergetic in the classroom and had even been labelled by some staff (and students alike) as a class ‘specialised in making excuses’. Coincidentally, 68% of the students in the class were Malay.

And the critics were not far from the truth. Through my interactions with the students, I soon discovered that they had essentially given up hope in themselves and had evidently relinquished themselves to fate – that they inevitably fail in the upcoming major examination. I knew then that if I were to come to class and just teach, I would not be able to make a significant difference to the students’ skewed perception of themselves. A different approach was needed.

And so began my ‘life journey’ with class 4N4. Rather than solely teaching English, I taught the class various lifeskills and the value of having a sound Emotional Quotient. Rather than giving homework, I gave them real-life stories about the hard truths of life and how difficult life would be in the future for them if simply gave up on their studies. Rather than writing long essays, I insisted that they wrote short pieces about their true aspirations, future plans and life goals. Rather than reprimanding them for their shortcomings or undesirable behaviour in the classroom, I found every opportunity to praise them for their efforts and diligence. In short, rather than just teaching the students, I motivated them.

When the GCE ‘N’ Level results were announced in December that year, class 4N4 achieved a 98% overall pass in English Language with six students clinching distinctions! This was a marked improvement from the average class pass rate of 62%. It was indeed overwhelming for all of us in the school, to say the least. Motivation worked!

“
the portrayal of Malay
inferiority is socio-
political in nature
and was used to
“... deflect attention
from the weaknesses
of the education
system and their
(Malay) marginal
socioeconomic status”
(Lily 1998:186).

Laziness?

Alatas (1977) first argued the concept of the ‘lazy native’ in the 1970s. Malays have long been perceived as lagging behind national averages and this image has been manifested even in the post-colonial period. To illustrate, Li (1989) and Lily (1998) explained that the portrayal of Malay inferiority is socio-political in nature and was used to “... deflect attention from the weaknesses of the education system and their (Malay) marginal socioeconomic status” (Lily 1998:186). In addition, this ‘backward’ status of the Malay community plays a significant role in “... legitimizing the inequalities in educational opportunity and in economic reward ...” (Li 1989:178).

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In the realm of education, for example, more Malay students now progress to tertiary education, and ultimately qualify for University places, than before.



Nonetheless, it is at this juncture that we need to embrace the fact that the Malay community has indeed made steady progress over the years since the 1980s. In the realm of education, for example, more Malay students now progress to tertiary education, and ultimately qualify for University places, than before. Also, more Malays shoulder important roles at the workplace and have effectively augmented their purchasing

power through higher salaries. Unequivocally, Malays today have made remarkable advances in various aspects of life, be it in education, employment or even housing.

Nevertheless, in parallel, there also exists an alarming percentage of Malays who still ‘lag behind’: they are highly dependent on others to assist them in their ‘misfortunes’, fall short on many aspects compared to the rest of the main ethnic groups in Singapore, specifically the Chinese and Indians. These are the Malays who have been classified as being very contented with their lives, not wanting to do more than they have to and not seeing the need to go the extra mile to better themselves (although I firmly believe that they have the means and potential to do better). “Lazy” or “unmotivated”, one may ask?

Motivation!

‘Give a man a fish, and you feed him for a day; show him how to catch fish, and you feed him for a lifetime’ - so the expression goes. But what if the man is not motivated to fish at all?

Many popular theories of motivation have the notion of intention as their central premise (e.g., Lewin, 1951). These theories primarily focus on elements that either advance or thwart an individual’s understanding of behaviour-outcome mechanisms, engaging in efficacious actions in order to attain these said outcomes. This theoretical difference between motivated and amotivated actions, or between intentional and non-intentional regulations, has been explained in various relationships, namely internal versus external locus of control (Rotter, 1966), voluntary responding versus helplessness (Seligman, 1975), and personal versus impersonal causality (Heider, 1958).

Though many professionals in the past were unable to arrive at a consensus on the exact definition of motivation - what influences it, its processes, its impact on learning and achievement and how it can be further enhanced (Pintrich & Schunk, 2002), motivation, in essence, is the integral drive one retains to achieve a certain goal (or several goals), fuelling an individual to engage in an activity in an entirely self-driven manner, endorsed by one’s sense of self (Deci & Ryan, 1991).

Mitchell (1982) earlier described motivation as a phenomenon that defines the duration (or perseverance), direction (or initiation) and intensity (or vigour) of voluntary human behaviour. In addition, motivation has been characterised as the driving force behind a learner's learning goals and engagement (Rothstein, 1990; Woolfolk, 1990).

Therefore, if motivation is the main driving force behind one's actions, are Malays then lacking in having the force to surge forward? Are they (Malays) not motivated enough to be better than what they are now?

50 years on...

Evidently, to enable a person to 'move forward', motivation, first and foremost, needs to be present. For Malays to carve a name for themselves in the next 50 years, motivation needs to be enhanced and pervade the community. It is imperative for Malays to inherently want to succeed and be innately driven to be the best that they can be.



To truly become a community driven by excellence and standing tall amongst the ethnic groups in Singapore, Malays must possess the motivation to rigorously challenge themselves, aim higher and not rest on their laurels.



While Malays have indeed made significant advances in many facets of life, the strong motivation to do and be better than today must continue to be instilled, nurtured and sustained. To truly become a community driven by excellence and standing tall amongst the ethnic groups in Singapore, Malays must possess the motivation to rigorously challenge themselves, aim higher and not rest on their laurels.

The next 50 years, I believe, will pose various challenges for our nation. Hence, Malays must not falter. To remain competitive and be able to rise above the rest of the communities in Singapore, they must be integrally driven to do their best, be self-regulated workers and learners, not give up without a fight and not be easily contented with their lives. Though it is most desirable for them to be intrinsically motivated to succeed, in the immediate term it would be impractical to assume that an autonomous form of motivation can be unfailingly present throughout their lives. Even if Malays are moved to achieve success via extrinsic means or due to some separable outcome, it is a form of motivation nonetheless, which is far better than being at the amotivated stage. What is imperative is that Malays are able to sustain their motivation over time and to retain the energy and zest to continuously move to the next pinnacle of success.

Thus, I call upon our Malay community to be more self-determined in their actions; to believe in themselves that they can do better and be driven to maximise their potential(s); and most importantly, to stop making excuses for their perceived 'limitations', whatever these 'limitations' may be.

Hendak seribu daya...

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Through his work, policy makers have learned how to better design economic policies to reduce poverty and inequality, through a better understanding of consumption choices.



Singapore's Agenda for the Next 50 Years:

Reducing Poverty and Inequality

By Caroline Brassard and Catherine J. Smith

This year's Nobel Prize in economics to Professor Angus Deaton is a tribute to his influential work on well-being, poverty and inequality. Through his work, policy makers have learned how to better design economic policies to reduce poverty and inequality, through a better understanding of consumption choices. His latest book, *The Great Escape: Health, Wealth and the Origins of Inequality* (2013), reminds us that “inequality is often a consequence of progress [and] in turn affects progress” (p. 1). Despite the high levels of living standards on average in Singapore, there persists great income inequality, much larger than in most OECD countries.

Poverty and Inequality in OECD Countries

Studies on income inequality in the OECD found that intergenerational earnings mobility is much lower in highly unequal countries such as the USA and the UK.¹ Another relevant learning point from OECD countries is that entries into poverty mainly reflect family-related (for example divorce and child-birth) and job-related events, including a reduction of transfer income due to changes in conditions determining benefit eligibility.

¹Cingano, F. (2014) “Trends in Income Inequality and its Impact on Economic Growth”, OECD Social, Employment and Migration Working Papers, No. 163. OECD Publishing, p. 13. Available at: <http://www.oecd-ilibrary.org/docserver/download/5jxrjncwvx6j.pdf?expires=1445067794&id=id&accname=guest&checksum=8A157360DD098AD3D3854995361D238A>

These are relevant findings for Singapore, where the Gini Coefficient (a measure of income inequality) remains at 0.412 after accounting for Government transfers and taxes - similar to ten years ago, and higher than most OECD countries². Nevertheless, the concept and measurement of poverty and inequality in Singapore is little debated and remains a highly politically sensitive issue. This short piece argues that in order to achieve sustained progress in the next 50 years, there is an overdue need to engage in an open discussion about poverty and inequality in Singapore. This will involve a review of the current institutional set up as well as the evidence used for policy making aimed at vulnerable groups, including, for example, children.

The issue of child poverty in developed countries was grasped by the media following a study published by UNICEF in 2005, entitled “Child Poverty in Rich Countries.” It found that child poverty had risen in a majority of the world’s developed economies, but that “on average, government interventions reduce by 40 percent the rates of child poverty that would theoretically result from market forces being left to themselves” (p.2).³

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Most developed countries have already defined their national poverty lines and regularly collect and disseminate relevant information on broader measures of poverty and inequality.

But in order to tackle poverty and inequality, a clear set of indicators with specific targets need to be defined, in order to track progress toward these targets, and to refine welfare policies. Most developed countries have already defined their national poverty lines and regularly collect and disseminate

relevant information on broader measures of poverty and inequality. For example, the current definition of child poverty in the United Kingdom is that a child lives in a household earning less than 60% of the national average. Based on this particular threshold, the number of relatively poor children in the UK stands at 2.3 million. Based on household data, in June this year, it was reported that the UK was ‘not on track to end child poverty by 2020’.⁴ The absence of this type of clear and publicly available indicators on poverty in Singapore can be harmful in many ways, as discussed below.

Understanding Poverty in Singapore

Over the past few years, the Singapore government and media have begun to acknowledge the existence of poverty in Singapore. Since 2011, it has not been uncommon to hear the Prime Minister, or Deputy Prime Minister Tharman, comment on the plight of the poor, or acknowledge the need for a stronger safety net. Such public discourse is a departure from the situation more than a decade ago. In spite of the shift in discourse, however, the government remains reluctant to provide a clear definition of poverty, and so Singapore

²“Key Household Income Trends, 2014” Department of Statistics Singapore, Available at: https://www.singstat.gov.sg/docs/default-source/default-document-library/publications/publications_and_papers/household_income_and_expenditure/pp-s21.pdf

³UNICEF (2005) “Child Poverty in Rich Countries” Available at <http://www.unicef-irc.org/publications/371>

⁴“UK ‘not on track to end child poverty by 2020’ as figures remain unchanged” <http://www.theguardian.com/society/2015/jun/25/number-of-uk-children-living-in-poverty-unchanged-latest-figures-show>

remains one of the few developed countries without a poverty line. When Hong Kong set its poverty line in 2013, the debate over Singapore's poverty line was reignited for a time, with Nominated Members of Parliament and various organizations calling for an official measurement. However, there continues to be no sign of the government reconsidering its position.

In the absence of a poverty line, various academics and economists have attempted to measure poverty in Singapore using proxies from publicly available government sources. For example, Yeoh Lam Keong has used the Department of Statistics' (DOS) Average Household Expenditure on Basic Needs (AHEBN) measure, which is the estimate of the minimum amount of money required by a family of four to meet basic needs in Singapore, and combined it with estimates from the DOS's Key Household Characteristics and Income Trends report, to estimate that "111,000 to 140,000 resident households... have great difficulty meeting basic needs".⁵ While such measurements go a great distance to understanding the situation of poverty in Singapore, they are unfortunately no replacement for an official poverty line, which would assist the social sector and policy-makers in developing strategies to reduce the incidence of poverty in the city-state.

Despite the evidence on welfare needs, Singapore is renowned for its low social protection spending; only 3.5 per cent of the Gross Domestic Product, far below the average for developed countries.⁶ In contrast, for example, South Korea spent 8 per cent of GDP, in 2009, on social protection. Government assistance for Singapore's poor is largely tied to employment; the Workfare Income Supplement (WIS), for example, provides supplements to the incomes of workers earning up to 1900 SGD per month, provided these workers meet certain criteria. These criteria, however, dictate that WIS is not available to workers under 35, and the payouts are quite limited, particularly for non-elderly workers. For example, workers between the ages of 35 and 44 are entitled to a maximum of 1,400 SGD per year, only 560 SGD of which is paid in cash; the rest is delivered directly into their CPF accounts. This works out to just under 50 SGD per month in cash, which cannot be expected to make a meaningful difference to families living in poverty.⁷

Meanwhile, most of the unemployed poor must rely on help from Voluntary Welfare Organizations, as well as on assistance from short-term government schemes, to stay afloat. Long-term financial support exists, but is quite uncommon, and is rigidly means-tested; in any given year, long-term financial assistance tends to be given to only around three to four thousand families.⁸ Further, all government schemes require a meaningful amount of paperwork and documentation, some of which is difficult to provide, as some schemes require documentation from family members, or ex-family members, who may live in different households.

⁵Smith, C. et al. (2015) A Handbook on Inequality, Poverty and Unmet Social Needs in Singapore. Lien Centre for Social Innovation, Social Insight Research Series, p. 15.

⁶"Asia Spending too Little on Poor: Report", Himaya Quasem, Straits Times July 12, 2013

⁷The Government of Singapore, 2015. Workfare (Employee). Available at <https://www.workfare.gov.sg/Pages/WISEmployee.aspx>

Discussions of poverty in Singapore often include the issue of race and ethnicity, as the Malay community tends to be overrepresented at the bottom of the income ladder, and underrepresented at the top. The Census of Population 2010 showed that the median monthly household income of Singaporean Malays was 3,844 SGD, which is significantly below the national median of 5,000 SGD.⁹ In contrast, the national average monthly household income was 7,214 SGD in 2010, and reached 10,503 SGD in 2012.¹⁰

In addition to the schemes discussed above, the government has also set up ethnic self-help groups to support impoverished members of their racial communities. These groups began to be developed in the 1980s, and continue to be active today. Ethnic self-help groups, including the Chinese Development Assistance Council (CDAC), the Singapore Indian Development Association (SINDA), the Eurasian Association (EA), and Yayasan MENDAKI, receive contributions from Singaporeans of their respective ethnicities, and use these contributions to provide assistance to low-income families in the same ethnicities.

Problematically, because the amounts of contributions to ethnic self-help groups are based on incomes, naturally those groups with greater numbers of people in higher income groups will have more to donate than those with less representation in higher income groups. CDAC, for example, has been able to grow faster than other groups, and to provide a wider array of services to underprivileged Chinese Singaporeans than can be provided to other underprivileged groups.¹¹ So ethnic self-help groups, while providing assistance to the groups they serve, may actually perpetuate economic inequality among Singapore's ethnic groups.¹² Moreover, as a key finding in the MENDAKI report "Living on a Tight Budget in Singapore" (2015), there is a clear stigma attached to seeking external support in times of financial difficulties. This is partly due to the strong emphasis on the rhetoric of 'self-reliance', which tends to be compounded to the lack of self-confidence that some low-income household members may have.¹³

⁹For example, 3571 households in 2013, and 3187 households as of March 2014. Ministry of Social and Family Development. "ComCare Annual Report for Financial Year 2013." p. 11. <http://app.msf.gov.sg/Portals/0/Summary/publication/CSSD/ComCare%20AR%20FY13%20-%20Final.pdf>

¹⁰Singapore Census of Population 2010, Release 2, page 9. Available at: http://www.singstat.gov.sg/docs/default-source/default-document-library/publications/publications_and_papers/cop2010/census_2010_release2/cop2010sr2.pdf

¹¹Department of Statistics Singapore, Ministry of Trade and Industry, Report on the Household Expenditure Survey 2012/13. p. 28. Available at http://www.singstat.gov.sg/docs/default-source/default-document-library/publications/publications_and_papers/household_income_and_expenditure/hes1213.pdf

¹²R.Q. Moore, "Multiracialism and Meritocracy: Singapore's Approach to Race and Inequality," *Review of Social Economy* 58, no. 3 (2000).

¹³*Ibid.*

¹⁴See "Living on a Tight Budget in Singapore: A Qualitative Study of 25 Low-Income Malay/Muslim Households" by Caroline Brassard, for Yayasan MENDAKI, Singapore (2015) Available at: http://www.mendaki.org.sg/upload_files/cuteeditor/Document/Research%20Report%20Book%2013042015.pdf

Policy Matters and Requires Difficult Decisions

Poverty statistics in Singapore are likely to suggest that poverty is an economic class issue. This would run contrary to the underlying hypothesis that poverty is predominantly cultural and should be addressed along ethnic lines, by the respective communities. Deep-rooted factors that impede low-income households from moving upward socially and economically must be addressed holistically, through welfare policies. The lack of national level data on poverty harms the ability of policymakers and civil society, as well as society, to address and track progress on poverty in Singapore.

Critiques of the poverty line argue that it is problematic to set a threshold, because it is purely quantitative and does not encompass non-income aspects of poverty such as health and education. But this point is only valid if the poverty line is the sole indicator used for policy making. As Professor Deaton argues, the poverty line should be seen as complementary to other broader indicators. Such statistics would enable us to set targets and measure trends over time, as well as analyze poverty in a disaggregated manner, taking into consideration various household characteristics.

In the next 50 years, the sustainability of Singapore's economic prosperity will be partly determined by its ability to rethink its welfare policies. This will involve engaging openly in a debate on the role of self-help groups, which has increasingly shifted away from advocacy (for example to raise the voice of vulnerable groups) and engaged in service provision. At the political level, a more open approach to poverty measurement will help both governmental institutions as well as civil society (including academia) to improve targeted approaches to poverty alleviation and reduction of inequalities.

There have been encouraging signs of support to increase the capacity of self-help groups to undertake independent studies on low-income households, but the scale of such research remains insufficient to establish clear comparisons across all segments of the population. A consensus on a definition of poverty between public institutions and civil society is required and overdue. Setting measurable goals for the reduction of poverty and clearly communicate progress is one of the signs of a healthy democracy.

Among the difficult questions are: Questioning prior assumptions, redefining the role of self-help groups, reviewing the conditionalities currently attached to welfare policies, reducing the administrative hurdles to applying for welfare support. In a highly urbanized Singapore, it is time to question the earlier assumptions on the role of social capital and communities in general in addressing the welfare of its members.

Professor Deaton's work makes it clear that redistributive policies have a crucial role to play in the long-term sustainability of economic growth. But the lack of visibility of urban poverty in Singapore has so far masked the urgency of this economic issue.

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Workers able to tap on
diverse and extensive
networks might have
greater access to social
resources (such as
information and influence)



Malay Connections: Presence and Absence

By Muhammad Farouq Osman & Vincent Chua

In a June 2015 interview with BERITAMediaCorp, then Minister in the Prime Minister's Office Mr Masagos Zulkifli underlined the importance of networking for young Malays, stressing that the opportunity to progress to different jobs on the career scale will increasingly lie in expanding one's professional contacts. He added that cultivating such personal connections is all the more pertinent, against the backdrop of intensified job competition brought about by globalisation and technological change.

This recognition from a senior member of the Malay/Muslim political leadership of the need to build social capital – defined as resources embedded in social relations – is important and timely. It follows the introduction of a slew of SkillsFuture programmes and initiatives, which the government has set up to promote lifelong learning and deepen professional and technical skills. Workers able to tap on diverse and extensive networks might have greater access to social resources (such as information and influence), which enable them to augment their competencies. As the community strives towards improving income levels and increasing its share of professional, managerial, executive and technical (PMET) workers, this new focus on harnessing the power of social relations may well prove to be the missing piece in the puzzle.

While there is growing evidence that social capital is unevenly distributed in society – for example, ethnic minorities tend to have less social capital than ethnic majorities – all is not lost. Social capital theorists posit that fostering connections to different social groups, usually beyond one's ethnic, educational or class background, can help minorities transcend their

disadvantaged status. Former dean of the Harvard Kennedy School of Government Robert Putnam calls this concept ‘bridging social capital’. It may not be immediately obvious, but SkillsFuture components such as enhanced internships and the Earn and Learn programme for fresh polytechnic and Institute of Technical Education (ITE) graduates serve to enrich the social capital of individual students, by exposing them early to industry contacts. The challenge then, is to encourage more Malay students to sign up for such internships and make the most of the latent opportunities.

Having said all that, are Singapore Malays really social capital-poor? If an indication of an individual’s level of social capital is the number of friends he has from outside his ethnic group, then it is worth noting that nearly two-thirds of Malays have at least one Chinese friend, according to a 2013 study by the Institute of Policy Studies (IPS) and racial harmony advocacy group OnePeople.sg. Furthermore, Malays, like other Singaporeans, are beneficiaries of government policies aimed at facilitating inter-ethnic mixing and cohesion – such as the Ethnic Integration Policy which institutes racial quotas for public housing estates, and National Service.

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Might it be that Malays
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But let us take a closer look by unpacking the different types of social capital. Might it be that Malays are doing well in certain measures of connectedness, but less so in others? A 2015 study on the geographical spread of personal communities may shed some light on the matter.

The study, conducted by Dr Vincent Chua in collaboration with colleagues at the Future Cities Laboratory (a joint research centre between Singapore’s National Research Foundation and ETH Zurich), examined the personal networks of 410 Singaporeans. The findings show that Malays have larger networks than Chinese and Indians. Larger networks tend to comprise a greater number of weak ties. Scholars confirm that weak ties are useful as bridges that link people to new resources such as job information and job opportunities. In contrast, strong ties are usually made up of close family members and friends, who are less likely to know of such new information.

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ETH Zurich), examined the personal networks
of 410 Singaporeans.”

It seems, therefore, that all is well for Malays: the community scores well in terms of access to larger networks and weak ties. Yet is there more to the research than meets the eye? Further analysis of the data has revealed that while Malays have bigger networks, these networks tend to be of poorer quality. Compared to the Chinese, Malays are less likely to have well-educated contacts: their family and friends have about 1.8 years less education than the family and friends of the Chinese. To put it another way, as the Chinese are more connected to people who are highly educated – like degree holders – compared to Malays, they have higher quality social capital. We chose the title ‘presence and absence’ to denote the observation that although the Malays have bigger networks, their networks offer less potential for leverage than the networks of the Chinese.

Nonetheless, there is reason to be hopeful. Analyses on the same dataset demonstrated that every additional year of education increases social capital more for Malays than for the other ethnic groups. This means that current efforts by the community in partnership with the government, to improve the educational achievement of Malay students, are critical for bolstering Malays’ access to social capital. For its part,

the Malay/Muslim self-help group Yayasan MENDAKI – whose *raison d’être* is to uplift the socio-economic status of the community through educational intervention – announced in August 2015 that it would set up a division to help Malay families take advantage of SkillsFuture. As Minister-in-charge of Muslim Affairs Dr Yaacob Ibrahim presciently pointed out, SkillsFuture is set to be a “game changer” for the community. Together with ongoing work by MENDAKI to strengthen the learning foundations of Malay children in the crucial preschool years, this augurs well for the future social capital of Malays.

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This means that current efforts by the community in partnership with the government, to improve the educational achievement of Malay students, are critical for bolstering Malays’ access to social capital.



Building upon Mr Masagos’ recommendation, young Malays would do well if their networking efforts result in them landing a sponsor – someone who will advocate for them and propel their career forward. This is especially useful for ethnic minorities: research conducted by the Center for Talent Innovation (CTI) in the US has indicated that sponsored minority employees are 65% more likely than their unsponsored peers to be satisfied with their rate of career advancement. Hence, in striving to unlock the potential of social capital, networking strategies need to be well-targeted. While much attention has been paid to strategies that narrow the income gap (and the education gap) among ethnic groups, we say that more needs to be done to narrow the network gap still segregating them.

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Special attention is also given to Malay/Muslim marriages as their rates of dissolution and remarriage are higher than civil marriages.



The Role of Social Networks in Community Progress

By Zhang Jiayi

The Malay/Muslim community is often singled out as having many social problems. National statistics show that of the major ethnic groups in Singapore, Malays are overrepresented in the lower socio-economic strata of society. Malay students also fare worse than their counterparts of other ethnic groups when it comes to academic and educational achievements. Special attention is also given to Malay/Muslim marriages as their rates of dissolution and remarriage are higher than civil marriages.

The impact of the scarcity of economic resources on educational performance, employment and marital dissolution rates is extensively studied. Children from well-to-do families start school with a higher command of languages as their parents tend to be better educated, and have more economic resources to hire tutors when they require academic help. In turn, students who achieve better educational outcomes have access to better jobs. As financial constraint is one reason for tension between married couples, well-to-do couples usually face fewer challenges in their marriage, thus having lower rates of marital dissolution.

MENDAKI has hence given extensive support to uplift members of the Malay/Muslim community through (1) schemes that directly help with educational performance, employment and marital dissolution issues, and (2) schemes which help with enhancing economic capital.

Social capital as part of the issue

Besides economic resources, recent studies show that social capital (or the lack thereof) has important consequences on various social indicators of the community. Access to social capital means (1) access to information that helps people make better choices, (2) access to job referrals which makes it easier to find a job and (3) stronger social support, which has psycho-social benefits and can help build resilient families.



One noteworthy example of MENDAKI's effort in helping Malay/Muslim families build social capital is through Family Excellence Circles (FEC).



MENDAKI has schemes that help low-income Malay/Muslim families build social capital. In many cases, MENDAKI as an organisation serves as a source of social support and social capital as well. One noteworthy example of MENDAKI's effort in helping Malay/Muslim families build

social capital is through Family Excellence Circles (FEC). This programme gathers various families together to form a tight-knit community. This initiative allows families to derive social support from one another. Families in the same FEC tap on each other's expertise and experiences, share information, engage in collective childcare, and derive social support from one another. This is one way MENDAKI has helped enhance social capital of Malay/Muslims.

However, such programmes are not without their limitations. Firstly, through such programmes, participants build social networks with people similar to them in terms of socio-economic status and background. Such networks typically have lower returns than more diverse networks, which increase exposure to job opportunities and different sources of information. Secondly, through such programmes, participants form strong, familial-like bonds with a small group of people. Research shows that close knit bonds with a high level of in-group solidarity fetches lower returns to social capital too. Compared to a handful of strong ties, a huge number of weak ties have the same benefits of having a diverse social network.

A recent study done by Dr Vincent Chua and Dr Irene Ng found that the lower earnings of Malays can be partly explained by their lower access to university graduate contacts, and that regardless of race, people with university graduate contacts have better earnings. This suggests that more benefits can be reaped from bridging low-income Malay families with higher educated and usually higher-income Malay individuals.



the lower earnings of Malays can be partly explained by their lower access to university graduate contacts, and that regardless of race, people with university graduate contacts have better earnings.



As studies show that other races have more extensive social networks, it will also be beneficial to bridge Malay families with individuals of other ethnic groups. Malay families can then tap on the social capital of these individuals, thereby closing the social capital and eventually economic and human capital gaps between the Malays and their counterparts of other races.

Social capital building within the malay community

MENDAKI can start by encouraging well-to-do Malay/Muslims to be more involved in giving back to the community. Existing efforts include the setting up of MENDAKI Club (MClub), a society of young Muslim professionals. However, MENDAKI can do more to tap on these volunteers to be engaged in the mainstream work that MENDAKI is doing. For instance, MClub runs its own programmes in mentoring and helping young students through the Young Minds Club initiative. However, this duplicates the work of MENDAKI, which also runs youth mentoring programmes, albeit for a different target audience. One way to focus efforts while tightening the link between well-to-do Malay/Muslims and MENDAKI is to get members of the MClub to be directly involved in the existing programme of MENDAKI instead of running their own programmes. MClub's annual Graduates' Tea can be a good platform to recruit more Malay/Muslim university graduates to run programmes, allowing the beneficiaries of MENDAKI to network with these graduates to enhance social capital.

MENDAKI can also look into closer collaborations with other Malay/Muslim organisations such as the Association of Muslim Professionals (AMP) and Persatuan Pemuda Islam Singapura (PPIS).

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Members of the AMP, who are professionals and tend to have more social capital, can take part in the mentoring programmes conducted by MENDAKI to enhance the social capital of the beneficiaries of MENDAKI. Synergy can be achieved by aligning the interests and work of all these Malay/Muslim organisations to reduce duplication of efforts, and enlarge the pool of professional Malay/Muslims whom the beneficiaries of MENDAKI can approach or seek advice from.



Social capital building with people of other ethnic groups

Besides bridging low-income Malays with more successful Malays, another way to build social capital of low-income Malays is to bridge them with people of other ethnic groups. This can be done by strengthening collaborations with non-Malay/Muslim groups as such immigrant associations and self-help groups of other ethnicities. This is currently done through platforms like joint tuition programmes and award ceremonies; it can also be done through dialogues and co-organising activities – generating more opportunities for people of different ethnicities to get together to share problems and resources.

To facilitate this spirit of sharing between people of different ethnic group, more emphasis on cultural sensitivity is needed. This is to create a safe and non-abrasive space for people of different cultural backgrounds to talk about issues and provide one another with support. Other ethnic groups can be exposed to the ‘Malay/Muslim worldview’ to understand how they deal with hardship issues, so that they might be able to provide more relevant assistance and support. MENDAKI can play a vital role in educating others about the cultural nuances within the Malay/Muslim community.

Malays generally have lower social capital, economic capital, and human capital. However, I argue that this is not an ethnic problem – it is a socio-economic problem and a national problem, and it warrants larger institutional changes. Policies should be tweaked to diminish the existing communal mindset in dealing with this issue. The current situation of having each ethnic group to contribute funds to their respective self-help group is divisive - it reinforces the mindset of helping only one’s own ethnic group, which is not conducive to the larger end-goal of building social capital across ethnic groups. As Malays are overrepresented in the lower socioeconomic strata of society, it also means that MENDAKI collects less funds, which further limits its potential outreach to more Malay/Muslims in need of assistance.

A preferred funding model would be for all Singaporeans to contribute to a common pool of funds, which is then allocated to each self-help group according to the needs of the beneficiaries. This not only allows Singaporeans to have a collective sense of ownership in addressing nation-wide social issues and thus be more willing to reach out to people of other ethnic group in need of help; it also addresses the problem of MENDAKI having inadequate funds to cater to the needs of low-income Malay/Muslims.


Going down to the root of the problem

Ethnic segregation in other institutions such as housing, education and National Service are other reasons for the disparate amount of social capital possessed by each group. Addressing social inequality and preserving common spaces for all ethnic groups to interact and build bonds helps low income Malays build social capital with people of different ethnic and socio-economic backgrounds. The presence of

Special Assistance Plan schools has to be rethought, and more effort should be put into exposing students in Madrasahs to students of different ethnicities.

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Addressing social inequality and preserving common spaces for all ethnic groups to interact and build bonds helps low income Malays build social capital with people of different ethnic and socio-economic backgrounds.



At the end of the day, uplifting the Malay/Muslim community is not just MENDAKI's responsibility, nor is it a problem that only Malay/Muslims should deal with. The unequal social capital that the Malay/Muslim community has is a national problem, and Singaporeans – regardless of ethnicity – should play a part formulating and executing a national solution to this issue.

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Reflecting on these
achievements, we
have indeed reached a
remarkable milestone.

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Reconfiguring the Performative Social Bond: A New Paradigm for Progress in the Malay/Muslim Community

by Umardani Umle

Since Singapore's independence, the Malay/Muslim community has come a long way to maintain parallel growth in educational achievements with the national population. The achievements were presented by the Minister-in-charge of Muslim Affairs, Dr Yaacob Ibrahim at the 2015 Committee of Supply Debate on "Nurturing a Progressive Community for the Future". In gist, there is an upward trend in the educational standard of the Malay/Muslim community: 90% of the Primary 1 cohort has moved to post-secondary institutions; the disbursement of bursaries increased from 500 in 2012 to 700 in 2014; and around 10% of the community has attained tertiary education. These signal the upward growth in the intellectual capital of the community.

Reflecting on these achievements, we have indeed reached a remarkable milestone. Interestingly, this seems to be due to a paradigm shift in which education is embraced as a primary social lever for mobility. This was reflected in a MENDAKI qualitative study concluded in 2014, entitled "Living on a Tight Budget". Parents ranked "Children, Family and Education" as top priorities and the thematic discussions provided insights that survivability of the next generation and success pivoted on academic/vocational qualifications.

Moving forward to the next 50 years, what would be the narratives that will be espoused by the community? Would it be a progressive or regressive one? We cannot predict things now, but we can strive towards an even more progressive level. Utilising a sociological definition of society, the next segment may offer new perspectives to mould the community in the next 50 years.

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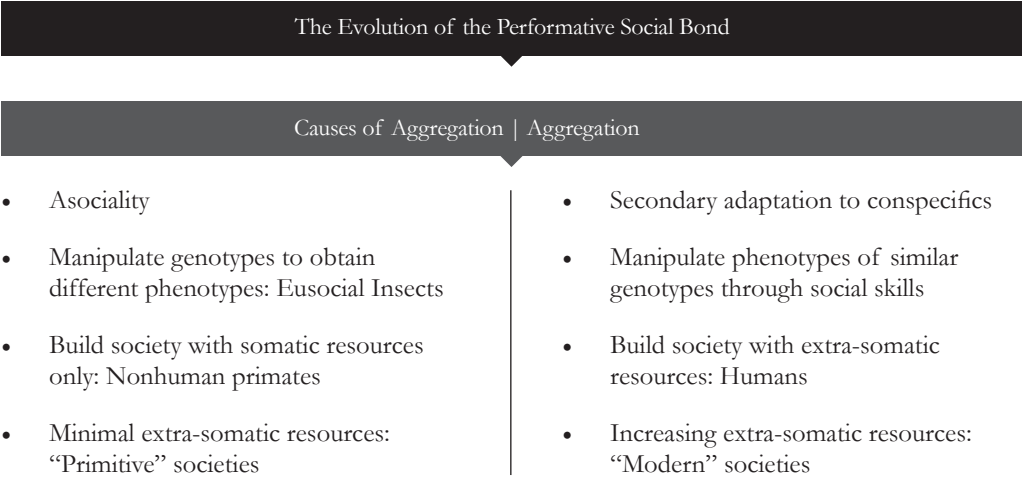


Strum and Latour, in their 1987 paper on “Redefining the Social Link”, shared on the factors underpinning the formation of a society. In their argument, a society is best explained through the “performative definition” of the social link. This concept refers to the fundamental assumptions that govern this framework:

1. It is impossible to establish properties which would be peculiar to life in society, thus society itself is not stagnant and is amenable;
2. Society is defined by social actors and it can include economic, biological and psychological dimensions;
3. Actors define for themselves and for others, what society is, both its whole and its parts;
4. Actors performing society know what is necessary for their success;
5. Social scientists are seen like any other social actor and are themselves performing in the society. What these professionals can do is to inject practical ways to help define society.

This article will revolve around these fundamentals. In my opinion, the principles espoused by Strum and Latour evoke a sense of autonomy within society. As a society, we are empowered to shape the future and we have the capacity to be a progressive community, develop a dynamic ecosystem of actors working collaboratively and defining our new narratives for the next 50 years.

Strum and Latour further explained the framework on the stages of formation of a society and this is reflected in the figure below [Strum & Latour (1987), Redefining the Social Link]



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In a society like Singapore, adaptations to maintain survivability may take the form of knowledge-pursuit endeavours.

In the transformation to be a progressive community or society, actors (or individual members of the community) are presented with two potential pathways. They can either follow the path of asociality, i.e. divergence from the community goals, or take on the secondary adaptations to the conspecifics.

Adaptations to conspecifics refer to adapting to the nuances and norms of a society. In a society like Singapore, adaptations to maintain survivability may take the form of knowledge-pursuit endeavours. Here, we need to qualify that knowledge should not be restricted to the academic form but should include other forms of education like vocational, cultural and even the arts. This is the beauty of this framework in which the Performative Social Bond leaves the definition of “society” in the hands of the actors (as stated in point 2 above).

If society is shaped and influenced by the actors, what are the new narratives that each of us can pursue as a community agent?

In charting the way forward for change, borrowing from the Desistance Literature, we will discuss the 3 necessary conditions for change: Motivation, Building Human Capital and Establishing Social Capital. Primarily, Human Capital is about instilling skill sets for individuals, with available resources and our community has established a strong foundation to develop Human Capital. For example, the community provides ample awards and scholarships to students to pursue their tertiary education. Of particular interest for this article is to discuss Motivation and Social Capital in greater depth.

In Desistance literature, motivation is a primer for change. It is what the psychologists term as “Change Talk”, the precursor for any action. Examples of change talk include, “I want to make sure my children succeed”, “I want to lead a better life now” and “It is about time I make a change”. This process of re-scripting new narratives marks the beginning of change. These narratives encompass a sense of hope which is usually filled with dreams, aspirations and goals.

A new narrative by the community should be put in order. But what is this new narrative that we are talking about? Have we not done enough in this aspect? Previously, narratives of a progressive society rested with the top echelons of the society. A potential pitfall is the inability to see the gaps that may perpetuate within the community due to their invisibility. One proposed idea is to generate focus groups from the different levels of the community to hear aspirations represented by the various segments. The MENDAKI study of low income families, in my opinion, is a triggering factor to understand the gaps faced by our community and also, more importantly, the narratives of the general population. Addressing issues in the barriers to resources and rewriting the definitions of help are some of the stepping stones towards building a progressive society. As a community, we need to bridge those ideals to infrastructures so that their aspirations can be materialised.

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If motivation forms a part of the equation, needless to say, access to valuable resources should complete the formula for a progressive society. Too many times, when individuals require access to opportunities, unrealistic barriers have been erected in the name of accountability.



Notwithstanding the need to ensure that funds are accounted for and appropriately spent, it is imperative that barriers to resources do not limit or de-motivate individuals. Some of the gaps that we as social agents can improve on are reconfiguring financial assistance means-testing and enhancing the evaluation of ad-hoc workshops.

Without going into the technicalities of means testing, it is imperative to re-examine the means testing components of current policies to ensure that the formula is relevant. Many a time, “per capita” indicators have been used as guidelines to decide the needs of the families and potentially, some vulnerable groups may unfortunately be denied help. As reflected in the qualitative study conducted by MENDAKI, many required some form of help from national or community resources but more than 70% were unsuccessful. A plausible explanation is that they did not meet the criteria to gain access to such resources. Thus, the current means-testing is definitely in need of re-examination.

Evaluation of ad-hoc workshops through participant feedback and similar methods should not be deemed as the sole indicators of effectiveness of the programmes. By virtue that most programmes were designed based on sound theoretical underpinnings, the measurements of effectiveness only seem to indicate the effectiveness of the designers. A suggestion for improvement is to measure effectiveness of such short and ad-hoc workshops beyond the workshop period. The change needs to continue after workshop hours and at times, follow-ups need to be carried out in the near future. Post – workshop learning is a true test of the efficacy and efficiency of the programmes. The common lament is the limited resources to carry out such endeavours - another area which warrants a new narrative.

Highlighting those two areas, the next segment will briefly touch on collective actions that can be undertaken by the various agencies to develop the Malay/Muslim community for the next 50 years.

Integration and coordination matter. Strum and Latour posited that the need for additional material resources will provide progress for society. Indeed, with additional funding, every additional want has a better chance of being met. However, given that resources are never infinite, what better way than to leverage other forms of capital that we have garnered in the last 50 years? With a better educated community, integration ideas and re-examining the status quo can contribute to a more progressive society. Indeed, we have started small pockets such as MENDAKI's CLF (Community Leaders Forum) Labs and volunteer welfare organisation (VWO) conferences to develop our intellectual capital. But are we working in silos? Utilising the performative social bond framework, cross-networking of different professionals on a common shared mission can help various Malay/ Muslim agencies achieve synergies in various areas, such as research and consultations. This collaboration can promote advancement in our approaches to help the various segments in the community.

Together, in the spirit of gotong-royong, with each community member bringing his/her own expertise, contributing to demystify cultural misconceptions, integrating evidence-based practices to alleviate social concerns, and advancing our community's intellectual capital, we can re-script our narratives for the next 50 years. The community's progress thus far did not come by chance. It had been a targeted approach to alleviate social concerns during the developing stages of Singapore. In the next 50 years, we need a new paradigm where a more integrated effort within the community can shape a performative social bond and a progressive society.

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With such a strong
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“business as usual”?



What Next after the 2015 General Election?

by Tan Khoo Giap & Qian Yuwei

As the fervor of the General Election (GE) subsides and noises of post mortem settled, can we expect business as usual for the newly elected Singapore government? With such a strong mandate given to the ruling party, should we expect or can Singapore afford “business as usual”?

During the GE, among the PAP and OPs (opposition parties) including Workers’ Party (WP), Social Democratic Party (SDP), National Solidarity Party (NDP), Singapore Democratic Alliance (SDA), Singapore People’s Party (SPP), Reform Party (RP), Singaporean First Party (SFP) and People’s Power Party (PPP), remarkably there were at least four broad common concerns pertaining to issues and plights to be addressed, but also stark differences in terms of how to deal with them.

Foreign Labor Dependence

Firstly, both PAP and OPs (notably WP and SDP) wanted Singapore to be less dependent on cheap and abundant supply of blue collar foreign workers and to ensure that the indigenous workforce continues to enjoy decent pay and good wage growth so as to cope well with rising cost of living. OPs were in favor of a legislated minimum wage policy (MWP), swifter and significant reduction in foreign workers even if means lower economic growth, whereas the PAP preferred to achieve decent pay and good wage growth through painstaking effort to push for productivity gains, and through its progressing wage policy (PWP) model. The PAP

also believed in seizing the opportunities arising from good economic growth and a favorable external environment, arguing that this is the best way the best way to cope with rising cost of living.

On Professional, Managers, Executives and Technicians

Secondly, both the PAP and OPs wanted to see higher ratios of and better remunerated indigenous professionals, executive, managers and technicians (PMETs). While some OPs (notably SFP) advocated directly reserving jobs for Singaporeans and reducing foreign PMET numbers, the PAP argued for a hybrid PMET plan under SkillsFuture to ensure a Singaporean-core work team, augmented with foreign PMETs from diverse sources within a company and industry. A Fair Consideration Framework and a National Jobs Bank (NJB) has also been put in place to ensure employers give opportunities to local workers.

Retirement Funding for Singaporeans

Thirdly, both the PAP and OPs wanted to ensure that Singaporeans have sufficient means for coping with retirement and old age, especially lower income workers. OPs (notably SDP) wanted to keep the withdrawal age for Central Provident Fund (CPF) unchanged at 55 years of age and objected to tempering with or raising the old minimum sum. The PAP argued for partial withdrawal at the age of 55, and a gradual rise in the minimum sum that people need to set for their old age. The PAP also introduced CPF Life, an annuity that pools CPF members' fund to give them a payout for life.

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The PAP resisted the welfare state, preferring the option of tracking affordability indices for basic public services; it objected to unemployment benefits and opted instead for Workfare Income Supplement (WIS)



On Social Safety Nets

Finally, both the PAP and OPs wanted to see significant improvement in social safety nets for the majority of Singaporeans. OPs (notably SDP and WP) argued for the setting-up of the western model of the welfare state with unemployment benefits and significant subsidy for basic public services including healthcare, housing, education and public transport. The PAP resisted the welfare state, preferring the option of tracking affordability indices for

basic public services; it objected to unemployment benefits and opted instead for Workfare Income Supplement (WIS), arguing that the best effort to mitigate income disparity was to get workers to stay in employment, not help them when they are unemployed.

In the 2015 GE, nearly 70 percent of the voters must have accepted and been convinced by the PAP's party manifesto, in so far as policy stands dealing with the four broad issues and plights discussed. Now that a strong mandate has been endorsed for the PAP to form a new government under the leadership of Prime Minister Lee Hsien Loong, are we going to be satisfied with business as usual, expecting the PAP government to continue as they have done over the past five decades, but now with the fourth generation of Singapore leaders?

Minister Mentor Lee Kuan Yew, our founding father, repeatedly reminded us that no one owes us a living, and the survival of Singapore hinges on how we collectively remake and ensure Singapore's relevance to the rest of the world by staying ahead of our competitors.

As we celebrate the jubilee SG50 in 2015, I think the next PAP government should be better prepared to deliver an even better future by planning for the longer-term survival of Singapore until SG80 and beyond!

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Now that we have entrusted the new PAP government with the responsibility of another five-year term, it is time to refrain from being inward looking. We should look at the bigger picture in which Singapore will always remain a little red dot.



Hence, we should come together to be better prepared in decades ahead by way of evidence-base-assessment of Singapore's public policies and charting long-term growth strategies within a global context. We can think of three quantitative research clusters, which are quite different from the qualitative futuristic scenario planning exercises, to guide us thinking through challenges as follows:

1. Re-assess Singapore's public policies in the post-Lee Kuan Yew era: which were relevant in the past, continue to be relevant today and are likely to be so in the future within the globalized context? A good example of this will be the External Wing Policy first mooted by then Senior Minister Lee in the early 1990s, which led to the expansion of Singapore's external economy. Such global-driven growth for Singapore can be quantified and will no doubt continue to be the key engine of growth for Singapore's future.
2. Re-evaluate Singapore's public policies in the post-Lee Kuan Yew era which need fine-tuning due to changes in conditions and circumstances. An appropriate public policy that comes to my mind will be the WIS; such policy, once introduced, is politically difficult to withdraw. Therefore, we ought to quantify how much it will cost future governments and whether we can design incentives for an exit mechanism for those who are benefiting from it?
3. Formulate public policies and future growth strategies for Singapore to stay relevant in the post-Lee Kuan Yew era, extrapolating from new emerging trends, with opportunities to be seized, challenges to be met and mastered. This third research cluster is probably the most critical amongst the three clusters, as it deals with Singapore's longer-term survival as a nation.

A good example of cluster C would be the much discussed 100 kilometer-long Isthmus of Kra Canal in Thailand, which was brought up again in 2015. It will allegedly cost \$28 billion to build and ten years to complete. Assuming that this proposed project is realized, how would the top and bottom lines of the Port of Singapore be affected? Would Changi Airport, including Terminal 5, scheduled to be completed by 2025, become more important in ensuring Singapore's economic connectivity to the rest of the world?

Another good example would be to identify shifts in global production networks within Asia and to seize opportunities for multinational corporations to engage in manufacturing migration, evaluate infrastructure investment and develop through opportunities like the "One-belt One-road" strategy advocated by China. Singapore could then be firmly placed as a leading international financial hub.

Conducting company level studies on tracking productivity, monitoring efficiency and improving competitiveness would be paramount and researching to spot potential synergies between Western and Asian companies. Especially amongst the small and medium enterprises, this would reinforce Singapore's reputation as a hub for regional headquarters.

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We can also afford to reappraise the relevance of our transportation policy, which uses price to control quantity for private cars



We may even rethink on our National Service (NS) obligations, which could evolve to include female Singaporeans; and our education system which could encompass both elitist and broad-based approaches. We can also afford to reappraise the relevance of our transportation policy, which uses price to control quantity for private cars, and the

economic justifications of our public transportation system which is a hybrid system of combining state subsidies with privatization.

Reexamining the optimal mix of Singapore's manpower policy to enhance productivity in terms of foreign versus indigenous workforce is useful. Reevaluating the longer-term feasible composition mix between manufacturing activities and services components could have important implications for employment creation for the Singapore economy. Such analysis can lead to further study on longer-term optimal population targets for achieving economic critical mass, yet maintaining social harmony with environmental sustainability would be in order.

Further evaluation of the economic costs versus benefits of defense spending for deterrent effect in order to ensure continued relevance of the city state as a business, financial, logistics, communication, maritime and aviation hub would be paramount. Empirical analysis on economic rationales, social cost and externalities of maintaining a Singapore society which is multi-racial, multi-religious, multi-cultural and multi-lingual would be appropriate too.

We must be made aware or be reminded that decades of social and racial harmony, which did not come easy, are not to be taken for granted. While we are evolving towards a Singapore identity within a community of multi culture, religion and ethnicity, different ways of life must be upheld and preserved.

Social divide exacerbated by income disparity, human capital deficiency, family disorientation and network disadvantages must be mitigated through constructive public policies, especially for ethnic minorities including Malay/Muslim Singaporeans, by ensuring a level playing field for all and by strengthening their ability to compete, without being reliant on subsidies.

Potentially, there are many areas of longer-term public policy which can be identified to solicit active discussion and wider participation, especially amongst younger Singaporeans who would be in their prime adulthood by SG80. Fundamentally, this group of Singaporeans who are in their early teens may want to ask themselves what do they want from and what can they offer to the city state? Which sort of a future statehood they expect to live with and be counted for?

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With imagination and creativity, be it SG50 or SG80,
the best is yet to be, for Singapore, we think.

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Note: This is a full-length version of an article which appeared in the Straits Times on 3 October 2015.

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Against this backdrop,
what prognostications
can we make about the
political landscape and
how it might evolve
over the next 50 years?



Politics in the Next 50 Years

By Zakir Hussain

As 2015 draws to a close, Singaporeans can look back with pride on a year where citizens and residents of all backgrounds came together to mark 50 years of nationhood, but also exercised their democratic right to vote for their representatives in Parliament in the 12th general election since independence. The result – the PAP Government was returned to power with 83 out of 89 seats, and almost 70 per cent of the popular vote – was a surprise to many across the political spectrum, and prompted much analysis and soul-searching among the ruling party as well as the opposition ranks.

If there was a single overriding explanation, it is perhaps the realisation among Singaporeans that they can take pride in a unique approach to politics and governance. We recognise a government that is consultative and responsive as much as we value a diversity of views, but when it comes to political change, caution is a key word and more speed bumps may not be a bad thing - counter to the widely-held observation that in politics, the only constant is change.

Against this backdrop, what prognostications can we make about the political landscape and how it might evolve over the next 50 years? What role will the Malay/Muslim community play in these changes and how might it be affected by these changes? Allow me to focus on three broad areas.

Political culture

Domestically, demands from individuals to have a greater say in shaping decisions and policies are set to grow. To some extent, longstanding agencies like the Feedback Unit, now REACH, and more recent steps like Our Singapore Conversation and the SGFuture dialogues have helped shape and refine recent policy measures and even address the desire for greater public participation in governance.

But the desire for greater political diversity, and diverse representation in Parliament, is projected to grow. As competing demands, and even sharp differences and divergences in views, grow, one key challenge many might be concerned about is ensuring that governance and policymaking can take place efficiently, and not be hobbled by partisan divides.

Such concerns are valid, but there are also strong grounds for confidence that they can be resolved. Malay culture has long placed emphasis on *musyawarah* – consultation and deliberation – and *muafakat* – consensus-building. Such deliberations helped shape key community decisions in the recent past, and can be applied more broadly.

The spirit of *gotong-royong* – or mutual help – in everyday matters has also helped forge neighbourliness and community harmony as our pioneers resettled in HDB estates over the years. Can we revisit these traditions and mechanisms to forge consensus on more challenging and difficult issues in the years ahead? Can we agree to disagree, even if some of these touch on matters that question or might seem at odds with long-held customs, beliefs, and even our value systems?

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As Singapore becomes increasingly cosmopolitan, can we retain our spirit of openness to others – across ethnicity – and embrace them as part of a wider community?



One key area is population. As Singapore becomes increasingly cosmopolitan, can we retain our spirit of openness to others – across ethnicity – and embrace them as part of a wider community? National recognition of the uniqueness of the various ethnic communities is set to remain for the coming decades, but can we also accept and acknowledge that increasingly, we are all part of a larger community – not just in Singapore, but also in Southeast Asia?

Empathy

Regionalisation and globalisation mean that increasingly, our futures will inevitably be intertwined with developments and the fortunes of our neighbours in Southeast Asia. Singapore has been fortunate that it has strong transport connectivity with the rest of the region, and even as Changi's hub status faces competition, the pool of travellers, students, tourists and businessmen criss-crossing the region is set to grow in the years ahead. The establishment of the ASEAN Community on Dec 31, 2015, is a strong signal that the 10 members of ASEAN want to move forward together and help one another prosper in an increasingly uncertain world.

But on a people-to-people level, residents in more fortunate circumstances like Singapore's are also keen to help reach out and do their part to bridge the development gap with their neighbours. Organisations like Mercy Relief and many others take projects on a more personal and informal level to assist friends and fellow ASEAN citizens in the region.

Malay/Muslim Singaporeans and groups, with an understanding of the Malay language and an awareness of cultural sensitivities, can consider taking the lead or facilitating some of these exchanges which are set to grow. These actions are far from political, but they could potentially shape the tenor of bilateral and regional politics as they lend connections and deepen layers of trust across national borders.

Legacy

Singapore's Malay/Muslim Community faced a turbulent start in the early years of the nation's independence, but has managed to make the most of its circumstances and rise to the challenge. It has contributed significantly to national development across various sectors, and has decisively shaped the country's multiracial, multireligious society, enriching community life and leading the way in a wide range of areas from the arts and charity to sports and science.

It has also played an active role in politics, and in recent years, done so across the political spectrum. The previous term of government saw several records made – the first elected opposition member of Parliament (MP) from the Malay/Muslim community, the first female speaker of Parliament appointed from the ranks of Malay/Muslim MPs, and the appointment of two full Malay Ministers in Cabinet since independence. They add to the record of achievements the community can be proud of, dating all the way back to the appointment of Inche Yusof Ishak as the first President and Professor Ahmad Ibrahim as the first attorney-general.

As the pool of professionals and achievers in the community grows, Malay/Muslims can expect to break new barriers and chart new paths in political participation and representation, earning national recognition on their own merits. More ambitious questions have been asked - as to when the community will have its first elected President, and its first Prime Minister. These are attainable milestones, and ones we can all be proud of when they are achieved. They will also take time.

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But when these happen, they will be signal moments in the national political landscape that all Singaporeans can be proud of.

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I suggest that the
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Singapore to safe harbour.



Rule of Law & Racial/ Religious Harmony - Twin Pillars of Singapore's Success Story

By Mahdev Mohan

If the Association of Southeast Asian Nations (ASEAN) – Southeast Asia's regional bloc comprising Singapore and nine other neighbours – were a single country, it would be the 7th largest economy in the world, with a combined economy of \$2.4 trillion (as of 2013).¹ Soon, ASEAN will launch an integrated economic community (AEC), a single market and production base with new opportunities for prosperity for the region's 600 million women and men.

I suggest that the cornerstone of AEC must be the rule of law and mutual tolerance of diversity, twin beacons that have guided Singapore to safe harbour. Traditionally, the 'rule of law' was not viewed as a unifying concept amongst ASEAN countries, but as a "protean" one.² Former ASEAN Secretary-General Rod Severino has noted that "[h]istorically, ASEAN has never been associated with international law and treaties. ASEAN has always been regarded as a group of sovereign nations operating on the basis of ad hoc understandings and informal procedures rather than within the framework of binding agreements arrived at through formal processes".³

¹Vinayak HV, Fraser Thompson, and Oliver Tonby, 'Understanding ASEAN: Seven things you need to know', May 2014, McKinsey & Co, available at http://www.mckinsey.com/insights/public_sector/understanding_asean_seven_things_you_need_to_know

²Randall Peerenboom, "Varieties of Rule of Law: An Introduction and Provisional Conclusion", in Randall Peerenboom (ed.), *Asian Discourses of Rule of Law, Theories and Implementation of Rule of Law in Twelve Asian Countries*, France and the US London, New York, Routledge Curzon, 2004, at 45.

³Rodolfo Severino, *ASEAN Today and Tomorrow*, The Asean Secreteriat, at 23, available at <http://www.asean.org/archive/pdf/sgbook02.pdf>

In 2004, in an oft-quoted treatise on Asian discourses of rule of law, scholars characterized ASEAN countries as typifying “competing conceptions” of the rule of law.⁴ Aside from communist Vietnam and Laos, ASEAN countries were classified by those scholars into two categories – countries that are authoritarian, soft-authoritarian or with limited democracy (Myanmar, Singapore, Malaysia, and Brunei); and countries that feature constitutionalism and transitional justice (Cambodia, Philippines, Thailand and Indonesia). Both categories were compared and contrasted with mature democracies in other parts of the world, primarily in the West.⁵

Relying on this schema, the treatise’s editor and lead author, Randall Peerenboom, concluded that while legal systems in the region are generally compliant with ‘thin’ conceptions of the rule of law that “provide a certain degree of universalism”, “universalism breaks down ... when it comes to competing thick conceptions”.⁶ Professor Peerenboom added that “much of the current legal and political debate has occurred without explicitly raising the banner of rule of law, though competing ‘thick’ conceptions of rule of law lie just beneath the surface, awaiting more systematic articulation”.⁷

“
has codified adherence to the rule of law – and its now familiar linkage to good governance and democracy – as a core ASEAN purpose and principle which all ASEAN member states have pledged to uphold.”⁸

Times have changed. With the adoption of the ASEAN Charter at its 13th Summit in November 2007, ASEAN has moved toward becoming a more singular polity, and has expressed its firm commitment to, inter alia, enhancing rule of law in terms akin to the use and definition of this expression by the UN. The ASEAN Charter “has codified adherence to the rule of law – and its now familiar

linkage to good governance and democracy – as a core ASEAN purpose and principle which all ASEAN member states have pledged to uphold.”⁸ To borrow and recast Professor Peerenboom’s words, this chapter suggests that ASEAN, and particularly Singapore, has hoisted the “banner of rule of law”, and that the time is ripe for a practicable framework to be articulated so that the rule of law, mutually reinforced by Singapore’s experience with inter-faith and inter-ethnic dialogue, can be systematically assessed and enhanced in the region.

While the degree of application of the rule of law in individual ASEAN countries varies according to their specific contexts and capacities, these variations do not reflect ‘competing conceptions’ as much as they are different notes on the same normative register for the rule of law in ASEAN.

⁴See generally Randall Peerenboom (ed.), *Asian Discourses of Rule of Law, Theories and Implementation of Rule of Law in Twelve Asian Countries*, France and the US London, New York, Routledge Curzon, 2004.

⁵*Ibid*, at 40.

⁶*Ibid*, at 45.

⁷*Ibid*, at 47.

⁸Mahdev Mohan, “Rule of Law for Human Rights in the Asean Region : A Synthesis” in David Cohen, Kevin Tan Yew Lee, Mahdev Mohan, *Rule of Law for Human Rights in the Asean Region: A Base-line Study*, Human Rights Resource Center, University of Indonesia, p.10.

In Singapore, the ‘rule of law’ is not just an esoteric principle, but a way of life. Affirmation of the ‘rule of law’ has been a key feature in various foreign policy statements issued by the Singapore government over the years. Small states like Singapore benefit from such a rules-based international order. As Law and Home Affairs Minister K Shanmugam has noted:

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It is a harsh world, with rules which are often ignored by many countries, including the major powers. Success is not preordained for any country, let alone a small city-state. We ignore that at our peril.”⁹



The rule of law has governed Singapore’s international economic relations as well. Most recently, Singapore has entered a much-publicised trade and investment treaty with the United States and ten other countries, which epitomises the importance of the rule of law. In 30 chapters, the Trans-Pacific Agreement (TPP) covers a wide range of subjects, from traditional trade liberalisation through to services, investment, environmental protection and labour standards. All substantive chapters of the agreement contain carefully-negotiated carve-outs and non-precluded measures clauses to ensure that ‘TPP States’ abilities to regulate in key areas (such environment, public health, safety, security, employment and innovation) are not unjustifiably limited by the treaty. The TPP’s diverse carve-outs, when coupled with the positive rights and duties imposed in corresponding fields, operate to ensure that the interests of 12 countries and 800 million people within the TPP area are balanced with the objectives of rules-based trade and investment liberalisation.¹⁰ Simply put, in a rules-based international economic system, rights and responsibilities are incumbent on both countries and foreign investors.

Singapore understands this well, as it is a natural extension of our long-held commitment to the rule of law. Domestically, the “rule of law” evokes a variety of images, often ones of particular modern societies with efficient, accessible courts, and equitable laws. The phrase “rule of law” itself is a contribution of English jurist Andrew Venn Dicey, whose seminal *Introduction to the Study of the Law of the Constitution* describes the rule of law as a “feature” of the political institutions of England. This feature is apprehensible in two different ways: “[T]hat no man is punishable or can be lawfully made to suffer in body or goods except for a distinct breach of law established in the ordinary legal manner before ordinary courts of the land;”¹¹ and “that . . . every man, whatever his rank or condition, is subject to the ordinary law of the realm and amenable to the jurisdiction of the ordinary tribunals.”¹² Dicey used the phrase “rule of law” as a description of England’s distinctive

⁹Goh Chin Lian, “Ukraine crisis offers lessons for Singapore: Shanmugam” *The Straits Times* (6 March 2014) at p 25.

¹⁰Chia Yan Min, “TPP: What’s in it for Singapore”, October 14, 2015, available at <http://www.straitstimes.com/business/economy/tpp-whats-in-it-for-singapore>

¹¹AV Dicey, *Introduction to the Study of the Law of the Constitution* s, 183 (8th ed. 1915).

¹²*Ibid*, 189.

political culture. The normative import of his now famous theory—that England owes the success of its robust, Westminster-style democracy to a set of laws of fair and equal application—has not been overlooked by others.

“

That no man is punishable or can be lawfully made to suffer in body or goods except for a distinct breach of law established in the ordinary legal manner before ordinary courts of the land”¹¹

I posit that Singapore has expertly applied the principle, with important modifications to suit our cosmopolitan local context, and has also benefited greatly. Observers often marvel at Singapore’s successes. Singapore’s per capita income has shot from USD\$500 in 1965 to USD\$55,000 today, the largest increase any newly independent nation has enjoyed. Indeed, since Singapore gained

independence, our Gross Domestic Product has increased by a staggering 3700%.¹³ Yet, it is our hard-fought racial and religious harmony that has made, and will continue to make, sustainable economic development possible in Singapore. We need not hark back to the bloody racial riots that had plagued Singapore in 1969; but only cast our eye around us in contemporary Southeast Asia. Amidst Myanmar’s elections in November 2015, for example, the stateless Rohingya Muslim minority may not be able to cast a ballot, but remain at the centre of an election campaign as the target of anti-Muslim sentiment stoked by Buddhist nationalist politicians and radical monks. In 2007, a 14-nation Partnership Group on Myanmar was established, initially called the United Nations Secretary-General’s “Group of Friends”. Singapore is a member of this group. Since the communal clashes of 2012, the problems in Rakhine State have been high on their agenda whenever they meet.

Former Foreign Affairs Minister George Yeo paid homage to this Group and to ASEAN, when he spoke recently at a lecture at the National University of Singapore. Referring to the National League for Democracy party led by Ms Aung San Suu Kyi and its major election victory in Myanmar, he attributed Myanmar’s “incredible, peaceful” transition to democracy to ASEAN’s hard work. Going forward, Myanmar’s newly elected Government must ensure the safety and protection of all civilians in Myanmar, no matter what their religious or ethnic affiliation.

Racial and religious tolerance is not an imperative for Asia alone. Beyond the region, the Charlie Hebdo shooting in France and the Charleston church attack in the United States have underlined the need to address racial and religious fault-lines and fissures, and to address them through honest and heartfelt dialogue.

¹³See Kishore Mahbubani, Why Singapore is the World’s Most Successful Society, 8 April 2015, available at http://www.huffingtonpost.com/kishore-mahbubani/singapore-world-successful-society_b_7934988.html

Inter-faith dialogue has been a key factor of Singapore's holistic success. The late Dr Goh Keng Swee once said,

“

Many people turn away from...religion in the mistaken belief that it is old-fashioned or even irrelevant to contemporary problems. In fact, the contrary is the case...a firm moral order [needs to] be established in a society which seeks economic progress. For only then can we get high standards of conduct both in public administration and in private business”.



Embodying Dr Goh's sentiments is a creature of the Constitution – the Presidential Council for Minority Rights. The idea for the Presidential Council for Minority Rights originated from the Constitutional Commission on Minority Rights appointed by the government in December 1965. Led by then Chief Justice Wee Chong Jin, the council was formed to consider how the rights and interests of racial, linguistic and religious minorities could be safeguarded and enshrined in the Singapore Constitution. A non-elected, advisory “Council of State”, acting as a check against the enactment of discriminatory laws, was proposed. Set up in May 1970, the Presidential Council was renamed the Presidential Council for Minority Rights in 1973 to better reflect its role. Among other things, the Council reports on matters affecting any racial or religious community referred to it by parliament or the government.¹⁴

The Council also assists in the determination of the composition of the Presidential Council for Religious Harmony, established by the maintenance of religious Harmony Act. The Councils, and their underlying legislation, show “the paramount importance placed on racial harmony in a world still rife with racial and communal conflict”.¹⁵ Properly observed, the rule of law therefore promotes not just Singapore's economic development, but its multi-racial and religious core. One aspect of our success story mutually reinforces the other, and is underpinned by enlightened statutory bodies and laws.

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Mosques, churches and temples are full during their respective days of worship, and throughout key religious events.



Inter-faith appreciation and understanding are rare gifts that should be cherished. Minister Lawrence Wong has noted that Singaporeans of all faiths have become more religious over the years. Mosques, churches and temples are full during their respective days of worship, and throughout key religious events. The MUIS Harmony Centre and the

¹⁴See Tan, K. Y. L. (2013). An introduction to Singapore's constitution (pp. 50–52). Singapore: Talisman Publishing.

¹⁵Ken Kwek (22 July 2006), “Two more join minority rights council: Council is significant symbol of racial harmony, stresses DPM Jayakumar”

National Council of Churches Singapore (NCCS) have played a pivotal role in promoting mutual tolerance, and coming to the aid of the underserved and underprivileged, regardless of creed. For example, The Harmony Centre has, in the past, worked with the other faith communities and the Rahmatan Lil Alamin (RLA) Foundation to help raise funds for the victims of various regional humanitarian crises.¹⁶ These initiatives provide a space for young Singaporeans who are keen to be involved in regional and national peace and religious harmony initiatives to be involved.

Singapore's decision to sign the United Nations Convention to eliminate all forms of Racial Discrimination, is significant, and will boost Singapore's standing in the international community. Lawyer and Speaker of Parliament Halimah Yacob has said:

“

The signing of this convention attests to our confidence and the strength of our race relations here, as member states signing this convention will have to submit reports regularly and be subject to UN scrutiny. We are already practising the principles enunciated under the convention, so signing it is a logical step.”¹⁷



Singaporeans should also look beyond Singapore to contribute. The Asian Peace and Reconciliation Council (APRC), launched in Bangkok in 2002 is a gathering of distinguished former national leaders and ministers, as well as well-known academics, from around the world who share a keen interest in Asian affairs, and are willing to offer their good offices in the service of peace and reconciliation in Asia. Speaking at a lecture organised by Singapore Management University's Wee Kim Wee Centre in November 2015, APRC's Chairman, His Excellency Professor Surakiart Sathirathai called upon Singapore's religious leaders, policy-makers youth and others to extol the nation's commitment to pragmatism, informal discussion and win-win compromise, and to guard against the challenges to peace and religious harmony in the region.¹⁸

The rule of law is our foundation stone, but we have to build upon the tenets that facilitate racial and religious harmony in Singapore. One needs only to visit the synagogue, churches, mosques and temples along Queen Street to know that devotees cross-pollinate these places of worship, and that Singapore is unique. There is a singular role that the Malay/Muslim community has had, and will continue to have, in answering Professor Surakiart's clarion call.

¹⁶Speech by Minister Lawrence Wong, “Strengthening inter-faith cooperation in Singapore”, delivered on 6 April 2013, available at https://www.mccy.gov.sg/en/news/speeches/2013/Apr/Strengthening_Inter-Faith_Cooperation_in_Singapore.aspx

¹⁷Walter Sim, “Race categorisation too rigid for increasingly diverse S'pore?”, Straits Times, 8 November 2015, available at: <http://news.asiaone.com/news/singapore/race-categorisation-too-rigid-increasingly-diverse-spore>

¹⁸For more about the inaugural IKEDA Peace and Harmony lecture, visit this link: http://wkwk.smu.edu.sg/events/announcements-and-upcoming-events/?event_cat=conference

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I imagine Singapore
as a gracious nation
whose people are
caring, kind and
compassionate.



Leaves from the Same Tree

By Saleemah Ismail

Democracy, peace, progress, justice and equality are Singapore's ideals, conceived at our birth in 1965.

Gracious. Giving. Diversity. Inclusion. Cohesion. These are the additional five ideals that come to mind when I imagine what Singapore could be by 2065.

I imagine Singapore as a gracious nation whose people are caring, kind and compassionate. I imagine diversity, social inclusion and cohesion as part of our DNA. I imagine Singaporeans living meaningful lives of peace and grace.

“
I may be a dreamer but I am
not the only one }
- John Lennon from 'Imagine'

In a 2012 study conducted by the Barrett Values Centre, 2,000 Singapore residents were asked for their perception of what defined Singapore society and what they would want their ideal Singapore to be. The results showed that a majority of respondents' ideal nation was caring, kind and compassionate. Singaporeans want to have a caring community. The result is heartening. We, the people, have broadly the same dream for Singapore. We are all kindred spirits.

So how can Singapore evolve to being this gracious, giving, socially cohesive and inclusive nation? What role can the Malay/Muslim community play in this evolution?

Showing Up

I believe that to live meaningful lives we, individual Malay/Muslim men and women, must show up in our own lives. It is important to show up. The most important person in our lives is ourselves. For those from marginalised, disadvantaged backgrounds, showing up may mean deferring non-essential consumption to pay bills. For some it might mean something as simple as taking responsibility for waking up and getting to work on time, or doing homework. While for others, it might mean utilising any opportunity to shine and rise above their peers - or even their own previous achievements. For the community as a whole, showing up might mean reaching out to the larger Singapore society.

A Seat at the Table

My experience as Co Vice-Chair of Suara Musyawarah, an independent committee whose aim was to engage Singapore's Malay/Muslim Community and gather feedback on the community's aspirations and concerns, showed me that every Malay/Muslim man and woman wants their voices heard. I observed how everyone at Suara Musyawarah sessions spoke fearlessly and with a lot of passion. There was no apathy or indifference. They wanted to be part of civic and political engagement. Many expressed their desire to have a seat at the table, to drive the narrative and agenda of their lives.

It is important that Malay/Muslims show up and be at the table. The decision maker, the person who drives the agenda is sitting at the table. If we are not sitting at the table, we are cannot expect to have full inclusion and cohesion. We need to be at the table to have our voice heard, to have full economic and civic participation, to be counted. No matter the size of the table, whether it is participating in workplace committee or at the community level, it is important that we are fully present.

Making Space at the Table

At the same time, "Showing up" isn't enough by itself. There is no incentive for the marginalised to want to be mainstreamed if they are treated as invisible when they "show up" or when their "showing up" isn't acknowledged.

Larger Singapore society must be willing to view the Malay/Muslim families at the bottom 10 percentile as people who are not problematic but as a group whose potential is yet to be realised.

Caring, kindness and compassion are among the strongest attributes of Malay/Muslim men and women. The values of collective responsibilities or *fardhu kifayah* come naturally. Compassion is reflected not just in the actions of individual Malay/Muslims but also in our daily language. We use the word 'rahim' to describe the womb of a woman. The word 'rahim' in Arabic denotes being compassionate, merciful and loving. Thus in our Malay/Muslim culture, babies are conceived in a space of compassion, mercy and love. What a beautiful beginning

to our lives. Another example is when we say thank you. We express our thanks by saying 'terima kasih' which means 'received with love' or 'received with gratitude'. Compassion and graciousness are reflected in our individual actions, our community collective responsibility and our language – it is in our DNA. We have much to offer the larger Singapore society.

The larger Singapore society must be willing to view Malay/Muslim values and culture as adding something to the greater whole. To embrace diversity and inclusion, space at the table must be made for all.

Leaves from the Same Tree

The concerns of the Malay/Muslim community are my concerns because I am a leaf and we are all part of the same tree. We are all inter-related. The symbol of the tree shows the roots and branches - where we have diverged and where we are joined. It shows where we come from and who comes from us. We are linked to one another. It is in this sameness that we find compassion and tolerance. It is in our differences that we should find wonder. This tree, that I am a part of, alludes to the interconnection of all life in our community. Our shared roots link us to the past, showing our connected struggles and aspirations; the small branches and new leaves show our desires to reach for the light.

Since we must be the change that we want to see in this world, the question we need to ask is what can we do as an individual, and collectively as a community, to be part of this evolution to realise the Singapore we want?

Do we see it as someone else's responsibility to have the ideal Singapore we want – one that is caring, kind and compassionate? How do we start with ourselves?

What is one thing you can do to be more present in your own life? What can you do to make a difference in our community?

- Be aware that a single solitary you, can make a bigger difference than you think.
- Show up, in your own life and that of others.
- Be present and see, really see, the value that other people are bringing to your life.
- Sit at the table to drive the agenda and narratives of your life and the community.
- Always remember that each of us is a leaf on the same tree. Each leaf can and must aspire for the light.

“

Till today, the legend of Hang
Tuah portrays a heroic symbol
of warrior-hood, community
courage and values often
associated with the DNA of
the Malay race.



Takkan Melayu Hilang Di Dunia - Reloaded

By Sabrena Abdullah

“Takkan Melayu Hilang Di Dunia”. According to many historic texts, this saying, which means “Never shall the Malay(s) vanish from the Earth” and is famous for rallying the spirit of Malay nationalism and self-rootedness, originated from Hang Tuah, a legendary Malay warrior who lived in Malacca during the reign of Sultan Mansur Shah in the 15th century. Till today, the legend of Hang Tuah portrays a heroic symbol of warrior-hood, community courage and values often associated with the DNA of the Malay race. In its literary meaning, the phrase “Takkan Melayu Hilang Di Dunia” depicts a sense of genuine hope that the Malay race will flourish, being deep-rooted in high moral values, grace and character; a race that will gain honour and respect globally, across space and time.

Fifty years since Singapore’s independence, fast forwarding the quote “Takkan Melayu Hilang Di Dunia”, how can we re-imagine this narrative?

What Makes the Malay DNA

Before we embark upon a short visioning exercise, perhaps it is worthwhile to recap some of the historic constitutions of the ‘Malay’ race. Though the etymology of ‘Bangsa Melayu’ by itself is often disputed, with various differing versions, from the sociological perspective, Malayisation (Masuk Melayu) is a process of assimilation and acculturation, that involves acquisition of elements of Malay culture, in particular, the religion of Islam and Malay language.

Various social science theories suggest that the collective awareness of a race is documented after it attains certain attributes like common language, culture, and religion. Since the early 17th century, there has been consistent social observation and documentation that common attributes ascribed to the Malays were largely articulated after the coming of Islam in the Nusantara, the Malay Archipelago.

In a recent television interview on Suria (the channel for Malay language programmes), Russian scholar Professor Tatiana Denisova, an expert in the history of Islam's spread to and in the Malay world, shared that it is relatively rare in contemporary times to identify an ethnic race almost synonymously with a religion (Malay and Islam), making the Malay civilization (Tamadun Melayu) a fairly unique entity and process.

Prof Denisova added that Islamic synonymy over the Malay race is reinforced by linguistic affinities. For example, 40% of the Malay lingua franca consists largely of 'borrowed' words from traditional Islamic Arabic text.

Besides religion and language as common factors that gel the identity of the Malay race, another common consistent cultural identity is the strong linkage between Malay culture and the attribute of 'adab'. In the context of behavior, this refers to prescribed Islamic etiquette: refinement, good manners, morals, decorum, decency and humaneness.

The principle of 'adab' is reflected in many Malay literary writings ranging from poetic discourse, words of advice and metaphors, more commonly known in the Malay literary scripts as 'pantun, sajak, gurindam and peribahasa'. Dr Ariff Ahmad, the well-known 'father' of Malay linguistics and an expert in Malay culture and traditions, strongly believes that literature is the vehicle of culture, where culture balances language and language is the soul of a race. The usage of literary tools to attain 'deeper meaning' has been a common traditional teaching tool of the Malays, often intended to pass codes and moral messages without being overly didactic and risking 'offending' an audience.

Of Adab, Laziness and a Conscientised Generation

In the 21st century, a practical question arises: could this collective cultural Malay 'DNA' of 'adab', advocating a softer approach to life, possibly be mistaken as 'lazy' or passive in the larger context of the community? It could be further argued that name-labelling of the 'lazy' Malays may be downright stereotypical, but a more nuanced approach would be to suggest that there could also be some 'factual truth' in the idea of Malays being 'passive' and 'non-aggressive', which could be a big 'misfit' in today's complex, 'straight-to-the-point' and competitive world.

Perhaps a good start to re-ignite the mantra of 'Takkan Melayu Hilang Di Dunia' would be to first take stock of our community assets. With a total of 89,500 Malay youths between the age group of 20-29, the Singapore Malay community has the largest community youth base in Singapore, and is heavily resourced with this younger generation as its 'investment for the future'. The question then would be how this community resource could be fully

optimised to ensure that the mantra of ‘Takkan Melayu Hilang Di Dunia’ remains relevant, and catalyses the spirit of dignity and community for now and the future.

In 2010, under the auspices of the Community Leaders Forum (CLF), Yayasan Mendaki conducted a massive forward-planning exercise (FPE). The project drew many community activists, thought leaders and youths to ‘forward plan’ their vision and aspirations for the Malay/Muslim community. From the exercise, the narrative of ‘A Conscientised Generation’ (Menjana Masyarakat Peduli) was formed, envisioning the future Malay/Muslim generation as one that understood global market values, was ever-ready to navigate challenges, and was resilient and harmonious with its ecosystem to maximise opportunities.

Harnessing youths as the fuel and pulse of the community, cultivating niche constellations of expertise and enhancing community foundations were among the FPE’s recommendations to take the community forward.

Re-igniting the Spirit of “Takkan Melayu Hilang Di Dunia”

Though these are useful ideas and recommendations, there is still a strong need to ‘re-package’ and ‘re-brand’ our traditional collective community “DNA”. This consists of ‘adab’, ‘semangat berjuang’ (fighter’s spirit), tinggi nilai budi pekerti’ (grace and decorum) and ‘gotong royong’ (spirit of togetherness) as the ‘core’ aspects that not only define the Malay community, but are evergreen values that have the ability to create an economic competitive edge for the Malay/Muslim community for the future. Hence, in the process, the mantra of “Takkan Melayu Hilang Di Dunia” may need to be repositioned from a purely collective concept to a more concrete, outcome-oriented community strategy to remain relevant in today’s society.

I hope that our rich Malay history, coupled with our youths’ energy and community’s pride, can reignite the 21st century version of our community DNA. When we do so, we can be a step nearer to living out the legacy of “Takkan Hilang Melayu Di Dunia”.

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The pride and joy
of the community
is embodied in
its intra-ethnic,
religious, and
cultural diversity.



Embracing Diversity in the Singapore Malay/Muslim Community

By Mustafa Izzuddin

The future looks incredibly promising for the heterogeneous Malay/Muslim community in Singapore. The pride and joy of the community is embodied in its intra-ethnic, religious, and cultural diversity. The more the community sees diversity as a source of strength, the more it will flourish, going forward. As an Indian Gujarati of the Dawoodi Bohra Muslim faith who speaks Malay, I would have seemed out of place had the community failed to embrace diversity, and had not been inclusive and accommodating in its posture. My multi-layered identity was not only welcomed by the Malay/Muslim community, but has also helped enhance my contributions to the community as a volunteer with the Malay Youth Literary Association (4PM) since the age of 16, and later on, also with Mendaki Club.

This warm embrace of diversity also extends to the intellectual capital of the community. The more the community welcomes all kinds of skills, talents, and occupations, the better the future will be, especially for the younger generation. As someone who chose to take the road less-travelled, especially since Dawoodi Bohras are a trading community, I was blessed to have had the fulfilment of my doctorate and choice of an academic career recognised not just by the Dawoodi Bohra Muslim community, but also by the wider Malay/Muslim community. This acknowledgement has further driven me as an academic to pursue research in such a way that it benefits not just the Malay/Muslim community, but also the larger Singaporean society as well as the regional or global arenas.

“

The space and freedom for expression, particularly by the younger generation, should not just be enlarged, but also welcomed and engaged in the growing marketplace of ideas, especially by the powers that be.

Inclusive pluralism also relates to embracing diversity, and in particular, to the plurality of views, ideas, and aspirations expressed by the heterogeneous Malay/Muslim community. The space and freedom for expression, particularly by the younger generation, should not just be enlarged, but also welcomed and engaged in the growing marketplace of ideas, especially by the powers that be. It is therefore heartening to see greater, and importantly, meaningful engagement between the political leadership and the younger generation of Malay/Muslims through a

variety of platforms. The notion of inclusive pluralism also encompasses the building of bridges with other ethnic communities by way of dialogue and joint collaborations. This outward-looking orientation will not only strengthen the social fabric of the Malay/Muslim community, but also Singapore's. The more the community embraces inclusive pluralism, the brighter the future will be for both the present and future generations.

Portraits of diversity are also embodied in leadership and institutions. Crucial to leadership are three facets: civic, political, and non-aligned. Civic leadership refers to the guardianship of civic-based non-governmental Malay/Muslim organisations (MMOs) including Islamic-oriented ones. One example of a civic-type leader is my father, Izzuddin Taherally, who is the current President of 4PM, and has also served on the Board of Directors of Yayasan Mendaki. Civic leaders like him play a crucial role in ensuring that civic-based Malay/Muslim groups remain relevant and effective in catering to the diverse needs of the community especially at the grassroots level. Political leadership refers to elected Malay/Muslim parliamentarians, particularly those with the party in government. Not only do political leaders work closely with MMOs, but they are also looked to for raising issues of concern to the community in parliamentary debates, among other avenues. Non-aligned leadership refers to private individuals who uplift the community independently through their own talents, abilities and platforms such as in the field of entrepreneurship and by

way of philanthropy. That the community boasts such diversity in leadership is a source of pride and a measure of strength. Going forward, the benefits from diversity in leadership could be much better derived if there is synergy in that diversity, with leaders of all three types working hand in hand for the greater community and national good.

The idea of synergy also extends to diversity in institutions catering to community needs. These institutions include self-help bodies, business groups, Voluntary Welfare Organisations, other non-profit associations, youth/student clubs and societies, the Majlis Ugama Islam Singapura (MUIS), Masjid (mosque) committees, as well as informal networks. Collectively known as Malay/Muslim organisations or MMOs, greater synergy amongst them will bode well for the community in the present and the future as it would help maximise limited resources. In so doing, we can enhance unity among the many MMOs that exist in Singapore today. Implicit here is also the need for the veteran and younger leaders to work closely together in order to bolster the organisational capacity and leadership succession in the MMOs.

As Singapore surges ahead from its 50th birthday, the Malay/Muslim community can do the same by embracing diversity to the fullest. No community is without its share of problems, but the embracing of diversity is a good starting point for the Malay/Muslim community to address and resolve those problems, whether through taking a community-based or a national-based approach, or a mix of both. As clichéd as it may sound, unity in diversity, if fully embraced, will be a boon to the Malay/Muslim community as we write the next 50 years of the Singapore Story.

“

Almost half a century later, his central thesis on the variations of Muslim life, even as they arise from the same religious source, remains pertinent.



Cultures of Muslim Life in Singapore in 2065

By Nazirudin Mohamed Nasir

In his classic 1967 anthropological study of religion, *Islam Observed*, American anthropologist Clifford Geertz studied the contrasting natures of Moroccan and Indonesian Muslim cultures in the mid-twentieth century. His findings have triggered numerous debates on the ways in which a whole culture, including its religious dimension, should be interpreted. Almost half a century later, his central thesis on the variations of Muslim life, even as they arise from the same religious source, remains pertinent. However, Geertz wrote before the acute advent of globalisation in the new millennium, especially in industrialised economies such as Singapore.

In view of this contemporary condition, can we still speak, like Geertz, of a culture with a set of fixed symbols and meanings through which Islam should be understood? This is an important question to ask, because as we continue to observe Islam after *Islam Observed*, we are struck by its remarkable variety, even at the localised level, amidst a small but deep kernel of shared beliefs and practices.

Historically, Muslim religious life in Singapore largely began with the propagation of Islam in the region by Yemeni traders/scholars (known as ‘ulama and haba-ib). Mostly trained in the city of Hadhramaut in Yemen, they taught a particular strand of Islamic practice broadly identified with the Syafi’i school of law and the Asy’ari school of theology. As they set up the earliest religious mosques and madrasahs in Singapore, their understanding of Islamic thought became established, and influenced various facets of religious lives of Muslims.

However, we are observing a shift in the current strand of Islamic thought. From the mid-twentieth century, Singaporean students have ventured into different institutions, whether in the Middle East or regionally, for Islamic studies. Beyond formal learning, Muslims in Singapore also have an almost unfettered access to ideas and orientations through the Internet and social media. It is therefore unsurprising that as access to various interpretations of the religion becomes easier, the religio-cultural landscape in the Singapore Muslim community begins to undergo a transformation.

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In his book *Islamic Thought* (2006), Saeed offers a theologically-suited nomenclature that captures streams of Islamic thought from the perspective of their focus and/or relationship with classical Muslim jurisprudence.

This can be seen in various realms of religious life: in orthopraxis that defines the liturgical norms of Islamic life; in theological discourse surrounding the interpretations of God and scripture, and in political thought that harks back to medieval Islamic rule or reconciles with contemporary political theory. Categories of Muslim thought that have floated around in popular parlance, whether locally or abroad, include salafis (referring to those who favour literalist approaches), sufis (those who hold to traditional mystical ideas and spiritual practices),

progressives and moderates (those who reconcile religion with contemporary life), and jihadis (those who adopt an austere version of the religion to advance their respective political agendas). A noteworthy categorisation has been suggested by the contemporary scholar of Islam, Abdullah Saeed. In his book *Islamic Thought* (2006), Saeed offers a theologically-suited nomenclature that captures streams of Islamic thought from the perspective of their focus and/or relationship with classical Muslim jurisprudence. According to him, one could be a legalist traditionalist, political Islamist, theological puritan, or progressive ijtihadi. Even in these categories, we have largely limited the observation on differences within the sunni “denomination” in Islam.

Locally, the concept of intra-faith diversity seems to be favoured, perhaps because the term “diversity” tacitly betrays a positive sense beyond simply a recognition or tolerance of differences. The concept also mirrors the successful inter-faith agenda in Singapore. The notion of “inter-faith diversity” is therefore well-established and functions well to describe both the plurality of religions as well as a political imperative which drives social cohesion between religious communities. Nonetheless, the differences within Islam itself seem to cut much deeper than is commonly perceived and display a spectrum

of exclusive behaviours. Whilst many common notions could be found in all groups that lay claim to the religion, such as in reference to God, the prophets, scripture (the Holy Qur'an and Prophetic Sunna), and basic notions of rituals and expressions of piety, there can be, at times, major divergences that have led to endless theological bickering over the authentic representation of the faith. The Sunni-Shia split is a clear testimony of not only the extent of commonality, but more so the difference and divergence between groups in Islam. For

example, in the Pew Research Center's Religion and Public Life Project published in 2013, at least 40% of Sunnis in countries surveyed (in the Middle East and North Africa) consider Shias as non-Muslims. Durkheim's sociological theory on the sacred and profane may explain this. Increasingly, we witness acute contestations of the 'sacred', to the extent that one person or group's 'sacred' is considered 'profane' by others. Such polemics are not new, and with the benefit of historical hindsight, we could say that such examples of fundamental differences will continue to be one of the most challenging facets in any Muslim community. The question then is to re-examine the ways in which we look at, and approach, the phenomenon of diversity.

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For example, in the Pew Research Center's Religion and Public Life Project published in 2013, at least 40% of Sunnis in countries surveyed (in the Middle East and North Africa) consider Shias as non-Muslims.

We ought to begin with a deeper appreciation of 'diversity' itself within Islam. Many of these differences are as old as the religion itself, and deeply intertwined with the history of its evolution in various socio-political environments. They are also well-captured in the tens of thousands of tomes of Islamic scholarship, whether on piety and rituals, theology and theosophy, jurisprudence, ethics, politics, governance, or esotericism. The range of these genres alone testifies to the plurality in focus and interest of Muslims over centuries. The differences in religious orientations were so significant that in historical Muslim polities, the ruler (usually a caliph) would zealously maintain an 'orthodoxy' by quelling 'deviations' from the norm. Some of the movements that were quashed at different moments in Islamic history include the rationalist movement led by the Mu'tazilites and the theosophical teachings of the tenth-century mystic Mansur al-Hallaj. The intellectual parallel to the political posturing is heresiographical works, such as *The Distinction between the Sects* by the eleventh-century theologian Abu Mansur al-Baghdadi, and *The Division between the Religious Groups, the Followers of Fancy and the Sectarians* by the Andalusian scholar Ibn Hazm. In the current context, such works present a ready resource for one's religious leanings, in that they could be easily picked up and appropriated to support one's views and orientation. We should anticipate more of this taking place, which would in turn drive a deeper wedge in the religious fabric of Muslims.

From a contemporary perspective, 'diversity' is seen as natural because of the unique ways in which individuals relate to religion in their lives. Modern social-scientific research on religion has shed light on the concept of 'faith' and shown that it is deeply personal,

whose meaning and significance are conceived internally within the individual. Thus, different aspects of religion may appeal to different individuals. For example, some may strongly identify with its orthopraxis and thus find great comfort in observing the liturgical practices, without paying much attention to its socio-political dimensions. In such cases, the issues of halal and haram may become paramount for them. Yet, there are those who relate to its socio-political dimensions more ardently than others. To them, ideas of state, systems of governance, religion in the public sphere, and the religious-secular divide are what matter most. These different interpretations of Islam are further accentuated by globalising forces, with the Internet facilitating much of the communication between individuals from the world over on areas of common interest.

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How then does this affect the ways we approach the agenda of the socio-religious development of Singapore's Muslim community?



How then does this affect the ways we approach the agenda of the socio-religious development of Singapore's Muslim community? For several decades, the idea of a Singapore Muslim community has been immensely helpful in organising and coordinating efforts to uplift the community and elevate it to new levels of progress. Implicit in this conception is the idea of one religious culture that defines and shapes the community's Islamic life. Without paying too

much attention to the possibility (whether at any historical moment or in anticipation) of the existence of a variety of such cultures, the focus has been on charting the community's socio-religious life using terms such as progressive, inclusive and resilient. If these terms are understood in the context of Islamic values, it would be highly unlikely that everyone, given their particular leanings and interests as pointed out above, would have a common understanding on what they mean. As we acknowledge the emergence of diverse religious cultures even within one faith, we are recognising that some of the differences that go to the heart of the faith are irreconcilable, much like how cultures are inherently different in the ways they structure and approach life. Accordingly, we ought to resist attempts to reify Islam in Singapore to any one particular essence or type. Instead, we ought to treat the various Muslim groups as separate cultures (albeit connected and arising from the same faith). The approach in managing such differences will be to facilitate greater understanding of how and why groups can be, and are, different, but also to rally them towards a commonality that binds – diversity does not need to be fragmenting, in this case. As Geertz reminds us, cultural variations are very pertinent to the formation of Muslim identities and religious life. These cultural transformations are now taking place even in local contexts. The challenge is for us to think of these in new ways, so that we do not get caught in a quagmire of socio-religious differences which are more complex than the phenomenon of diversity.

“

When the Indian Muslim Professionals (IM.PROF) group was invited to contribute a piece for this ‘milestone’ publication, we were both honoured and grateful to share our thoughts.



An Exemplary Community and Citizenry

By Raja Mohamad, Halima Gose Ahmed Shah, Nazhath Faheema & Hamid Rahmatullah

Introduction

As we celebrate Singapore's 50th anniversary, it is timely to take stock and assess the challenges ahead in the next 50 years. When the Indian Muslim Professionals (IM.PROF) group was invited to contribute a piece for this 'milestone' publication, we were both honoured and grateful to share our thoughts. We posed this topic to the youth demographic within our network and the response was both interesting and thought-provoking.

Our unique history/Past 50

Before conceiving our vision and aspirations for the next 50 years, we looked back on how we have progressed thus far as a community. On this, Prime Minister Lee Hsien Loong has commented eloquently:

“

What we have achieved together in Singapore is special. Here many races live in peace, and many from humble homes make good. We will surely meet challenges ahead, but whatever the world throws at us, as one people, we will overcome.”

- Lee Hsien Loong, 29 August 2015, Facebook



This statement encapsulates the difficult path we have endured and the enviable position we have attained in the last 50 years. Singapore's uniquely rich heritage is a mix of our various Asian ethnic backgrounds and a melting pot of cultures from all around the world, the result of a long history of immigration to this island nation. Singaporeans are able to co-exist and live peacefully whilst practicing their own faiths, culture and lifestyles with tolerance and respect. This is a very precious commodity that we need to protect, cherish and leverage on, in the next 50 years as well.

Some of the challenges we are facing are internal; for example the need to improve social mobility; narrowing both educational and socio-economic gaps between our communities and the national average. Some are external, such as foreign elements that attempt to paint Islam as an extremist religion, giving rise to bigotry and anti-Islamic or Islamophobic sentiments as well as social media propaganda by fundamentalist and violent groups such as the Islamic State of Iraq and Syria. If we do not proactively keep such negative forces at bay, the consequences for all of us will be dire.

Tough love/Bold actions/Economic Uncertainties/Going forward/Future 50

The global and regional financial crises have direct implications on the progress of our community. The crises punctuate not only global economic growth, but also that of Singapore, since we are heavily dependent on external trade. These crises also seem to occur more frequently as our economy matures, and the subsequent recovery takes longer yet. Such speed bumps affect Singapore and are especially difficult for our small community, given their direct correlation to jobs and incomes.

As the saying goes, "tough times demand tough actions". This paper provides the community an opportunity to deliberate over bold actions and also how we might achieve our own version of the much-quoted "paradigm shift".

The narrative for the next significant thrust by the community should include these terms:

- Empowerment,
- Inclusiveness,
- Being blessings to all or "Rahmatilil Alalmin",
- Going global,
- Take an innovative approach to view and spread the word of Islam,
- Entrepreneurship, and
- Development of thought leaders, amongst others.

Out of the Box Thinking or Remove the Box

Mosque as both Spiritual and Social Spaces

In every Muslim's life, the mosque plays a silent yet integral role. Youths tend to start their formal introduction to Islam via Madrasah classes, usually at the neighbourhood mosque, mostly during weekends. We Muslims throng to the domed structures every Friday for prayer. As we get older and retire, and when we try to reconnect with the faith at the mosque, it becomes the ideal place for solace and spiritual homecoming.

Our vision for the next 50 years is to 'reconstruct' the perception of mosque as not only a place of worship but also as a vibrant space for people from all ages and races (and even religions) to congregate as well. We wish to see mosques as dynamic and progressive institutions, radiating the true message of Islam to promote peace, harmony and progress, while steadfastly holding on to the deen in the modern marketplace.

In that regard, we propose a radically different way of looking at the mosque's role in society. Until now, mosques in Singapore only have had traditional uses and come 'alive' with buzz of activities during the following 'designated' occasions:

- Every Friday afternoon for Jumu'ah congregational prayers
- Weekends for prayers and madrasah classes
- During the celebration of the two Eids
- Every evening post-dusk during the month of Ramadhan
- Other ad hoc uses like evening Tahlil or religious classes

Space Utilisation in Mosques

Most modern mosques in Singapore are constructed with productive use of space. The prayer area has been designated to ground floors with airy spaces for worship and water points for ablution are conveniently situated at the entrances. The mosques are well-equipped with tools of information technology and are geared to be places for learning as well as spiritual development. However, during most of the week, these facilities are often under-utilised.

We propose **that mosques in the coming years open up and lease their meeting and conference rooms as co-working spaces for small and medium enterprises, start-ups and entrepreneurs.** The leasing of such space will yield both direct and immediate benefits as well as indirect and long-term benefits over its development. The key benefits include:

- From the perspective of mosques, the leasing of the weekday redundant space to techno 'start-up' like firms can be a new channel of revenue and improve their financial standing through rental income.

- We are seeing an unprecedented upsurge of small technology start-ups whose working space requirements are basically a high speed Internet connection with basic office amenities, such as conference and meeting rooms, projectors, copy machines and printers, with which most mosques are already equipped.
- Many aspiring technopreneurs are already working out of novel workplaces, ranging from cafes with free Wi-Fi to privately funded start-up incubators and government funded idea-labs such as Plug-In@Blk71. Their jobs do not confine them to the typical working hours of typical office-workers.
- Most entrepreneurs and technopreneurs are youths, belonging to the 18 to 40 age group. The importance of engaging these young hearts and minds cannot be overstated; mosques will greatly benefit from the optimism and can-do attitude that these aspiring youth bring with them.
- Frequenting the 'work-space' can also nurture a relationship, both professional and social, between young business leaders and mosques. The mosques stand to benefit significantly through this, through volunteerism and having the technopreneurs perform pro-bono work for the mosques.
- Fledgling start-ups are usually one- or two-man efforts; it is at this phase that operating costs are to be kept as minimal as possible. The mosque can provide for their basic infrastructure needs at an affordable cost.
- If the mosque communities leverage on this concept collectively, it will effectively address the government's expanded focus on helping smaller businesses and encouraging entrepreneurship in addition to attracting multinational corporations for the economy to stay competitive (S Iswaran, 2015, MTI press release 30 Sep). There are even opportunities for the mosque's administration to access funds such as ACE Startups Grant by SPRING Singapore together with first time entrepreneurs and many more.

Modern Working Spaces

Let us pause here for a minute to consider what constitutes working or working space in today's world. In the universe of wired communities and advanced technology, almost everyone is or can be connected anytime and anywhere. The definitions of work-time and space are rapidly evolving. Concepts such as flexible -hours, contract work, working from home, pop-up stores and home start-ups blur the line between work and social lives. A smart phone or device is almost an essential 'extension' of human existence, regardless of a person's age.

This is the workforce of the 21st century. Muslim professionals in Singapore would greatly benefit from mosques engaging them this way, and many will find creative ways to contribute back to the mosques and to society. In that respect, the aim for both parties should not be profit alone, but to enable the mosques to be more engaged and relevant to the youth of today, and to encourage the youth to be more rooted to their faith. Furthermore, opening up the spaces to non-Muslims could be a constructive way of reaching out to them. This

will lead to better social integration and appreciation of Islam amidst the barrage of negativity in social media.

We see the mosque as a social space bustling with young entrepreneurs and see young leaders deliver TED-X-styled talks during the Friday prayers before Khutbah, espousing business ethics and successes of social enterprise while adhering to Islamic principles. Showcasing our own Mark Zuckerbergs and Steve Jobs in such safe environments can infuse confidence and start a positive ripple effect for the whole community.

“

Through this transformation, we can start seeing a ‘connected’ masjid with live updates of the Khutbah via social media.

We could also transcend language barriers by leveraging IT for simultaneous translation, which in turn would keep our increasingly multi-lingual Jam’ah engaged, involved and learned.

Learning From Early Islamic Architecture

Our vision of “reconstructing” mosques is not something new. Mosques were not just places of worship, but they were, and still are in many parts of the world, social, cultural and spiritual centres of their communities. If one analyses the mosques in Europe, particularly in Turkey and Spain, one can witness how the architecture was indeed designed for such integration. For example, during the reign of the Ottoman Empire between 1299 and 1437 A.D., the Ottomans integrated mosques into the community and added soup kitchens, theological schools, hospitals and even baths. The Selimiye Mosque in Turkey comprises a madrasah, an Al-Hadith school, a timekeeper’s room and interestingly, a row of shops doing small businesses as well.

Singapore certainly lacks the luxury of space and vast land that Europe is abundantly endowed with. While physical space might be a premium in Singapore, the challenge is to find more innovative ways to use the space we have, to benefit our communities.

Potential Issues

The main issue associated with implementing this is the issue about mosques potentially becoming sites of business as opposed to spiritual places. After all, the Quran has a very stern warning for those who are avaricious:

As Muslims, corporate social responsibility is inbuilt into our business code (Hussein

“

They who hoard up gold and silver and spend it not in the way of God, unto them give tidings of a painful doom”

- Quran 9:34

}

Elsagar, Islamic Finance: Basic Concepts and Issues, 2014). The spaces that mosques would be leasing out would certainly have to exclude anything that is forbidden or haram in Islam. As beneficiaries, those utilising the space would have to contribute back to the mosque either financially, or by undertaking voluntary work, over and on top of any zakat contributions. This would provide an ideal platform for Muslim youth to lead social enterprise projects, and become role models for their community in terms of creating value addition to mosque spaces.

Islam highly regards and celebrates ‘muamalat’ and, further, places immense importance on being economically viable by staying employed. One is blessed indeed if one creates jobs for others. Islam celebrates and elevates anyone who is gainfully employed to the level of ‘Ibadah’ or worship. Surat al Ya-sin and Surat Al-Jummah beautifully elaborate the merits of being socially and economically viable, and also impress upon Muslims the importance of the proper etiquette and ‘akhlaq’ (conduct) of doing business.

“**paying the due emoluments to the employee before the sweat dries from his skin”** } The well-known saying of Prophet Mohammed (pbuh) on “paying the due emoluments to the employee before the sweat dries from his skin” demonstrates the profundity and emphasis on not just the importance of working, but also on the ethics thereof. Islam thus gives us the liberty of creating space that can be used for spiritual, religious, intellectual, social and now commercial discourse as well.

There will also be initial teething problems, such as adjusting to noise levels, managing expectations of all stakeholders and respecting the uniqueness of the mosque as truly a social space in addition to being a place of worship. There could be hesitations about opening up such working spaces for non-Muslims, but these are only matters of perspectives, which can be alleviated over time and with education.

This proposal presents a great opportunity to use the marketplace to welcome non-Muslims to understand Islam better, and to foster peaceful co-existence on a deeper, personal level. It shows a different side of Islam that is often overlooked in mass media; a broader economic and spiritual perspective that shows the value Islam places on honest rewards for ethical businesses, as well as the deep wisdom in practices such as prayers being made in silence only during Zohor and Asar in order to minimise interruption in the day.

Statistically Speaking

The latest reports from the Department of Statistics (2015) showed that the Malay community’s Total Fertility Rate (TFR) stood at 1.73 versus the national average of 1.25. Statistically, the Malay ethnic group form a larger proportion of the youth today than they did even ten years ago.

Another interesting statistic is the Citizen Old Age Support Ratio (COASR), which was 13.5:1 (13.5 adults supporting one 65 years old adult) in 1970s and now stands at 4.9:1 on the national level (DoS 2015). If we look at this group’s ethnic data, we arrive at the table as shown:

| | Working adults between 20-64 | No. of Citizens 65 and above | COASR |
|----------|---------------------------------|---------------------------------|--------|
| National | • 2,170,000 | • 440,000 | • 4.93 |
| Malay | • 323,000 | • 38,600 | • 8.36 |

These findings show that the COASR for the Malay community is almost double that of Singapore’s 4.96. (National Population and Talent Division, 2015). When put together, these statistics reveal some pressing issues and great opportunities that could be harnessed for the betterment of the community. As the proportion of Malay/ Muslims in the population grows, the responsibility to nurture and develop this burgeoning pool becomes greater on the government and its agencies. It also means that more young Malays are entering the workforce and supporting their aged relatives. While it is projected that amongst other communities, the COASR can go as low as 2 in 2030, the Malay community continues to maintain a healthy figure that could become a showcase of stability and social awareness. Thus, it becomes imperative and urgent that we keep this momentum going in the Malay/ Muslim community and enable them to move up the value chain in the marketplace.

Improving social mobility of the youth via our proposal to diversify the use of mosque space could bring important benefits for the wider community.

3 E's – Empowerment, Entrepreneurship and Examples

- Uber is in the transport business but they do not own a single car.
- Ebay and Alibaba are two of the biggest e-commerce marketplaces in the world but they do not produce any goods.
- AirBnB is in the holiday accommodation business, yet it too does not even own as much as a hotel reception desk.
- The digital world is creating waves in redefining the ecosystem of commerce and fund-flow.

Market participants both welcome and eschew the advent of disruptive technologies. The pace and advancement on one hand can appear to be menacing but it is also exciting at the same time. Instead of reacting fearfully to the “known unknown” that the digital revolution may throw at us, we Muslims should proactively leverage on these platforms to our advantage. Maximising mosque spaces for value-added and shariah-compliant economic activities, is only the tip of the iceberg. We hope this change continues to reverberate throughout our community and infuse a sense of zeal in youth with support from various non-profit organisations and government agencies.

Empowering Youth

Currently many community based programs are administered through organs such as Ministry of Culture, Community and Youth (MCCY), Majlis Ugama Islam Singapura (MUIS), Yayasan Mendaki and Singapore Indian Development Association (SINDA), amongst others, who are sometimes challenged to find the right partners to execute on the ground. This more often than not requires significant deployment of resources and leads to micro-management, especially when significant sums of money are involved.

One consideration would be to harness the energy, enthusiasm and engagement amongst youth by providing accreditation to their work through these bodies, instead of taking direct ownership of the project. For example, these organisations could call for proposals for such projects as long as an individual or group of individuals and funds can be disbursed progressively based on submission of status reports or completion of key project milestones. Such an approach will enable organisations, looking to fund humanitarian work, to tap on a pool of resources not leveraged on before.

Youths also stand to benefit through this approach as many of them may be on the fringe and not part of any structured organisations or enterprises, but nonetheless be keen to learn how to run social programs. Our proposed strategy will enable us to harness the talent and skills of youths, plugging them into the organisational and funding framework

to facilitate their projects' success. The decoupling of the current form of institutionalised social and humanitarian work will increase the participation rate of youths. Such formats can empower them, and accelerate their involvement in the community. Islam and our community will promote the concept of being blessings to all instead of just working in silo within our community. Organisations like Mendaki, MUIS and others serving the ummah would greatly benefit from harnessing this energy.

Conclusion

In conclusion, we hope to see both the space we use, and the services we offer, not only confined to traditional functions of mosques during Ramadhan or the Eidul Adha period. Instead, we can work towards being inclusive and radiating the true message of Islam - of tolerance, living harmoniously with others, and being entrepreneurial and contributing community. Our community could thereby produce thought and business leaders capable of standing on the world stage and being true Rahmatalil Aaalam.

“

Dunia terasa semakin
mengecil dan rentak
kehidupan semakin
bergelora dan berputar
pantas.



Bagai Air Murni Mengalir atau Buih Hanyut:

Cabaran, Keindahan dan Keunggulan Kesusasteraan Asia Tenggara

By Hadijah Rahmat

Asia Tenggara dan dunia umumnya memasuki abad ke-21 dengan penuh harapan dan kemungkinan. Lanskap kehidupan telah bertukar. Dunia terasa semakin mengecil dan rentak kehidupan semakin bergelora dan berputar pantas. Abad ke-21 ini menjanjikan pelbagai kemungkinan dalam semua bidang kehidupan. Negara-negara Asia Tenggara dan komuniti sasteranya sedang meniti arus perubahan yang besar. Latar penulis, corak, bentuk, wadah, media, khlayak dan sekitaran sastera sedang mengalami proses transformasi yang hebat. Berbagai cabaran sedang diharungi dan perlu ditangani dengan cekap lagi bijaksana untuk memastikan bahawa sastera dalam bahasa Melayu/Indonesia dapat terus berfungsi dengan baik dan berkesan; supaya pencapaian dan kedudukan sastera Nusantara mampu mencapai tahap mutu tinggi, serta dapat menyumbang secara aktif dan berpengaruh dalam pembinaan sastera dunia dan kesejahteraan kemanusiaan sejagat.

Cabaran

Kesusasteraan Asia Tenggara, sedang mengharungi banyak cabaran. Kertas ini hanya memberi perhatian pada lima cabaran utama:

1. Cabaran teknologi informasi dan komunikasi (ICT)
2. Cabaran minda
3. Cabaran kreativiti rentas media
4. Cabaran identiti
5. Cabaran arus songsang

Cabaran Teknologi Informasi Dan Komunikasi (ICT)

Teknologi informasi dan komunikasi (Information and communication technology-ICT) telah menjadi acuan dan mewarnai kehidupan kita. Berlaku paradigma dari segi cara perhubungan dan maklumat disalurkan sehingga menukar cara hidup manusia sejak internet digunakan secara meluas pada tahun 1990-an. Fungsi dan kesan teknologi perhubungan ini dijangka lebih radikal lagi dengan berleluasanya generasi ‘digital natives’ di merata dunia yang sudah amat mesra dan sehati dengan komputer sejak lahir. Ini ditambah dengan perancangan negara-negara yang mahu memanfaatkan teknologi dalam pentadbiran negeri dan pengurusan rakyat. Misalnya, Singapura merancang untuk melahirkan ‘negara bijak’ (smart nation), dan mahu menggalakkan ‘budaya mencipta dan membina’ (‘a culture of creating and building’).¹ Kementerian Pendidikan Singapura (MOE) memberi tumpuan yang besar dari segi teknologi ICT ini dengan memperkenalkan “ICT Masterplan (MP) in Education” sejak 1997 secara bertahap-tahap. Bermula dari Tahap 1(MP1), hinggalah kini pada tahap MP4. Visi MP4 adalah untuk menyediakan anak-anak Singapura untuk menjadi pelajar yang bersedia pada masa depan dan menjadi warga digital yang bertanggungjawab.² Faktor ICT ini juga telah dikenalpasti oleh Institut Pendidikan Nasional (NIE) dan diterapkan dalam sebuah Kerangka Pengajaran dan Pembelajaran khas (NIE Teaching & Learning Frameworks) khas untuk melatih dan menghasilkan para pendidik (educators) abad ke-21.³ Visi ICT nasional Singapura ini disokong sehinggalah pada peringkat pengajian di universiti. Universiti Teknologi Nanyang (NTU), misalnya, mempunyai program pendidikannya (NTU Education) untuk menghasilkan para graduan, bakal pemimpin masa depan yang menguasai teknologi, inovatif dan mempunyai tanggungjawab sosial serta berpengaruh di luar Singapura, Asia dan seterusnya.

¹Ibid. <http://www.ida.gov.sg/>

²Lihat ETD, MOE, nota ppt 4th Masterplan for ICT in Education (mp4) Sharing with NIE Office of Teacher Education pada 24 Ogos 2015.

³Lihat Nota pembentangan Professor Paul Teng, Principal Officer NIE, semasa Appointment Holders Retreat pada 24 Julai 2015 di Jen Hotel.

Jelas, bahawa pada tahap negara, Singapura melalui institusi pemerintah dan bukan pemerintah sudah menyiapkan kerangka (framework) besar untuk unsur ICT ini, dan kini dalam proses pelaksanaannya.

Cabaran Minda

Berbanding cabaran teknologi, cabaran yang lebih menggugat ialah dari segi minda atau pemikiran. Menurut Howard Garner (2006), tokoh pemikir tersohor kini, landskap abad ke-21 ini menyebabkan cara pemikiran dan pendidikan lama tidak lagi relevan atau sesuai. Howard Garner telah mengenalpasti lima jenis minda untuk menyediakan generasi masa depan:

1. Minda berdisiplin (Disciplined mind).
2. Minda menggabungkan (Synthesizing mind).
3. Minda mencipta (Creating mind).
4. Minda menghormati (Respectful mind).
5. Minda beretika (Ethical mind).

Lima jenis minda ini amat penting dalam semua bidang kehidupan termasuk bidang sastera. Para penulis haruslah mempunyai 5 ciri tersebut, khususnya ‘minda sintesis’ dan ‘minda mencipta’ (creating mind).

Sastera Sebagai Obor Pencerah Masyarakat

Sepanjang sejarah penjajahan ini, kita menyaksikan kebangkitan suara para penulis, sasterawan yang cuba membangkitkan rasa kesedaran masyarakat terhadap nasib malang yang menimpa bangsa dan negara. Ini bermula dari Munsyi Abdullah, Tuan Simi, Raden Adjeng Kartini, Amir Hamzah, Sutan Takdir Alisbana, Harun Aminurashid, Chairil Anwar, Pramoedya Ananta Toer, Muhd Ariff Ahmad, Masuri SN. dan ramai lagi. Para penulis nusantara ini telah berperanan sebagai obor pencerah masyarakat.



Gerakan bahasa dan sastera Melayu/Indonesia moden sejauh ini telah memperlihatkan daya kesedaran para bahasawan atau sasterawan kita untuk memajukan dan mengangkat martabat bangsa atau peradapannya melalui saluran bahasa dan sastera.



Pada umumnya para sasterawan Nusantara menganggap sastera sebagai alat penting dalam pembinaan moral dan jiwa masyarakat. Gerakan bahasa dan sastera Melayu/Indonesia moden sejauh ini telah memperlihatkan daya kesedaran para bahasawan atau sasterawan kita untuk memajukan dan mengangkat martabat bangsa atau peradapannya melalui saluran bahasa dan sastera. Mereka memperlihatkan sikap

keterbukaan dan kesediaan mereka untuk terus mempelajari bahasa-bahasa baru dan teknologi maklumat dan perhubungan, serta ilmu-ilmu baru yang diperkenalkan melalui bahasa dan teknologi baru (minda disiplin). Sumber ilmu tidak terbatas pada dunia Islam, malah dari tamadun barat.

Selain Munsyi Abdullah, Raden Adjeng Kartini adalah tokoh Jawa yang telah memanfaatkan ilmu dari Barat untuk memajukan bangsa dan negara. Abdullah dan Kartini adalah pemikir, modernis nusantara telah memanfaatkan berbagai sumber ilmu (Barat & Timur) dalam diri & karya mereka. Minda rintis mereka telah diteruskan oleh penulis pemikir nusantara yang lain.

Pada tahun 1930-an, misalnya Angkatan Pujangga Baru di bawah pimpinan Sutan Takdir Alisjahbana, telah melahirkan semangat baru untuk memajukan masyarakat Indonesia. Konsep seni yang dipegang oleh Angkatan Pujangga Baru ialah

“

Seni itulah penggerak Semangat baru, pembantu bangsa dalam perjalanan ke arah kebesaran dan kemuliaan”.

”

Cabaran Kreativiti Rentas Media

Dengan perubahan wadah atau media sastera, bentuk, corak kreativiti dan estetika juga berubah sesuai dengan citarasa baru penulis dan khalayak sastera. Penekanan juga bukan lagi dalam satu bentuk, tetapi berbagai corak atau genre (multi-modal) dan bersifat lentur dan saling mempengaruhi (seamless) serta mudah menjangkau (accessibility) khalayak yang lebih luas; merentas batas geografi, masa (anywhere, anytime). Sastera rentas media adalah suatu fenomena baru yang perlu diberi perhatian. Sastera rentas media dari segi bahasa, yakni terjemahan dari satu bahasa ke bahasa; dari bahasa daerah ke bahasa nasional; dari karya sastera dalam aksara lama kepada aksara rumi moden yang digunakan di negara-negara MASTERA, serta juga dari karya sastera ke bentuk braille.

Kepelbagaian Bahasa

kita perlu memperkenalkan dan meluaskan khalayak dan impak sastera kita, tidak lagi terbatas dalam tempurung wilayah lama. Selain menulis dalam bahasa Melayu, kita juga harus menerima dan menghargai golongan penulis muda yang lebih selesa menulis mengenai masyarakat Melayu dan kebudayaan Melayu dalam bahasa Inggeris atau bahasa-bahasa dunia yang lain. Kepelbagaian bahasa ini adalah sesuatu yang tidak dapat dielakkan

bahkan wajar dianggap sebagai suatu langkah pengluasan kebudayaan Melayu. Pada masa yang sama, kita harus berusaha untuk memastikan supaya ada jumlah penulis yang cukup besar untuk terus menulis dalam bahasa Melayu yang bermutu. Di samping itu, kita perlu menggalakkan pula penulis dalam dwibahasa atau dalam aneka atau pelbagai bahasa.

Golongan yang dilupakan

Kita juga perlu melahirkan karya sastera untuk golongan istimewa seperti orang-orang yang cacat anggota dan anak-anak istimewa. Golongan ini telah lama dilupakan dan mereka tidak berpeluang menikmati karya-karya sastera dalam bahasa Melayu. Kita perlu melahirkan sekumpulan penulis yang pakar untuk menulis, mengalih huruf, atau menterjemahkan sesuatu karya untuk golongan ini. Misalnya, kanak-kanak 'down syndrome' memerlukan pendekatan penulisan yang berbeza mengikut tahap pembangunan kecerdasan (intelligence) mereka.⁴

Cabaran Identiti - Antara Kesatuan Dengan Kepelbagaian

Kepelbagaian Identiti

Perjuangan sasterawan nusantara bukan hanya dalam medan teknologi, minda dan daya kreativiti. Yang lebih dasar lagi ialah apakah identiti dalam karya ciptaan baru atau produk sastera yang ingin dibentuk dan dimiliki, kesan atau pengaruh yang ingin dihasilkan pada khalayak sastera dan masyarakat umumnya. Adakah karya-karya sastera baru ini akan mencerminkan dan mengukuhkan jati diri atau identiti bangsa, budaya, sosial, nasional, rumpun nusantara, kota metropolitan atau warga global atau identiti diri individu yang terasing?

Identiti Negara dan Budaya Serumpun

Selama ini, persamaan bangsa, budaya, agama dan sejarah di bawah penjajahan Barat telah menjadi faktor penyatu dan menjadi sebahagian penanda atau ciri bersama (common identity marker) dalam pembentukan identiti sastera nusantara. Malah, kita menyaksikan banyak karya besar dari negara nusantara yang lain menjadi rujukan dan nara sumber untuk seseorang pembaca mengenal akar sejarah budaya dan pembentukan jati diri bangsa dan budaya serumpun, walaupun di bawah sempadan politik yang berbeza. Kita boleh bangga menjadi rakyat Singapura yang pelbagai budaya dan agama dan pada masa yang sama menyayangi warisan budaya nusantara yang kaya dan unik dan menjunjung agama Islam. Akar budaya Nusantara telah mengukuhkan jati diri nasional saya sebagai warga negara Singapura yang berbagai bahasa, budaya dan agama.

⁴Idea ini tercetus apabila berbual dengan seorang ibu yang melahirkan kesukaran yang dialami untuk mendapatkan bahan bacaan dalam bahasa Melayu yang sesuai untuk anaknya yang merupakan kanak-kanak istimewa. Saya menyarankan agar beliau cuba menghasilkan bahan bacaan untuk anak-nya sendiri kerana ibu ini juga seorang guru.

Sungai Jatidiri

Kesimpulannya, unsur-unsur yang membina identiti seseorang atau sesebuah negara adalah berlapis dan kompleks, seperti sebatang sungai yang mempunyai pelbagai anak sungai. Setiap anak sungainya menyumbang pada corak dan mutu aliran sungai tersebut. Nilai air sungai yang terbentuk hasil pertemuan anak-anak sungai umumnya akan lebih rencam, kaya dan unik dibandingkan dengan sungai-sungai yang lain. Demikianlah sungai jatidiri saya, yang menjadi kaya dan unik kerana pengaruh anak-anak sungai dalam negeri, dari rantau dan juga di luar rantau kerana pendedahan pendidikan dan pengalaman di Asia Tenggara.⁵

Cabaran Arus Songsang (Alternatif)

Cabaran terakhir ingin dibicarakan ialah kebangkitan dan pengluasan sastera yang mengangkat nilai dan gaya hidup yang menolak atau menentang nilai-nilai dan cara hidup atau budaya konvensional, atau tamadun yang dipegang selama ini oleh masyarakat Asia Tenggara dan juga dalam amalan tamadun dunia yang utama.

Misalnya, nilai-nilai dan bentuk konvensional keluarga, telah dicabar oleh golongan LGBT dan mahu digantikan dengan konsep keluarga baru, yang tidak berasaskan jalinan pasangan suami dan isteri yang diterima oleh agama, yang dikatakan lebih 'liberal dan humane'. Yang membimbangkan, nilai-nilai songsang ini telah disasterakan dengan kreatif dan berkesan, sehingga gaya hidup baru itu berjaya digambarkan sebagai sesuatu yang memang fitrah atau 'natural' dalam kehidupan keluarga dan masyarakat sekitaran. Apa yang lebih mengkhawatirkan ialah sastera songsang ini sudahpun menyelalap dan berkembang dalam sastera untuk kanak-kanak, tanpa mungkin disedari oleh para ibubapa dan pendidik sendiri. Yang lebih parah lagi ialah sastera jenis ini mendapat sokongan golongan masyarakat (social group) yang kononnya ingin memperjuangkan hak dan kebebasan manusia (human right group) atau golongan yang mahu bersifat 'inklusif'. Sokongan yang mereka terima amat kuat sehingga golongan konservatif yang mahu mempertahankan gaya hidup konvensional kelihatan seperti golongan yang 'bersalah' dan hanya boleh mendiamkan diri. Sekedar contoh, buku *The Misadventures of the Family Flether* oleh Dana Alison Levy. Buku ini mendapat ulasan yang amat baik di Amerika Syarikat dan dinilai sebagai 'perfect book for children'.

Sepintas lalu, buku ini memang kelihatan baik dan bermutu, jika dilihat dari nilai estetika dan mesej luaran yang disampaikan. Ia mengandungi nilai sastera dan estetika yang baik kerana menyeronokkan, menarik dan memikat (Fun, interesting, engaging) kerana penulisnya, Levy seorang pencerita yang hebat (great story-teller). Mesej luaran yang ingin disampaikan ialah nilai yang menggalakkan nilai 'keluarga' dan nilai sejagat antra pelbagai agama dan budaya dalam latar yang moden.

⁵Analogi 'sungai' ini dicetuskan oleh Menteri Pendidikan Singapura (MOE), Encik Heng Swee Kiat, dalam ucapannya semasa Simposium Bahasa Ibunda (MTLS 2015) anjuran MOE, pada 29 Ogos 2015, Suntex Convention Centre. Penulis ingin merakam penghargaan kepada beliau kerana mengilhamkan symbol ini.

Namun begitu, buku ini mencabar dan menggugat konsep keluarga tradisional yang murni berasaskan hubungan sah antara lelaki dan wanita. Falsafah dan nilai yang tersirat dalam buku ini ialah adalah wajar atau patut untuk keluarga mempunyai kedua waris/ibubapa daripada pasangan sejenis. Pasangan sejenis ini boleh juga menjadi ibubapa yang penyayang dan berkesan, seperti keluarga lain yang normal. Buku ini menggalakkan kehidupan keluarga yang songsang, sebagai pilihan hidup berkeluarga. Ciri kreativiti dalam buku ini ternyata dapat ‘mengabui’ pembaca terhadap nilai pemikiran atau minda songsang yang diterapkannya.

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Allah telah menurunkan air (hujan) dari langit, maka mengalirlah air di lembah-lembah menurut ukurannya, maka arus itu membawa buih yg mengembang. Dan dari apa (logam) yg mereka lebur dalam api utk membuat perhiasan atau alat-alat, ada (pula) buihnya seperti buih arus itu. Demikianlah Allah membuat perumpamaan (bagi) yang benar dan yang batil.



Penutup - Air Murni Mengalir Atau Buih Hanyut

Sebelum menutup, marilah kita renungi sebuah metafora yang terdapat dalam Al-Quran, al-Quran Surah 13:17 (Ar-Ra'd/Guruh) untuk memerikan nilai ‘kebenaran dan kebatilan’.

Kebenaran diibaratkan seperti ‘air murni yang mengalir’ memberi kehidupan pada manusia dan hidupan di lembah atau di bumi Allah. Ia berbeza dengan buih-buih yang dibawa oleh arus air mengalir, mengembang dan hanyut di atas, tetapi tidak memberi nilai pada kehidupan yang murni dan abadi. Kalimah Allah ini juga memberi contoh satu lagi buih yang berasal dari logam yang dibakar. Buih jenis ini juga sama nilainya dengan buih dari arus air tadi - hanya melambangkan kebatilan!

Sastera ‘Air murni mengalir’ adalah sastera yang mengandungi kebenaran, kemurniaan, kekuatan minda dan jiwa, keutuhan identiti, keindahan yang diterima oleh nilai dan falsafah agama dan budaya murni Asia Tenggara; atau hanya sastera yang mengikut arus perdana, arus popular (yang banyak jumlah ‘like’ dan ‘views’ serta menjadi ‘viral’), arus teknologi, arus pemikiran dan cara hidup songsang, yang kelihatan tinggi mengapung di mata tetapi, sebenarnya kosong, hampas dan penuh kebatilan.

Semoga kesusasteraan Asia Tenggara, sastera nusantara, sastera kita yang kita cintai ini dapat terus diilhamkan dari langit tinggi, turun mencurah sebagai hujan rahmat, mengalir jernih di muka bumi, di seluruh pelosok alam seagat ini, sebagai aliran sungai murni yang tenang meluncur, yakin, tanpa sekatan, tanpa sendatan, membasahi, menyuburkan, membijaksakan setiap insan tidak kira latar kepercayaan, budaya, bangsa dan negara, supaya dapat mereka menikmati kehidupan, kemanusiaan dan keindahan yang lebih kekal dan diredhai. Insya-Allah.

Note: This is an abridged version of a paper presented at the SAKAT seminar held from 7 to 8 September 2015 at Hotel Jen, Singapore

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The taskforce has also generated two plausible scenarios, meant to indicate challenging combinations of circumstances that the community may have to grapple with.



A Brief Discussion on the Current Challenges and Future Scenario of the Malay/Muslim Community¹

Extracted from “Community Leaders’ Forum (CLF) Forward Planning Exercise 2010”

In the first quarter of 2009, a taskforce to look into the current challenges and future scenarios of the Malay/Muslim community was convened. After several months of intensive discussions, a projected outlook to the year 2020 concerning the Malay/Muslim community was conceived. Accompanying a report on the current socio-economic health of the community, the taskforce has also generated two plausible scenarios, meant to indicate challenging combinations of circumstances that the community may have to grapple with. Perhaps, from the lens of community leadership, it will be useful to discuss the two scenarios in summary and make plausible snapshots of the community in the year 2020.

¹Adapted from “Current Challenges and Future Scenarios”, a report on the Malay/Muslim Community (July 2009, Unpublished) by Taskforce Team

Current State of Community

Overall, the Singapore Malay/Muslim community has made continued progress over the past 10 years, seen most clearly in an upward trend of various educational indicators. For instance, the percentage of the Primary One (P1) cohort admitted into post-secondary education has risen markedly (62.6% in 1998 to 83.5% in 2007)². A similar increase was also reported for admissions into tertiary institutions (polytechnics or universities) – up from 1.3% in 1980 to 39.5% in 2008³. There has also been an improvement in the education profile of the Malay/Muslim workforce (i.e. Malays with postsecondary education increased from 17.8% in 2000 to 24.9% in 2005⁴).

Similar upward trends are also noticed in the economic indicators. Progress has been made in employment, with Malay workers experiencing upward mobility in their occupational profiles. In 1980, only 7.2% of Malays were holding administrative, managerial, professional and technical-related jobs. This increased to 28.4% in 2008⁵.

While it may be too early for definitive conclusions, community efforts in the past five years to address family issues appear to have had some initial successes. Marriages involving minors have been on a downward trend since 2005. There has been a 29% decrease in marriages involving minors between 2003 and 2008, from 633 to 452⁶. The number of Muslim divorces has also fallen from 1,747 in 2007 to 1,697 in 2008.

Nevertheless, several challenges remain. On the education front, 32% of the Malay/Muslim P1 cohort of 2007 was in the Ministry of Education (MOE)'s learning support programme⁷, and only about six in 10 Malay students in each cohort passed their PSLE Maths. The rate of improvement in education indicators also seems to have reached a plateau over the past few years. It is observed that:

1. The percentage of Malay students eligible for secondary education remains the lowest when compared to other ethnic groups. In fact, there was an apparent dip since 2004, from 94.4% to 91.2% in 2008⁸. Correspondingly, the percentage of Malay students not eligible for secondary education has risen since 2004, from 6.5% to 8.8% in 2008⁹, making it a highly over-represented group when compared to other ethnicities.
2. Among students who are eligible for secondary education, the percentage of Malay students in the Normal Academic/Technical streams remains higher, compared to other ethnic groups.

²Source: Ministry of Education

³Source: Ministry of Education

⁴MENDAKI Policy Digest 2007, pg 20

⁵Department of Statistics

⁶Source: Speech by Dr Yaacob Ibrahim in Parliament on 11 February 2009

⁷Source: Berita Harian, 21 February 2007, "Ramai Anak Melayu Tidak Hadiri PraSekolah" & Ministry of Education Press Release, 14 December 2007, quoted in CLF Report 2008, pg 10

⁸Source: Ministry of Education

⁹Source: Ministry of Education

3. The percentage of GCE 'N' Level Malay students eligible for Secondary Five has dipped gradually from 64.3% in 2004 to 62.9% in 2008¹⁰, and remains the lowest when compared to other ethnic groups.
4. The GCE 'O' Level results of Malay students for English, Maths and Science have either seen a gradual decline or have reached a plateau. The percentage of Malay students with at least five GCE 'O' passes has dropped from 59.3% in 2004 to 58.3% in 2008¹¹, the lowest among the various ethnic groups.

In terms of family and social indicators such as teenage pregnancies, early marriages and divorces, these remain high in the Malay/Muslim community relative to national averages, as are the rates of youth delinquency. For example:

1. Minor Marriages: In 2005, 13% of all Malay brides were aged 20 years and below, compared to 5% of all brides aged 20 years and below under the Women's Charter¹².
2. Early Divorces: In 2007, 33% (578) of 1,746 Muslim divorces comprised those who were married for less than five years, compared to 13% of all divorces under the Women's Charter¹³.
3. Teenage Births: In 2005, there were 11 Malay teenage births per 1,000 Malay female residents, as compared to the national average of three teenage births per 1,000 female residents¹⁴.

In terms of **household incomes**, two-thirds of Malay households have incomes less than the national median of \$3,830¹⁵. Other notable characteristics of the Malay/Muslim community include the higher proportion of **single income households** (and correspondingly higher proportion of stay-at-home mothers – i.e. 53.6% of all married Malay women between ages of 20 and 59 years are not working¹⁶); relatively **higher youth base** where as at June 2008, 33% of Malays are in the 0 - 19 years age group¹⁷; as well as **higher total fertility rate** (1.9 births per woman, compared to the national Total Fertility Rate [TFR] of 1.25¹⁸). The relatively higher TFR and youth base implies that the Malay/Muslim community will age less quickly relative to the other communities. It is worth noting that the relatively lower rate of **workforce participation** among Malay women represents a possible untapped potential for the community. Similarly, the high youth base also represents greater economic potential for the community over the next 10 - 20 years, as this group starts to enter the workforce.

¹⁰Source: Ministry of Education

¹¹Source: Ministry of Education

¹²Source: Statistics on Marriages and Divorces

¹³Source: Statistics on Marriages and Divorces

¹⁴Source: Department of Statistics

¹⁵Source: Department of Statistics, as quoted in MENDAKI Policy Digest 2007, pg 19

¹⁶Source: MENDAKI Policy Digest 2006, pg 30-50

¹⁷Department of Statistics

¹⁸Department of Statistics

There also appears to be a trend of relatively **lower financial prudence** within the community. Despite having lower average household incomes, statistics indicate that the Malay community ranks high in the list in terms of car ownership, cable TV subscription and ownership of entertainment systems. Anecdotal evidence also indicates a higher proportion of Malays who subscribe to hire-purchase schemes and seek financial assistance at Community Development Councils (CDCs).

Such trends might have implications in terms of the savings rates of the community, and thus, the ability of the community to deal with shocks such as a prolonged recession. In addition, there might be concerns if such financial prudence means reduced investments in education.

Summary of Two Scenarios of the Malay/Muslim Community in 2020

A Tale of Two Communities

In the first scenario, the economic downturn is pictured to sustain till 2012. In such an economic climate, security of present jobs and availability of new jobs remains bleak. A concoction of factors such as low educational attainment, concentration in manufacturing and labour-intensive industries, as well as low participation in retraining initiatives makes the Malay/Muslim workforce most vulnerable to redundancies and lay-offs. A younger population base would also mean that a bulk of the community is dependent on financial and care-giving resources. The median income of Malay households in 2005 showed a lag of \$1000 when contrasted against the national median figures, and this gap has been projected to widen even further. The Malay/Muslim community in 2020 hence is anticipated to be visibly divided along the lines of the 'have-a-little' and the 'have-nots'.

At the household level, due to greater budgeting challenges as a result of wage-cuts and layoffs, spending towards perceived non-immediate needs – such as personal upgrading and children's education – is reduced. For severely affected families, resorting to survival measures becomes the norm, at the expense of mounting tensions within the family. Divorce thus becomes the most convenient way out for quarrelling couples. Children affected by crisis in the family eventually turn to the Internet for escape. The older ones, on the other hand, get associated with gangs that are always ready to take them in as one of their 'brothers' or 'sisters'.

For those who have broken into the ranks of middle management prior to the crisis, they continue to turn to credit to maintain their affluent lifestyles, despite signs that the economic downturn will affect the full spectrum of the workforce. Over-extended credit slowly strangles the family with multiple bad debts and threats of bankruptcy. While a segment of the community promotes an inward appreciation of life to mitigate life stresses, at the other extreme, another segment visibly demonstrates a resignation to what is perceived as an unjust worldly life.

This first scenario paints a picture of one possible extreme. It is a bleak picture that could confront the community when we meet again in 2020. Throughout the decade till 2020, the long-standing issues of community underdevelopment, family instability, youth delinquency, school drop-outs and unskilled workforce continue to plague the files of community

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Throughout the decade till 2020, the long-standing issues of community underdevelopment, family instability, youth delinquency, school drop-outs and unskilled workforce continue to plague the files of community leadership.



leadership. These problems are compounded further with additional challenges that are fast becoming too overwhelming to be resolved. While the situation of underdevelopment within the majority of the community worsens; at the other extreme, the professionals and creative entrepreneurs are riding the waves towards higher successes, forming a ‘runaway’ segment that are detached from the rest of the community. In this scenario, the community is seen to be attaining mobility in opposing directions. On one extreme, a large segment slips further down the social mobility ladder while on the other, the more successful are fast catching up with the top quintile of income earners nationally.

Slivers of Silver

The other scenario, *Slivers of Silver*, opens on a hopeful note with the global economy approaching slow and steady recovery by 2010. With the effects of the downturn contained, the efforts to facilitate those affected go into full-swing. With the ‘many helping hands’ and ‘wrap around care’ support by social service agencies at national and community levels, those floored by the recession are beginning to stand up again on their own two feet.

At the lower-income segments of the workforce, the aftermath of the economic crisis has brought about the piling of arrears as affected families attempt to cope with their limited financial resources. At the other extreme – armed with good education, awareness of risks and readiness to seize opportunities – a small pool of emerging young professionals continue to perform well. These Professionals, Managers, Executives and Technicians (PMETs) – who have seized the opportunity to upgrade themselves during the recession – are fast exploring windows of opportunities locally and within the region.

Although every segment of the community seems to be moving forward, those who are better-endowed educationally and financially, are moving at faster strides, leaving behind many who are still recovering. The rapid attainment of new-found personal social mobility is celebrated as a self-made success.

Social intervention strategies are bearing fruits and a greater realization of the importance of lifelong learning, quality education and multiskilling has impacted the community at every level. With the realities of a rapidly changing economic cycle and the wave of information and technological globalisation emerging as the most important lesson from the economic crisis, those already on the PMETs track have gone on to push themselves further in the race; often without seeing the need to anchor their progress to the rest of the community.

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Through the various schemes available nationally and within the community that promote resilience, many of those affected by the economic downturn are bouncing back.



In the second scenario, Slivers of Silver, a brighter yet fuzzy picture of the community may be seen. The arrest of the deteriorating economy has contained the worst fears and gave the community hope to move forward. Through the various schemes available nationally and within the community that promote resilience, many of those affected by the economic downturn are bouncing

back. However, although the improving economic climate has allowed for every strata of the community to move forward, the speed of progress differs from amongst those who are struggling, those who are just having enough and those who are better- endowed. Come 2020, with the more successful members of the community consciously distancing themselves from being affiliated to the ‘Malay/Muslim Problem’ despite improvements in many frames of social indicators, Malay/Muslim community leaders now have to confront a depleting base of financial resources and expertise. In this scenario, when compared to indicators from earlier decades, every segment of the community may be said to have attained some degree of upward mobility. However, it is a situation where the gap between the ‘haves’ and the ‘have-nots’ continues to grow.

Envisioning Desired Change alongside Continuity

The summary from the two scenarios conceived by the taskforce represent extremes that may possibly take place, upon weighing various dynamic (such as the changing tide of the global economy) as well as regular factors (trends in community intervention strategies). While it is almost impossible to control the dynamic influences that impact the society, the responses and strategies to overcome challenges may be amended accordingly. This is where community leaders are most urgently needed to facilitate the capacity of the Malay/Muslim community to respond in ways that are most advantageous. However, before any prescription can be made, it is perhaps necessary to discuss aspects in the two scenarios that may be changed for the better. Alongside this, there is also a need to appraise the state of the community and set the baseline from which community leaders may launch further strategies towards achieving the envisioned Community of Excellence.

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Reliable air travel has allowed for people all over the world to almost ‘teleport’ from their home town to Singapore without the need to pass by larger land masses in the region.



The Navigation Map: Harnessing Awareness, Living Diversity

Extracted from “A Conscientized Generation – a retrospect of the Malay/Muslim community over the last decade & a projection of the way forward”

Singapore’s airport system today greets thousands of visitors by the hour. Reliable air travel has allowed for people all over the world to almost ‘teleport’ from their home town to Singapore without the need to pass by larger land masses in the region. Similarly, Singaporeans are now able to stop over land-locked places like Geneva, Switzerland as if it is an island. Air travel has made it possible to almost ignore geography. Perhaps, it is useful to reflect, how was it before the advent of air-travel which allows this ease of transit and transaction we enjoy today?

Unlike air-travel which allows for someone to have breakfast in Singapore, lunch in Manila, dinner in Jakarta and be back at home to rest for the night, a continuous journey by sea and land were the obvious options. For sea farers, distance and speed of the journey is highly dependent on the cruise from India to China would notify sea farers geographical features in the region when passing-by large land masses of Sumatra, Malaya, Java and Borneo. A few days or weeks stop-over at various ports of call within the region is a normal affair of a sea-farer’s journey. With every stopover is a moment of cultural exchange. Travellers

from east to west and vice versa would observe that from Kota Raja in Aceh, Pattani at the North of Malaya, to Melaka in Malaya, to Pekan Baru in Riau, to Singapura at the tip of Malaya, to Brunei in Borneo, to Palawan and the Southern Islands of today's Philippines, there are many similarities in practices and habits of living. At minimum, the presence of transit ports in the region poses as testimony of active maritime engagement within the region. Beyond that, these port-calls offer people of this region, the chance to learn and know intimately the cultural background of these travellers.

Singapore being geographically strategic was a favourite transit port. Amongst those who stopped by, many eventually move along on their journey. Records have shown that some stayed a little longer to draw up opportunities before moving on. Some others decided to call Singapura, already a haven for cultural diversity, home.

Learning from past heritages, and cultivating strong geographic imagination, it can be observed that in living diversity was strength for unity. This section presents excerpts of discussion on what was, what is and what can we be as a community in a global city-state of Singapore.

Three Cauldrons of Wisdom (Nusantara Melayu, Islam, National Development)

Singapore's geographical advantage at the heart of Maritime Southeast Asia (also known as the Malay Archipelago or Nusantara Melayu) has for centuries been acknowledged by many people of many generations across many regions. Singapore's coasts welcomed sojourners travelling through Maritime Southeast Asia which itself is strategically located at the intersection point of international trade route connecting China, Japan, Taiwan, Hong Kong, Korea and Australia in its east with Europe, Arabia, India and Africa in its west. As the southernmost tip of Malaya, Singapore connected Southeast Asia's maritime world with the rest of Southeast Asia and Indochina.

With the advancement of aviation and communication technology, Singapore's geographical advantage again allows seamless connectivity via air, land and sea to serve the needs of the business communities from the east and the west. It is important to note that particularly the process of Singapore becoming an aviation node in post WWII period did not only happen because of its strategic location. It was in the human capacity to appreciate the geographical advantage, institute carefully weighted design, decision making and governance that builds on the strengths of past administrations. At the same time developments were planned with a commitment to ensure that future generations will be able to further grow and enhance these developments.

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The third resides with our homeland; Singapore and her long history of development.



Three cauldrons of wisdom represent heritages that the Malay/Muslim Community in Singapore has at hand as sources of inspiration and aspiration. The first is a **shared heritage with Nusantara Melayu** at the heart of Maritime Southeast Asia where centuries of maritime tradition have exposed the MM community to diversity of practices, language and traditions beyond those

situated in the region. Second cauldron is represented by **virtues and values embedded in Muslim traditions over time and regions** eventually evolved into the Southeast Asian experience of Islam which gave emphasis to hospitality of guests, moderation, community spirit and embrace of diversity. The third resides with our homeland; **Singapore and her long history of development**. Sharing a long history within the Riau-Linga Sultanate, Singapore was eventually annexed to be part of British Straits Settlement for almost one hundred and forty years. Two years as a member of the Malaya-Borneo union of Malaysia has shaped her character and in the last 45 years as an independent, rapidly developing state, she has established a reputation as a valued partner with international groupings such as UN, NAM, APEC, Commonwealth, AOSIS and ASEAN.

Making sense of these heritages, traditions and values while locating them within the context of urban society, necessitates an appreciation of generational consciousness that makes our presence as a community and society in today's Singapore. The three cauldrons of wisdom offer Singapore's Malay/Muslim community a unique experience of historical affinity as well as information resources that can facilitate our participation in setting a new heritage for the future; a heritage of Global Citizenship.

Diversity in Common Destiny

The importance of creating and providing platforms for the expression and articulation of thoughts and ideas, particularly for the fringe groups embracing different subcultures, gender and religious orientations requires no further deliberation.

Singapore's multiculturalism is known for its celebration of racial and religious diversity. This can be seen every year on the day when students go to school in either their own or others' ethnic outfit to celebrate Racial Harmony Day. Early this year, Senior Minister Goh Chok Tong mentioned that Singapore is 'blessed' with religious diversity and harmony because of the different religious groups that are able to co-exist and engage in inter-faith dialogues. While such endeavors to live diversity is much applauded, the idea of diversity itself could perhaps be broadened and certain barriers expanded to include those fringe groups who are embracing different subcultures, gender and religious orientations.

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While we could argue that the former is a form of cultural borrowing and the latter a result of critical awareness, we cannot deny the common element that exists in both groups - the choice to believe in and to be part of something.



Within the small Malay/Muslim community, we have an entire complex of youth bloc comprising diverse pockets of different, at times conflicting, interest and advocacy groups. Each of these groups adhere to their own respective codes of conduct, sets of values, worldviews, perspectives and professing various issues and concerns of varying degrees. At one extreme, the younger ones who have immersed themselves into the hardcore subculture, for instance, would

have a different outlook towards life as compared to a matured youth who is active in, say, an established advocacy group within the industry attempting to promote an awareness of music and arts from the Nusantara. While we could argue that the former is a form of cultural borrowing and the latter a result of critical awareness, we cannot deny the common element that exists in both groups - the choice to believe in and to be part of something. Thus, before we could conveniently dismiss and relegate any of such groups further into the periphery due to their non-conformity to the ideals and values of the mainstream, it is only fair that such groups are equally given the space and platform for the expression and articulation of thoughts and ideas. This would allow for further growth of ideas as well as develop a mutual understanding between mainstream and fringe groups, with the hope that it will culminate into mutual cooperation and emergence of natural leadership amongst them.

With the ‘Rejuvenation of Citizen-Leader at Personal and Collective level’ set as a thrust, the presence of diversity requires more than affirmation and endorsement. It requires us to live and celebrate such potential. In living diversity, it is hoped that community leadership will flourish and be as diverse. Proposed by the Family WG as a strategy for consideration, “it is equally critical to harness statesmen/leaders in other industries such as finance, medicine, law, academia, sports, arts or music. It is highly strategic to develop and recognize this spectrum of leaders, not only to acknowledge and redefine alternative notions of success, but to promote greater inclusivity of the increased heterogeneous community of Malay individuals/family units.”

Dividend In Citizenry

In 1942 Lt Adnan bin Saidi and his forty-two strong platoon of the Malay Regiment stood firm in defense of Singapore. Giving up and surrender was never an option. Their sense of duty and their will to defend to this beloved ‘Tanah Air’ till the last drop of life represents emblems of courage, loyalty and citizenry. In 1958, Zubir Said, composed a song entitled ‘Majulah Singapura’. Written in the philosophy of ‘dimana bumi dipijak, disitu langit dijunjung’, the song encapsulated the call for citizens of Singapore to unite in a noble aspiration and strive for shared happiness. It is a song that has accompanied Singaporeans across generations and keeps us reminded of our sense of purpose as Singapore’s national anthem.

Two towering giants by the name of Ahmad Ibrahim graced Singapore's infant years. One was a brilliant "legal draftsman" and scholar of law, the other an active unionist and trustworthy political leader. When Singapore attained self-governance in 1959, the former was appointed Singapore's first State Advocate General and the latter the Minister for Health in the first Cabinet.

In 1930 Mawlana Abdul Aleem Siddiqui came to Singapore to share the beauty of Islam. As he taught, he learnt. While he strengthened the foundation for Singapore's Muslim community, his appreciation for diversity is exemplified in his life habits. Together with leaders of other faiths he founded the Inter-Religious Organisation (IRO) with the objective of promoting interreligious understanding; a principal virtue for this plural society.

The idea of pluralism would not have taken off had only the interests of men were addressed. The struggle for gender justice and presence in the public sphere has spurred women activists to assert their capacity to contribute towards nation building. Zahara Mohamed Noor through the Malay Women's Welfare Association (MWA) which she co-founded led for a couple of decades

since mid-1940s to several processes of educating society on the rights and position of women within it. Her firm stance against blindly accepting laws and rulings that disadvantage women set by authorities, particularly those associated with religious institutions inspired her generation to recognize the equality of women in society. Along other women leaders in her era, Zahara's persistence was instrumental in the eventual institutionalization of the women's charter in 1961.

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Her firm stance against blindly accepting laws and rulings that disadvantage women set by authorities, particularly those associated with religious institutions inspired her generation to recognize the equality of women in society.

Towers of intellectual endeavours whose shadows span beyond national boundaries can be seen in the intellectual pursuits of P. Ramlee and Professor Syed Hussein Alatas. Their works hold testimony that they were men of technique and sophistication. P. Ramlee's works were not only a demonstrative mastery of filmmaking; it is today presented as a huge corpus of social documentation used as reference in academic studies across a variety of fields.

In a different stride, Professor Alatas was a critical 'student of society' till his death. He observed society, learnt from it and provided analyses with the spirit of the Nusantara at heart. His contributions to Southeast Asian social sciences were tremendous. He created a passageway along with necessary tools for future students of society to think for itself while thinking of itself.

In a sea of jewels, it is almost impossible to identify which gem sparkle the brightest. The names above represent a handful of the many more individuals and groups that have dedicated their lives in service to others. The impact of their dedication left lasting trails of dividend for citizens to reap for many generations. The legacy they left behind symbolizes unwithering loyalty, profound statesmanship, benevolent humanity, unsurpassed creativity, progressive thought leadership and inspirational icons for the community. Their contributions form part of the Singapore's strong foundation that remains to be enjoyed today.

Perhaps, the most important lesson for the young is that in exercising their craft, these icons stood amongst the best of their time and their service transcends barriers of language, race, faith and place of birth. The next important lesson is perhaps less obvious. Through the course of their service journey it must be noted that there were the support, trust and commitment from their spouses, children, parents, community, partners, colleagues, friends and community which provided them the lasting opportunity to serve.

Indeed, it is acknowledged that amongst us today are many more living icons and many more that have contributed in many ways that improve the quality of life of fellow citizens. It is recognized that in our young, lie the potential for active citizenry. The challenge is for us to seed the love and concern for society in ourselves and in our young. As exemplified by our pioneers in their acts of citizenry which have cumulated a 'dividend' for this generation, it may not be too much to ask that we do the same or more for our future generations.

Education

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As a teacher, it is
always uplifting to
learn from one's
students.

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Teaching and Learning in a Tech-Enabled Environment

By Ashraf Maniam

Introduction

‘New technology is common, new thinking is rare’ - Sir Peter Blake, world renowned ocean racer and holder of the Jules Verne trophy (1994 to 1997) for setting the fastest time around the world on a yacht.

As a teacher, it is always uplifting to learn from one’s students. I was therefore thrilled when one of my very own students shared those wise words by Sir Peter Blake with me. I can still recall the day, and the context within which it happened.

It was a hot afternoon at Pasir Ris Park, and I had the good fortune of accompanying the Outdoor Activities Club (OAC) students on a kayaking expedition as their teacher-in-charge. After a long afternoon of kayaking along the North-Eastern coast of Singapore, we took a break along the shore of Coney Island. It was here that I got into a conversation with one of the kids on how lucky we were to be born in a time when technological advancements had significantly improved the design and buoyancy of kayaks. This is how our conversation transpired, roughly.

“

Mr Ashraf, you look really tired!’ }

“

Yes I am a lot older than you, I’m not in the prime of my youth anymore. Kayak-ing, as you can tell, is not my forte.” }

“

Well, Mr Ashraf, you should be thankful. Did you know that kayaks were previously made of denser driftwood or whalebone? They were a lot heavier, and more difficult to manoeuvre! It wasn’t until 1984 that the first plastic kayak was designed and produced.” }

“

That’s wonderful. Glad it isn’t 1983 then!’ <You must excuse me, my humour was a bit dry (no pun intended) at that point as my arms and back were aching from all the kayaking.> }

“

Yes, we are lucky indeed. The first plastics were invented in 1862, Mr Ashraf. It took mankind more than a hundred years before they realised that plastics could be used to enhance the design of the kayak. As the great Sir Peter Blake once said, new technology is common, but new thinking is rare.” }

I may have been knackered that day, but his words struck me. It dawned on me that it wasn’t the abundance of technology, in and of itself, that had significantly improved human lives in recent times. It was our ability to think creatively, and to generate new perspectives, that allowed us to put such technology to good use. True transformation came only when we adopted new thinking to drive positive change. As we loaded up our kayaks to return to Pasir Ris, his parting words aptly summarised my sentiments – ‘Mr Ashraf, it’s not just about the tech. If it was, just about anyone could hold the Jules Verne Trophy.’

Harnessing the Power of Technology in Education

Kayaking continued to be an activity I struggled with, but I had the good fortune of drawing a powerful lesson from the day's experience. During my time in the National Institute of Education (NIE), I had picked up a slew of pedagogical tools, many powered by technology. I was eager to try them out in the classroom. However, through my own personal experiences (and with Blake's words as a constant reminder), I soon learnt that these methods would count towards little without a proper understanding of how technology could be applied in a practical setting, with the student's learning experience as a focal point. This required new thinking.

Till today, many educators use tech in the classroom as a novelty, to excite and entice kids – I recall sitting through numerous lectures as a student where one of my lecturers would smirk in contentment at how his colourful font and dynamic animations in PowerPoint looked, I quote, 'pretty'. Such applications of technology have short-lived effects, and do little to enhance learning. I realised along the way that when exploring how to deploy tech in the classroom, educators have to fundamentally reconsider assumptions of how students learn in order to truly harness the power of technology in the classroom.

Let me share a few of my key lessons learnt from attempting to deploy technology in the classroom.

Improving Teaching and Learning

On the pedagogical front, technology can be used to create virtual simulations and models to better illustrate complex concepts and ideas. In numerous instances, students can also be given the opportunity to virtually manipulate these models, hence deepening their understanding of concepts. At the very core, this promotes deep understanding of subject matter (as opposed to rote learning).

I experienced the true pedagogical value of technology when I was on attachment at a neighbourhood school, and was tasked to teach Pythagoras' Theorem to a class which had been struggling with Mathematics for a while. Many of us will be familiar with Pythagoras' theorem; it is a relation in Euclidean geometry among the three sides of a right triangle. It states that the square of the hypotenuse (the side opposite the right angle) is equal to the sum of the squares of the other two sides, or as many of us would recall: $a^2 + b^2 = c^2$.

It was the night before the lesson (yes, a little last minute, I know), and I had been racking my brain for a while, considering how best to teach this seemingly abstract concept to the kids. As luck would have it, I chanced upon an online software which provided a visual proof of the theorem (see Figure 1 below).

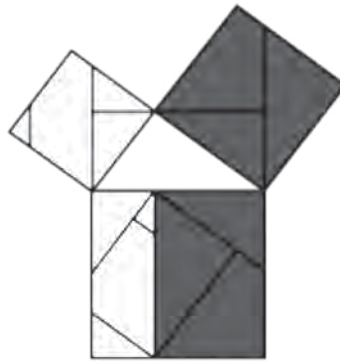


Figure 1: Pythagoras' Theorem Proof¹

The software was particularly impressive because it helped students derive Pythagoras' equation, rather than just stating it. The two-dimensional figure above does little to illustrate the interactivity which the software brought to the overall experience, but in essence, it allowed my students to realise a few things:

- When you square the length of a triangle (e.g. side 'a' or side 'b'), you are essentially calculating the area of a square with length side 'a' or 'b'. This corresponds to the purely blue and yellow areas above.
- The areas of the squares with length 'a' and 'b' could be broken up, and reconstructed to form a larger square, with side 'c'. Students were able to use the software to 'drag' the yellow pieces and blue pieces to form the bigger square. Essentially, they were able to derive that the yellow area + blue area = total area of bigger square, and that $a^2 + b^2 = c^2$.

The software was a hit in the classroom. The kids loved how interactive it was, but more importantly, were able to explain why Pythagoras' theorem was the way it was. Several of the kids came up to thank me after the class, and told me this was better than merely memorising the concept. Technology and virtual manipulation, in this instance, had allowed students to develop an instrumental understanding of a seemingly abstract concept because students were given the opportunity to construct their own knowledge.

This was lesson #1.

¹<http://www.phy.ntnu.edu.tw/ntnujava/index.php?topic=1421.0>

Promoting Collaborative Learning

Lesson #2 came when I realised that technology wasn't just great for helping students construct their own knowledge, but also helped create platforms for students to construct knowledge with others.

I was teaching a topic in Economics on 'Market Structure' to a group of JC1 students. This pertained to the 'Theory of the Firm', and how different markets were characterised by differences in the size and abundance of firms, as well as the nature of goods sold. The nature of the topic was highly fragmented – there were numerous models to learn, and multiple characteristics to consider within each model itself.

In preparing for the lesson, I came across a software called 'Mindmeister'. It was a mind-mapping tool which allowed multiple users to collectively contribute towards creating learning maps in real time (see Figure 2 below for a sample). I immediately knew this was the perfect tool for the topic at hand.

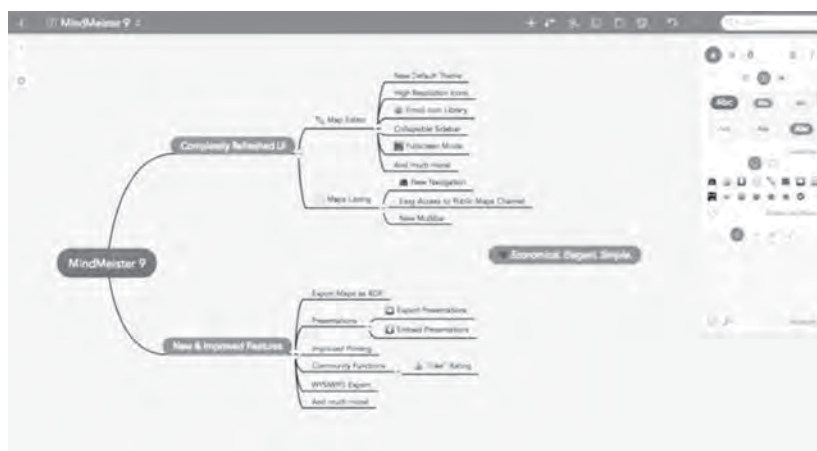


Figure 2: Example of a Mindmeister Mind-Map

Prior to the lesson, I divided the students into teams, and they went home to research a different aspect of the pre-assigned Market Structure before turning up for class. During the lesson, students discussed their findings in groups, presented their key findings and collectively built the mindmap over the course of the lesson. Students were allowed to freely roam to other groups which had constructed other 'nodes' in the mindmap, and clarify their understanding spontaneously. By the end of the lesson, students had built their understanding of a topic collectively, by starting off as an expert in one area, and expanding this understanding in other areas through collaborative learning. The technology provided the environment for this to take place.

Students particularly loved this method because it allowed them to build deep understanding of subject material through peer learning. Numerous studies have shown that peer learning is particularly effective because students learn a great deal by explaining their ideas to others, and by having ideas explained to them (in a simple manner) by a peer. The psychological hurdle to learning seems lower if you learn from someone who has also just picked up an idea, and hence, is no more or less intrinsically inclined to be ‘smarter’ or more adept at a concept than you. Here, technology served as a highly effective tool in facilitating a collaborative learning environment.

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Many of us take for granted that one of the most important aspects of education is the practice of conducting assessment and providing feedback to our students.



Improving the Effectiveness of Assessment

Lesson #3 was about leveraging technology to better assess students’ learning. Many of us take for granted that one of the most important aspects of education is the practice of conducting assessment and providing feedback to our students. This is critical in a student’s learning journey. It helps students recalibrate and adjust their learning patterns

before less than desirable learning habits and conceptual misunderstandings become deeply entrenched. In that respect, technology has the immense potential to heighten the efficiency and effectiveness with which educational assessment is conducted.

Traditionally, teachers have always relied on pen-and-paper tests to formulate a picture of their student’s progress in learning. During my time as an educator, I had the privilege of using online programmes and software which enabled me to gather even more data about my students’ learning than if I had just relied on pen-and-paper tests alone. Advanced online software allowed for a much richer tracking of my students’ learning. For example, when issuing an online assignment, I was able to monitor the time a student took to answer a particular question, the number of times he/she got the question wrong and how many tries he/she took before getting the answer correct. I was able to collect and analyse real-time assessment data, allowing for more personalised and tailored feedback. It gave me a more holistic picture of each student’s progress, and I was better able to provide students with the tailored guidance they needed and deserved.

This was Lesson #3.

Democratisation of Education

I also realised along the way that technology has improved overall access to information and opportunities for learning beyond the formal classroom setting. I was constantly captivated by students who approached me to discuss theories they had read online, or listened to on a ‘podcast’. I realised that the Internet had single-handedly provided the largest database of readily-available information for students to tap on, and mobile applications such as ‘Ok Google’ literally brought access to such information to one’s fingertips. Massive Open Online Courses (MOOCs) allow individuals to access high-quality and free online courses from reputable universities worldwide, such as Stanford, Harvard and MIT. The Khan Academy provides free education via micro lectures in the form of YouTube videos. These allow individuals to learn new skills and enhance knowledge acquisition, but also require a fundamental shift in the mindset of teachers and students from one of directed learning to self-directed learning.

As education becomes increasingly democratised, it is the role of the educator to intrinsically motivate students to learn, even when a teacher is not around. I recall numerous instances in my classroom where students would ask me ‘Mr Ashraf, what is the definition of <insert Economics concept>?’. My reply, almost always, would be ‘Google it. Then we can discuss’. As educators we need to fundamentally consider how to build such proactive behaviours in our students, especially when the opportunities for self-directed learning are boundless.

“

Mr Ashraf, what is the definition of <insert Economics concept>?”. My reply, almost always, would be “Google it. Then we can discuss”.

This was Lesson #4.

Community Upliftment Programmes: Leveraging Technology

Technology has made it an exciting time to be an educator. There is extensive potential for it to enhance teaching and learning, both within and beyond the classroom. Stakeholders and key players in the education sector have recognised this. For example, the Education and Technology Division (ETD) in MOE has taken active steps towards equipping teachers and schools with the necessary knowledge, skills and infrastructure to effectively harness technology in the classroom.

On a similar note, it would be crucial for MENDAKI to also ensure that its academic programmes keep abreast of technological advancements. MENDAKI’s programmes, which range from the MENDAKI Tuition Scheme (MTS), Collaborative Tuition Programme (CTP) and MENDAKI Homework Café, have made tremendous progress in providing assistance to Malay/Muslim students. Moving forward, it would be crucial for MENDAKI to ensure that its tutors and programmes are at the forefront of designing and implementing technological changes to the way Malay/Muslim students learn.

The students who attend MENDAKI's programmes are also the very kids who stand to gain the most from a tech-enabled classroom. Technology can pave the way for students to develop deeper understanding of concepts, and receive better feedback from teachers - especially crucial for students struggling academically. There are far too many instances where educators make the mistake of resorting to memory work and 'drilling' techniques to help struggling students master answering specific styles of questions. This is less than effective in helping these students, because what they lack is an instrumental understanding of concepts. This foundational layer of understanding needs to be taken care of first before exam techniques can be effectively honed. Technology, as we saw earlier, can have profound effects in this respect.

Furthermore, examination boards are also fast-recognising a trend of rote learning amongst students. Increasingly, the PSLE, GCE 'O' and 'A' Level examinations are being set in a way which tests students for their ability to apply concepts, rather than just regurgitate them. Parents may lament, but this style of more difficult, probing questions is here to stay. Students who struggle academically would gain much more from developing a deeper understanding of concepts, rather than simply memorising model answers. This is where technology comes in. It serves as a key enabler for education-focused institutions, like MENDAKI, to enhance the way teaching and learning is done.

Conclusion

While Blake may have extolled his wisdom in the context of the design of water vessels, we see that new thinking is required to truly harness the potential of technology to enhance teaching and learning more generally. New thinking will help us to ask new questions, and hopefully take steps towards discovering new answers to today's challenges.

“

Our ability to help our
learners move towards
new social horizons
must surely be one of
the measures of a good
education system.



The Narratives of Ahmad and Ali¹:

Looking Back a Decade and Hoping Forward a Few More

By Mardiana Abu Bakar

I ‘found’ Ahmad almost a fortnight ago at a petrol kiosk. I didn’t recognize him when he came up to me, smiled and asked me if I remember him. He had grown taller and was bulkier and had to remind me who he was. It brought me back a decade ago when I observed him as one of my case study learners in a Secondary 1 classroom in a neighbourhood school. I was then a Research Associate at the Centre for Research in Pedagogy and Practice (CRPP) and part of my study focused on the social biographies of two boys – Ahmad and Ali – who were attending schools at either end of the ‘elite’ spectrum. One of my research questions was ‘Are Malay boys constructing masculinities that enable them to engage and achieve in school?’ And here was Ahmad, a pump attendant about to get married at 24 and eager to talk about his upcoming wedding to a former classmate. He was not forthcoming about his educational journey or his job. He was also reluctant to share his future plans on education – “Bingit ah Cher, macam dulu juga”² he said to me half-mockingly as he tried to sidestep my questions.

The encounter with Ahmad made me revisit a paper³ I wrote about the two young men in their first year of secondary school in 2004. I am retelling their stories here in what anthropologist Clifford Geertz would refer to as ‘thick descriptions’ because I believe the social biography of Ahmad, the pump attendant, was written while he was in school. My hope here is that immersing ourselves in the narrative may remind us of the other Ahmads in our schools, and

¹The two names are pseudonyms.

²English translation: Oh no Teacher, you are still nagging me like before.

³The paper titled Learning to learn: Minority boys succeeding and failing in Secondary Schools was presented at the Redesigning Pedagogy, Research, Policy and Practice conference in Singapore in May 2005.

how we need to work with them to redraw the possibilities of their life trajectories through education. Our ability to help our learners move towards new social horizons must surely be one of the measures of a good education system.

In contrast to Ahmad, the other student in my study was Ali whose aggregate score in the Primary School Leaving Examination (PSLE) in 2003 puts him in the top 3% of the PSLE cohort. He was the top boy in his neighbourhood primary school and the principal persuaded Ali and his mother to apply for a place in an elite school. Ali and his mother had earlier planned to enroll in a neighbourhood school nearer his home. Ali took a lot of pride in his identity as a Mendaki scholar, and was a positive ingredient of his growth. His story should also be paid attention to and reflected on as we mull over the learner identities and dispositions we are building in class and for life.

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Learning...implies
becoming a different
person (and) involves the
construction of identity”

} Research on anthropology and sociology of education has described how students' diverse social identities both influence and are shaped by schooling. Pioneering works such as those of Bakhtin (written in 1920s, published in 1993), Vygotsky (1934/1987), Cazden (1972), Hymes (1972), Bourdieu (1977), and

Willis (1981) have examined the connections between the processes of social identification and learning. In the past two decades, researchers have continued to analyse these processes; much of this recent body of work involves what Packer (2001) calls an “ontological” approach to learning. According to this approach, learning changes not just what the learner knows but also who the learner is. In their seminal works, Lave and Wenger (1991) note that “Learning... implies becoming a different person (and) involves the construction of identity” (p.53), and “The experience of identity in practice is a way of being in the world” (Wenger, 1998, p.151). The classroom and the school then become a way for students to answer the question “Who am I?” (Packer, 2001), and who they want to become in relation to learning and in relation to their social biographies. A student's learning changes who he is but his development of who he is is also dependent on his conception of himself as perceived and constructed by his social biographies outside of the classroom.

Ali, Ahmad and their schools

ALI is a fair, tall, gawkily thin, sickly-looking, bespectacled and soft-spoken boy with a slight nasal impediment in speech. There were eight ethnic minority boys, three of whom were Malays, in his class of 37. Almost daily in the first few months of class observations, I heard the boys constantly reminded how they can do what they are tasked to do because they are special. With a history of more than 100 years, the school has long been seen as a formation site for future socio-political elites. Cabinet posts in Singapore's politics are dominated by alumni of the school, who also make up the elite in all spheres of Singapore life. In the year that Ali enrolled, the school begun a through-train programme, a six-year educational trajectory which assures him of a place in an elite junior college after his four years in the secondary school. The independence status of this school allows more autonomy in its curriculum choices and Ali and his cohort are learning a curriculum

that would usually only be taught at secondary two and three in other “neighbourhood” secondary schools. The school has a very small percentage of Malay boys.

AHMAD is a good-looking, solidly-built boy, taller than most of his classmates. He wears a funky pair of glasses, carries himself with confidence and walks with a swagger. He enrolled in his school because it was a few bus stops away from his home, and because he had heard from his older

“

Students here don't know what school spirit is – they do not know what a school cheer is or what pride in a school means.”



school mates that it was a school that “was good to its students”. Also: “I have many Malay friends coming here”. The school has a relatively long history but now has a reputation for being relatively low-achieving. There is very little sense of school history or school spirit amongst students. The school's secondary one level head says “Students here don't know what school spirit is – they do not know what a school cheer is or what pride in a school means.” There are 40 students on Ahmad's class register. However, only 38 are regulars - two Malay boys, both repeat students, seem to have dropped out. Malay boys number 16 out of the 31 male students in this class, while Malay girls make up six out of the 11 female students. Three Chinese girls, 10 Chinese boys, two Indian girls and three Indian girls make up the rest.

“

allowed another 15 per cent of the Primary 1 cohort to benefit from a secondary-school education -- students who would otherwise have lost interest in school because of their inability to cope with the more academic streams”



Ahmad and his classmates are in the Normal Technical⁴ (NT) stream. The stream, implemented almost 25 years ago, is attributed to have “allowed another 15 per cent of the Primary 1 cohort to benefit from a secondary-school education -- students who would otherwise have lost interest in school because of their inability to cope with the more academic streams” (Phoon, 2001). They comprise students

who score the lowest aggregate mean in their PSLE. Ahmad is one of ten students in the class who had been streamed into the NT stream from the EM2 stream. Ahmad's PSLE score is 10 points shy of qualifying him for a place in the Normal Academic stream, a higher stream that would have enabled him to take the GCE “O” exam level at the end of five years. Lateral transfer to the NA stream is possible for Ahmad at the end of Secondary One but he must achieve 70% passes in all his subjects to qualify. Each year, between one to three NT students in the school qualify for the transfer. In one focus group discussion and the first interview, Ahmad expressed a desire to make the transfer but his first semester

⁴The Normal Technical Stream was introduced after the Improving Primary School Education Review (IPSE) (1991) acknowledged that Singapore's primary school system had served the “majority of pupils of average and above-average ability (80%)” (IPSE Report, 1991, p. 11), but was not as “effective” (p. 11) in helping “pupils in the lowest ability range (20%)... progress up the educational ladder” (p. 11).

result did not indicate him making any effort in that direction. His Maths teacher said that she counselled him after the semester one examinations about his lower-than expected results and his response was “I passed what, Cher.”

Ali, Ahmad and the curriculum

In class, Ali and his classmates are stretched to perform to a higher level curriculum compared to their peers in other schools. In a Maths class I observed in the third month, Ali and his classmates made individual presentations on the philosophy of zero (“Why is zero not equal to zero?”) after a week’s preparation. Ali, despite his soft voice, made a convincing eight-minute powerpoint-aided presentation on the meaninglessness of zero divided by zero. In class, Ali is most comfortable in lessons which are teacher-fronted – where the teacher provides a whole-class lecture and occasionally calls upon students or asks for volunteers to answer questions. Ali is always able to answer questions when called upon and regularly volunteers to answer them in the three subject-classes observed - English Language and Literature, Mathematics and Physical Science. His answers are usually inaudible and often have to be revoiced by his teachers but he continues to offer them consistently. He seems most at home in the Physical Science class where lessons are taught largely using what Freire (1972) might refer to as the banking deposit model of teaching, where the teacher comes into class with a slew of powerpoint slides and rushes the students through its content. Ali is seen to be engaged in listening to the teacher and taking down notes during the teacher’s monologues and checking his worksheets and jotting down more notes when the teacher answers his classmates’ questions.

“

We are put into groups to get ideas. I have no ideas so I just sit and listen.”



Group work, however, was a very uncomfortable experience for Ali initially. This is an activity that is used in almost all of the English language and literature lessons. He told me, “We are put into groups to get ideas. I have no ideas so I just sit and listen.” Proffering ideas and opinions, as opposed to

volunteering facts, makes him uncomfortable. One incident that took place in the first term, in a focus group discussion with me and a chosen group of his classmates, illustrates this further. Ali is usually the least able to offer few opinions in these discussions. He turned a few times to Malik, his more voluble Malay classmate and asks him “Can you say what I think?”, a transference of agency that was greeted by laughter. As a learner, Ali is observed to be very focused on the separate tasks he has to perform and has performance anxiety about almost all his subjects although he takes the effort to participate in class activities. His grades are one of the highest in class across most subjects. Ali invests heavily in his school work. For the first two months of secondary one, Ali was staying up until almost 2 am every school day, to finish his homework and “revise”. The homework load eased slightly when his mother voiced her opinion about its “burden” at a parent-teacher meeting in the second month of school, but Ali continued to be stay up to “past midnight” all the way through the first term.

In Ali's classroom, there is a high level of civility - students are addressed as "gentlemen" by teachers both during the formal greetings at the start of each lesson and through curriculum time. Even when reprimanding the boys, teachers use civil, objective talk and are usually observed taking the boys out for pep talk away from the class. The boys in turn display largely the behaviours of well-schooled boys - whispering to one another if they need to speak at all, and putting up their hands to answer questions. I observed no disruptions of class during the first semester. They are especially well-behaved in the Physical Science class, taught by a strict male teacher in his 40s, and the English language class where a female Caucasian teacher handled the class with firm, affective warmth. The Maths teacher is Ali's form master and invites more personal and male bonding interchanges that are more loudly expressed, such as asking the boys if they missed him when he was away ill or when he asks them if they don't like his class since they didn't do so well in his test. The boys in the class are very competitive about grades and I often observed them, including Ali, signaling to each other their marks as soon as assignments are returned. High fives are often exchanged after marks are handed out. Ali carries a huge file where he neatly keeps his assignments and homework. School pride is instilled in the way the boys wear their uniforms - with shirts tucked in neatly, a formal tie-attire on Mondays and no PE shorts to be worn in class during curriculum time. The classroom is kept open through the day, even when the boys move to other rooms or the labs for lessons.

Unlike Ali who is being stretched by a curriculum above his cohort level, Ahmad is having frequent déjà vu experiences in his current NT curriculum. As someone from the EM2 stream, he is revisiting a number of the Maths and English curriculum items which his EM3 classmates have yet to learn and is now being taught in his Secondary 1 class. He is often bored in class, not just a result of the curriculum but because he predicates his engagement in class on his "mood". "Tengok mood"⁵ is Ahmad's main explanation for describing how he would engage in class. His teachers, working with CRPP researchers, had originally planned a challenging, interdisciplinary curriculum for the class in view of their high PSLE aggregate scores but by the first 2 months of school, it became clear that classroom management issues were a major stumbling block that sidelined the implementation of more complex, team-based tasks. Ahmad and his classmates seemed not yet socialised into "schooled adults" (Lave and Wenger, 1991) and were not able to cooperate in a peer learning environment. They had weak conceptions of how to participate in group settings - instead of generating and exchanging ideas, they were chatting or misbehaving and were disruptive in most of the lessons across subjects (see Lim & Mardiana, 2005). Lessons are frequently disrupted by the boys drumming, speaking loudly or walking around the class and although he was not one of the Malay boys who initiated noise-making activities, Ahmad occasionally joins in these noisy activities. His Maths teacher observed Ahmad becoming more cocky at the end of the semester. There is hardly any homework assigned to the class and the reason given by the teacher is students do not keep the worksheets handed out and are not likely to do the homework. It is not unusual to see discarded worksheets on

⁵English translation: I'll see what my mood is like

the floor a few minutes after they are given out. Ahmad has not been observed throwing any worksheets but he has been observed not being on-task during curriculum time, day-dreaming or talking instead. Teacher-student relationships in this class are dominated by a game for power by the second month, where individuals and/or groups of students will disrupt the class to see the teachers' reaction. This happens across most lessons except in the very structured Computer Programme Applications (CPA) class and the English class. In the CPA class students are drawn to and engaged with the tool of instruction – the computer – and the highly regulated individual tasks leave little room for opportunities to misbehave. Also the stakes are high for misbehaving – the teacher will lock the students' computer or send them out of the room and no one seems to want this to happen to them.

The English class is conducted by Mr Tan, the secondary one level head who carries himself with a military bearing, is teacher in charge of the National Cadet Corps and a member of the school disciplinary committee. His affective but strict disciplinary management of the class turned students who are observed to be noisily disruptive in other classes merely passive resistant in his. Ahmad's classroom is locked whenever the class moves elsewhere for lessons. During recess, the class is locked and access disallowed to the floor by prefects. Students are quite frequently shouted at by teachers. Ahmad says he has never studied for examinations since he was in Primary 1 but said that he wants to transfer to the Normal Academic stream "if he can" and has made attempts to study. I asked him if he knows he has to obtain a 70% score for all subjects – he said he would have no problem since he has been scoring marks of 70 and above for his subject. His first term results however did not reflect this. His favourite subject is Maths because he feels "gerek" when he can solve the problems. Many of these Maths sums are problem sums he would have done at primary 6 level.

Ali, Ahmad, their parents, agency and future imaginings

Ali's mother is an articulate woman who speaks good English. In her early 40s, she has a GCE "A" level qualification and it is she who is very involved in Ali's education. Her involvement is pervasive and close – such that even when I speak to him on the phone, the mother would stand beside him to prompt his answers or repeat questions for him. Occasionally she would take the receiver to ask me what my questions meant. She also sat in in the two initial home interviews conducted in the first semester and I observed her presence as being a source of both comfort and disquiet for him. She is ambitious for him to achieve good grades and is consistently helping him in one way or another with his schoolwork – whether it is running errands such as buying paper for the printer, or sitting by him in the computer room while he finishes up his homework. It was also she who "fought" with her husband to buy Ali a new computer in the second month of school. She scheduled the use of the computer such that Ali will use it from afternoon until past midnight to do his homework while his elder sister, then in her first year of computer animation studies at the polytechnic, uses it after he is done, usually past 1 am. Ali's conversations with his father are done in staccato exchanges while his conversations with his mother are confined largely to affirming and responding to her instructions and advice.

The family lives in a five room flat and the father, a technician, who was educated in the Malay stream up to secondary four, is the sole breadwinner. Finances are an issue - a part of Ali's last scholarship cheque was used to pay the family's outstanding utility bill. Ali's achievement at the PSLE and his consistently high scores in secondary one qualifies him for two awards from Yayasan Mendaki. The total of the two awards is about \$1,100. Ali's two other Malay classmates are also Mendaki scholarship receivers but, unlike him, they receive only one award as they do not have his high GPA scores. Maintaining high GPAs remain one of Ali's most consistent anxieties. In the first semester too, Ali tried very hard to win the friendship of the two Malay boys – he seemed to see friendship with them as necessary as “we are the only Malays” – and expressed puzzlement when he was rebuffed by both boys, one of whom is a football team leader of the class and the other one of two monitors in the class. In the survey done at the start of the study, Ali wrote down three very divergent possible careers in the ambition column: a gynecologist, a horror story writer and house husband. By April however, he had changed his mind about all three and was quite firm on becoming a Science teacher. His reason for this is simple: “I think I can teach better than my Physics teacher.” Ali spends a lot of his time doing homework on the computer – in this elite boys school, almost all homework is to be done on a word processor and two weeks each semester is devoted to IT; the boys spend an extra week after the March and June semester breaks at home attending classes and doing homework virtually. Ali has also become a self-taught computer software expert who picked up his skills within six months of acquiring a new desktop at home. His sister, a first year polytechnic student in computer animation, consults him about her various animation softwares. He has also become a volunteer online consultant for an anti-spyware forum and logs in daily on the forum to give advice. He was invited to attend a major conference at the end of 2004 by the software company as a gesture of thanks but he did not go because “he doesn't know what to do and what to wear.” Ali knows for a fact he will go to university, and he knows he will get a “good” job – these are accomplishments that he considers “not very hard”. He is convinced that to “make it” in Singapore, “no matter what race”, one just needs to put in the effort.

Ahmad lives with his widowed mother, 58, whom I did not have the opportunity to speak with – a suggestion to Ahmad for a home visit was met with ambivalent answers and silence. They live in a three- room flat 10 minutes away from school. His father passed away 8 years ago at the age of 60 when Ahmad was in kindergarten 1. Ahmad says he missed his dad as they used to horse around and he remembers having so much fun disturbing his father when he was sleeping. His father was a bus driver for a factory transport company and one of his three brothers has taken over this job. His father passed away on the day of Ahmad's circumcision. He had forgotten to take his medicine in the excitement, collapsed and died. The celebration was supposed to have been a grand one. His mother makes curry puffs and other kuih for a living and Ahmad sends one lot to a stall at the bus interchange in the morning before going to school while his mother also sends one lot to a coffee shop nearby. Ahmad says that having to deliver the cakes to the interchange is why he has stopped carrying “heavy things” including books and stationery to school. He commented

that his mother doesn't mind this as he has many things to carry. Like him, most boys in his class carry almost empty bags.

Ahmad's siblings are in their 20s and 30s. His brothers give his mother and him money occasionally but none of his 3 sisters contributes to them—a fact Ahmad attributes to them being married and having their own families. He is given \$3-\$4 a day as pocket money, and is one of the few students in his class to carry a mobile telephone. His brothers are in manual jobs – one works as the factory transport bus driver having taken over his father's job, one works as a semi-skilled technician and the third is a lighting technician. In the family, his mother is the only one who discusses his studies with him. The only time his brothers asked about his studies was to ask how he did for the PSLE – and where he was going for secondary school. His mother asks him every day whether he has any homework and whether he has done it. He seems to be rather independent in dealing with school otherwise – he made the choice of the secondary school on his own, “telling” his mother of his choice. However, she is very strict with him and he must be back home before the sunset prayer, or he will get beaten with a cloth hanger. He said that so far this year, he has not been beaten and has kept her happy.

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I asked him why must
one go to school. “To
study, to get a job later
on” was his reply.

Curious about his erratic engagement in class, I asked Ahmad many more pointed questions about his life chances than I did Ali. I asked him why must one go to school. “To study, to get a job later on” was his reply. As for his ambition, Ahmad, who had mentioned in an earlier focus group that he wanted

to be a lead guitarist and had jammed with friends, says he doesn't know and it is too early maybe to envision an ambition for himself; he will probably think of one when he is in Secondary 3. I pointed out to him that some students start thinking about what they want to be and pursue them when they as young as primary 3 and he reacted in surprise – he seems to think that ambition is one of those things you think about later in life. I also asked him if he has talked to anyone about going onto further studies – he said he has one friend who has finished ITE and been admitted into polytechnic. Ahmad says he can do the same – “even if I don't transfer to NA I can go poly like him. And then after that I can go to University.” However Ahmad cannot name any course of study at the university when asked. University is a vague concept for Ahmad but he aspires to gain admission someday. Similarly, with regard to interest in his guitar playing, Ahmad displayed the same vagueness of ideas – he had picked up guitar playing from a friend, does not know how to read musical notes but plays by ear and has stopped jamming because he has not seen his band members for a while. He also harbours a vague notion of becoming a lead guitarist but his knowledge of the genres of music is confined to soft or hard rock. He has no idea

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what jazz or blues are. I asked him if he sees himself owning a terrace house and driving a car – his answer is “A HDB is good enough and I don’t need a car.” Success for him is being happy – a pronouncement that is stereotypically a Malay response according to Li (1988). He thinks that to be comfortable and maintain a family of two children, one needs only \$1,200 per month – a projection he justifies based on what he and his mother live on. I asked him if jobs are going to be hard for him to secure if he continues his education in the vocational line – he makes a clichéd reference to “the economy in a downturn”. He had read the phrase from the newspaper – which he reads sometimes – but feels that he should be able to get a job regardless. Ahmad is close to three Malay boys from the EM3 stream of his primary school; they still “play football” or just hang out. I asked him about peer influence and his answer was savvy – yes they can be strong – he pointed to classmates who were quiet at the start of school but had since become “influenced.” I also asked him if he has ever gotten into a fight – a regular occurrence in class. “I have pushed people around or punched their shoulders when they provoke me but I don’t want to get into a fight and have never gotten into a fight.” He knows some students are gang members – he knows of one Chinese boy in his class and one Malay boy in Secondary 2 from his primary school, each in a gang. He said he will never join a gang because “there is no benefit in it”. He says he is aware that the Malay gang in his school area is very strong.

Beyond the “thick description”, an analysis perhaps

Anthropologist Clifford Geertz (1973) coined the term ‘thick description’ to describe his method of detailed analysis of an anthropological context by immersing himself in it. I did the same. In 2004, I grappled with weaving the elements of the lives of Ali and Ahmad, in which education is a substantive part, and I take heart that there is no “obviousness” in the interpretations of these lives.

Identities forged in 2004

The identities of the two boys here cannot simply be understood in terms of race, gender and class although these are traditional categories within which the notion of identity is thought to be played out. They are adolescents in a globalised world, constantly engaging with the media, popular culture, technology, fashion and leisure, and their consumption of these plays a part in the making of their identities. Note the way that Ali, who finds little space for enunciating authority at home and in school, is constructing himself as an online web consultant who helps and directs people on ways to clean up their computers on a daily basis, taking on an authoritative “space of enunciation” (see Ball, 2001). Ahmad is taken up by the glamorous idea of becoming a lead guitarist in a rock band – an almost clichéd ambition in this boy band era.

However race, class and gender remain important starting points which limits and conditions what we are and what we do (Craib, 1998). Practices of the race-d self might be quite elusive and borrow from the many interactions with people and texts the boys are in contact with, but they may at the same time be acted upon by racial stereotypes that adhere to race as stable and predictable. In other words, they may be at the receiving

end of other people's construction of their membership within a collective identity, in this case that of "being Malay".

Both Ali and Ahmad speak of being Malay, implicitly and explicitly. Ali was ascribed his Malayness in a school where the minority population needs numbers to make up a performance of their culture. At some level, he was clearly aware that the Malays are not perceived as people who succeed when he made his unsolicited comment about succeeding not being hard in Singapore – even a Malay can succeed with effort, he said. This is also the State's discourse about education – as a level playing field where anyone can succeed. Ali hankers for friendship with his two other Malay classmates and remained unhappy that they are not "friends, just classmates". Conversely, Ahmad finds ties with his Malay friends the reason for going to the school and has remained close to them. Conversing in Malay is a comfort for him in school and in conducting my interview, I find that he prefers me to speak in Malay as well.

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Ali thinks the Malays do not
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school friends.”

Being Malay in Singapore is also being a minority. As observed by Ogbu (1992), the status of “minority” is a double-edged sword. Belonging to a minority may, in some cases, motivate hard work and eventual success, whereas in other cases it may have the opposite effect. Ogbu found that immigrants, whom

he calls “voluntary minorities,” are more likely to belong to the former group than are people whose minority status was imposed on them. Other studies have shown that focus on the negative reaction to having minority status may be done at the risk of negating that individuals in this situation are capable of generating a myriad of responses to this status (Grant, 1992). Ali thinks the Malays do not seem to work very hard – “they are easily contented like some of my primary school friends.” But he positions himself as the minority who wants to succeed. Ahmad wants to succeed but does not quite know how and is easily distracted. In educational research work one does not confront abstract “learners”, instead, one sees “specific classed, race and gendered subjects, people whose biographies are intimately linked to the economic, political and ideological trajectories of their families and communities, to the political economies of their neighbourhoods” (Apple, 1986, p.5).

In interpreting the stories of Ali and Ahmad, the way the boys are addressed and positioned in their formal learning spaces makes a difference: how they are treated by their teachers in class – as gentlemen to be treated with civility or as boys to be shouted at in regular misbehaviours; the way the curriculum speaks to them as different kinds of learners – stretching out their learning capacities or ignoring them; the way the school system streams them into one trajectory of education over another; the relationships they have with their parents that provide them with spaces for enunciation of agency and support or support that denies agency. These are all a mix of variables that are not easy proxy indices for predicting successes. When I was observing them, Ali was heavily invested in school while Ahmad

likes going to school “to have fun with friends”, but usually finds lessons boring. This explains his inconsistent, mood-dependent engagement. In 2004, Ali exercised his agency in class towards accomplishing the status of a Mendaki scholar. On the other hand, I do not see Ahmad looking towards any identity. For Ali, identity continues to be a struggle against himself – against frustration and future broad horizons for actions. For Ahmad his

sense of identity seems predicated against possibilities he has yet to envisage. Mood is a basic character trait – internalised and personalised. However he has a more gungho sense of self against the world. He is more confident and even cocky compared to Ali’s hesitance, measured and almost painful difficulty at projecting himself. Ahmad has no compulsion to forge any felt agency and there is little evidence of a biographical project that he present. Ali has space for choice-making – with his mother guiding him. As far as the landscape of possibilities is concerned, Ali has self-knowledge, a sense of responsibility and practical anticipation yet a fragile learner identity within the high-ability school context exemplified by lack of confidence. Ali is a dependent learner – he uses his literature teacher’s assessment of him as a guide on what subjects he can and cannot take. For example a general comment made by the Literature teacher in late 2004 about the need to work on his writing seems to have deterred Ali from choosing Literature as a subject in secondary three.

Ahmad on the other hand seems to display a resistant identity and Ball (2000, 2001), borrowing from Rees et al (1997), talks of students exhausting their learning identity. Ball also used the terms damaged learning identity, fragile learning identity, exhausted learning identity. Sources of positive identity must be availed of in school and estranged or, worse, damaged learner identity may be taken on by students. Comber et. al. in her 2001 study note how boys as young as 9 displayed reduced possibilities for their life trajectories. Ball sums this up as students withdrawing from a less than worthwhile experience, feeling stigmatised and ‘othered’. But pupils also react according to what is accorded them – the two minority boys seem to take on the meanings given to them and seem to accede to the discourses afforded to them and labels provided to them and their socialization, even without being conscious of them.

The notion for identity in this paper is neither as representation of something which is fixed nor a representation of deep and profound psychological characteristics that reside in a person. Rather, I am concerned with changes which may either be structural or social that influence young people – it does not merely serve a descriptive purpose but it provides a site of struggle for the representation of meaning. Identity is itself a determining factor that has been noted to cause students to change his view of the world and act on felt

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specific classed, race and gendered subjects, people whose biographies are intimately linked to the economic, political and ideological trajectories of their families and communities, to the political economies of their neighbourhoods”

- (*Apple, 1986, p.5*).



agency (Lawy, 2003). For Ahmad, my concern remains this - do schools shoehorn students into vocational pathways too early and this may well cut off later life choices for him and many others from the EM2 to NT stream? The paper notes that students may not be given positive identities resources in schools and begs the question who else can and must step in to do that. Mendaki for sure, but most certainly each and every one of us in the community.

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Alamak Cher why you always nagging one, my mother pass away when I was in Sec 3, I had nobody I couldn't study so I was doing rubbish things for many years but now I ok. I getting married Cher.”



Fast forward to 2015 at the petrol kiosk

“Alamak Cher why you always nagging one, my mother pass away when I was in Sec 3, I had nobody I couldn't study so I was doing rubbish things for many years but now I ok. I getting married Cher.” But you must study Ahmad so you can have a better job for the family – you don't want to work here whole life right - remember we talked about this? There are many courses at ITE. “I see how lah Cher...” I left Ahmad at the petrol kiosk that

Maghrib and came back to try to hand him a list of Nitec courses a few days later but he was not there. “Part-time only sometimes come, now no come two days,” said the cashier. I cannot help but feel that I have lost Ahmad.

The Singapore education system has done right by many of our students. I am a product of the system and have benefitted much from the care of my principals and teachers who noticed me as an individual and not just part of the cohort; and grown through both the official and hidden curriculum of the school. The hidden curriculum of an elite girls' school is in fact a part of my life scripts. But there are Ahmads out there who have fallen through the cracks. I have also been wondering about Ali but do not really worry about him because chances are he would have acquired more through his positive learner identity despite the initial diffidence. There is now a growing body of work on the ontological approach to education through a theoretical/conceptual exploration of learning that will hopefully expand the narrow focus on the intellect by promoting the integration of knowing, acting and being as well as future imaginings of broader social horizons. As a teacher educator it is to these that I look to and expound on in my classes of student-teachers as I remember Ahmad and Ali.

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Even today, people come to tell me how much they loved him, his lessons, and how he impacted their lives with his humble ways of educating Islam to his community.



The Future of Islamic Education in Singapore

By Muhammad Tarmizi Abdul Wahid

Introduction

This article looks at the future opportunities and challenges within the frame of Islamic education, focusing more on the areas of: methodology, content, people and platforms. 'Islamic education' is defined in this article as the exchange of Islamic knowledge through the processes of teaching and learning between two or more individuals.

The Background

My late paternal grandfather was a well-known Imam and Ustaz in his community. Prior to the time when HDB housings were built en masse, he already had a strong presence and influence as a religious guide. I was told of how when the kampung environment and spirit were still lively and strong, neighbours near and far would gather to his house to learn Quranic literacy, and fardhu ain (obligatory acts to be performed by each individual Muslim) subjects, among others. Even today, people come to tell me how much they loved him, his lessons, and how he impacted their lives with his humble ways of educating Islam to his community.

Stories about my late grandfather gave me a good sensing of how Islamic education was generally spread in the past. Traditional teaching was conducted in classes where people would flock together in throngs to the house of the learned amongst them, who were usually the eldest in the community, or the senior leadership in their neighbouring mosque.

When I was growing up in the 1980s, I recall my mother bringing me to classes of similar settings, oftentimes in mosques and homes of an Ustaz or Ustazah who lived within our neighbourhood. It was apparent that even though the environment and housing structures had changed, the methods remained the same.

During these early years, the level of trust that people gave towards whom they considered to be their teachers is indeed noteworthy. There was not as much emphasis on certified qualifications to teach Islam as there is today. Trust was given to those who primarily knew how to read the Qur'an well and those who could teach through the Jawi writings fluently, which were widely used in the translated books of Islamic disciplines from their original Arabic texts.

Today, the Islamic Religious Council of Singapore (MUIS) sets the overall tone of Islamic education, and along with strategic partners like PERGAS (Singapore Islamic Scholars and Religious Teachers Association), it manages the teachers and trainers' overall development. The providers of Islamic education range from private corporations, some non-profit organisations, as well as mosques.

Technology and Innovation in Islamic Education

If we assess the adoption of technology and innovation in education in Singapore, it would be apparent that the current Islamic education providers - bar a few - are far behind when compared to the providers of non-Islamic education. At the same time, it is also worth mentioning that the technology used in other parts of the world are leaps and bounds ahead of Singapore altogether.

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When introducing new technology and innovative methods in the teaching and learning of Islam, we must also be aware of the concerns, discomforts and sensitivities of such matters which are still prevailing in the Muslim community. Though some of the concerns are valid, others need more time and effort to be reasoned with - perhaps by allowing people to see for themselves the greater benefits that can be achieved, in contrast to the perceived negatives.

At present, there have been increased efforts from mosques and Islamic education organisations to post videos and live-streaming of lectures online. There are also companies that provide design and animation services focused on promoting Islamic content and values online. And almost all private, non-profit, and public bodies today have some form of online presence, in which they leverage on to share valuable content, or to promote Islamic-related events to their followers.

Present Gaps

In a survey of around 200 parents that was released by MUIS in 2013, several key questions were asked to parents and caretakers of young Muslims, as to why they were not sending their children to part-time Islamic education programmes in Singapore. In summary, the study concluded that parents had three key concerns:

1. Accessibility and convenience
2. Affordability
3. Quality

Recent statistics from MUIS (2014) show that approximately 60% of young Muslims are not attending Islamic education programmes in Singapore. By having a better understanding of the driving factors and ways to address them, it is hoped that more young Muslims can be encouraged to attend such programmes over the next 3-5 years.

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This current data as well as the study above is important to note as we discuss the future of Islamic education in our country. The current batch of young Muslims - the majority of whom have not been directly ‘touched’ by Islamic education programmes - will soon become the working professionals and young parents of the next generation. Their willingness to attend and send their children for religious classes in the future, will be predominantly determined by how exposed they are to Islamic education programmes today.

Future Opportunities and Challenges

People Potential

Despite the evolving circumstances in the ecosystem, the future of Islamic education is expected to still be driven mainly by teachers who are madrasah-trained. If we observe the gradual yet positive changes that many of these madrasahs have made over recent years, such as incorporating new theories of teaching and infusing technology in their lessons (e.g. Madrasah Irsyad Zuhri), then there is every reason to believe that the future of Singapore's Islamic education will move in parallel towards the same direction.

People Challenges

As Singapore continues to open its doors to foreign talent over the next few years, Singaporean Muslims who are less-travelled and less-integrated into other cultures and norms may find it difficult to accept different shades of Islamic norms and practices into their space. There will be an escalation of fear and confusion, as the number of non-local Muslims who settle down here surge in numbers. They will each bring their own unique 'brand' of Islamic values and practices.

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There will be varied outcomes to this matter. I believe it has the potential to lead people into wanting to know more about Islam, to verify their own practices and beliefs, and to eradicate doubts which may have risen from their personal experiences of mixing with others.



Mindset

I believe that there are potentially huge returns in the investment of technology for the learning and teaching of Islam. As with adopting anything new and unconventional, there will be initial roadblocks. A shift in mindset does not happen overnight. But with proper guidelines, and an effective strategy to educate the public, it can easily address issues of accessibility and affordability with some trial and error.

However, if the decision to use new technology is forced upon people, and if its purpose is not clearly explained, technology will not have the intended impact that it could possibly have.

There will always be groups who prefer to hold on to traditional ways of learning, which will have its own benefits. However, to hold fast to only traditionalist methods without offering alternative options may prove to be dire, as it fails to address current frustrations that people might have, as highlighted in the survey earlier.

Final Thoughts

Deep and verified knowledge of Islam has always and will continue to be derived from its root sources. However, the approaches used to convey it, the people entrusted to deliver it, and the environment in which it is to be delivered to, will continuously evolve. Unpopular decisions will need to be made; by policy-makers, important stakeholders, and key providers. But popularity is a small price to pay, in order to leave a legacy that our children will thank us for.

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Being away from the comfort zone and being exposed to constant change strips you away from that zone of predictability, and makes you enter the zone of volatility with an almost zen-like mindset.



Leaving the Comfort Zone: Five Ways Living Abroad Makes You Better Equipped for Change

By Mohammed Jalees Jalal

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I gripped the approved visa tightly. This was it – we were really going to the U.S. for an entire year. To be more precise: 14 months, in a foreign land, without the comfort and familiarity of home. New places, new people, new norms. The sheer unpredictability of all the “newness” caused disquiet within me. I looked at my wife and two sons, thinking: “What have I done?”



The uncertainty, unpredictability and worrying that comes before a major move overseas is understandable, but not unsurmountable. I had the opportunity to pursue a Masters in Public Policy at the University of Southern California under a Fulbright programme last year, and hauled my wife and two children to Los Angeles with me while I analysed the intricacies of policy formulation. During our stay, I quickly realised that I had to analyse much more than that – like figuring out cultural nuances and navigating a labyrinthine medical system, for example. Having been through those experiences has changed not only my outlook on life, but my family's too.

I am the first person from my family to travel overseas for study, and it has had a profound, positive effect on all of us. I believe the Singapore Malay/Muslim community would benefit tremendously by exploring opportunities for work and study, in order to build capacity and resilience at both the individual and community levels. As we reach the 50-year milestone as a nation, it would bode well for the Malay/Muslim community to also explore the global space, and establish a keener awareness of and connection to the larger global community. This will help us to remain relevant and thrive in the next 50 years.

Visiting a country for leisure is vastly different from living there for work or study, experiencing daily life for an extended period. Many Singaporeans have no hesitation to living abroad: 212,000 Singaporeans were living overseas as of 2014, an increase of more than a third compared to 2004¹.

Being one of these 200,000-odd brought five important benefits, which I believe would be useful for anyone intending to do the same.

I'm Leaving My Comfortable Bed

Going abroad forced me to leave my comfort zone. The act of leaving a stable, predictable and familiar state for a more unpredictable, volatile situation is profoundly emotional and mentally challenging. For an entire week before departing for Los Angeles, I could not sleep. The thought of leaving a well-established routine with all the comforts of home, and transplanting myself to a totally foreign place with my family was very uncomfortable. Voices gnawed at me: “A thousand things could go wrong. I might get lost. My flight might not even make it there!” But forcing myself out of my comfortable “stasis” revealed something very important to me – that change isn’t so bad.

Beyond my life in Singapore, I felt that I had come to experience something beautiful and memorable in California which I would not have, if I had listened to my gnawing voices. A related lesson was that exposure to change builds resilience. Many of us tend to become comfortable in our set ways, until sudden change “shakes” us up. Being away from the comfort zone and being exposed to constant change strips you away from that zone of predictability, and makes you enter the zone of volatility with an almost zen-like mindset. In the first few days in LA, I had to switch to right-hand driving and manoeuvre in high-volume traffic on the legendary freeways of California, while trying not to get lost. This might seem mundane but for me, was a powerful example of how a routine task could change my “muscle memory” and build personal resilience to change.

¹Department of Statistics, 2015. Retrieved from <http://www.nptd.gov.sg/portals/0/news/population-in-brief-2014.pdf>

Expansion of Space

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3 hours!” I exclaimed to Molly, my American classmate. “3 hours to drive from Los Angeles to San Diego to see nice beaches?” Molly replied “Hon, that’s short. I’ve driven 9 hours, 12 hours, whatever. You get used to it. That’s how big California is...”

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My sense of “place” has broadened immensely. Having dislodged myself from our Tiong Bahru home into the city of Pasadena in California, my family and I began to grow a rapport with our surroundings. We learnt to fall in love with the San Gabriel mountains. We developed good friendships with our neighbours, the local store owners, the neighbourhood hairdresser and car workshop mechanic. We formed new habits involving our surroundings – our week would not be complete without exploring a new hill, park or beach. The thought that we had not explored the whole of California, and that there were 49 other States within the US, and nearly 200 other countries in the world which we had not explored fully (and most likely would not be able to) in our lifetimes was a remarkably humbling thought. The world became so much more bigger than our established routines and humble place in Tiong Bahru.

This perspective enlarged my sense of “space” from not only through a spatial lens, but also through an analytical lens. I was able to think about world events and large scale trends through not just through a purely academic angle, but also through a more practical angle of how such events and trends could have cascading effects in a more global setting. My studies in an international public policy class also contributed to my being able to shift my thought patterns to a more global setting. In a particular policy analysis class examining the conflicts in the Middle East, classmates from Saudi Arabia, Ethiopia and Kazakhstan helped the class to uncover knock-on effects in their respective countries’ economies.

Apart from expanding my physical space, my “conceptual space” was also enlarged significantly. Before arriving in the U.S., I had certain pre-set notions about many things, which I assumed to be unchanging and “fixed” – for instance, my choice of speciality in the work I do and the way in which I chose to contribute to the larger community. Post-U.S., my idea of what was possible expanded. From attending seminars, speaking with and observing interesting people, I realised that possibilities were far and wide in the way I looked at my work and community work. This brought about a new-found excitement in the manner I approached many things when I returned.

“

The counter staff smiled and just looked at me, trying to understand. I repeated myself: “Can I have some water?”. The queue behind me had formed, but they didn’t seem to be in a rush. The staff leaned forward and asked: “Oh, you mean wah-dur?”

It’s conceptually self-evident that when living abroad, you meet people who may not be like you. But the reality is infinitely more complex than the concepts. People may speak differently; they may hold certain deep-seated political ideology; they may have different personal, emotional and mental orientations from what you are familiar with; they may hold strong views about the country you come from, or the ethnic group you belong to. But at the same time, you need to make friends with them to achieve a greater goal. In my Masters program, very often we had to work with classmates from different countries, and somehow meet at the middle to make sure that we completed the assignment (and gave our best shot at the best possible score). I was especially lucky to have met and worked with classmates from China, Kazakhstan, Ethiopia, Saudi Arabia and Japan. Everyone had their little quirky side which I needed to manage, while they handled my own oddities. Through such interactions, one develops what Karl Albrecht termed “social intelligence” – the ability to get along well with people – anytime, anywhere. You develop cross-cultural sensitivities and accept that people are different. Instead of avoiding difference, you actively embrace difference and appreciate it as a blessing – in the spirit of the verse from Chapter 49 of the Qur’an (Al-Hujurat):

“

O mankind! We created you from a single (pair) of a male and a female, and made you into nations and tribes, that ye may know each other...”

Very quickly, beyond the (literally) skin-deep differences and learning to “know each other”, I realised that people are fundamentally the same.

Global Friend Base

Travelling overseas multiplies your reach and network of contacts. A network is essentially a “fabric of personal contacts who will provide support, feedback, insight, resources and information”². Your friends will have the reach to and insights of multiple markets and governments around the world. As someone keen on public policy, I learnt that my classmates had wide-ranging assumptions of what “good government” is, and appropriate solutions to tackling challenges at various levels. The sheer diversity of thought stemming from different backgrounds opened my eyes to issues I otherwise would not have seen. The advantage of having a globally-distributed friend base, combined with social intelligence, is the development of a “global empathy” of how a certain event, policy or trend might affect people in other countries. For instance, when I read about climate change agreements done at the international level, I tend to put myself in my overseas’ friends’ shoes to gain insights to how they might perceive such issues, in addition to putting my hat as a Singaporean.

Things Look... Different

“

We reached our destination. The amount was \$14.25. I quickly calculated a 15% tip, and gave the total amount to the taxi driver. He turned to me and began returning some coins: “Why you give me more?” I remembered that I did not need to tip extra in Singapore. “Nevermind ah uncle, just keep.”

We were home.

Probably one of the best things that can happen to you after you get back is to have a **fresh view of things back home**. After 14 months of adapting an American view of things, readjusting to Singapore was intriguing. Whatever had seemed “status quo” and taken for granted before, now looked different. I valued simple things a lot more – like going downstairs to the coffeeshop, instead of having to drive 20 minutes, to get milk coffee. I also valued the not-so-simple things more – like having sound strong governance principles and robust institutions to build, maintain and grow a city-state that has more than its fair share of vulnerabilities, like space constraints.

One thing that stood out for me more than anything else, is the extent of religious freedom in a multicultural setting like Singapore. Although California, and the U.S. by extension, is a bastion of religious freedom amidst multiculturalism, this is far from consistent across the vast American continent. There are multiple pockets of misunderstanding and religious intolerance in parts of the U.S. However, in Singapore, we have made great efforts to ensure

²Herminia Ibarra & Mark Lee Hunter. (2014). How Leaders Create and Use Networks. Harvard Business Review. Retrieved from <https://hbr.org/2007/01/how-leaders-create-and-use-networks>

that our religious freedoms and harmonious co-existence is upheld very seriously. When I returned to Singapore, I felt truly blessed that I was in walking distance to a mosque.

All aboard

Is the Malay/Muslim community taking opportunities to live abroad? It is hard to tell in the absence of data. One study suggests that there might be hesitation. In a 2011 study conducted by the Association of Muslim Professionals on the state of the Muslim community in Singapore, 52% of parents felt that the prospect of them sending their child abroad for further studies was “bleak”. Of these, 34% said that they did not want their children to have an overseas education.

If this is any indication of reality, we need to shift our thinking as a community to see the value of spending time away from home, and learning to develop ourselves. It is imperative for Singaporeans to explore the global stage by plugging into global, and even regional, networks. At the Future Leaders Summit held in July 2015, Secretary-General of the National Trade Union Congress Chan Chun Sing called on young Singaporeans to travel the world for opportunities beyond Singapore, gain valuable experiences and return to Singapore to serve. This rings true even more for the Malay/Muslim community; we are a small community and it is vital for us to embrace a global mindset to ensure the community’s growth.

Going abroad may be an adventure of a lifetime for some. For others, it may be challenging. Whatever the experience may be, it is highly likely that an overseas stint will change you for the better and make you see things from a different perspective. Looking for opportunities to travel for work and study is a good way to build capacity for the future in more than one way. It forces you to consider new perspective by unseating your assumptions about the “norm”; you will make new friends who will provide you a link to their worlds. The community will be collectively better off.

“

Many still have misconceptions about what museums are and what they offer, thinking that all museums are those so-quiet-you-can-hear-a-pin-drop spaces that have a stuffy atmosphere and are staffed by grumpy historians or art-apprecianados who might judge them for having no clue about the artefacts on display.



Let's Go to the Museum!

By Asmah Alias

Mention the word 'museum' to children or even adults and they would say it is boring or dark and scary. Many people don't even go to museums, perceiving them as associated with the elite and intimidating. Many still have misconceptions about what museums are and what they offer, thinking that all museums are those so-quiet-you-can-hear-a-pin-drop spaces that have a stuffy atmosphere and are staffed by grumpy historians or art-apprecianados who might judge them for having no clue about the artefacts on display.

This is not surprising, as museums have always played a significant role as repositories of knowledge, and had the traditional role of collecting, preserving and sharing rich collections. But over the years, their roles have changed: since the 20th century, museums' roles have gradually moved from that of an authoritative body that lectures to a passive audience, to that of a partner in dialogue with interested, engaged members of the community.

Museums now play a greater role in supporting the development of communities, bringing different groups together and providing learning opportunities, platforms and resources for developing the skills and knowledge of their members.

Today's museums have exhibits that are hands-on, with simple explanations geared for younger crowds and helpful adult staff ready to assist, explain and sometimes even translate. As museums broadened their missions and evolved in the last decade, learning has become a new and central focus for these institutions. To accomplish their educational purposes, museums around the world, including those in Singapore, have been offering programmes and activities such as lectures, workshops and events for visitors of all ages.

But for many families, museums often are not the first places that come to mind when you think of family bonding or weekend activities. After all, there's often no touching, no running and no snacking allowed in the galleries. However, there are limitless opportunities to let your imagination run wild and incredible worlds to explore. Learning at museums is voluntary and self-directed, taking place in an informal setting where people can be driven by curiosity, discovery, free exploration and sharing of experiences with companions.

So how can one reap these benefits from a museum visit? Here are some tips to enrich your family's experience during your next museum visit.

Before Your Visit

What excites your family and your children especially? Choose an art museum if the little one adores painting. Select a history or science museum if you have inquisitive children who love to solve problems. Other than the national museums and heritage institutions operated by National Heritage Board (www.nhb.gov.sg), the Museum Roundtable website (www.museums.com.sg) provides an overview of more than 50 museums in Singapore. Look up the museum's website for information about the galleries and collections. Let your child browse too and interest them by discussing what they can expect to see and experience at a museum during your upcoming visit. You can download and print relevant Activity Sheets from the museum's website and bring them along for your visit.

To further build up excitement before your visit, you can dig out some old photographs, personal belongings with sentimental value or family heirlooms at home. Have a conversation with your family about these items and look out for similar ones during your visit.

Knowing in advance what the museums have to offer will definitely help you plan your visit strategy. It is also important to let your children know what behaviour is expected of them at the museum, especially if it is their first visit. On the way to the museum, tell them they will need to walk, not run, keep their voices low and, in most cases, they would not be allowed to touch the artefact and artwork.

During the Outing

Museums can be visually overwhelming, even for adults. Take your time to look around during your visit. You need not see the whole museum in one day. Your goal is to let your family have a positive experience and an enjoyable time, so that they end up wanting to return in the near future.

Engage in an active dialogue with your children; allow them to discover their interests by asking what they would like to see. Let them lead your adventure to stir their imagination. Apart from asking questions, each family member can identify one favourite object from the museum collections and tell the rest of the family why he or she likes it. If your children love to draw, you can bring blank paper and pencils so they can do simple sketches of

favourite artefacts or sites together. You can also take “we-fies” with your loved ones and upload them on Facebook and Instagram to capture memorable moments.

Most important, enjoy yourself and try not to overwhelm your child with too much information all at one go. Whether you spend 30 minutes or an entire day at the museum, there is value in every museum visit with your child. I guarantee that you’ll be amazed at how much your children notice and how their experiences and way of seeing are different from your own.

Don’t feel intimidated if you don’t have all the answers to the questions asked by your children during the visit. You don’t need to understand everything on display. Show them that exploring the unfamiliar is fun, and forms a gift that will last a lifetime.

After the Visit

Keep the conversation going and ask your children about their museum experience, their favourite artefacts, interesting facts they have learnt, and other things they would like to learn about. You can also ask your children to draw the most memorable moment of their visit.

Final tip! I usually take my daughter to the museum café or museum shop after our visit to allow her to choose a treat. It makes for a sweet (often literally!) ending to the outing.

There is no shortage of research indicating the benefits of museum visits. Such visits raise awareness of a nation’s unique culture and heritage, instilling national pride among its people and reaffirming their sense of identity and rootedness in the face of rapid globalisation. In the context of Singapore, our nation’s history is distinctive in its people’s largely peaceful multiracial and multi-religious co-existence. Collectively, they form a vast database of facts and powerful lessons that can shape how our children view the present and future.

Museums are also windows to the world. Through the exhibition of artefacts and artworks, museums play a significant role in introducing our local audiences to the diverse societies and cultures around the world. In the process, museums foster greater understanding and appreciation of how societies relate to each other.

In short, a visit to the museum provides memorable, immersive learning experiences, provoke imagination, introduce unknown worlds and subject matter and offer a unique environment for quality time with family. So what are you waiting for? Let’s go to the museum!

Family & Youth

“

The recently-announced decision to raise the retirement age from 65 to 67 is indicative of the tendency for older workers to remain in the labour market.



The Future of Post-Retirement: Towards Community-Based Support and Employment for Older Singaporeans

By Suen Johan

Retirement, defined as a complete exit from the labour market, is increasingly becoming both undesirable and unfeasible. Older Singaporeans want to remain economically active for a number of reasons, such as the pursuit of a meaningful and productive activity in their later years, or out of financial necessity. The recently-announced decision to raise the retirement age from 65 to 67 is indicative of the tendency for older workers to remain in the labour market. From a macro-social perspective, such a trend bodes well for an ageing society, especially when faced with challenges posed by increasing dependency ratios and anxieties about the heavier economic burden that will befall a shrinking workforce. Policies that encourage post-retirement employment have already been promoted as a plausible solution to the depleting pension schemes of welfare states in Scandinavia. Japan's efforts at keeping older workers employed through the creation of a variety of employment opportunities, including the management of small businesses, have proved successful in an additional dimension - bringing health benefits, both physical and psychological, to the elderly. Thus when addressing the issue of post-retirement economic activity, it will no longer be solely about demand and supply in the labour market, but about the creation of quality opportunities for economic productivity as well as mechanisms of support which would empower older Singaporeans to age meaningfully into latter stages of their lives.

However, what characteristics do such “quality opportunities” for seniors consist of, and what does “ageing meaningfully” actually mean? This essay will briefly unpack these terms and discuss them in relation to the idea of community-based systems of support and employment.

Ageing Successfully and Meaningfully

The vision of successful ageing has been on the national agenda since the 1990s, when an inter-ministerial committee sought to address the six essential and determinant aspects of ageing: healthcare, financial security, social integration of the elderly, employment, housing, and intergenerational cohesion and conflict. While these issues are crucial when gauging the quality of life of senior citizens, attention should also be paid to how much agency, independence, and empowerment older Singaporeans have in realizing their own standards and goals within the various dimensions of successful ageing. In other words, it is important for older Singaporeans to have the autonomy to plan and structure their lives as they enter into old-age, which is approximately from between the age groups of 65-75 years to 76 years and above. Meaning plays an important role throughout the life course of human beings but more often than not, perceptions about the lives of older persons tend to underestimate the importance of aspirations. Granted, such aspirations may starkly differ from the type of ambitions embodied by the youth; nevertheless, the dynamic process of deriving meaning out of experiences, then making decisions and structuring their lives around what is deemed symbolically valuable, continues until the later stages of life.

“

Singaporeans have in realizing their own standards and goals within the various dimensions of successful ageing.



As meaning is ultimately a cultural process, its variations also depend upon an individual's socio-biographical characteristics, such as socio-economic status, ethnicity, religion, and gender. The process of social stratification, especially along the lines of social class, tends to be compounded in old age as those lacking financial resources experience further impoverishment due to health and a reduction in work. Extrapolating from trends within the Malay/Muslim community, we can anticipate an increasingly higher educated cohort of older persons who will demand for more jobs that require middle to higher-middle range of skills; jobs that are severely lacking in the current labour market for older persons. On the other hand, findings from the latest National Health Survey indicate that health risks for Malay/Muslims are generally higher in comparison to other ethnic groups in Singapore; poor health could thus be a major obstacle for future cohorts of older Malay/Muslims to maintain independence and autonomy as they age.

Ageing successfully and meaningfully therefore requires a social environment that enables and empowers across and within social groups of the older population. Especially for those who are already in socially marginal positions, the ageing process results in a downward spiral that accentuates their vulnerability because they are compelled to disengage further from employment and social roles. Thus, the issue is putting in place mechanisms and systems to ensure that the social environment is universally conducive enough for older Singaporeans from various socio-cultural backgrounds to encounter the dynamic and potentially distressing experience of ageing with freedom, dignity, and some measure of independence.

A Community-Based Approach to Ageing in Place

Numerous studies have documented the positive effects of ageing-in-place. Over time, an individual develops intimate and intuitive knowledge of the resources and opportunities available from their immediate environment, which are used to cope with specific contingencies. For instance, an elderly person who supplements his/her income through informal work opportunities, such as selling newspapers, sewing, ironing clothes, or babysitting, would have to have personal contacts of interested clients within the vicinity of their home. Older persons who struggle with caregiving responsibilities for dependent elderly family members would also rely heavily on the assistance provided by nearby social service or eldercare centres. As the mobility of some older persons becomes increasingly limited in later life, it is imperative that community-based systems consisting of both informal and formal support are strengthened as well as geographically and bureaucratically accessible to older persons. It should be noted that such a community-based approach requires a delicate balance between top-down and more organically-driven initiatives from the ground up.

“

In order for older persons to feel comfortable enough to expand their informal networks and participate in community-based systems, they have to feel a sense of productive purpose and connection.

The future of post-retirement employment should be community-based, flexible, and leverage on the skills of older Singaporeans. In order for older persons to feel comfortable enough to expand their informal networks and participate in community-based systems,

they have to feel a sense of productive purpose and connection. To facilitate this, social policy paradigms will have to go beyond purely monetary handouts and voluntary-based programmes for senior citizens and create opportunities that generate both gainful and meaningful participation within communities. It will serve older Singaporeans and society in general well if ageing and post-retirement are dissociated from ideas of dependency and economic inactivity, and understood as phases of the life course that have the capacity to thrive meaningfully and productively given the right social conditions.

“

Saya percaya yang paling penting dalam membentuk ketiga-tiga nilai utama ini, sebagai orang Islam, kita memerlukan pemahaman agama yang sempurna.



Ke Arah Masyarakat Cemerlang: Membentuk Nilai Murni di dalam Keluarga

By Nurul 'Izzah Khamsani

Ada banyak nilai-nilai murni dalam membentuk keluarga yang positif. Namun, yang saya kira teras adalah kepercayaan, hormat-menghormati dan kasih sayang.

Saya percaya yang paling penting dalam membentuk ketiga-tiga nilai utama ini, sebagai orang Islam, kita memerlukan pemahaman agama yang sempurna. Hanya dengan pemahaman & pengamalan agama yang sempurna, dapat kita merealisasikan ketiga-tiga nilai yang teras ini sesuai dengan kehendak ketentuan Allah dan Rasul.

Pemahaman & Pengamalan Agama yang Sempurna

Dalam semua perkara didahulukan Allah dan Rasul. Untuk ini ibu bapa harus bersedia dengan ilmu dan amal.

Apabila individu Muslim kenal dan cinta Allah dan Rasul, insya-Allah mudah untuk menerapkan nilai-nilai murni dalam diri.

Penting ibu bapa dan ahli keluarga mengadakan masa untuk menerangkan tentang kefahaman agama yang benar kepada anak-anak. Jika merasakan kurang kemampuan dalam mengongsi ilmu agama, pergilah ke institusi agama atau para asatizah yang bertauliah untuk belajar bersama atau hantar anak-anak dan apabila mereka pulang nanti, minta mereka kongsi bersama apa yang telah dipelajari.

Ini penting untuk memastikan kefahaman Islam yang benar dalam diri anak. Contohnya seperti masalah pengganasan. Perlu anak itu faham apa pengertian jihad yang sebenar supaya tidak mudah terpengaruh dengan ideologi radikal yang dibawa oleh pendokong pengganasan seperti ISIS. Ibu bapa perlulah memastikan anak-anak belajar dengan asatizah yang membawa mereka ke jalan yang benar dan akhlak yang mulia. Antara ciri-ciri asatizah yang baik adalah tidak membawa fahaman yang boleh memecah- belahkan di antara anggota masyarakat.

Selain itu, ibu bapa hendaklah menghidupkan aktiviti keagamaan bersama di rumah. Hidupkan rumah-rumah kita dengan solat berjemaah dan membaca Al-Quran. Pastikan setiap individu dalam keluarga menunaikan solat fardhu dan 'role model' nya adalah ketua keluarga itu sendiri. Inilah yang dijelaskan oleh Rasulullah (saw) dalam sabda Baginda yang bermaksud:

Antara cabaran yang dihadapi para asatizah ialah apabila mendengar anak murid berkata, khususnya yang masih kecil: "Ustaz/Ustazah, bagaimana saya nak solat sedangkan ibu ayah

“

Banyakkanlah membaca Al-Quran. Sesungguhnya rumah yang tidak dibacakan Al-Quran akan sedikit kebaikan padanya, akan banyak keburukan di dalamnya dan akan menyempitkan dan menyusahkan penghuninya.”

”

saya di rumah pun tak solat?” Tapi kami sebagai asatizah akan cuba untuk memberikan jawapan yang positif. “Takpa, awak balik boleh ingatkan ibu ayah awak untuk solat.”

Asas kepada nilai-nilai murni dalam keluarga Islam perlu didasari dengan hubungan baik antara insan dengan Allah dan Rasul. Jika seseorang tidak amanah dalam menjalankan tanggungjawabnya yang asas kepada Allah dan Rasul, bagaimana dia ingin memupuk dan membina kepercayaan dalam keluarga?

“

Ustaz/Ustazah, bagaimana saya nak solat sedangkan ibu ayah saya di rumah pun tak solat?

”

Kepercayaan

Kepercayaan ini dibina dengan adanya kepercayaan ibu bapa kepada Allah dan Rasul. Rukun Islam dan Iman diimani dan difahami serta diamalkan dengan baik dalam diri dan keluarga. Sifat tawakkal dan bersangka baik kepada Allah dalam melalui kehidupan, perlu dibina dalam diri sendiri dan anak-anak. Sifat ini mestilah dibina dari kecil. Segala usaha yang dilakukan, hendaklah diakui bahawa akhirnya Allah yang menentukan ia berjaya atau tidak. Ini teras kepercayaan tiap individu Muslim. Usaha, doa dan tawakkal kepada Allah. Jika kita memahami hakikat ini, kita akan berjaya bangkit semula daripada kegagalan dan kekecewaan di dalam kehidupan. Anak-anak yang ada tawakkal dan sangka baik kepada Allah, tidak akan dibawa arus kekecewaan yang boleh membawa mereka untuk melakukan perkara-perkara yang dapat menghancurkan diri dan melakukan perbuatan-perbuatan yang tidak bermoral dan terkutuk.

“

Anak-anak akan faham bahawa rasa hormat dan berbuat baik kepada ibu bapa adalah suruhan Tuhan yang perlu mereka akui dan laksanakan. Bila ada keikhlasan, barulah mereka dapat menjiwai nilai ini.

Hormat-menghormati

Ibu bapa menunaikan segala kewajipan kepadaNya dan meninggalkan suruhanNya. Ibu bapa jika inginkan anak-anak menghormati diri mereka, mereka perlulah terlebih dahulu menghormati aturan Allah dan Rasul. Bagaimana ingin ada sikap hormat, jika dengan Pencipta tidak ada hormat? Anak-anak akan faham bahawa rasa hormat dan berbuat baik kepada ibu bapa adalah

suruhan Tuhan yang perlu mereka akui dan laksanakan. Bila ada keikhlasan, barulah mereka dapat menjiwai nilai ini. Ibu bapa juga perlu mewujudkan suasana ini dalam rumahtangga. Apabila ada konflik, sebaiknya diselesaikan antara pasangan di dalam kamar tidur, atau di waktu anak-anak tidak ada atau tidak mendengar perkara yang dibincangkan. Jika perlu perbincangan dilakukan bersama dengan anak-anak, pastikan emosi cuba dikawal sebaik mungkin dengan tidak meninggikan suara, dan menggunakan perkataan yang kesat. Sebagai ibu bapa, kita contoh ikutan anak-anak.

Kasih Sayang

Kasih sayang itu penting agar jiwa terus subur dan hidup. Sama ada dalam bentuk verbal dan juga tingkah laku: tunjukkan kasih sayang. Dasarnya Allah dan Rasul suruh berkasih sayang. Antaranya dengan saling memberi hadiah dan menggembirakan hati ahli keluarga. Cari dan usaha untuk melakukan sesuatu yang boleh menggembirakan pasangan dan anak-anak kerana ia berpahala di sisi Allah dan mendapat kasih sayang mereka. Nabi pernah menjadi tunggangan cucunya dan Nabi pernah memeluk dan mencium cucu-cucunya. Seorang sahabat Nabi yang melihat kehairanan. Beliau berkata bahawa beliau ada ramai anak tapi tidak pernah berbuat begitu. Nabi lalu memandangnya dan berkata:

“
Siapa yang tidak mengasihi, ia }
tidak akan dikasihi.”

Komunikasi yang Baik Membantu

Untuk anak-anak yang sedang meningkat remaja, ibu bapa perlulah mengajak mereka berbincang tentang perihal remaja hari ini. Dapatkan kepercayaan anak-anak agar mudah mereka berkongsi cerita dan meluahkan perasaan mengenai cabaran dan permasalahan mereka pada hari ini. Inilah peluang untuk memberi nasihat dan mengenali teman-teman anak-anak. Antara cara mendapatkan kepercayaan anak-anak ialah pastikan ibu bapa mendengar dahulu apa yang ingin anak itu luahkan, selepas itu barulah bertanya dan memberikan pandangan, juga nasihat.

Dengan kemudahan teknologi canggih dan media sosial serta aplikasi sosial seperti Facebook dan WhatsApp, ibu bapa juga boleh mengambil kesempatan daripada kelebihan ini untuk dimanfaatkan dengan menghantar pesanan-pesanan ringkas yang bermanfaat dan menarik sebagai perkongsian dengan anak-anak.

Contoh Tauladan atau ‘Role Model’ dalam Keluarga dan Masyarakat

Ibu bapa atau datuk nenek, juga yang lebih dewasa dalam sebuah rumahtangga perlu berusaha untuk menjadi contoh tauladan yang baik buat anak cucu. Ia memerlukan usaha yang berterusan dalam menimba ilmu dan mengamalkan apa yang telah dipelajari.

“
Contohnya, ibu bapa yang }
menghantar anak-anak ke madrasah }
mingguan dan mengharapkan para }
asatizah untuk mengajarkan anak- }
anaknya tentang solat.”

Bagaimana kita mengharapkan anak itu menjadi baik dan berpegang teguh dengan nilai-nilai yang murni, jika kita sendiri belum berusaha menjadi contoh ikutan yang baik dalam keluarga? Contohnya, ibu bapa yang

menghantar anak-anak ke madrasah mingguan dan mengharapkan para asatizah untuk mengajarkan anak-anaknya tentang solat. Namun, apabila pulang ke rumah, solat tidak diamalkan dalam rumah tersebut. Bagaimana asas nilai murni iaitu ibadah kepada Allah dapat dijayakan?

Mudah-mudahan dengan panduan yang diberikan secara berterusan di dalam masyarakat oleh para asatizah dan para ilmuwan yang lain dalam masyarakat, akan dapat membantu anggota masyarakat kita menjayakan visi dan misi keluarga yang berjaya di dunia dan akhirat.

“

Growing up in the 90s,
I remember watching
Barney, the purple
dinosaur which taught
children valuable lessons
on growing up.



What's in Your Barney Bag?

By Afiqah Nur Fitri Suhaemi

“

Well I've been looking in my Barney Bag
And I found a lot of things.
Gizmos and gadgets and odds and ends.
And even some old string.
So let's ask ourselves a question,
'What can we make today?'
With imagination and the Barney Bag
We'll see what we can make today
Yeah!
See what we can make today.”

- *The Barney Bag Song*



Growing up in the 90s, I remember watching Barney, the purple dinosaur which taught children valuable lessons on growing up. My favourite song was the Barney Bag song. There were a few reasons why I absolutely adored that colourful bag. First, the bag was magical; it contained every possible art and craft material that a child could ever imagine and there was enough for everyone to share. From glitter to ribbons and tassels, it was a bag fit to entertain a child and more. Second, the characters that used the Barney Bag organised

mini projects that were almost always aimed at making their classroom learning better. With a group of friends and a little bit of imagination and fun, they always completed their projects.

But what does the Barney Bag have anything have to do my hopes and aspirations for the community? Let me answer this question with yet another question.

What do the insides of our Barney Bags look like?

Of course, the Malay/Muslim community's Barney Bags are not magical; we would have to manually fill them. In the next 50 years, Singapore's external landscape is likely to continue changing, including societal norms, the community organisation landscape and the job market. Take the job market, for example. As the world moves toward a skill-based economy that utilises technology and integrated IT services, there will be large shifts towards demand for more knowledge-based talent than manual labour, depending on the economy. This has implications for Singapore, which has a significant service industry. Skills such as problem-solving and the ability to process information quickly will be very much in demand. These, coupled with the willingness to continuously learn, are definitely worth picking up and placing in our Barney Bags for the future.

“

For me, I have “jotter books” with pencil-drawn mind maps. These mind maps perhaps suggest a potential strength in reorganising information.



But just as it is important to ask what is needed, it is also important to ask: what is already in our bags? These could be items that represent our interests and strengths. For me, I have “jotter books” with pencil-drawn mind maps. These mind maps perhaps suggest a potential strength in reorganising

information. Alternatively, these blank pieces of paper could be filled with inspirational doodles, reflective of the artistic talents of the doodler. Understanding both our strengths and weaknesses helps us answer the next question.

‘What can we make today?’

Barney and his friends' mini projects were almost always aimed at making classroom learning more fun, such as making hats to learn more about occupations. With our strengths and interests, what mini projects can we undertake to make an aspect of our community better? How do we match issues which we are passionate about, with our talents?

Take inequality, for example. Some may argue that even with social transfers, inequality in Singapore is relatively high compared to several developed countries. As such, it is very likely that inequality exists in all communities including the Malay/Muslim community. This implies that there will be disadvantaged groups in the community and that there are gaps to be identified and plugged.

So, what can I do about it? If I have an aptitude for numbers, is there a project I can embark on which utilises this aptitude of mine? If I have been gifted with oratorical skills, is there a way I can transfer such skills to help the community? If I find empowerment in music and theatre, is there a platform through which I can spread it for the benefit of the community? Without a doubt, these are complex and difficult questions to answer and we youths definitely have our work cut out for us.

Tapping the Community's Human Capital

The journey towards discovering an answer does not have to be a lonely road. With imagination and our equivalent of the Barney Bag, and most importantly friends, figuring out and completing any task is not all that daunting. Through working together, we recognise our unique individual strengths and weaknesses. Sometimes they are similar and can augment each other; at other times, they are vastly different and complement each other instead.

Recognising the human capital in our community is key and the question then shifts the focus from the individual i.e. what can I do, to a greater collective, what can we do? It is almost like a super large communal Barney Bag, within which we have plenty of skills, talent and creativity. Such human capital becomes much more than the sum of its individual parts. Hopefully, with many passionate individuals with unique strengths, we will see a diversity of creative and impactful projects that address gaps in our community.

As such, my ambitious aspiration for our community is that we figure out for ourselves the answers to these three questions:

- What does your Barney Bag look like?
- What are the gaps in our community that need to be addressed?
- What can we do about it?

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We may not have a magical Barney Bag with everything we possibly need. But with the untapped human capital that exists in our community, we definitely hold more tools than we think we do and it is high time we make full use of them.



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A melting pot of cultures
where people from diverse
backgrounds live and work
together in a harmonious
and multi-ethnic and multi-
religious society.



Youth and Social Participation in Singapore

By Hasliza Ahmad

Introduction

Singapore celebrates 50 years of nationhood this year. It has been a transformational development from a poor fishing village to a cosmopolitan global city, a melting pot of cultures where people from diverse backgrounds live and work together in a harmonious and multi-ethnic and multi-religious society. However, we cannot take our peaceful and harmonious society for granted. In recent years, there has been a growing sense of uneasiness as our society becomes more heterogeneous with the influx of foreigners.

According to national population data, Singapore has an overall population of 5.5 million and a resident population of 3.9 million as at 2014 (Department of Statistic (DOS), 2015). Malays make up 16% of the population, with the Chinese majority making up 72% and Indians, 9% of the population respectively. Of this, the resident youth population (aged 15 to 34) stands at 1.07 million. Based on available data, 1 in 5 persons today is a resident youth, compared to the 1990s when 1 in 3 persons was a resident youth (DOS 2000, 2014). With Singapore's total fertility rate remaining below the replacement rate (of 2.1), much of Singapore's population growth in the years to come will continue to be through immigration. This will inadvertently contribute to an increasingly heterogeneous society,

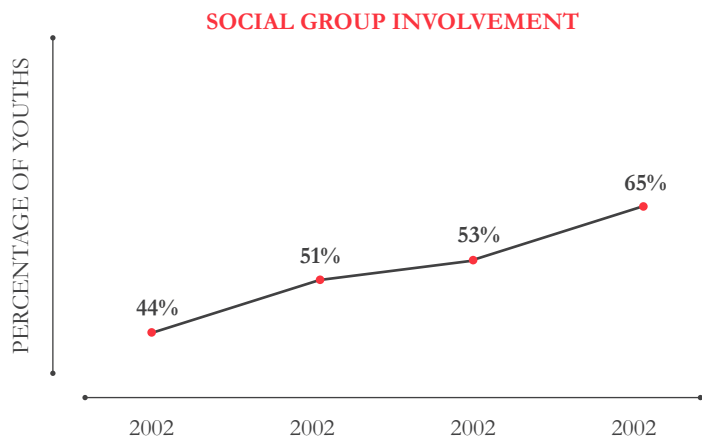
one which has been most keenly felt by our youths. As social diversity increases, there is a tendency for trust to erode within and across ethnic groups in the short-to-medium term (Putnam, 2007), particularly if there is a lack of frequent, socially diverse interaction (Stolle et al., 2008). This underscores the need for greater exposure and integration along inter-ethnic, inter-religious and local-foreigner lines.

Youth and Social Participation

Against this backdrop, an important case for youth social participation can be made: social participation allows young people to interact with, understand and eventually hopefully accept people of diverse ethnicities and nationalities (Ho, K.C., 2014). The 2013 National Youth Survey (NYS) found that youths who were active in social groups reported greater friendship diversity; were more likely to respect, be aware of other cultures, and be involved in the community, as well as report a higher level of social competencies (Ho, K.C., 2014). By means of social participation, a more cohesive society could potentially be developed by bridging youths across and within the different population segments. This is key as Singapore looks beyond SG50 towards SG100, and better prepares herself to face the various challenges ahead.

Based on the NYS 2013, 65% of youths aged 15 to 34 surveyed indicated that they were involved in social groups (see Chart 1) in the last 12 months. This trend has increased over

Chart 1: Social Group Involvement over Time
“In the past 12 months, how often are you involved in the following social groups?”

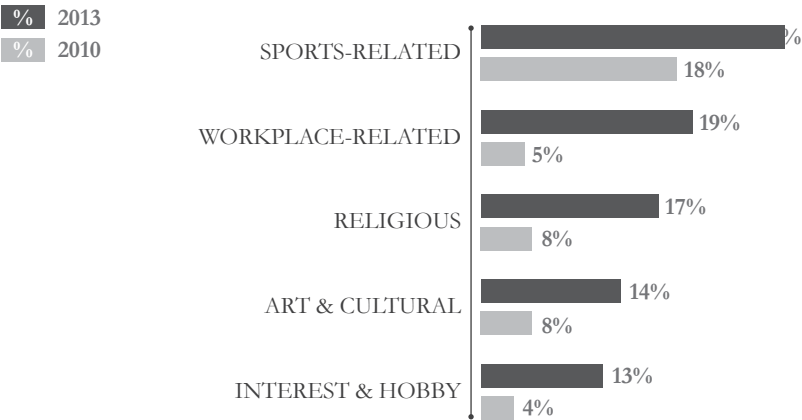


*NYS 2002 and 2005 captured youths aged 15-29 only; NYS 2010 and 2013 captured 15-34 year olds.

Source: National Youth Survey 2013, National Youth Council

the past decade. The social participation measure includes participation in groups across a variety of domains such as arts and culture, sports, uniformed, community, welfare, religion, and workplace. The most popular social groups were sports-related, workplace-related, religious groups, arts and culture, and interest and hobby groups (see Chart 2). Approximately 70% of Malay youths participated in social groups with the social group participation trend mirroring the national trend. This is higher than the current national average.

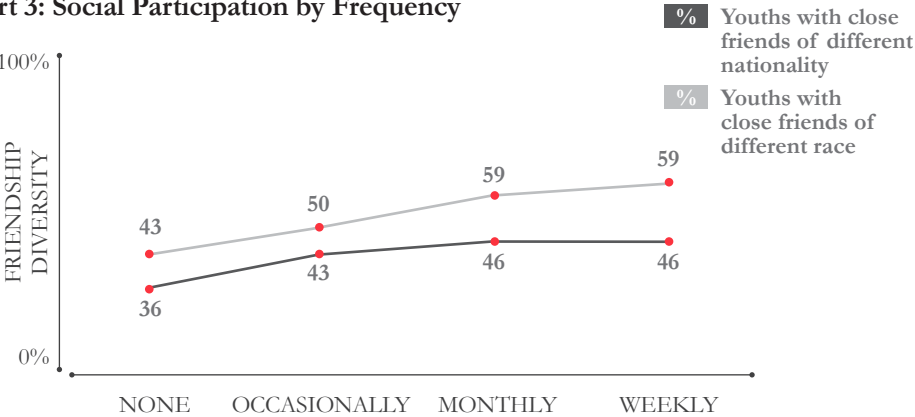
Chart 2: Top 5 Social Groups by Time



Source: National Youth Survey 2013, National Youth Council

The NYS 2013 also reveals a positive correlation between friendship diversity and social participation. Chart 3 illustrates the correlation between friendship diversity and frequency of youths’ social participation.

Chart 3: Social Participation by Frequency



Source: National Youth Survey 2013, National Youth Council

Chart 3 suggests that youths who participated in social groups were more likely to have close friends of a different race and/or nationality as compared to non-participants. The likelihood was even more apparent among youths who participated on a monthly and weekly basis. Considering this, youths with diverse friendships could potentially help foster a better understanding of social differences in society and bridge differences across communities, leading to better acceptance of diverse ethnicities and nationalities. In light of this, it is worthwhile to encourage youths to participate in social groups (e.g. welfare and self-help group) to strengthen the sense of community amongst youths and with fellow Singaporeans as society becomes more heterogeneous.

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More recently, SG50KITAx Unconference was another platform that included participation of youths from all walks of life and ethnicities to discuss the future of Singapore and aspirations of young people.

In this regard, the efforts made by Malay/Muslim organisations such as MENDAKI and 4PM (Malay Youth Literary Association) in recent years to step-up youth participation in their respective programmes as well as reach out and engage non-Malay/Muslim youths are laudable. A case in point is the Ramadhan-on-Wheels (ROW)

programme, an annual initiative by 4PM to engage volunteers from diverse backgrounds to send food provisions to families in need. More recently, SG50KITAx Unconference was another platform that included participation of youths from all walks of life and ethnicities to discuss the future of Singapore and aspirations of young people.

Such collaborative platforms bode well in socially mixing young people across all population segments. This increases the opportunity for youths to grow their social network beyond their usual circle of friends and nurtures a more inclusive and socially cohesive society. Nevertheless, more can be done to buoy Malay youths' participation in non-Malay/Muslim platforms as well as on national youth platforms such as Youth Corps Singapore, a movement to catalyse young people to ignite positive change in society through community service. Participation in such social groups not only exposes Malay youths to a broader range of multicultural issues, but could also provide opportunities for shared experiences to bond with youths from different socioeconomic, educational, racial and religious backgrounds.

Conclusion

As Singapore embarks on its journey towards SG100, and faced with the daunting prospect of increasing heterogeneity, it is of utmost importance that our society remains cohesive and united. As suggested by the NYS 2013 data, social participation of youths may be the way forward to realise a strong social compact in Singapore. Young people, as the future of Singapore, have a strong stake to ensure social cohesion and their future survival in a highly competitive and globalised environment. A more concerted effort to expose and encourage youths to participate in social groups early in their lives will establish diverse friendships and connections across varied segments of the population.

Achieving this requires multi-party collaborations – public, people and private sector organisations – so as to support greater youth participations in society. Malay/Muslim organisations such as MENDAKI can do more to enable and facilitate youths' participation in social groups through their respective programmes or through joint collaborations with other non-Malay organisations on youth initiatives. Singapore's multi-ethnic nature makes it vital that youths develop deep, meaningful friendships spanning multiple social groups and communities to ensure social cohesion.

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Malays have traditionally
prided themselves on
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stressed the importance
of mothers being at home
for their children



Prospects for Stronger Marriages in the Malay/Muslim Community

By Mathew Mathews

Communities sometimes differ in what they value. Compared to the other races in Singapore, Malays, as a group, place high priority on family life. Malays have traditionally prided themselves on their large family sizes, stressed the importance of mothers being at home for their children, relished the involvement of the extended family in the care of their young and had high regard for communal activities to bond family members.

Despite the strong emphasis on family cohesion, there are troubling aspects of Malay/Muslim families that have to be reckoned with. Malay/Muslim marriages are more likely to result in divorce compared to civil marriages. While 14.3% of civil marriages dissolve in ten years, based on data from the Ministry of Social and Family Development, 24.5% of Muslim marriages end in divorce during the same time period¹. Marriages within the Malay/Muslim community which are more predisposed to divorce include those (1) which have been constituted in more recent years, (2) where the groom is younger, (3) when partners have been married before and (4) where spouses are less educated. For those who married at the start of the new millennium, a quarter had divorced by the tenth anniversary, compared to those who married in 1987, for whom it would take 25 years to reach the same proportion of cohort divorces. Marriages where the groom was between 20 to 24 years old were particularly unstable, with a fifth of these marriages dissolving in 5 years. More than a third of those who had ever married before were divorced by the 15th year of

¹Although figures detailing marriage breakdowns by race are not available, figures on Muslim marriages are a good approximation since practically all Singaporean Malays are Muslim.

marriage, compared to 27% among marriages where both partners had not married before. Among Malay/Muslim females with below secondary education, 31.1% divorced in 10 years compared to 7.4% among those who had university qualifications.

Scholars attribute at least some of the increase in divorces worldwide to the reduction of social stigma to divorce. In Singapore, based on the IPS Survey of Race, Religion and Language in 2013, among Malay respondents, 35.1% viewed divorce as always wrong regardless of circumstance, compared to the majority who were accepting of divorce.

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Parents have to deal with emotional issues post-divorce, which leaves them emotionally drained. As a result, it is difficult for them to attend to the emotional needs of their children.



While the great majority of the population accepts that divorce is a reality and bad marriages should be exited, the negative effects associated with divorce have not diminished. Children of divorced parents face substantial disadvantages such as poorer educational outcomes and psychological well-being. This is attributable to custodial parents who often have much less time to supervise their children because they have to parent solely. Parents have to deal with

emotional issues post-divorce, which leaves them emotionally drained. As a result, it is difficult for them to attend to the emotional needs of their children. The magnitude of the negative effects on children is based on factors such as the age of the child, the level of conflict and the availability of social support. Children who are older when the divorce is initiated have access to high levels of social support, and where the divorce proceedings are less acrimonious, adjust better to the divorce and subsequently have better outcomes.

Considering the deleterious effects of divorce, especially on future generations, and how integral family life is to the happiness of many Malays/Muslims, it is imperative that the community constantly works on enabling the conditions for stronger marriages. There are several trends which hold substantial promise for future cohorts of Malay marriages, which will likely result in a substantial reduction of divorce rates.

First, the overall educational attainment of Malay/Muslim is increasing. As observed, divorce rates are the lowest among those who are better educated. With greater educational achievements, couples have better techniques in problem solving, managing household needs, and adapting to changes in their family or external environment. They are also more resourceful in obtaining the help they need in the event of a marital crisis. Couples are also more likely to engage in rational decision making rather than be emotive when problems plague their relationship. While higher female education is sometimes associated with higher divorces, it also signals to their husbands that their wives have the ability to sustain themselves without being dependent on them, and are less inclined to put up with major infractions to the relationship agenda.

Second, there is greater religious orientation among Singaporean Malay/Muslim. Research shows that religion is often cited as an important basis for couple's long standing commitment. Religious precepts prioritise notions of sacrifice, commitment and devotion; these values can structure the conduct of marital decision-making and provide shared understanding of rights and responsibilities between the couple. Essentially, religion provides a set of norms and values that can guide marriages. Such cultural ballast is crucial considering the more permissive global culture which is antithetical to longer term marital commitments. The negative effects of religion on marriages, as observed in some societies where religion can be used to entrench cultural practices which leads to the subordination of women, is greatly moderated in the Singaporean context. This is due to the progressive religious leadership within the Malay/Muslim community where leaders seek to contextualise the principles of religion to the needs of contemporary society. This ensures that religion is not an archaic institution which tries to subjugate its members to outdated practices which are not viable in the contemporary demands of modernity, but rather becomes an institution which provides a moral compass and wholesome anchor for marriages.

Third, the Malay-Muslim community, through its various voluntary welfare and religious organisations, has been implementing strategies to support Malay/Muslim couples. Premarital preparation programmes, marriage enrichment programmes and marriage counselling have all been demonstrated to assist couples develop better relationships and cope with marital crisis. The culturally sensitive manners, in which these programmes are conducted, where the lived context of Malay/Muslim marriages in Singapore shapes the design of the programmes, make such programmes exceptionally relevant. Other strategies to support couples with the parenting of young children and deal with various stress sources, such as financial inadequacy and employment loss, all work to surmount the challenges that can seriously destabilise marriages.

There are of course new challenges on the horizon which can further stress Malay/Muslim marriages. While the problems associated with a rapidly ageing population will affect the Malay/Muslim community later than the Chinese or Indians, it is still a looming concern which adds to substantial caregiving responsibilities. Economic trends which might lead to more frequent job displacements and the need for constant retraining to ensure competitiveness for work will be equally stressful. However, with the host of government initiatives to tackle these problems, and a community which pools its resources to face collective challenges, there is good reason to be hopeful that the Malay/Muslim community will continue to enjoy the strong marriages and families that they value.

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I feel that the world,
and we Singaporeans
along with it, need to
realize that there is more
to Singapore than its
money-making industry.



Past, Present and Promise for the Future

By Nabillah Jalal

Singapore celebrated its 50th anniversary this year with all the ritzy fanfare we have come to expect of our cosmopolitan city. Tiny but mighty, Singapore has succeeded as a formidable economic player since gaining independence in 1965. As much as Singapore has grown into a First World country and marked itself as a highly competitive market, I feel that the world, and we Singaporeans along with it, need to realize that there is more to Singapore than its money-making industry.

Through this article, I hope to trigger ideas of what Malay/Muslim youths can do for themselves, their family and community as they strive to become the next generation of Singapore. I feel that this community should shift its paradigm towards being a more open society, willing to accept changes and more welcoming to new ideas.

Singapore is a global city filled with timeless stories, but I believe that very few of us take notice of them as these stories do not resemble anything at the movies, on our daily televised shows, or in the bestsellers that we read. So many stories are still caught in between the cracks and in the back alleys of contemporary society. We need to rediscover these timeless tales as global citizens. I believe it is essential that we try to return to our roots – whether in the aspects of family, culture or religion – and find passages from these stories that can serve as reminders not only for our generation, but also the coming ones.

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Our heritage and roots ground us and keep us mindful of who we are and where we come from, while the ever-changing society propels us to become progressive individuals.



What I find most compelling, as a Muslim youth, is the importance of balancing our heritage and our evolving world. Our heritage and roots ground us and keep us mindful of who we are and where we come from, while the ever-changing society propels us to become progressive individuals. In that manner, we will then be accepting of the challenges we have to face, be willing to push ourselves against the limits of what we can do, and most importantly,

embrace loss when it occurs. I have come to realize that embracing loss, the oldest and most constant of human experiences, has helped me to be in control of my life. We need to stand in the space between what we see in the world and what we hope for; look squarely at rejection, at heartbreak, at death, and draw out lessons from these situations.

“We are our choices” (Jean-Paul Sartre) – and rightfully so. It is most definitely our choices, and not our abilities, that define us as a person. My unconventional choice to pursue education in the arts has pushed me to new boundaries and allowed me to gain experiences that I would not have had, especially if I had followed the conventional routes of business, medicine or law. This choice also comes with its own unique problems and challenges and in those trying times, my roots to home, *di mana bumi dipijak, di situ langit di junjung*, give me faith and keep me grounded.

A final tip for all the youths who are working hard to realise their dreams - fake it till you make it. Just like you, everyone is learning about life and gaining experiences along the way. Nobody truly knows what they are doing, or whether their game plan was going to work until they have achieved success. Some confidence in yourself will go a long way. There will be days where life and its problems seem to be too difficult to bear and when that happens, take small steps. Wake up, dress up, and show up. This mantra got me through many trying occasions in these years.

Every success or failure should be a pivotal anchor to strive toward and maintain that inner drive in us, to keep creating and developing as local and global role models.

The next 50 years is a space filled with light and promise. I hope that our nation, in particular, our Malay/Muslim community, will not be afraid to push and challenge itself.

Science & Health

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While our nation's economy is dominated by the services sector, manufacturing still provides significant economic output and employment.



Prospects for Our Community in the STEM Sector

By Mansoor Abdul Jalil

As a percentage of GDP, Singapore is investing an increasing share in research and development (R&D) in STEM (science, technology, engineering and mathematics). The latest figure¹ shows that our nation spends slightly above 2% of GDP on R&D (amounting to US\$6.3 billion on a parity purchasing power basis). This is on par with many developed countries such as Switzerland, France and the United Kingdom, although still significantly lower than countries at the technological edge, such as South Korea, the US and Japan. Even the BRIC countries, not normally associated with technological prowess, have joined the bandwagon. In particular, China is set to challenge the US as the world's pre-eminent power in science and technology in less than a decade². This is nothing short of a startling development in a country that, barely a decade ago, was more known for being a manufacturing hub of cheap goods, while innovation and design were done elsewhere.

It is safe to say that Singapore will have to spend even more on STEM R&D in future, to stay in the race. While our nation's economy is dominated by the services sector, manufacturing still provides significant economic output and employment. The government is thus keen for this sector to maintain its global competitiveness and not be hollowed out. Manufacturing has long played a pivotal role in nation-building by providing gainful employment to a large segment of our population. Just after independence, the government

¹https://en.wikipedia.org/wiki/List_of_countries_by_research_and_development_spending <http://www.moe.gov.sg/>

²Nature article, doi:10.1038/nature.2014.16329, <http://www.nature.com/news/china-predicted-to-outspend-the-us-on-science-by-2020-1.16329>

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In parallel, the government has sought to nurture home-grown industries, resulting in local companies such as Creative Technologies and Chartered Semiconductor becoming internationally-known.



instituted a policy to attract investments from multinational companies (MNCs). Our educational system was designed to place emphasis on STEM, so as to produce the highly-skilled workforce required by the MNCs. To this day, MNCs are a lynchpin in Singapore's manufacturing sector, especially in electronics, pharmaceutical and chemical industries. In parallel, the government has sought to nurture home-grown industries,

resulting in local companies such as Creative Technologies and Chartered Semiconductor becoming internationally-known. To support STEM R&D, the government also set up a statutory board, NSTB (later re-named as A*STAR), which now boasts some 14 research institutes, mainly within the Biopolis/Fusionopolis cluster. Besides manufacturing, STEM R&D is also crucial for our nation's defence, and so another entity, DSTA, was set up to develop defence technology for MINDEF. In short, the government recognizes the vital importance of STEM R&D for our nation's prosperity and very survival.

So where do we go from here? And specifically, what role can the Malay/Muslim community play in the next 50 years and beyond? It is clear that we cannot afford to stay still as other countries race up the technological ladder. At the same time, given our relatively small population, we have to prioritise and focus on certain specific areas. Furthermore, STEM R&D should not just add to GDP figures, but must yield a real positive impact to society. For instance, our increasingly crowded city living necessitates research into smart and sustainable cities, urban transportation and infrastructure, renewable energy and water resources. And our rapidly ageing population makes it imperative on us to focus on medical research, translational medicine and assistive technologies (e.g., robotic helpers and prosthetics). Yet another trend - the pervasive computerisation of our lives - has opened up new research vistas in, e.g., the internet of things, social networking, cloud computing, augmented reality, "big data", etc.

These new R&D areas are geared to solving real-life problems in complex, dynamic and multi-disciplinary situations. Gone are the days when knowledge can be neatly compartmentalised into distinct subjects, its highly-specialised practitioners working in ivory towers divorced from the wider society. Also, knowledge is expanding at such a rapid clip that STEM R&D is becoming a level playing field for newcomers. Its multidisciplinary nature draws on a wide range of talent and expertise, not just the hard sciences. For instance, Jack Ma, the famed founder of the Chinese internet company, Alibaba, was no computer geek, and had only encountered a computer at the age of 33. Yet, what matters is that he had a clear vision of the opportunities presented by the internet, and the business savviness and determination to realise it. In the local context, a similar philosophy exists at the Duke-NUS medical school, which accepts applicants with a bachelor's degree from any discipline, not just those with a biological or even scientific background.

The greater opportunities, coupled with the higher educational attainment of the Malay/Muslim community, suggest a brighter prospect for our community in the STEM sector. Indeed, as a community, we have made encouraging progress in the sector. For instance, there is anecdotal evidence of an increasing number of Malay/Muslim graduates and PhD holders, particularly in the biomedical field. Inspiring role models and mentors, such as Professor Jackie Ying, the executive director of IBN and Assistant Professor Rufaihah Abdul Jalil of Yong Loo Lin Medical School in NUS, who also founded Granada Academy (an enrichment institute aimed at developing programmes to expose young Malay/Muslims to the sciences) have helped this trend, as does the government's push into biomedical research. Another factor which may foster greater participation in STEM for our community is the increasing internationalization of science. For our young aspiring scientists, the world is their oyster. Recently, I was on a sabbatical at the King Abdullah University of Science and Technology (KAUST) in Saudi Arabia, which prides itself on attracting the global best in engineering, be it professors, researchers or PhD students. I was heartened to see quite a number of Malay/Muslim Singaporean PhD students, researchers and professionals there. Besides being good ambassadors of our community, they will also bring valuable skills and expertise back to Singapore in future.

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In fact, it is well-known that some of our students face difficulties in Science and Mathematics.



Speaking of KAUST brings me to a related point. STEM is not usually associated with the Malay/Muslim community in Singapore. In fact, it is well-known that some of our students face difficulties in Science and Mathematics. But this need not be the case, as STEM is not something alien to the Islamic culture and tradition. The golden age

of Islamic science spanned several centuries from the Islamic caliphate up to the Mongol invasion (which continued in some form even to the Ottoman empire), and laid the foundations of much of modern science. The achievements of Muslim scientists of that time encompassed the full range of scientific knowledge. The full list is too long to enumerate and only a representative few can be given: in physics – Ibn Al-Haytham formulated the modern scientific method, and laid the foundation of optics; in medicine – Ibn Al-Nafis' theory of the circulatory system predated that of William Harvey by almost four centuries while Ibn Sina contributed his famous magnum opus, the Canon of Medicine; in chemistry – Al-Razi's classification of substances, reactions and apparatus laid the basis of modern chemistry; in mathematics – Al-Khwarizmi established the basis of algebra; in engineering – Al-Jazari with the first robot and Ibn Firnas with the first heavier-than-air flight. Sadly, this rich heritage is scarcely known by most Muslims, who are more familiar with Western pioneers such as Galileo and Newton.

But steps are being taken to address this. In fact, my choice of KAUST as the site of my sabbatical was sparked by an exhibition named “Sultans of Science” at the Singapore Science Centre, and the accompanying IMAX show “Arabia”. These showcased the achievements of past Muslim scientists, and in “Arabia”, KAUST was depicted as an institution to rekindle the glories of Muslim science. One of my favourite spots during my sabbatical at KAUST was its museum³, where I spent many hours browsing through the achievements of past Muslim scientists. I was intrigued to uncover the reasons underlying their achievements, which may hold relevance to our Malay/Muslim community.

Of all the underlying reasons, the Islamic faith itself plays a central role. It is an obligation on all its believers to seek knowledge. In addition, Muslims are exhorted to search for the signs of the greatness of the Creator in all the

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In addition, Muslims are exhorted to search for the signs of the greatness of the Creator in all the creation around us.

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creation around us. And there is no better way to reveal the beauty and order of nature than through the systematic and logical pursuit of scientific knowledge. In fact, certain religious obligations such as the precise timing of prayer times, and the determination of the qiblah, require detailed calculations and astronomical observations. In determining the qiblah, Biruni, a 10th century Persian scholar, made major advances in the science of geodesy, and determined the radius of the Earth to an astonishing 99.7% accuracy (without the use of modern telescopes, satellites, etc.). I am heartened to see increasing attempts to popularise the science of astronomy to our young. Some mosques have organised eclipse-watching sessions while there are Muslim travel agencies that organise trips to view total solar eclipses. It is hoped that through these efforts, science can become an integral part of our lives, something which is fun, can stoke our innate curiosity and evoke feelings of awe at the grandeur of nature. Science and mathematics should not just be viewed as academic subjects at school, where the sole purpose of pursuing them is to get good grades and improve one’s career prospects. We can look to the Jewish community, where the pursuit of knowledge for its own sake is deeply engrained in their way of life. Their success in various fields of knowledge is well beyond their small numbers. Based on the number of Nobel laureates in Physics and Medicine as one measure of success, a whopping 26% are of Jewish lineage even though they constitute only 0.2% of the world’s population. Such reverence for knowledge should similarly be part of our lives as Muslim Singaporeans, as enjoined by our religion.

Another reason why science flourished during the Islamic golden age is that Muslim scientists at that time were open to learn, synthesize and adapt knowledge from all sources, including more ancient civilizations of China, India, Persia and Greece. Learning institutions, initially mosques and madrasahs, and subsequently teaching hospitals and houses of wisdom, were set up by religious and political leaders and rich patrons to pass on knowledge, and more

³KAUST museum, museum.kaust.edu.sa

importantly, the ethos of lifelong learning to future generations. The famous House of Wisdom in Baghdad was set up by the Caliph Harun al-Rashid as a proto-university for research and education, and was highly cosmopolitan. It included not just Muslim scholars of various ethnicities, but also Jewish and Christian ones. Such was the size of its repository of books, that at the point of its destruction during the Mongol invasion, it was said

that the river Tigris “ran black with the ink from its books”. Furthermore, the majority of the famous scientists and thinkers during the Islamic golden age were non-Arabs. Many were Persians, Central Asians, Moors, Assyrians and Turkish, but they were all united in their common endeavour. The universal use of the Arabic language also enabled ready transmission of knowledge throughout the Islamic world and to all levels of society. The support from wider society for academic pursuit, and the respect with which scholars were accorded in Islamic society at that time, was a key cornerstone in the knowledge ecosystem at that time.

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In summary, these are the four basic ingredients – i) the Islamic values such as the sincerity of intention, consistent effort and lifelong pursuit of knowledge, ii) lessons and inspiration from the past glories of the Muslim scientific tradition, iii) resources and opportunities provided by the government and industry as Singapore ascends up the technological ladder, and explores novel research areas, and iv) the globalisation of the STEM R&D, with more countries aiming for a knowledge-based economy (including several Middle Eastern nations) - which in my opinion can catalyse our community’s effort in the STEM sector in the next 50 years of Singapore’s history.

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There are many other reasons
why Singaporeans have cause
to celebrate this milestone
– Singapore being a social
miracle is one such reason.



Harnessing Technology for a Community of Excellence

By Shaikh Ismail Sathakuthamby

9 August 2015 marked more than just the 50th year of independence for Singapore. There are many other reasons why Singaporeans have cause to celebrate this milestone – Singapore being a social miracle is one such reason. Nowhere on earth can we see, citizens from no less than four distinct ethnicities co-existing harmoniously and enjoying equal opportunities to progress in their lives. This, to me, is the single most critical element of Singapore's social fabric which needs to be safeguarded for us to further progress in the next 50 to 100 years.

Every community, including the Malay/Muslim community, now needs to ask how it will stay relevant and contribute to the future successes of this nation.

Yet, in reflecting on what we will need to do to contribute to Singapore's future, there are a number of inherent challenges which the community will face in its bid to progress further. The fight against Islamic radicalization, our community's focus on education, business and commerce are three areas where the community will need to rethink its direction in order to optimise the benefits it can derive from them.

Role of Technology

There are many things which can be done to surmount these challenges. For the purpose of this discussion, I would like to anchor the discussion around what technology can do to help in each of these areas – the fight against Islamic radicalization, our community's focus on education, business and commerce.

The reason behind this is simple. We are a connected nation. The 2013 Annual Survey on Infocomm Usage in Households and by Individuals shows that more than 87% of Singaporean households have computer access. Internet penetration in Singaporean households is more than 93%, one of the highest in the world. A 2014 Google study reveals that Singapore has the highest smartphone penetration in the world at 85% (up from 72% in 2013)¹. These numbers will continue to increase.

What this means is that we are now presented with a mature platform where information can be shared and mindshare can be gained on policies and initiatives. This may not have been possible many years ago. However, now, the pervasive power of technology, if utilised appropriately, can enable our community to help shape and change lives.

Technology in Religion

The Internet is now a prominent staple among both youth and religious extremists, who use it to communicate, collaborate and indoctrinate our young on extremist views. The Arab Spring and the rise of ISIS, have involved the Internet and social networking platforms to attract and recruit young minds to their causes. Earlier this year, two Singaporean youths were arrested under the Internal Security Act for terrorist-related activities, both of whom were known to have been radicalised through online terrorist propaganda².

We will continue to see such examples cropping up through our community fundamentally because the Internet cannot be restricted or policed. So what can be done to mitigate this?

The same way technology has been used to spread vile extremists' messages, we too, should wield technology to close ranks within our community, and set up a conducive learning environment where citizens can continuously learn and interact on the core aspects of our religion.

An e-Muslim Community in Singapore

MUIS can lead in this “un-radicalisation” agenda, by working with other Malay/Muslim organisations to cultivate an inclusive and connected online Muslim community. Using social networking platforms and mobile applications, we can bring together virtually every Malay/Muslim citizen, in particular, our youth, into a common space where Islamic teachings from credible and trusted sources can be discussed.

¹“Asia’s mobile first world” 2014 Google research (<http://googleasiapacific.blogspot.sg/2014/10/asias-mobile-first-world.html>)

²“2 Singaporean youths radicalised by ISIS arrested, one of them detained for planning terror attacks” 27 May 2015 Straits Time article (<http://www.straitstimes.com/singapore/2-singaporean-youths-radicalised-by-isis-arrested-one-of-them-detained-for-planning-terror>)

Ignorance and misguidedness are some of the reasons why Muslims go astray. Through this virtual platform, individuals can be directly connected to religious groups and established scholars so that valuable interactions can take place and misconceptions and ignorance about various aspects of the religion can be addressed.

There is a large volume of resources available from MUIS and other religious organisations which can be consolidated and made accessible, through such an e-Muslim platform. Imagine Friday Prayers Khutbahs or even a podcast on “Practicing Self-Reflection in the month of Syaaban” being pushed to mobile applications on every smartphone or connected device owned by a member of our community. The benefits of this, over simply uploading them onto existing web channels, are multi-fold.

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“Many of the jinns and human beings have We destined for Hell, who possess hearts but do not feel, have eyes but do not see, have ears but do not hear, like cattle, even worse than them. They are people unconcerned”

- *Al A'raaf* 7:179



We must cultivate a culture of social concern, questioning and learning within our community. Through the e-Muslim community platform, I suggest, we will be able to provide a platform for such exchange to take place. We will be able to understand the needs and aspirations of individuals from a religious perspective which will enable us to address them on a timely basis. It will also enable us to detect potential individuals exhibiting behaviours of waywardness, enabling us to intervene early and proactively in countering the threats of Islamic radicalisation.

A New Focus in Education

While we continue to focus on ensuring that our young do well in mainstream secular subjects such as mathematics and science, we cannot ignore the importance of developing skills in technology.

Singapore sees technology and innovation as the next phase of growth. The Infocomm Industry in Singapore reached S\$167 billion in revenue in 2014 and is expected to continue its rise in the years ahead. Infocomm manpower grew by 2.4% to reach 150,200 in 2014. Together with 14,600 Infocomm job vacancies, total demand for ICT professionals increased by 2.3% to reach 164,800 in 2014³. These numbers are expected to climb in the coming years with more technology companies and start-ups making Singapore their Asia-Pacific base to tap into Southeast Asia and beyond.

³Various figures on Infocomm Industry and Manpower published by Infocomm Development Authority in 2015 (<https://www.ida.gov.sg/Tech-Scene-News/Facts-and-Figures>)

It is clear that opportunities abound in this growing sector but the challenge we face as a community is that there our young are markedly under-represented in science and technology. We run the risk of becoming a community pushed into economic backwardness.

As a community, we should encourage and facilitate our young to move into technology and develop deep skills in it – enabling them to take advantage of the opportunities from the growing technology sector.

There is much that Malay/Muslim organisations can do to facilitate this.

Last year, Mendaki Club organised a 3-day workshop to expose youth to the world of programming. This event was targeted at students between the ages of 15 to 19 and was in line with the Infocomm Development Authority's (IDA) 10-year Infocomm Media Masterplan hoping to develop computations thinking as a national capability.⁴ Participants were pushed to think systematically and logically as they were taught basic fundamentals of programming which they then used to build their own ready-to-launch Android app.

This may have been a one-off event but it was definitely a good start to having a more technology-literate community.

Getting our Young exposed to Technology Early

Community organisations such as Mendaki should recognise technology appreciation as a key tenet of their overall education agenda. Technology appreciation and basics of coding should be introduced to our young at an early age so that they can build logical thought and process thinking. At the very least, such exposure can help to reduce or remove phobias to coding which can unnecessarily inhibit their involvement in technology related work in their later years. Until some form of programming or computer science become a formal part of our overall secular education system, organisations like Mendaki can fill the void by providing viable alternatives for our young to develop interest in this field.

This recommendation is a direct adaptation of what Code.org and Codecademy, both non-profit organisations, are trying to do in the US. Recognising that there is an increasing demand for ICT professionals as well as a general lack of interest and capability among the young in programming, these groups have taken it upon themselves to spread the importance of coding to schools in the US and pushing young people to be exposed to basic levels of coding. Their aims are simple. In a society where Internet penetration is high and in a country which has given birth to some of the world's biggest technology giants, these organisations aim to nurture and develop a larger, home-grown talent base.

⁴“Workshop encourages Malay-Muslim youths to dabble in new technology” article by Nashita Kamir (<http://mendakiclub.org.sg/media/workshop-encourages-malay-muslim-youths-to-dabble-in-new-technology/>)

Singapore, in many respects, shares the same story as the US – the main difference is that there are ethnic self-help groups which can provide the necessary support for an agenda like this to be pushed out more effectively.

In addition to giving our young early exposure to coding and the fundamentals of technology, professional organisations such as the Association of Muslim Professionals (AMP) can complement this new education agenda by bringing together our home-grown ICT professionals to help mentor and guide the potential interests of our young in this field. The technology industry is very large, spanning various technology horizontals and applied through multiple industry verticals. Professionals from these different fields can provide our young with more current information around market trends, insights and perspectives. Career talks, internships and personalised coaching can be provided to aspiring students interested in pursuing a career in technology.

Businesses embracing Technology

Technology is rapidly changing how businesses innovate and expand, creating huge impetus for businesses to go digital. As a community, we should push for this drive to be digital and technology-savvy, in as many businesses as possible, so that our businesses can continue to be relevant and competitive.

IDA has identified nine key drivers in the 2012 Infocomm Technology Roadmap⁵ so that public and private sector organisations can understand the respective market opportunities, challenges, adoption enablers and inhibitors, as well as navigate through the Infocomm landscape and create value for their organisations, customers and stakeholders. The question is how many of our businesses truly understand this roadmap and what it can do for them. How many of our businesses are aware of support programmes and initiatives which are nationally administered and aimed at improving a business's productivity and operational value?

More can be done for our businesses here.

Bringing technology closer to businesses

For a start, the Singapore Malay Chamber of Commerce & Industry should consider setting up a technology division, which, can work closely with national bodies like IDA and Spring Singapore to bring technology initiatives closer to our businesses. It can help educate our

⁵“Infocomm Technology Roadmap 2012” published in 2013 by Infocomm Development Authority (<https://www.ida.gov.sg/Tech-Scene-News/Technology/Technology-Roadmap>)

businesses in new technology offerings and support them in identifying, developing and deploying innovative solutions to raise overall productivity and client value. For example, technology offerings around business intelligence and analytics can be utilised by our businesses to get a better sense of their customers and their products. This may sound like huge investments on the part of our businesses but there are a whole host of cost effective solutions which can do the job. The challenge here is the lack of guidance.

Empowering businesses with the right tools in technology, they can be given access to various possibilities. The advent of mobility and collaboration tools has become possible for business entities to work across different geographies. Embracing these technologies will enable our home grown businesses to tap into otherwise untapped markets in the region and beyond. Malay/Muslim businesses in Singapore already have the edge in the sense that they are operating in an environment characterised by relative ease of doing business; they also have commonality of language and religion with large markets such as Malaysia and Indonesia. Think about what businesses can now do if they are able to use technology to reach out to customers and markets in these regions.

Technology Capability development for Working Professionals

In addition to providing both business and technology advisory to our businesses, we should continue to invest in our working professionals by providing them with opportunities to develop strong technology capabilities. Building on the education agenda mentioned above and as an extension to our national SkillsFuture initiative, our community should come together to take the lead and provide support through funding and other means, for our working professionals to develop critical skills in technology. This can span from learning a new productivity software tool to developing in-depth, higher-order skills in programming. This will further encourage technology adoption and advancement across all levels of our commerce.

Conclusion

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A new enterprising breed which
dares to dream big and risk failures
is what the country needs”

- Lee Kuan Yew⁶

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As we begin to write our next chapter of the Singapore Story, we need to ask ourselves, what it will take for a community to stand the test of time and be able to progress in the future global environment. Our community has come a long way over the past 50 years – Malays/Muslims are now home-owners, better educated and overall wealth has increased. But to thrive and progress in the future, the community needs to be much more enterprising. We need to dream big and build the resilience to tackle challenges head-on.

Technology can be our community’s future-proof “Swiss-army” knife providing a variety of solutions to a myriad of challenges that we stand to face as we progress into the future. But as a community, we must first be prepared to adopt technology and embrace it across all levels of society – from our young, to our professionals and to our businesses.

⁶Singapore Senior Minister Lee Kuan Yew in a Straits Times article, 11 Feb 2000 page 1

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Recent years have also seen worsening of certain health statistics, such as the rising incidences of certain chronic conditions such as cancer, diabetes and obesity – conditions that are related to unhealthy lifestyles.



Fostering Mental Wellness in the Community by a Balanced Approach to Progress

By Radiah Salim

In its first 50 years as a nation, Singapore has made much progress particularly in the economic sphere, where we have now become a first-world nation. Spectacular progress in the areas of employment, housing, infrastructure and technology has produced parallel improvements in many areas.

For example, improved health statistics such as reduced rates of maternal and infant morbidity and mortality, reduced incidences of tropical infectious diseases such as malaria and tuberculosis, and increased life expectancies reflect improvements in areas such as housing, water supply and sanitation.

However, recent years have also seen worsening of certain health statistics, such as the rising incidences of certain chronic conditions such as cancer, diabetes and obesity – conditions that are related to unhealthy lifestyles. We also see certain socially unhealthy trends, such as a rise in single parent families, youth suicides and addictions.

These worsening health and social indicators are very likely reflective of a community that lacks mental health and wellbeing.

According to the World Health Organization, mental health is defined as

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a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.”

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Many internal and external factors contribute to cognitive and emotional well-being, including relationships with loved ones, financial issues, work environment, and coping behaviours/skills. When one or more factors prove overwhelming, acute stress (anger, anxiety, depression) or chronic stress may result. Stress can lead to physical symptoms ranging in severity from headache, heart palpitations and bowel problems, to heart attack and stroke. When an individual is experiencing chronic stress, their risk of committing a violent act against themselves (suicide) and others increases significantly.

It is therefore imperative that in the next 50 years, Singaporeans, including members of the Malay/Muslim community, continue to prioritise fostering mental wellness in order to reverse the unhealthy trends that have emerged.

For this to happen, the community needs to continue to develop healthy approaches towards coping with stress, as well as build its mental resilience.

A balanced approach to progress

At the community level, I would like to suggest that a more balanced approach to progress be made in order to meet the twin goals of having healthy coping styles and developing mental resilience. This is already being done, but it is important to keep the momentum going with ongoing efforts and periodic reviews to fine-tune existing approaches.

In the field of education, aside from the provision of a solid academic background and the development of relevant skills, there should also be a focus on the development of civic-consciousness. In educating the young in particular, attention should be paid to the overall development of the individual instead of simply aiming for good academic results or acquisition of technical skills. This education process need not be limited to secular schools and institutions.

Education can be both formal and informal, secular and religious. In the development of moral values, a spiritual emphasis is helpful. For the Malay/Muslim community, mosques and madrasahs should continue to play a pivotal role in educating our young and helping to equip them with the right moral compass.

In the economic and employment sectors, encouraging work-practices that foster work-life balance helps workers cope with stress and become more resilient. Incorporating healthy

work practices such as regular exercise and healthy eating, flexi-work hours, and minimising travel to allow people to be closer to families will result in a happier, more productive labour market. Working parents (some of whom belong to the sandwich generation) will then be able to better balance competing demands on their time and attention.

In the social sector, ongoing efforts to revive healthy traditions such as the “kampong” spirit and the “gotong-royong” ethos, through formal and informal programmes and the building of appropriate infrastructure, is imperative. These traditional values help build more well-rounded communities that care more and share more, thus helping to provide safety nets to flat-dwellers, particularly those who are at home alone. This will also help to spread kindness and encourage more to take up volunteer work – something that yields rewards at many levels. This spirit of volunteerism should be encouraged everywhere – in schools, at the workplace and in the neighbourhoods. This will help encourage caring approaches that are based on a deeper understanding of issues faced by the less fortunate, as more people get up close and personal with them through volunteering efforts.

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Do not belittle even the smallest act of kindness, even if it were no more than meeting your brother with a smiling and cheerful face.”

- *Hadith from Muslim*



Last but not least, Malay/Muslim Singaporeans in particular should heed the following verse from the Qur’an where one can conclude that the community has an important role to play in protecting and preserving the planet by implementing healthy environmental approaches.

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And Allah has sent down rain from the sky and given life thereby to the earth after its lifelessness. Indeed in that is a sign for a people who listen.”

- (16:65)



Recycling, planting trees, conserving water, reducing food wastage and other such acts can only serve the community by reducing stress and improving mental wellbeing. Such a closer and kinder relationship with the environment is crucial for our survival in the next 50 years.

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With the community
pondering over what lies
ahead, it is important to
draw strength and stability
from its past success even as
it sets targets for the future.



Health, Mindset and Identity: Future Challenges for the Malay/ Muslim Community

By Syed Harun Alhabsyi

As Singapore moves towards a centenary of independence, the Malay/Muslim community has every reason to look back to its progress with pride. The community has benefited much from Singapore's progress and while most would argue that we still have some distance to go, it really is a journey of continued improvement for the community.

With the community pondering over what lies ahead, it is important to draw strength and stability from its past success even as it sets targets for the future. Given the pace of change in today's globalised world, keeping up is already a sure challenge, let alone staying ahead of the curve. With these considerations in mind, I offer three key concerns which the community will have to confront in the years to come: Health, Mindset and Identity.

Firstly, the healthcare trends for the Malay/Muslim community have been nothing short of alarming, and need closer review and attention. It is a worldwide trend that some chronic "First World" illnesses are on the rise, with the tide of affluence, excessive food intake, longer lifespan, greater reliance on technology and less opportunity for physical exercise.

In a 2010 National Health Survey, the Malay community had the highest prevalence among ethnic groups in Singapore for hypertension, obesity, raised cholesterol, daily cigarette smoking, asthma and chronic kidney disease. The same survey also found that Malays between 40-69 years of age had the lowest prevalence for healthcare screening of important cardiovascular risk factors including diabetes, hypertension and raised blood cholesterol. It is worrying that the community has the highest disease burden for chronic illness, yet with

an apparent lack of reflective insight and urgency to arrest this trend, whether at the level of the individual or the larger community. The next survey, due in 2016, will hopefully give a more optimistic report card of the community's health.

There needs to be a concerted awareness and drive for action in the community, especially when some of these chronic illnesses are preventable and should be addressed early, rather than to wait for progression to a more chronic, debilitating and complicated state of disease. Healthy habits need to be percolated within the community, and become a way of life rather than the occasional token activity. It will require an integration of healthcare policies and ground-up initiatives geared towards awareness and early intervention, and for its outreach to be effective, Malay/Muslim Organisations (MMOs) should be engaged to be fervent torchbearers of healthy living. For the community to continue to be robust, vibrant and dynamic, its overall health needs to be taken care of.

Secondly, in addressing future challenges, the community will do well to consider a broader outlook and mindset. The strength of the community has always been a collective “gotong-royong” spirit of hard work and desire to uplift its people and standards. This has anchored and rooted the community with a strong foundation to do well in the past, yet to some extent, this insular outlook also stymies ambition and contribution beyond the community's needs.

On the backbone of a world-class education system, our young have shown every potential to be world beaters. Even our Madrasahs, which began as institutions to solely serve the community's religious needs, should now be seen as key contributing entities to the resolution of greater national and global dilemmas. Meeting a former student of the Madrasah is now commonplace in the mainstream tertiary schools and institutions, with some going further to competitive courses such as Medicine and postgraduate programmes in renowned universities the world over. Our Asatizah from the Religious Rehabilitation Group (RRG) are another example of how a community effort has contributed to the larger national security landscape.

The community has grown in the last 50 years with enough capacity to compete and contribute beyond itself, and its mindset should reflect this ability with corresponding confidence, tenacity and rigour to address the needs of Singapore and beyond. To progress further, the community also needs to believe that it has an unwavering stake in Singapore's progress and nation building, and energise its young to target further horizons that the nation and the world can draw and benefit from.

The third challenge is that of the community's identity, and finding its place in Singapore society. This appears to be the most delicate and difficult to handle because of the many moving parts that potentially shape its direction.

The world today is peppered with news of extremism, terrorism and wars across religious and ideological lines. Locally, recent headlines addressed the issue of wearing a tudung at the workplace, an online petition about slaughter of sheep for Hari Raya Haji and the arrests of two youth who were radicalised from online material. Additionally, the globalised and social media environment we live in exhibits a greater desire for expression from the individual, and everyone has a potential platform to give an opinion.

Such issues resonate at a deeper level within the Muslim community, more than any other, as they concern the core beliefs and tenets of the religion. Some issues highlight a gross distortion and malignment of what the community stands for, yet others sprout from the community's innate desire for greater expression and identity. Often, a desire to express individuality and religiosity that is innocuous to the community may be otherwise perceived as a shift by the rest of society towards something previously unfamiliar, unorthodox or even extreme.

How, when and where the community finds this balance will be hard to predict; living peacefully within a maturing diverse society, maintaining discourse with a government trying to be fair and gradual in adapting to new socio-religious norms, coupled with the burgeoning desire of individuals to create greater space for culture and religion. This is also against a backdrop of a tumultuous world, sometimes where the voices of extremism and prejudice trump reason, tolerance and impartiality.

On balance, the community appears poised to move forward and keep pace with the rest of Singapore, though the next 50 years will present a vastly different set of challenges for the country and consequently, the community; requiring much versatility, adaptability and reflexes to change. A struggling nation with no resources half a century ago, Singapore is now a red dot influencing, leading, punching and contributing internationally well above its weight and size. This affords the country some confidence and latitude for the future, quite unlike the insolvent and precarious position she was in decades ago.

Likewise, the Malay/Muslim community has moved past its humble beginnings to keep pace with this progress, and it should be proud of how far it has moved in terms of education, socio-economic indicators and contributions to the wider society today. As the community readies itself for the next leap of progress, it needs to reflect on its own successes and current health, renew itself with an invigorated mindset and prepare to forge its place, identity and contributions for the Singapore of the future.

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Globally, there are
more than a thousand
scientific laboratories
that conduct research
on diabetes.

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A Healthier Lifestyle, a Meaningful and Bright Future

By Yusuf Ali

The prevalence of diabetes mellitus (sweet urine) is increasing at a staggering rate. Latest estimates indicate that there are 350 million diagnosed diabetics worldwide. This burgeon is largely fuelled by the rapid rise of obesity around the world. In Singapore, diabetes, together with its associated complications, is a top killer and currently 1 in 9 people aged between 18 and 69 have diabetes. It is a chronic disease and 90% of diabetics in Singapore have Type-2 diabetes, which is defined by the inability to respond to insulin. Once diagnosed with diabetes, there is no therapeutic drug that offers remission. Hence, the disease burden is carried by a diabetic person throughout life. There is therefore an unmet need for better therapies and interventional points to stem the tide of this disease.

Globally, there are more than a thousand scientific laboratories that conduct research on diabetes. In Singapore, various research institutions are studying fundamental processes that are altered due to diabetes, to improve diagnosis and therapy. As diabetes is a complex disease with interconnecting biological pathways that transcend multiple organs, uncovering diabetes-causing molecules/pathways is a massive undertaking. Reaping the rewards of research in diabetes will take time, but it is essential that all stakeholders stay the course as scientific discovery is our only hope for treating diabetes.

Beyond research, I feel that there are immediate non-invasive ways that we, as individuals, can keep diabetes away. I propose that we make the effort to change our lifestyle so as to greatly reduce the chances of us developing diabetes. First, we must eat in moderation because normal body physiology cannot cope with copious amounts of food. Next, it

is imperative that we also make time to exercise (low-medium intensity) for 2 hours each week. I will attempt to explain the impact of these two, easier-said-than-done, lifestyle changes from the biological angle.

Like it or not, we have to understand that we were all hunter-gatherers before. We did not grow crops or farm animals. Our biology is wired as a hunter-gatherer. We had to hunt for food which usually involved walking long distances and perhaps even running, before each meal. Upon obtaining this precious meal, we digested and absorbed the food in a manner that extracted the most amount of energy from it. A sizeable quantity of this energy was used for our daily activities. The excess energy (i.e. energy remaining after subtracting the daily energy consumed) was rapidly stored to ensure that we continued to thrive/survive in time for the next exercise (i.e. hunt). Wired as hunter-gatherers, our biology is extremely thrifty when it comes to energy. We are primed to rapidly store excess dietary nutrients and we are also designed to quickly adapt to prolonged periods of starvation. Numerous genetics and systems biology studies have shown that our body adapts rapidly to fasting conditions with numerous compensatory pathways that allow liver, muscle and fat cells to cope with less energy. However, compensatory pathways that deal with excess energy when we over-feed are not present in the various organs except for fat. Hence, our body struggles with excessive energy input especially when there is no opportunity to burn off this excess energy. With this excess energy input, our muscles, fat and liver progressively become resistant to the anabolic hormone insulin giving rise to diabetes mellitus.

With each meal, our body continues its energy extraction and storage processes with unabated efficiency. Before long, there will be a rapid accumulation of energy stores (in the form of fat) because we are biologically wired to anticipate that these stores will be rapidly consumed (it still remembers the hunt). However, in today's day and age, food security brings energy to individuals extremely readily. With rapid modernisation, our work has become more sedentary. This creates a situation where energy consumption is high while energy expenditure remains relatively abysmal. With no natural process to stop energy absorption, storage and dissipation, our body runs aground by becoming less insulin-sensitive (i.e. diabetes).

Our body is not wired to deal with excess energy well and we have to limit energy input by not over-consuming food. The prevalence of diabetes is increasing in Singapore and the Malay community is not shielded from this rise. Data from the Health Promotion Board suggests that there has been about a 50% increase in the incidence of diabetes among Malays between 2004 and 2010 (Figure 1). This is a cause of concern but let us not be too alarmed because the increase in number of diabetics is a worldwide phenomenon, across races. However, as Malay/ Muslims, we need to be aware that diabetes is a chronic disease that is largely driven by lifestyle choices, so we can do something about it.

Diabetes in Singapore 2010
Diabetes is affecting people at a younger age

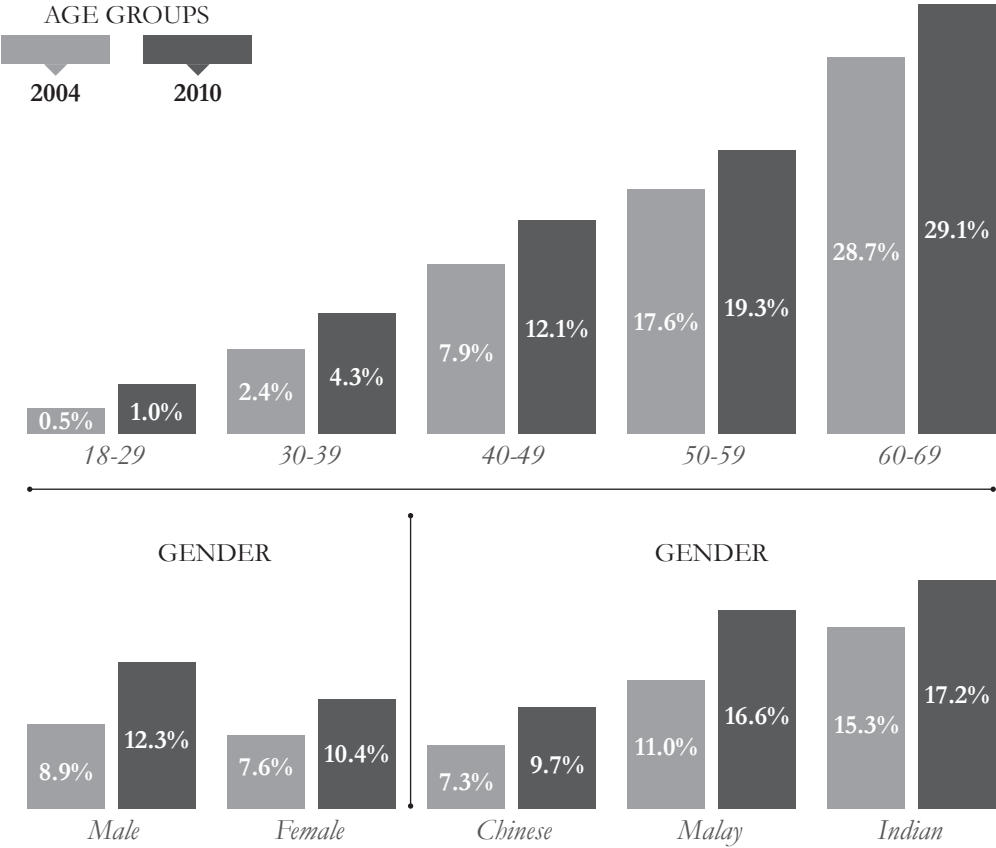


Figure 1: Number of diabetics in Singapore in 2004 and 2010. Upper panel shows the percentage of diabetics in the different age groups in 2004 and 2010. Lower panel left shows that a higher percentage of males suffering from diabetes compared to females. Lower panel right shows the percentage of diabetics among the different ethnic groups. (Source: Health Promotion Board, 2010.)

If you do not have diabetes, be thankful but remain healthy by considering the hunter-gatherer concept that I earlier posited. Eat in moderation, especially when we break our fast during the month of Ramadan. Second, by exercising frequently over time, we increase our basal metabolic rate, the rate at which we consume energy, and this improves insulin responsiveness in the muscle, fat and liver tissues. Our body is quick to adapt to these two lifestyle changes, regardless of age. If you do have diabetes, proper management of the disease is crucial but finding time to exercise is equally as important. The type of exercise you engage in will depend on the severity of disease and on the medication-type. It is very important that you discuss with your doctor/specialist the appropriate exercise you can engage in, given your condition. It is never too late to keep diabetes away and we as Malay/ Muslims can achieve this by choosing a healthier lifestyle.

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According to the World Health Organization (WHO), close to 50 percent of all chronic disease deaths occur in people below the age of 70. This is a significant number. But to address the issue closer to home, how prevalent are chronic diseases amongst our Malay/Muslim community? Is it something crucial that needs to be addressed?



Building a Healthier Community through Increased Health Literacy

By Nuriesya Saleha Abu Bakar

Chronic diseases are among the primary causes of illnesses and death in Singapore. 6 out of the top 10 causes of death in Singapore are a result of chronic diseases. What are chronic diseases, and is Singapore unique in having this trend? Chronic diseases are essentially medical conditions that are long-term and typically progressive over time. Heart disease, diabetes, stroke and chronic respiratory problems such as chronic obstructive pulmonary disease (COPD) are examples of chronic diseases. Currently, these diseases are a major cause of death and disability globally, especially in developed countries such as Singapore. According to the World Health Organization (WHO), close to 50 percent of all chronic disease deaths occur in people below the age of 70. This is a significant number. But to address the issue closer to home, how prevalent are chronic diseases amongst our Malay/Muslim community? Is it something crucial that needs to be addressed?

Recent statistics from Singapore's National Disease Registry showed that a disproportionate number of those with chronic diseases are from the Malay/Muslim community. Here are some examples to illustrate this: even though Malays make up only less than 20 per cent of the population in Singapore, Malays account for approximately 25 per cent of those individuals who are on dialysis; Malay men are found to be 50 percent more likely to suffer from stroke compared to the odds of Chinese men; amongst the different racial groups in Singapore, Malays are found to have the highest rate of heart attacks, most likely due to the higher incidence rate of hypertension and high cholesterol found amongst this group. These examples serve to highlight how more efforts are needed to improve the statistics above, with the hope and goal of better health statistics for the Malay/Muslim community in the next 50 years.

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One of the possible reasons for the poor health statistics described above could be linked to the religious mentality of “*ini semua takdir dan kuasa Tuhan*”, or translated to English, “this is all fate and God’s will”.

One of the possible reasons for the poor health statistics described above could be linked to the religious mentality of “*ini semua takdir dan kuasa Tuhan*”, or translated to English, “this is all fate and God’s will”. Since these diseases are perceived to not be within the control of individuals but in the hands of God, few proactive measures are taken to prevent the occurrences of these diseases. What this means is that those who do have chronic diseases do not use their experiences to educate their young on how to better take care of their health, and

hence the cycle repeats for each generation. I can still recall a Hari Raya visit to a relative’s house, where the owner had been diagnosed with diabetes. Despite his doctor’s advice to reduce his sugar intake, he continued his daily meals as per usual with regular desserts after each meal with blatant disregard for his doctor’s advice; his argument was that everything lies in the hands of God and no changes should be necessary. The next year, I found my relative in a wheelchair with both legs amputated because his diabetes had worsened. I hear similar stories from others with regards to such health matters. While I do not deny that things lie in the hands of God, I believe we as individuals must be proactive in taking care of our own bodies entrusted to us by God.

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A man said, “O Messenger of Allah, should I tie my camel and trust in Allah, or should I untie her and trust in Allah?” The Messenger of Allah, peace and blessings be upon him said, “Tie her and trust in Allah”.

In one hadith, Anas ibn Malik reported: A man said, “O Messenger of Allah, should I tie my camel and trust in Allah, or should I untie her and trust in Allah?” The Messenger of Allah, peace and blessings be upon him said, “Tie her and trust in Allah”. On that note, I hope in the future, there will be a shift in mentality amongst the Malay/Muslim community where there is recognition that one needs first to do his/her part in taking care of one’s health, and after which, ask God for His blessings for good health.

Increasing health literacy through talks and workshops would also better educate the community of the importance of being proactive in managing one’s own health, and the downfalls for poor adherence to medical advice and treatment. Moreover, most of the chronic diseases described above could be avoided entirely if preventive measures were taken early in life to impact lifestyle changes. Today, different exercise activities have been organised to encourage an active lifestyle amongst the Malay/Muslim community, but more can be done. One particular area is with regards to cooking. Certain traditional Malay dishes may be relatively unhealthy and the regular intake of high cholesterol foods could result in individuals having a higher risk of getting chronic diseases such as heart disease. While one can argue that we need to maintain our own traditions with regards to ingredients used in our Malay dishes, eating such foods in moderation is the important message to drive home to all.

“
Let’s work together towards increasing
the health literacy of our community!” }

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As Singapore navigates its way towards a fairer meritocracy, we must also acknowledge that as it is, Singapore's Malay/Muslim population is well-placed to chase their rainbows if they choose to engage in the exciting adventures offered by pursuing scientific knowledge.



Building Scientific Leaders from the Community

By Muhammad Nadjad Abdul Rahim

On the Noble Pursuit of Scientific Knowledge and Technology Creation

Technology changes lives. The most useful technologies are utilised by diverse populations across the world, crossing national boundaries, transcending existing beliefs, benefitting people from all creeds. Technologies necessarily emerge from the discovery, re-organisation and re-categorisation of scientific knowledge. Products are imagined and built to solve problems, fulfilling particular needs of a society. The benefits of pursuing such knowledge and the production of technology are immeasurable. Its obvious positive long-term impact and service to the community at large convinces one of the value in this noble pursuit. The prospects for Malay/Muslims in Singapore to contribute to the progress are bright.

Advantages of being Singapore Malay/Muslims

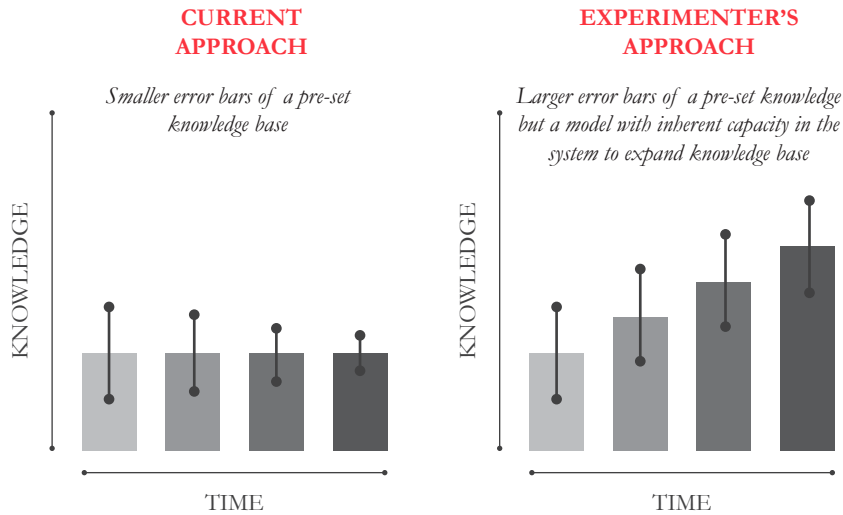
It is important to not be limited by the important conversations concerning the less than equal opportunities afforded to families with low financial means - a group in which Malay/Muslims are still overrepresented. Equal opportunities for all will always remain a key policy aim. As Singapore navigates its way towards a fairer meritocracy, we must also acknowledge that as it is, Singapore's Malay/Muslim population is well-placed to chase their rainbows if they choose to engage in the exciting adventures offered by pursuing scientific knowledge. Singapore's education system ranks very highly in the world, from its primary schools to its universities. The multibillion-dollar drive to build the Biomedical Sciences sector, robust

support for IP laws, trust in Singapore's standards and her proximity to emerging markets are some reasons for the continued growth of the industry. The network of world-class researchers can also be accessed by inquisitive and hungry students as young as 15 years, via internship opportunities at Universities and Research Institutes and by participating in the Singapore Science & Engineering Fair. These opportunities are critical to the development of scientific talent in the community and should be made a key aim of our community organisations if we are serious in developing better scientists from our community.

Bioanthropologist E.O. Wilson has written about how, as a child, he wrote letters to researchers in the nearby university about his simple experiments and observations. In a way, he was lucky to get a response to his letter, which led to regular correspondence and mentorship that aided him in becoming the world's leading expert on ants. Current systems of mentorship are unfortunately limited in their ability to scale and perhaps in the next 50 years, automated mentoring systems or good mentor-aiding systems may exist. However, the community can do more in encouraging such interactions for our young instead of focusing excessively on 'what counts' while in school. Perhaps our MMOs can take the lead, listing willing individuals who want to mentor or creating algorithms to connect curious young minds to the right person based on their interests. But more important, we need to create a culture where our children are determined to excel in all kinds of knowledge because after the initial connection, the children themselves must be tenacious in their pursuit of knowledge.

If there is one drawback of our education system, it would be the over-focus on examinations and results. It is important but as our students strive to do well in their A-Levels and diplomas, many curious young minds overseas are often afforded opportunities to do research from their teens mentored by faculty who enjoy teaching. If one were to use a scientific allegory to describe this: we are currently rewarding children who find the smallest error bar for the same set of experiments (by doing the same limited problem sets as defined by the education syllabus over-and-over again to get that 'A' grade), when many would (1) enjoy and (2) gain much more by doing many different sets of experiments, learning new things as they go along, building on prior knowledge, both their own and others'. It really is the latter skill which is more prized in a knowledge-based economy (see Figure 1 below).

Figure 1: Process of Learning



A laser-like focus on grades also limits exploration in skills that are important in order to think laterally. James Watson (a co-discoverer of the structure of DNA), for example, famously risked losing his university scholarship by taking courses with which he was less comfortable. Despite having a natural affinity for biology where he constantly got his As, he instead took differential calculus, for which he got a ‘B’ grade, and in the following term got a ‘C’ grade for integral calculus. In this century’s public marketplace of skills, we are already seeing IT companies hiring programme developers without degrees in computer science but those who excel in quizzes which require the skills learnt from such courses. With the trend of increasing availability of high-quality and free online courses right now, there will be less reason for our young not to learn new things ahead of others if these items for learning are not yet available in public schools. Once again, building a culture in the community which a child loves knowledge is key to imbuing the character and spirit needed for children to excel and have the courage to be independent.

“
Genius is 1% talent and 99% hard work” } *Building a Resilient Evidence-based Community*
A pre-requisite to creating a community which leads in science and technology is its robustness in dealing with failure. I would borrow Einstein’s clichéd statement of “Genius is 1% talent and 99% hard work” because it really is true. Scientists fail in their experiments most of the time. A key difference is that in the pursuit of knowledge, every result provides an important data point which informs the experimenter of the state of the truth. Failure (or an unexpected result) is another data point that one needs to learn from. It is natural to fail because that is the cost of success. Of course, everyone needs positive encouragement once in a while and it helps if the number of failures is small and not overly costly; that is where the mentorship and guidance of one with experience comes in handy. It helps in cultivating that prized insight and

more importantly in developing that robust spirit in dealing with known unknowns, unknown unknowns and the ever-constant temporary failure.

Accompanying every new technology are the adverse consequences of its invention. Legitimate concerns that come to mind include environmental pollution and nuclear warfare. But it is also easy for uninformed fears to be propagated in an uneducated community especially when buzzwords that most people do not understand, like ‘genetic engineering’ and ‘hormones’, are used in the same sentence as food. It is also not helpful for the community to foolishly believe what we read in newspapers regarding the progress of science - otherwise we must have cured cancer many times over by now, and would be able to predict how our babies will perform as adults just from a simple but exorbitantly-priced genetic test.

We need a community that is able to straddle both ends of the spectrum. We need to avoid self-destructive tendencies because it is clear that the only way forward is to leave the keys to the younger generation (having instilled good character in them), and trust them in their pursuit of scientific adventure towards the betterment of society. We need a community that critically questions whether health supplements really have brain-boosting capabilities that work better than disciplined effort in studying. What sociologist Robert Merton called “organised skepticism” in science and matters of science is extremely important, and should be applied also to the oft-marketed panacea. We also need a community that is open enough to question commercial outfits that misuse religion to sell products like over-priced water and massage oil.

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The Prophet Muhammad (saw) has been quoted as having said: “Seek knowledge (of science), even unto China,” suggesting that the knowledge of science was so important that one should seek it even unto “the edges of the earth”.

Islam's Call to Pursue Knowledge

To honestly discuss progress of the community and to chart out its path for the coming 50 years, it is also important to acknowledge and appreciate the trend of increasing religiosity in Singapore and the region. The misuse of religion is a real problem in communities across the world; recent examples show how ill-founded campaigns are wrought by groups which push the community towards self-destructive tendencies.

It is beneficial to note the substantial theological ballast for pursuing scientific knowledge in the Islamic tradition. The Prophet Muhammad (saw) has been quoted as having said: “Seek knowledge (of science), even unto China,” suggesting that the knowledge of science was so important that one should seek it even unto “the edges of the earth”. In addition, in his exegesis on pursuing true knowledge, Al-Munqidh min-ad-Dalal, Imam Al-Ghazali condemned “the ignorant friend of Islam who supposes that our religion must be championed by the rejection of every science ascribed to the philosophers,” continuing that “great indeed

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great indeed is the crime against religion committed by anyone who supposes that Islam is to be championed by the denial of mathematical sciences. For the revealed Law nowhere undertakes to deny or affirm these sciences, and the latter nowhere address themselves to religious matters.”

is the crime against religion committed by anyone who supposes that Islam is to be championed by the denial of mathematical sciences. For the revealed Law nowhere undertakes to deny or affirm these sciences, and the latter nowhere address themselves to religious matters.” Moving forward, scientists, clinicians and lovers of knowledge need the support of families and other leaders to influence the community to become more resilient and evidence-based.

Another global trend that puts our community at an advantage is that apart from the traditional heavyweights in Science (the West), the Middle East has been aggressively promoting numerous opportunities for development in Science and Technology. The cultural affinity and familiarity in religion of the Malay/Muslim community makes us well-placed to reap the benefits of a Middle Eastern scientific resurgence. Awash with oil money and looking towards sustaining diversified future economies, Middle Eastern Universities are recruiting many talents to drive innovation in their countries. This is underscored by the fact that King Abdullah University of Science and Technology in Saudi Arabia has the 5th largest Endowment in the world, only slightly behind Harvard, Yale, Stanford and Princeton Universities. While money and opportunities are important, the body and mind of individuals must first be able and willing to take that path. We need to act.

Developing Number Sense to take Advantage of Technological Innovations

Quantitative skills will become even more important for the next 50 years. From a management perspective, it is difficult to improve what you cannot measure. This could possibly be a truism that applies to most fields in general. The importance of reasoning abstractly and quantitatively will become even more important as repetitive tasks are automated and a deluge of sense-making data requires individuals to prioritise their aims and approaches in tackling problems.

In the field of synthetic biology, we are beginning to understand how to tune metabolic pathways to produce different amounts of desired metabolic intermediates using various modalities. The production of complex biochemical products requires very precise concentrations of feed intermediate chemicals and control of protein machinery within a given cell. Like building a system of vats to produce desired chemicals in the chemical industry, a reliable cell factory can only be realised with a quantitative understanding and control of multiple biochemical processes in the microbial cell. Biology and medicine have traditionally been fields that progress without much quantitative predictor variables. The ability to harness information technology and model systems quantitatively will be key to excelling in the field.

Thinking of cells as factories in synthetic biology is a ‘workable model’ right now only because many important and complex chemical intermediates cannot be synthesised using cheaper chemical methods and some proteins of the cell have been characterised and understood to catalyse the production of these intermediates. But developments in the field of chemistry, materials science and nanotechnology can easily disrupt that ‘workable model’ of synthetic biology if their production methods are purer and cheaper. ‘Purer’ and ‘cheaper’ are relative measures which always need to be quantified and understood from a whole system perspective.

For now, the clearest examples for the need for, and importance of, quantitative predictor variables are the technologies that arise from the field of physics. Without the quantitative physical rules that Newton identified, we would not have been able to reliably build structures and many other inventions. It is also with a quantitative foundation that despite the difficulties faced in pursuing nuclear technologies, it still remains a key part of the future of energy due to its immense potential (see Figure 2 below)!

| Approximate mass required to produce 24,000,000 kWh | |
|---|----------------|
| Coal (Complete Combustion) | • 3,000,000 kg |
| Mineral Oil (Complete Combustion) | • 2,000,000 kg |
| Natural Uranium (Complete Fission) | • 1 kg |

Clearly, the challenge then remains for the next 50 years to invent safer systems that could exploit nuclear energy. While Singapore has ruled out the building of nuclear power plants in Singapore in the near future, alternatives to light-water reactions and nuclear fusion experiments at ITER are likely to catalyse new insights in finding a practicable nuclear solution.

Numbers also tell us which pursuits are commercially viable for their time, and the numbers don’t currently add up for many microbial factories. But just as Malthus’ 18th century prediction on the growth of populations did not account for increased efficiencies in the production of food, improvements in yields from biotechnology should improve in the near future reducing the cost of production of biochemicals that are of industrial interest.

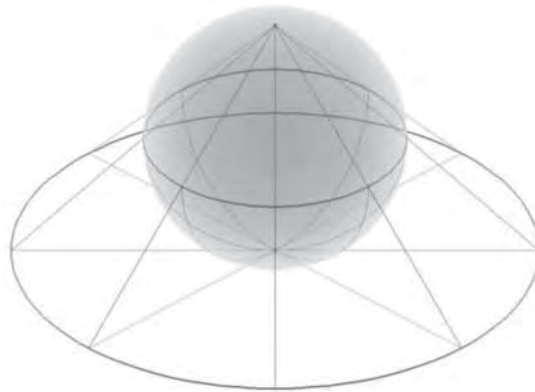
With numbers, we can prioritise what is important for the community in the long-run, which can be applied not just to scientists and technologists but the population in general.

Research is neither Linear nor Predictable

In this piece, I have avoided predicting very specific technologies as scientific endeavour is rarely predictable. Even with a shorter timeline of 10 years, 90% of Scientific American's predictions of 2015 from December 2005 have either not been fulfilled. In some cases, the current research trend has even diverged from the previously suggested path; what more expecting accuracy in looking 50 years into the future?

Perhaps while talking about uncertainty and inaccuracy, we could afford to dabble in some irony by bringing in an example from the precise field of mathematics. In many ways, some technologies exist before they are found a particular use or application. Who would have thought in the 18th century that a mathematical invention, the Riemann's sphere, would be critical to solving the structure of proteins and DNA? Is the link between a geometric drawing (Figure 3 below) and proteins not clear?

Figure 3



Source: Howison (2007)

If, in the past, cooking utensils, weapons, transportation and farming tools were thought of as useful technological products for a particular society, 50 years ahead the labour and progress of Man will depend much more on mastery of tools that come in the form of more abstract thinking. The next 50 years will call into place industries that prize mathematical tools (algorithms included), nanoscale toolkits and other planning and design abilities.

Prescriptions

One thing is clear: in order to build leaders in the scientific community, the Malay/Muslim community should fully utilise the resources available and make full use of its advantage. We must realise that cultivating a robust culture which supports innovation and develops good quantitative skills would not just help in advancing Science and Technology, but also provide further impetus in managing the progress and development of the community as a whole. Building a resilient, evidence-based community requires not just science academics, engineers from industry and good teachers in schools. It also requires support from families and leaders of other parts of our community. As we look 50 years forward, it would be instructive for young swash-buckling scientists to remember that the manner in which they engage the society is also important in delivering the message for the community. As Puan Noor Aisha has been quoted recently in the SG50 KITA book:

“

Untuk orang muda, jangan simpan apa-apa di hati. Akhlak mesti baik. Kalau akhlak baik, mana-mana kita pergi pun senang. Jangan pentingkan pelajaran saja. Budi bahasa pun mesti bagus. Jangan sombong, bersyukur dengan apa yang ada.”¹



¹For the youth, don't take things to heart. Practise the best of virtues and manners. Because if that is good, you can go anywhere easily. Don't make academic education your only aim. You must have good manners as well. Don't be arrogant (with knowledge) and be contented (and humble) with what you have.”

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Without plants, life
on Earth would
not exist. }
”

Cultivating Opportunities in the “Hidden Garden”

By Nura Abdul Karim

Due to increasing urbanisation by fast-growing developing economies, widespread use of fossil fuels and increasing demand for resources, the Earth’s green coverage is fast dwindling. Without plants, life on Earth would not exist. Forests cover a third of our planet. The plants in these forests provide raw materials for food and medicine, maintain biodiversity, protect land and water resources, play an important role in climate change mitigation and provide the air we breathe.

However, forests are now being heavily exploited in an unsustainable manner. Our web of life is being threatened by none other than ourselves! What is the Malay/Muslim community going to do about it? Are we going to stay complacent? Are we happy to just let ‘others’ do the work and pray that we will be ‘saved’ from imminent disaster without getting directly involved? Are we so uninspired to be driven to push frontiers and lead in the crusade to save nature and ourselves just because we live in a little island called Singapore? Do we Malay/Muslims believe that, being just a minority community, we will hardly make a dent in alleviating the looming problems from unsustainable practices on nature? In my opinion, we have to start looking at our capabilities and willingness to take up challenges that will affect our lives as citizens of Singapore and the world, if we are to thrive 50 years from now.

A renowned American botanist and environmentalist, Dr. Peter H. Raven FLMS, once said:

“

We have relatively short lives, and yet by preserving the world in a condition that is worthy of us, we win a kind of immortality. We become stewards of what the world is.”

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These words should resonate well with my Malay/Muslim brethren as our Islamic foundation for ecological ethics and moral principles rest firmly on the Al-Quran and Hadith, where the notion of Man being God’s Khalifah (vicegerent) and possessing Amanah (trusteeship) define our communal obligation to the environment.

Singapore is part of the tropics, which host the most complex collections of plants, animals and micro-organisms on Earth. We may not be able to save every species but we can certainly, as a first step, look to better understand and in turn conserve the key to diversity i.e. plant species. The field of botanical sciences and horticulture (the science and art of cultivating plants) has never been more relevant than now. Singapore has been fortunate that for the past 50 years, our leaders have valued and understood the importance of cultivating a ‘green’ city. With strong conviction, our Government set up agencies like the Parks and Recreation Department, and later the National Parks Board (NParks) to specifically make Singapore a ‘Garden City’ and, more recently, a ‘City in a Garden’. Sadly, Singaporeans may not be fully aware of the “hidden garden”, and the many people who toil behind the scenes to create and maintain this green canvas that is part and parcel of life in Singapore.

For instance, botany, horticulture and their various branches are often overlooked and undervalued by many Singaporeans. This branch of science is not perceived as ‘exciting’ nor ‘cutting-edge’ by Singaporeans as well as the rest of the world. In recent years, botanical and horticultural science courses have been downsized in many institutions of higher learning, in favour of new fields such as molecular or genetics, nanoscience and digital science and technology. When a person talks about working with plants, the young and old normally visualise a gardener toiling away planting his plants, exposed to the harsh outdoor environment. Worse, some might even assume that a gardener is not educated, reinforcing a fallacious stereotype and not helping to advance the representation of botanical and horticulture science.

In reality, botanical and horticultural sciences have always been multi-disciplinary. They do not just involve the knowledge of cultivating and sustaining plant life; but require knowledge from disciplines as diverse as mathematics, chemistry, arts, geology, entomology, pathology, permaculture, engineering, economics, finance, law, communication and now even molecular science.

Presently, Singapore is one of the most densely populated cities in the world. But it is also one of the most advanced when it comes to green city planning, which other Asian cities look to for inspiration. By 2065, more of our green areas will be cleared in response to population growth and industrial development, which in turn will lead to escalating pressures on our already fragile ecosystems. As such, horticulturists and botanists are researching and perfecting creative horticulture practices and permaculture, such as vertical farming, rooftop and indoor greening, to compensate for the projected decline of green areas and ensure that we retain our greenery fifty years from now. This would undoubtedly create opportunities for more research in this area which in turn requires more scientists, engineers, botanists, horticulturists and gardeners to create and maintain such innovative green spaces.

Having been in the horticulture and botanical line for the past 25 years, I believe there are plentiful and exciting opportunities for young Malay/Muslims to explore this field. It is time now to be different and look beyond the norms that most might instinctively pursue as a career and livelihood. Intense efforts are underway worldwide to discover and utilise the potential of plants before they become extinct due to pressures on their natural habitats. This means pharmaceutical, agricultural and nutritional researchers are working against the clock, as only botanists and horticulturists can provide the specialist skills needed to save these species. Our Malay/Muslim community can take up the challenge in the field of botany and horticulture to meet the demand for such skills. Currently, many employers in this sector of horticulture and botany are struggling to fill skilled vacancies and have resorted to hiring foreigners. I would urge our community to seriously consider encouraging our youths to look into horticulture as a possible career path that could lead them into new vistas of knowledge and allow them an opportunity to be the Khalifa to safeguard the Amanah (the flora, fauna and environment) that Allah s.w.t has bestowed upon us.

It is time that the 'hidden garden', comprising the works of botanists and horticulturists, be made known. We need our community to tap this 'garden' and harvest the opportunities in this field. Only then can we adequately take up the challenges to sustain the vision of the City in a Garden, for our future generation fifty years from now and beyond.

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Chemistry has always fascinated me, the way one can mix two very different compounds, resulting in a new compound with new properties that is not just a simple sum of its discrete parts.



Thoughts from a Young Scientist

By Siti Nurhanna Riduan

In June 2015, it struck me that I had spent 10 years doing research in chemistry. What started out as an unsure footing in research has today developed into a passion for what I do, and the drive to do it well. For those interested in possibly pursuing the same path, here is some anecdotal advice from a novice but veteran researcher.

Find your niche and passion

Often, when interacting with younger students about being a scientist, I get asked “Why do you do science? Don’t you get bored doing the same thing everyday?”

My answer? I cannot imagine myself doing anything else. Contrary to popular belief, we scientists do not perform the same experiment everyday for the rest of

our lives. Sure, there will be some repetition, to ensure the data collected is sound and reproducible. But most of the time, we have to think on our feet about how best to design a new experiment to test our hypotheses.

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Why do you do science? Don’t you get bored doing the same thing everyday?

”

I’ve always known myself to be a hands-on person and fairly adept at putting things together. Chemistry has always fascinated me, the way one can mix two very different compounds, resulting in a new compound with new properties that is not just a simple sum

of its discrete parts. The challenge of figuring out why molecules act a certain way, and indirectly, the pursuit of knowledge, has been a driving force in my research.

Growth comes with being brave, adaptable and a constant student

Being brave doesn't only mean skydiving, or going on a solo round the world trip (two things on my bucket list), but also being able to embrace change and being adaptable.

As an example, my main areas of research during both my undergraduate and graduate studies were catalysis and methodology involving small molecules. I studied and optimised catalytic systems for best performance in chemical conversion to fuels and useful feedstock. Along the way, I also dabbled in organic syntheses of molecules, exploring their potential utility as anti-cancer agents.

The skills I learnt along the way helped in my first project, after completing my graduate thesis work. I was entrusted to spearhead a materials chemistry project, specifically the design and synthesis of novel materials for antimicrobial use. I was the only one in the research group doing that particular project, which meant a steep learning curve, plenty of reading and picking up skills for biology experiments. Was I unsure of myself when I first that out? Yes, just as I first was when starting out in the lab as an undergraduate researcher. But as one reads more, and becomes more adept, a sense of confidence will naturally grow.

Right now, I'm back to my first chemistry love, catalysis, but in an entirely different form. I am currently studying the discrete molecular steps for the activation of small molecules, halfway across the world from my Singapore comfort zone. It has been another learning curve for me, in a challenging academic setting, and revising what I've last studied as an undergrad, but I am glad I made the leap.

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I've been extremely blessed and lucky to have had amazing mentors, who not only taught me the theory and skills I now have, but were able to help me realize my potential and encourage me when I felt like giving up.



Have a good mentor (or mentors), and try to be a good one

In E. O. Wilson's "Letters to a Young Scientist", he identifies that passion for science is essential, but it also has to be fostered. This is where having a mentor is important. A mentor would be able to recognize your strengths and weaknesses, and identify your potential.

I've been extremely blessed and lucky to have had amazing mentors, who not only taught me the theory and skills I now have, but were able to help me realize my potential and encourage me when I felt like giving up. Their faith in my capabilities far exceeds my own self-assessment, and I would not have gotten this far without them.

Having great mentors is only one part of the equation; trying to be a good one is the other half. As a scientist, the pursuit and the sharing of knowledge are the two factors that drive me. I often share my excitement of my experiments and results with my students, and I find joy when my students make the connection between the theory taught in classes and the experiments in their hands. Their enthusiasm and sometimes out-of-the-field questions often give me a fresh perspective of the projects I am working on.

Have a good support system, both in and outside the lab

It is no secret that we often fail in the lab. Sometimes, experiments that took two days to set up failed spectacularly, most of the time at midnight, right before an important progress report. Sometimes the results we were waiting for do not support the hypothesis that all the rest of data pointed to. As all this happens, we know we will have to wake up the next morning to do the same experiment again.

It takes personal strength to pick yourself up, brush off the failure and try again. Sometimes, you would need a sounding board to talk to about your troubles, with your mentor, or, just as important, your fellow labmates. They commiserate and understand your struggles, share your tub of dark chocolate ice-cream, and often give you a pep talk to go at it again.

Your friends and family outside the lab circle will probably not understand why you are spending late nights and weekends in the lab, preparing your samples for a time-scale study the next day. That doesn't mean that they are not there for you. I try my best, occasionally, to take the day off and spend time outside of science for a change, and have come back refreshed and ready to tackle challenges.

Conclusion

From when I first started out as a junior researcher 10 years ago, I was one of the few Malay/Muslims around in Biopolis. Since then, I've only seen the numbers grow. This doesn't include the numbers who are pursuing their graduate research studies at the local or overseas universities. It is my hope that there will be more of us with each year, joining me in the journey and adventure of being a constant student of science.

Business & Innovation

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According to a national-level survey done by MoneySENSE in 2005, only half of its 2023 respondents indicated an interest in learning more about how to better manage their finances.



Financial Literacy: Critical and Mandatory Knowledge for the Community in Facing Future Challenges

By Mohd Ismail Hussein

You are a young working adult who has settled down in your career, and are pondering the wide array of courses available to enrich yourself. Which would you choose? Religious classes? That's a commendable choice. Music or singing lessons perhaps? This would likely be a popular choice. But how about attending a free financial literacy course? Not likely it seems.

According to a national-level survey done by MoneySENSE in 2005, only half of its 2023 respondents indicated an interest in learning more about how to better manage their finances. I suspect that, for the Malay/Muslim community, it is likely even lower than that. This is a shame as the Malay/Muslim community seems to have a particularly critical need for financial education, given the rising number of people from the community facing debt issues.

The government has recognized the importance of financial literacy for all Singaporeans. MoneySENSE was launched in 2003 to provide ordinary Singaporeans with highly subsidized, even free financial education programs. But to date, voluntary attendance to these courses by members of our community remains dismal. How can we attract more people to attend financial literacy classes? Advertise a course that promises to double your investments or give you an additional \$10,000 of income every month and I am sure that the Malay/Muslim community will be more than adequately represented. Unfortunately, sound financial management starts with far less glorious, more basic skills in budgeting, savings and prudent use of credit. This is followed by financial planning to meet long-term financial needs such as home ownership, children's education, healthcare costs and retirement needs. With your finances on firm footing, only then should you embark on acquiring investment skills. The community needs to understand that financial education can be a compass to guide you in understanding and managing your priorities in life.

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Have you also factored in the monthly installments required for the electrical appliances you purchased on installment plan?



Take a scenario where you earn \$4,000 a month and your monthly payment for your housing loan is \$1,500. You are thinking of purchasing a car that requires a monthly installment payment of \$800 because in your calculations, you can live with \$1,000 for your day-to-day expenses.

Owning a car seems like a good idea because it makes you look like you are earning enough to afford one, and it elevates your standing in the community. However, can you really afford one? Have you considered the hefty down-payment for the car, the additional expenses on road tax, fuel, parking, ERP and servicing costs? Have you also factored in the monthly installments required for the electrical appliances you purchased on installment plan? Many in the community seem to have a blind spot when it comes to spending and taking debt. They seem to confuse between the ability to repay and affordability. In the car example, the monthly installment is \$800 but the car itself is likely to cost around \$90,000. Can you really afford one with a pay of \$4,000 a month? Even if you are adamant that it is within your capability to lock-in \$800 per month for the next 5 years, is it the right priority for you?

Debt is a rising issue for the community. Earlier this year, the Association of Muslim Professionals (AMP) provided some interesting insights on the community's attitude towards debt in its Community In Review Seminar. Panelist Mr Sumit Agarwal, a National University of Singapore economist, shared that Malays have the highest credit card debt although they have the smallest credit card spend as compared to other races. One of the insights was that the PMET segment (professionals, managers, executives and technicians) is actually the more vulnerable group in the community simply because they have easy access to credit, be it credit cards, bank loans or hire purchase, unlike those in the lower income segment.

Quite clearly, a mindset change is required for the community to be better equipped to face challenges in the coming decades. Grappling with a more volatile job environment is only one half of the equation. The other half is to have a better understanding and better management of rising costs and rising expectations and aspirations. We have to learn the value of delayed gratification, that is, to resist the temptation of an immediate reward in favor of a greater reward in the future. We have to learn to make our savings work harder for us rather than us working harder for the bank. Most of us know of only one way to make money (by working) but we know of many ways to spend them: indulging in food, going for holidays, spending on hobbies, shopping for clothes etc. We have to learn to prioritize essential expenses for ourselves and our family, and find more cost-effective ways to meet our needs and wants. Only when we have built up a comfortable level of savings should we consider learning how to invest in a prudent manner.

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Even then, there are many dangers for members of the community to grapple with. One is the get-rich-quick mentality: it is far easier to lose investment capital than generate consistent investment returns.

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Therefore, only invest in what you know and build your investment know-how gradually with small investments that you can afford to lose, rather than ploughing all your life savings in a new investment or business venture, at the recommendation of a friend. We have heard many stories of those who have fallen victim to get-rich-quick scams, bogus investments and fraudulent pyramid schemes. The reward for those who work hard, live modestly and are armed with sound financial management is the ability to retire early comfortably and live a more fulfilling life.

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The rise of their
companies brought
them fame and glory,
from their humble
backgrounds.”



Technopreneurship & Social Mobility

By Syakir Hashim

Introduction

Technopreneurship is a major impetus to social mobility. It has been proven worldwide that through dedication, perseverance and sheer ingenuity, many entrepreneurs went from zero to hero - examples include the meteoric rise of tech entrepreneurs such as Jack Ma (Alibaba), Steve Jobs (Apple) and Bill Gates (Microsoft).

The public generally know of the success and billion-dollar valuations of these companies. However, the success of these technology companies was backed by a lot of hard work and determination from the founders. The rise of their companies brought them fame and glory, from their humble backgrounds. They had to start their entrepreneurship journey with limited capital and resources which forced them to be creative.

I believe all their sacrifices were worthwhile as their innovations have not only made them wealthy and respected, but have improved the lives of millions if not billions of people around the world. I believe such technopreneurship is a great platform to catalyse social mobility within the Malay/Muslim community.

What is technopreneurship?

Technopreneurship is what you get when you unite “entrepreneurship” with “technology”. This is not just the effect of technology on businesses, but rather the process where progression in the lives of the people takes place. It is the process of using the developments brought about by specialised knowledge to generate innovations in all aspects of human life, with the aid of a creative and skillful mind. This field provides every entrepreneur with the challenge of exploring a path less travelled, towards greater success.

Why technopreneurship?

Many organisations and groups within the Malay/Muslim community promote mentoring and guidance programmes amongst youths. I believe these are good initiatives to engage young people while developing their character. However, there is also a real need to channel these youths to paths that can enable them to make a living. As one such path, technopreneurship can be a truly viable option for a range of reasons.

Singapore is pushing hard to build a ‘Smart Nation’. The government and community stakeholders are working to catalyse and encourage innovation amongst Singaporeans. Many initiatives have been and will be put in place to achieve the vision of a ‘Smart Nation’.

The startup ecosystem in Singapore has matured significantly; many startup accelerators & incubators are helping startups take-off faster and more efficiently. ‘Venture Capital’ funding has poured into Singapore, hitting \$1billion in 2015.

The ecosystem has been set up for young Singaporeans to take the plunge and work hard to realise their ideas. In a report titled ‘Startup Ecosystem Ranking Report 2015’, done by Compass (formerly known as Startup Genome), Singapore emerged as the 10th best startup ecosystem in the world, the only Asian country that made it to the top 10. The access to Venture Capital and funding is important to startups as it provides the fuel to continue running and growing at a rapid pace. This is also good news for entrepreneurs from humble backgrounds, since the access to an abundance of capital means that they do not need to accumulate huge amounts of capital on their own before taking the plunge into technopreneurship. Also, the availability of capital from Venture Capital funds means that technopreneurs need not come from rich families to finance and build a big company.

We are also blessed to have technopreneurs in our community such as Shamir Rahim (whose company recently closed a seed round funding of almost half a million US dollars), Ibnur Rashad (who is currently running a sustainable living lab and also experienced working in Silicon Valley), Khairu Rejal (who now works at Majuven, a VC-fund based in Singapore) and many more. These people are valuable assets within the community, and can be tapped more widely to be role models and provide the social capital for budding technopreneurs within the community.

What needs to be done?

I believe the community currently has sufficient resources to mobilise Malay/Muslim youths to seriously look at technopreneurship as a viable alternative career path that can lead to big successes. Promoting technopreneurship can be done in 5 stages.

1. Raise awareness regarding technopreneurship (through short enrichment sessions/hands-on programmes, leveraging on community programmes such as the Mendaki Tuition Scheme)
2. Showcase success stories of local technopreneurs (using online and offline media channels)
3. Run challenges/competitions regarding entrepreneurship for the young (adolescents/pre-adolescents)
4. Organise programming courses for children and adolescents
5. Channel students to accelerator programmes and incubator programmes which are already existing in Singapore

This sounds easy when typed onto a Word document, but takes leadership with conviction and a dedicated team to run the programmes, which will probably take 5-10 years to bear fruit.

Cracking the 'chase'?

I believe that we stand an excellent chance to crack the 'game' wide open through technopreneurship, which is a dignified alternative path to social mobility within the Malay/Muslim community. Technopreneurship is currently picking up momentum amongst Singaporean youths, and we should explore and nurture the possibility that our Malay/Muslim youths may possess dreams and untapped skills that go beyond public education.

Being heavily involved with the entrepreneurship ecosystem in NUS, I realised that Singaporean youths in general are not so fast and willing to take the plunge into technopreneurship. If the Malay/Muslim community is to do this now, we won't be too late: in fact we would be among the earlier ones on board.

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still be humans working.



Human Factors and the Worker of the Future

By Mohamed Syahid Hassan

I was walking along the corridors of the hospital I work at and as I turned a corner, I was greeted by the beeping sounds of an automated heavy burden carrier vehicle. On its back, it carried a container filled with warmly prepared meals on its way to one of the wards. A while later, I noticed another robot roaming the corridors, an autonomous hospital delivery robot known as HOSPI which was probably delivering some samples to the lab. As a practitioner of the Human Factors approach - the scientific discipline of understanding the physical and cognitive strengths and limitations of the human and how they affect these interactions within the work system - I could not help but wonder about the evolution of the human's role in the work system with increasing automation and the challenges in designing how the human will interact with that work system. Human Factors is ultimately concerned with the designing of systems that fit the worker as opposed to designing the worker to fit the systems. Such an approach is essential in facing these challenges and this field is one where our Malay community could potentially excel in.

Over the next fifty years, with rapid advancements in the field of robotics and artificial intelligence, we will see more automation in various areas of work. Today, grocery shopping at some supermarkets can be done without interacting with a single human by using automated self-checkout counters. Meanwhile, researchers around the world are developing ideas that were once the stuff of science fiction and turning them into reality. For instance, prototypes of self-driving cars are already being tested in Singapore by a team

from the National University of Singapore (NUS) and the Singapore-MIT Alliance for Research and Technology (SMART).

When a task is automated, rather than describing its state as between two polar opposites of either being done by human or being done by automation, it is more accurate to express it as a continuum of roles played by the human and roles played by the automation. Thomas B. Sheridan, a well-known thinker in the field of human-automation interaction, describes this continuum as the Levels of Automation. At the lowest level, the automation offers no assistance while the human does all the decision-making and actions. At the highest level, the automation decides everything and carries out the task actions autonomously, ignoring the human. Depending on factors such as the level of technical feasibility and issues of liability, most types of automation lie somewhere in between these two extremes. Near the lower end of the continuum, the automation would provide suggestions but the ultimate decision and actions are carried out by the human, such as driving with GPS navigation. Nearer to the higher end, the automation decides and acts automatically but keeps the human informed of what is going on and lets the user veto its actions if necessary. This is the case for the type of automation found in modern power plants.

Given the pace of technological development over the next fifty years, the future will see the

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Human work in the future will become more complex and there will be more emphasis on critical thinking, decision making and problem solving.



automation of whatever that can be automated and human's role in the system will evolve to become more of a supervisor or coordinator of robots, monitoring the work of the automation and stepping in when the automation faces a situation it is not programmed to solve. An irony of automation is that while we imagine that automation would make our work easier, it tends to do the easier parts of the job and leave us with

the most complex parts which are too difficult to automate. Human work in the future will become more complex and there will be more emphasis on critical thinking, decision making and problem solving.

Whatever the level of automation, a key aspect of the interaction that must not be ignored is the interface between the human and automation, which is the means by which the human and the automated entity communicate with one another. In critical thinking, decision making and problem solving, information flow between human and the automation is important for successful task performance. The automation informs the human on the state of the work while the human informs the automated entity on what he wants it to do. Designers of work systems have to pay attention to ensure that the human is not overwhelmed with information and is able to operate the controls with minimal effort. Poor interface design can cause suboptimal communication between the human and the system, which could lead to inefficient task performance, or worse, unsafe operations.

How well a human worker performs his task is a product of his interactions with different parts of the work system, including the automation. Apart from the characteristics of the task and the tools, human performance is also influenced by the physical environment, the social environment and the organisational or management environment.

Human Factors is an area of expertise that draws from multiple disciplines. Amongst them, the human factors expert needs knowledge from engineering and design to understand how to design systems, knowledge from physiology to understand how the physical body works, knowledge from psychology to understand how the mind works and even knowledge from sociology to understand how humans function within a work culture. While these are just the technical knowledge requirements, a human factors practitioner also needs to possess non-technical skills such as strong interpersonal skills. The key philosophy in human factors is to design systems with the user in mind. To be able to design for human workers, one needs to first relate and interact effectively with them in order to understand them.

The Malay community is well known for its emphasis on nurturing inter-personal relationships. Malay culture values empathy and thinking for one's fellow man. This lends itself well to the key philosophy of human factors. Human factors practitioners need to be able to talk to the people they are designing for, understand their goals and challenges and ultimately be able to view the system through the perspective of the user. This demands a strong sense of empathy and desire to make things better for other people.

In Singapore, human factors is still a niche field but it has great potential for growth. While the field has received much attention in aviation and the military, there is a growing interest in it in other safety-critical industries such as healthcare, where careful human-centered design can make the difference between successful diagnosis and treatment and unintended harm from preventable human errors. There will be a growing demand for expertise in this area, and individuals from the Malay community looking to develop specialised expertise should consider it as an area of interest because it will fit naturally with our instinct to make things better for others.

Fifty years from now, I can expect robots to run a much more significant portion of hospital operations, but there will still be humans working. Human factors can help design jobs for these people that are not there just because they can be merely be done by a human but because they justify the need for a human, and this makes human work more meaningful.

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Our very thinking
needs to evolve – how
we conceptualise and
approach problems,
develop and implement
solutions.



New Thinking for New Times

By Aaron Maniam

We are often exhorted to respond to the challenge of “new times” – characterised by intensifying globalisation, inter-connectedness, and VUCA qualities (volatility, uncertainty, complexity and ambiguity). Stable and established patterns are upended more frequently, and we can no longer expect past trends to be good indicators of future behaviour.

New times call for something deeper than new information or data. Our very thinking needs to evolve – how we conceptualise and approach problems, develop and implement solutions. In this piece, I suggest five new types of thinking that will help both Singapore and the Malay/Muslim (MM) community to navigate the new world we will inhabit.

Systems Thinking

Increasingly, we will have to adopt a “systems approach” to understanding and responding to problems. John Donne’s reminder that “No man is an island” lies at the heart of systems thinking; he reminds us that each of us is nested in a much larger web of interacting, interconnected entities.

One could argue that systems thinking is not all that “new”. It has roots in the “General Systems Theory” developed by Ludwig von Bertalanffy in the 1940s, and extended by Ross Ashby in the 1950s. Subsequently, systems thinking as a discipline was formalised by Jay Forrester and members of the Society for Organizational Learning at MIT, including management guru Peter Senge, whose book “The Fifth Discipline” identified systems thinking as a key component of organizational learning.

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It needs to penetrate every aspect of our lives, because every individual influences and is influenced by complex, overlapping larger systems.



What is new, however, is the fact that we can no longer see systems thinking as the purview of elite thinkers and management specialists. It needs to penetrate every aspect of our lives, because every individual influences and is influenced by complex, overlapping larger systems. For the MM community, improving educational outcomes for young students will

mean understanding the social pressures to which their families are subject; improving economic situations will entail understanding the broader systems, like health, politics and culture, of which a group is part.

Design Thinking

We must also remember that we are dealing with subtle, constantly evolving human systems – a dynamic, living ecology, rather than a mechanistic system of parts interacting in identical repeating patterns. In this regard, design thinking usefully reminds us to focus on the lived experiences of end-users in whatever we do. Made increasingly popular by global design firms like IDEO, the design thinking approach emphasizes a few aspects: including understanding human needs through gathering deep, detailed stories (akin to an anthropologist’s research on a community); and then experimenting, iterating and prototyping possible solutions.

Such approaches are second nature to designers of software, physical products and web interfaces. They focus on crafting and curating positive holistic experiences, not just creating discrete products.

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Design approaches could be usefully deployed in designing the interventions of MM community organisations as they tackle different social challenges – helping to define problems in more precise ways, and highlighting better solutions.

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The answers that emerge will not always be obvious. When applying design thinking to improving tuition programmes by a self-help group, for instance, some users of design thinking found that the biggest reason for poor attendance rates in one tuition centre was the fact that lights in the toilets closest to classrooms were not turned on, because a well-meaning school principal wanted to save electricity during the evening tuition sessions. Young students were therefore reluctant to attend classes because they felt uncomfortable. The response did not involve particularly complex changes to curriculums or tutor training, as some thought might be necessary, but simple steps to make the experience of tuition more welcoming and less intimidating for students.

Tri-sector Thinking

One way of achieving better designed programmes is to tap on ideas and resources from the public, private and people (or civil society) sectors. Such an eclectic, syncretic approach is what Harvard academic Joseph Nye had in mind when he coined the term “tri-sector athlete” to describe people who could operate well in, and effectively leverage the resources of, all three sectors. Tri-sector athletes have the analytical and emotional range to tap on the reach and institutional longevity of government agencies, the agility and innovation of businesses, and the idealism, passion and activism of community groups.

The MM has done this in nascent ways so far, particular in making sure that the boards of our organisations involve people from diverse backgrounds. But we can do much more, including encouraging our young talent to acquire tri-sector experiences instead of straitjacketing themselves into single and unchanging lifelong careers. The diverse experiences, instincts and skills that they acquire from such broad exposure will be important sources of strength for our community.

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Polycentric Thinking

Elinor Ostrom, the only woman to have won the Nobel Prize in Economics (2009), was famous for her concept of “polycentric governance” - formally independent but interacting centres of decision-making at the global, national, regional and local levels. Ostrom developed the concept to explain how communities, not just governments or markets, can effectively manage the use of common-pool resources like forests and fisheries.

But polycentric thinking has much wider applicability – including to how minority communities like ours can secure a better collective future. We do this best if we see ourselves as embedded in larger, polycentric structures, including national, regional and global ones. In education, for instance, we can tap much more into the opportunities provided at the national level by Singapore’s already strong, broad-based education system. In economics, there is much to be gained from being plugged into the national, regional ASEAN and even global market networks.

Futures Thinking

Most of the new thinking identified above applies to how we approach the present – which is natural, given that the present is where we live. But we also need to think more systematically about the future, because the assumptions we make about tomorrow can affect the quality of our decisions today.

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Today, futures thinking has proliferated across geographies and sectors, as more and more people understand the wisdom of imagining multiple “futures” or different scenarios



Systematic thinking about the future was pioneered by the US-based RAND Corporation and Royal Dutch Shell, with their technique of “scenario planning”. Today, futures thinking has proliferated across geographies and sectors, as more and more people understand the wisdom of imagining multiple “futures” or different scenarios, and then ensuring that we are prepared for a good range of contingencies.

We cannot predict the future with 100% accuracy, or imagine the full range and subtlety of what tomorrow will be like – but applying futures thinking helps us to at least be better prepared for possible eventualities. In this respect, the MM community can afford to apply futures thinking much more systematically and widely, to ensure that we contemplate both the best and worst possible futures; the scenarios we both desire and fear; and hopefully make better preparatory steps for all of them in the present.

Concluding Thoughts

T S Eliot's wonderful poem "The Four Quartets" includes some of my favourite lines in the English language:

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We shall not cease from exploration.
And the end of all our exploring
Will be to arrive where we started
And know the place for the first time.

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My hope is that new thinking by the MM community will allow us to explore more widely than we might have before, and contemplate new possibilities. The aim is not to advocate new things for their own sake, but as tools to better know ourselves, our community, our home, our prospects and our possibilities.

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Social impact bonds have the potential to open new funding sources for programmes that deliver measurable social benefits, saving taxpayer dollars in the process.



Social Impact Bonds: A New Public-Private Model for Social Programmes?

By Amira Karim

While social programs have traditionally been conceived as the exclusive domain of governments, a new funding mechanism, social impact bonds (SIBs), may offer an innovative technique for harnessing private capital to finance social programs and achieve measurable gains on some of the most persistent social issues - including those affecting ethnic minorities like the Malay/Muslim community in Singapore.

This new form of public-private partnership represents one component of a rapidly growing field of innovative social finance, aimed at helping governments fund critical social programs through a combination of government initiation, private investment, and non-profit implementation. Social impact bonds have the potential to open new funding sources for programmes that deliver measurable social benefits, saving taxpayer dollars in the process. SIBs are but one emerging instrument in the vast, dynamic field of social finance, in which “impact investors” seek blended social and financial returns (the double bottom line) and more sustainable, responsible investments.

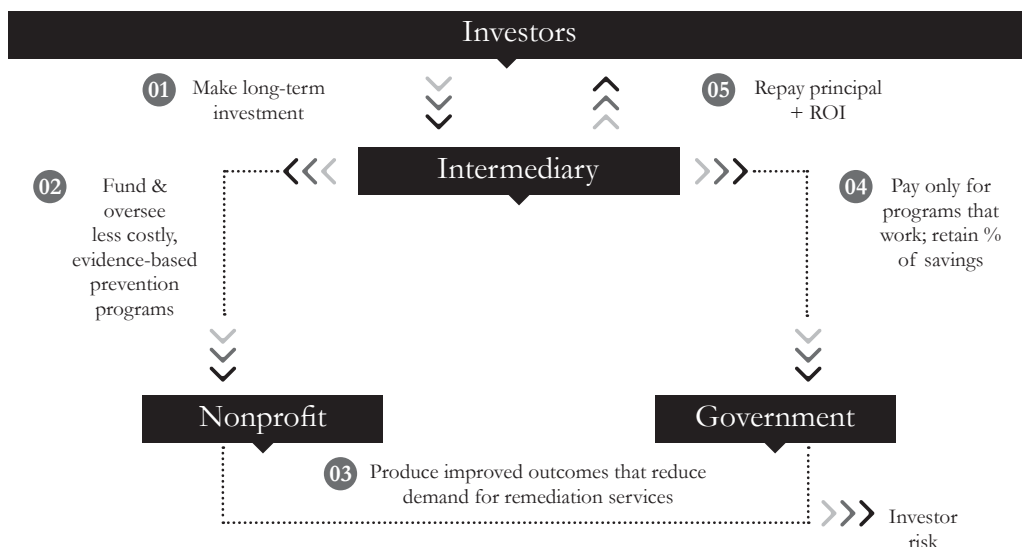
Following the announcement of the world’s first SIB in the United Kingdom in 2010, countries as varied as Australia, Canada, Colombia, India, Ireland, and Israel have started exploring SIBs. These countries have used SIBs to target social problems ranging from recidivism to homelessness, unemployment, at-risk youth, gender disparities, and early childhood education. SIBs have become increasingly popular in the US, with funding contracts for SIBs included in President Obama’s budget since 2011 for various social programmes, including vocational training and youth initiatives.

How do SIBs work?

The social impact bond model typically involves four main players: a government, an intermediary, a non-profit organization and an investor. Once a government agency has identified a social issue to be resolved, it enters into a contractual agreement with an intermediary (or bond-issuing organization) that is responsible for raising capital from independent investors including financial institutions, foundations, and individuals, and for hiring and managing non-profit service providers. If the project achieves its stated objectives, the government repays the investors with returns based on the savings the government accrues as a result of the programme's success. A neutral evaluator, agreed on by both parties, is hired to provide credible evaluations of outcomes and resolve any disputes that arise.

In this model, private investors pay the upfront costs for providing social services, and government agencies repay the investors with a return—if and only if the independent evaluator determines that the services achieve the targeted outcomes. Also known as “social innovation financing” or “pay for success”, SIBs offer governments a low-risk way of pursuing creative social programs that also yield measurable results. The remaining portion of the savings remains in the hands of the government to use as seen fit — usually to reinvest in more programmes that help serve the public good. In the US and UK, banks have provided a greater proportion of funds than foundations or philanthropists, while a combination of private donors and charitable fundraisers have bankrolled SIBs in poorer countries like India and Colombia.

Figure 1 Social Impact Bond Mechanics



Source: Forbes

SIBs, however, are not “bonds” in the strict financial sense of the word. If the project fails the objectives outlined in the contract, the investor stands to lose all capital originally invested into the programme. In contrast, regular bonds on the financial market usually guarantee a return on investment. Nor are SIBs currently being traded in the market, although there is potential for this to be done. Some SIBs, including the New York City Social Impact Bond, have adopted safeguards to mitigate risks. The capital invested by Goldman Sachs (\$9.6 million) is backed by a philanthropic loan of \$7.2 million, provided by Bloomberg Philanthropies. Under the NYC SIB, which currently focuses on reducing youth recidivism and its related social costs, the city has agreed to make payments that range from \$4.8 million, if recidivism is reduced by 8.5 percent, to \$11.7 million if recidivism is reduced by 20 percent.

Why has this experimental technique garnered so much interest from governments around the world? The first reason has to do with the increasingly lean fiscal situations faced by many states. SIBs offer an opportunity to continue innovating and investing in promising new solutions for cash-strapped governments. SIBs also align well with the spread of data-driven social impact programmes focused on improving government performance. They also comport with increasing efforts by the government to collaborate with non-profit and for-profit partners in solving community-based problems. Moreover, unlike traditional philanthropy or government spending where funds channeled into social programs are not recoverable, funds raised through SIBs can be recycled into the programme to help more people, while freeing up government funds for spending on other issues. In addition, while governments may simply want to fund traditional interventions directly, without introducing the complexity and extra costs of a SIB structure, SIBs pave the way for new partnerships that may not be possible through the conventional budgeting process.

SIBs could also boost the effectiveness of non-profit organizations. Financial uncertainty and the constant need to fundraise often deny NGOs the ability to plan more strategically and to be involved in more long-term initiatives that typically yield greater impact. SIBs could provide greater financial security and allow these organizations to focus their already lean staffing towards core functions, improve their effectiveness and operate more autonomously.

Potential Challenges

Due to their recent appearance on the market, the success of SIBs has so far been largely unproven. Data on the success rate of SIBs, which tend to involve 3-10 year horizons, remain incomplete. Data collection has yet to be completed, even for the very first SIB established in September 2010 in the UK to reduce recidivism. Thus accurate estimates regarding the success of the programme cannot yet be determined. However, a recent report by The Rockefeller Foundation on the programme indicates that progress has been made in finding housing, accessing health care, increasing the income of former inmates, while lower recidivism rates have also been confirmed by police.

In light of the complexity involved in developing SIB projects, it has become increasingly clear that the potential for large impact serves as a key driving factor when deciding whether or not to establish an SIB. SIBs require sustained attention over the course of a programme, from the government agencies implementing them. Given other competing demands on these officials' time, an initiative is only worth undertaking if it is directly aligned with one of the agency's top priorities. To be worth the effort, SIBs require either a large initial scale or a realistic vision for scaling up an initial successful SIB into a larger, nationwide initiative. This in turn requires sufficient technical expertise such as incentive contracting, cost-benefit analysis, and evaluation design that some government agencies do not have.

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While the accumulation of additional knowledge about what works is clearly a benefit of these more innovative interventions, their greater risk raises questions for investors as well as governments.



The burden of risk-sharing also remains uncertain. Most interventions being tested in current SIB projects are riskier, more innovative, and offer more potential learning benefits than previously anticipated. While the accumulation of additional knowledge about what works is clearly a benefit of these more innovative interventions, their greater risk raises questions for investors as well as governments. A recent report found that

many investors, even those who are socially minded, are uncomfortable with the prospect of being locked into a SIB contract with a long duration and concluded that future SIBs may need to involve more risk-sharing from government.

For SIBs to be valuable for longer-term projects, governments may need to consider pay-outs based upon short-term results that are predictive of longer-term benefits. For instance, investments in pre-natal health care may produce short-term benefits such as improved infant and maternal health and lower healthcare costs, but they may also produce longer-term benefits such as reduced special education spending, and increased adult earnings. While it would not make sense for a SIB contract to only offer pay-outs after all these targets are achieved, it might be possible to design a SIB that provides staggered returns to investors.

Another potential drawback is that the enabling environment for SIBs is often challenging to find, or even to cultivate. To succeed, SIBs require the presence of high-performing organisations capable of delivering services, as well as intermediaries who understand the financial landscape of a given area/country, are able to fundraise, as well as manage projects. Moreover, given the complexity of social goals and the multiple deliverables often embedded in one single social program, outcomes and success rates can be difficult to accurately quantify, without well-trained impact evaluation experts.

Can SIBs potentially work in Singapore?

Yes, if the government has an appetite to spread the responsibilities and financial risks of social development amongst other players, or if innovative NGOs has the capacity and desire to be the chief architect of a social intervention. SIBs could potentially empower well-established NGOs with strong track records to garner greater leverage in performing much-needed social interventions, while developing the capacity to assess and be accountable for measurable, targeted outcomes. Singapore's sophisticated financial landscape portends well for fundraising, while our relatively low-risk environment for investing provide reassurance to potential investors. Yet, unlike in many other developed countries, the notion of socially-conscious financial investing has seeped into the mainstream. We also do not have, at least at the moment, organisations that are capable of acting as intermediaries, though many high-functioning NGOs or even boutique investment firms could grow to assume this role.

Conclusion

It may be too soon to determine whether, and how, social impact bonds will fundamentally change the way social services are funded and implemented. Yet, projects bring public and private actors together on a long-term basis to tackle some of society's toughest problems. According to the Harvard Kennedy School, the use of SIBs allows for more quality control by both private investors and the NGO implementers, which can lead to better performance for programs. In addition, the evaluations involved in assessing whether or not a programme succeeds will also provide insight into which programmes do and do not work, to prevent further failures down the road.

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Yet, projects bring public and private actors together on a long-term basis to tackle some of society's toughest problems.



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Of the various features of globalisation, its economic manifestation is the most pervasive and palpable to the common man, thus generating heated debates in both academic and political circles.



Tearing Down Our Walls

By Abdullah Abdul Aziz

In 2005, Thomas Friedman opened our eyes to the extent to which advances in transport and telecommunication have “flattened” the world, connecting humanity across borders and oceans at an unprecedented magnitude. But the common term for this phenomenon, “globalisation”, has both positive and negative connotations, embroiled in a tug-of-war between those who extol the benefits of humanity-wide thinking and functioning beyond physical borders on the one hand, and those who fear the repercussions of such rapid and uncontrolled exposure on the other. Of the various features of globalisation, its economic manifestation is the most pervasive and palpable to the common man, thus generating heated debates in both academic and political circles.

The high point for globalisation was perhaps in the early 1990s, when the worldwide proliferation of the Internet coincided with the Uruguay Round of trade negotiations which led to the formation of the World Trade Organisation (WTO) in 1995. The Communist regime in the USSR had collapsed; optimism was rife as the potential for information and communication to traverse more easily across borders was met by 123 governments, including Singapore, agreeing to allow freer movement of goods, services and capital. The nadir, however, came soon after, as public opinion swayed the other way and protests in Seattle prevented the start of another round of negotiations in 1999. The anger primarily came from workers in developed countries who found that, as more companies internationalised, their jobs were being shipped away to countries with cheaper capital. But this trend found no favour in segments of emerging economies either, where local businesses found themselves dwarfed by so-called “Multi-National Corporations”. It became clear that trade liberalisation needed to take into account the span of issues that globalisation throws up, lest its benefits accrue only to a small segment of the population.

The trade-liberalisation agenda was subsequently revived in November 2001, as a world reeling from the events of September 11th tried to find solidarity through deeper economic integration. This time, the mandate included topics such as the environment, and was christened with a name that belied a special emphasis on development as a goal, the Doha Development Agenda.

Today, we find that global economic integration seems to be taking a back seat as regional integration, via free trade pacts signed between several countries, takes greater prominence. The biggest regional trade pact, the Trans-Pacific Partnership (TPP), concluded with much fanfare in October 2015 as 12 countries across the Asia-Pacific region, including Singapore, the United States and Japan, agreed not just to liberalise trade between them, but also on a set of labour, environmental and other standards that would provide a more open and level playing field between their corporations and nationalities.

The natural question is, therefore: has the world inadvertently divided itself between those most prepared for economic integration, along with the responsibilities that come with it, and those who lag behind? Equally intriguing is whether, with this segregation of opportunities, the latter will ever have the chance to catch up?

The good news for us is that, if such a split exists, Singapore is on the right side of it. Our small domestic market and lack of a hinterland compelled us, very early in our history, to open our markets and be plugged into the global economy. But making the most of a globalised economy also requires a population with a globalised mind-set - one that seeks opportunities beyond the confines of one’s own borders. The opportunities are diverse, especially in regard to knowledge, trade and investment, and the key to reaping them is the willingness and ability to compete, to be resourceful and to adapt.

Of course, competition throws up winners and losers. But in doing so, it diminishes complacency and breeds excellence, thereby benefiting society as a whole. In a globalised

world, the competition is inadvertently with other nationalities – whether on a personal level in terms of jobs or places in higher institutions, or on a corporate level in terms of profits or market dominance. In both, there are parallel potentials for gain or loss; particularly in the case of the former, the emotions that arise from such competitions may even degenerate into xenophobia. While calls for the parameters of such competition to be properly defined are legitimate, we cannot allow ourselves to slip into an attitude of self-entitlement simply by virtue of our natal circumstances. Instead, the earlier we accept the inevitability of such international exposure, the better we can steel ourselves for the competition by seeking out all the risks and opportunities out there and staying ahead of the pack.

In the age of Google and YouTube, the exhortation to be resourceful seems almost perfunctory. However, the increasingly seamless integration between our day-to-day experiences and the online realm of limitless information poses its own set of problems. Access to knowledge is as much at our fingertips as misinformation and deception; the line between beneficial and trivial knowledge is harder to discern. Resourcefulness is ultimately the ability to deal with a situation or seek a solution to a pressing problem, and society benefits from the ones who are able to create value from the information available while being careful not to chase red herrings.

Finally, we need to be able to adapt our knowledge, experiences and lifestyles to different geographical and socio-cultural contexts. Globalising is not simply replicating our current practices in different parts of the world. Neither is it about building an environment or creating the conditions that we are familiar with wherever we go. Rather, it is an opportunity for growth and adaptation, recognising that there is something to be learnt and developed within ourselves from what we discover or experience in another social, cultural and physical context.

While acquiring these three attributes eventually boils down to individual will and effort, more can – and indeed, must – be done as a community to cultivate them. The Malay/Muslim community is imbued with the strengths of a common identity, lingo and faith that connect us at multiple levels. The ones who have found their own pockets of success amidst the intense competition must serve as guides to those still finding their foothold; the ones with access to resources must reflect how individuals from all economic strata can also benefit from them; and the ones imbued with the relevant knowledge and experience must facilitate and encourage adaptability and manoeuvrability amongst our young even as they remain grounded in the strengths that bind us.

An increasingly integrated world favours those most prepared for it. Since the fall of the Berlin Wall in 1989, the major divide between two economic systems is of a bygone era, and physical walls built by governments have fallen out of fashion. Today, the smaller walls dividing nations are becoming more and more porous as economies seek mutual benefit through economic integration. What remain are the walls that we build around ourselves, and the decision to tear them down is wholly ours to make.

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As a child, I grew up in an era where technology began to play a very important role in each individual, family, community and nation.



Transcript of Majalah Masa's managing editor Rasheed Asr's interview with founder Aminah Nadim on Dec. 5, 2065

By Jeffrey Salleh

Rasheed Asr: Assalamualaikum and welcome, it's Rasheed Asr. I'm the editor of Majalah Masa. With me today, I have Ms Aminah Nadim, the first tech billionaire from Singapore and currently among the top 10 richest people in the world. Ms Aminah, thank you for joining us this evening.

Aminah Nadim: Wa'alaikumsalam dan terima kasih to have me on your program.

RA: Thank you again for making the time, I know you are a busy person so we are honoured to have you here today. The first question I have is - where did all this begin?

AN: As a child, I grew up in an era where technology began to play a very important role in each individual, family, community and nation. We knew how to use electronic gadgets such as tablets and smartphones even before we could walk. So each one of us who lived through that era had an early and close relationship with technology. The difference for me is that I decided to make it a career and tried to be a contributor to the technology space instead of just a consumer. So I started to learn more about technologies that interested me back then and tried to apply them to the day-to-day usage, or to solve problems that were faced by me personally or my family or the community in general.

I also remember how the Smart Nation initiative was strongly pushed by the government at that time, along with some forms of programming being introduced in schools. With that, everyone really could not run away from being in contact or growing up with technology one way or the other.

RA: Can you elaborate what technologies you meddled with back then?

AN: Oh yes, I love reading TechCrunch and its like (still do by the way) to find out what were the latest gadgets and technologies that were coming up. So I got exposed to all these wonderful things or at least knew of their existence and usage. When I discover or read new things, at the back of my mind, I always had a few lingering questions such as ,”How can I use this ? Where can I apply this in my life?” being played in an infinite loop (No tech pun intended). I dove into things like Raspberry Pi for small device computing, Google Glasses for augmented reality, Oculus Rift for virtual reality and Emotiv Epoc doing brain-computer interface. These were among the things that I played around with and now you would probably find them in the technology museum although I think I can still find some of them at home.

RA: What made you choose technology as your career path and not things like Science, Law, Medicine, etc.?

AN: I chose technology because it is more accessible and immediate in its impact. In tech, one is not bounded by location. There is an abundance of materials that you can learn from and most of them are FREE !! So learning is relatively cheap and the things you have to use to learn new technology are usually cheap too. Unlike doing science experiments that need expensive equipment, labs, etc. I also love the speed of the change and new “discoveries” made by various tech fields. These rapid changes kept me on my toes. I saw the impact that technology has on communities at various levels and how easy it can be introduced to improve processes and tackle issues. The most interesting thing I experienced was how it became a tool that bridged me with my grandparents. I remembered that we got to spend time with each other because I taught them how to use the holographic mobile phones as I listened to their stories and advices.

RA: In the earlier part of your career, you advocated for technology to be taken as seriously as Language, Maths and Science. Why was that?

AN: I still do now, again, mainly because of its accessibility. I am referring to both the tools we need for learning and the study materials we can have access to; to pick up new skills. As an example, everyone that we knew then had a smartphone with them that was a functioning computer and I would argue that the smartphones had better components on them than the laptops because they had a GPS module, accelerometer, etc. that a laptop or PC didn't. Other gadgets were cheaply available too, like a Raspberry Pi, another functioning computer cost less than a hundred dollars and you can start learning how to do programming and a bit of electronics immediately. That was cheaper than some of

the jeans our youths spent on streaming entertainment services. As for education, you had access to many online courses offered by prestigious universities such as Stanford University, MIT, etc. One could connect and build up relationships with these institutions without even being physically there. This allows access to quality learning materials and building up a great network of personal connections.

RA: You mentioned programming, how important is it? Still relevant now?

AN: There are many benefits to learning programming. At the very least, you can strengthen the logical thinking process of individuals. Programming will force individuals to think step-by-step, evaluate decision points and take certain courses of action based on the information they have. That is good and I do think everyone would get some benefits from doing that. However, I must caution that programming is not for everyone, there are people who just can't code. That doesn't mean that they are not good, it just means that they are just not cut out to be a programmer. It is like drawing, I can draw a cat but I can't even get loose change for any cat painting I might produce.

It is still important now to learn programming, as much as we learn about language, maths and science. You can see how entrenched technology is in our life. This will continue, and there will be many opportunities to innovate and make a good living if one can build up their programming skills.

RA: Talking about opportunities - how can the Malay/Muslim community take advantage of these opportunities to enhance our social mobility?

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We have seen many successes from young entrepreneurs in their early 20s who have made their fortune at a very young age.



AN: Firstly, technology is a highly equal opportunity sector. When you try to get a job, people hardly look at your paper qualifications. They want to know what you have done, what were your failures and how you learned from them; so educational achievements are far less important than your practical experience. Age and gender are also not a factor. We have seen many successes from young entrepreneurs in their early 20s who have made their fortune at a very

young age. On gender, tech companies recognize the need for more female technologists and continue to have many programs to encourage young women to take up a role in the technology sector.

Secondly, a good piece of technology can be marketed in the globally accessible platforms that will help you market your products. As long as people find your product good, they don't really care who develops it. A simple game that one creates, can be marketed on platforms like Google and iTunes and immediately be accessible globally. It is challenging to find other fields with that kind of immediate go-to-market paths.

It only makes sense for our community to take advantage of all this accessibility and opportunities, and continue becoming a technology contributor and not just a consumer.

Oh lastly, selling software especially has a very high profit margin plus one can choose to work for a company or start you own.

RA: Does “Starting your own” require skills or luck? Can anyone be an entrepreneur?

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We look at possibilities and then based on the facts at hand, we make the decision.



AN: Skills are definitely a crucial ingredient for success, you need to have more than just fundamentals to be good. Most successful tech companies are founded or started by techies; however to remain successful these companies get talents from other disciplines like business, marketing, etc. On luck - as an engineer, we don't leave anything to luck or chances. We look

at possibilities and then based on the facts at hand, we make the decision. There are circumstances that are beyond our control and we have to deal with that, perhaps that is the luck part. As a Muslim, I leave those things to Allah but we sure should give it a good shot with what we know and the strength we have.

I think everyone can be an entrepreneur, a successful one is a different matter. Jokes aside, this is one thing that we should learn from our earlier generations. Most of them were entrepreneurial in their own right, perhaps the lack of formal education forced them to look beyond the system and carve out success with the talents they had.

It is much easier if your business is selling software though. The software you are selling don't require logistics, or worrying about expiry - maybe some ideas will become dated, but they can be re-invented quickly, etc. So there are great advantages when selling software. As I said earlier, there are platforms where you can market your product globally, reviewed by thousands if not millions. Your products can shoot to fame in a very short time especially if you are dealing with consumer tech products, both hardware and software.

RA: You are also passionate about moving the community forward. How do you intend to do that?

AN: I am sticking to what I know, which is technology. I would like to continue providing opportunities to the youth to make it out on their own and continue to explore technology. As I say, I don't see technological influence to be decreasing at the moment but continuing to grow. The opportunities are still there and so are the characteristics that make technology attractive. So I wish to continue to grow a community of highly skilled, globally mobile Singapore Muslim youths who will not be out of place when they work with talented people around the globe. I am inviting individuals to tap on my company's resources and will personally oversee this program as I do feel having access to mentors in the field of your career or interest will help you move much faster.

The community itself requires renewal on how they are going to continue taking advantage of technology. With the flood of new and possibly great technologies in the not too distant future, we should be looking at how we can leverage these opportunities to further help the community - perhaps through the MMOs and other NGOs so that they can continue to help the community better with better technological infrastructure.

Technology safety is another area that I would like to help the community with. As you can see, technology is also being exploited to take advantage of those who are novices and mere end-users. They may have lost their identity, their money lost, etc. Crimes in this era no longer require the perpetrators to be physically present - they can be halfway around the globe. Hence, technology education and safety are important to our community and I would like to help increase the awareness of technology safety.

RA: Thank you very much for all your insights, any last words for our readers?

AN: Technology is fascinating and you could say I am biased about it, but I believe for something that is so influential in our daily life we should go beyond just being the passive end-users but the active contributors. At the very least, continue to read and understand them. As with many other things, technology can be a boon or a bane depending on how it is used or spread in a community. We need to ensure that technology can be used safely, appropriately, responsibly and not used as a means of exploitation.

RA: Thank you again, selamat malam and Assalamualaikum.

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Dalam 10 tahun
akan datang, Encik
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kita adalah dalam
mengembangkan
ekonomi.



Impak Cabaran Negara Akan Datang pada Masyarakat Melayu

By Nazri Hadi Saparin

Dalam satu wawancara majalah Time sempena menyambut ulang tahun kemerdekaan negara yang ke-50 baru-baru ini, Perdana Menteri Lee Hsien Loong, menggariskan cabaran Singapura dalam lima dekad akan datang.

Menurut beliau, cabaran Kota Singa ini bergantung kepada tempoh masa. Dalam 10 tahun akan datang, Encik Lee berkata cabaran kita adalah dalam mengembangkan ekonomi. Dalam tempoh 25 tahun pula, isu-isu demografi akan mempersembahkan cabaran yang besar. Pada akhir tempoh lima dekad nanti, pada pengamatan beliau, Singapura bakal berdepan dengan cabaran membentuk sebuah identiti nasional.

Apakah kesan cabaran tersebut kepada masyarakat Melayu? Apa pula persediaan kita dalam meniti fasa-fasa mencabar itu bagi memastikan masa depan yang terus cerah bagi generasi Melayu dan Singapura mendatang? Sejak mencapai kemerdekaan 50 tahun lalu, Singapura hari ini berdiri megah dan dikenali dunia sebagai sebuah keajaiban ekonomi. Namun, pembangunan negara dari sudut ekonomi dalam lima dekad mendatang bakal mempunyai wajah yang amat berbeza. Usaha yang diperlukan untuk terus memacu kemajuan ekonomi Kota Singa ini akan bertambah rumit.

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Sehubungan itu, pemerintah mendambakan perkembangan ekonomi yang didorong kemahiran mendalam dan inovasi berteraskan warga Singapura dan syarikat setempat.

Ekonomi masuk fasa baru

Ekonomi negara kian matang dan memasuki fasa baru – yang disifatkan dengan perkembangan lebih perlahan namun diharapkan dengan mutu yang lebih tinggi. Sehubungan itu, pemerintah mendambakan perkembangan ekonomi yang didorong

kemahiran mendalam dan inovasi berteraskan warga Singapura dan syarikat setempat. Ini adalah perubahan daripada strategi pemerintah lalu yang mengambil berat memikat syarikat berbilang negara (MNC) dan menjadikan Singapura pusat bagi kegiatan nilai tinggi dalam rangkaian pembekalan global.

Jika sebelum ini, masyarakat kita gigih mengembangkan golongan lulusan universiti, dalam dekad-dekad mendatang ijazah tidak semestinya menjamin masa depan yang diinginkan. Ramai yang lulus universiti menjangkakan kerjaya sebagai PMET atau Karyawan, Pengurus, Eksekutif dan Teknisyen. Namun, pada masa yang sama, persaingan semakin sengit. Di Singapura sekitar 30 peratus pelajar memasuki universiti awam. Jumlah itu akan meningkat kepada 40 peratus dalam tahun-tahun akan datang. Ini tidak termasuk mereka yang mendapatkan ijazah daripada universiti luar negara dan privet. Justeru, masyarakat kita perlu bersedia melihat kejayaan itu lebih daripada menggenggam segulung ijazah.

Daripada kisah-kisah yang dikongsi relawan akar umbi yang menangani masalah penduduk, ramai ibu bapa yang berhabisan puluhan, malahan ratusan ribu dolar, untuk menampung kos pendidikan anak-anak di universiti privet dan luar negara. Namun, mereka kecewa apabila menyedari industri dan sektor pekerjaan tidak meletakkan nilai tinggi kepada ijazah tersebut. Ini kerana mungkin ijazah itu daripada universiti yang tidak diiktiraf atau program yang disediakan kurang ‘lasak’. Lantas, berlatarbelakangkan perubahan teras ekonomi, kita perlu melihat kelayakan dan kemahiran dari sudut lebih luas. Kita juga wajar menyedari potensi dalam sektor seperti pendidikan awal kanak-kanak dan penjagaan kesihatan serta industri aeroangkasa, maritim serta bidang sains dan tekonologi. Galak anak-anak kita meneroka pendidikan dalam bidang tersebut berdasarkan minat dan keupayaan mereka.

Menangani cabaran demografi

Bagi setiap tiga rumah tangga yang didirikan warga Singapura, satu dibina dengan pasangan bukan warga setempat. Justeru, di masa depan, kita bakal mempunyai penduduk yang dewasa dengan pengaruh yang pelbagai.

Perkara ini sudah pun berlaku dan ia bakal menjadi cabaran lebih besar dalam tahun-tahun mendatang. Dalam keadaan sedemikian, bagaimana kita sebagai sebuah masyarakat dapat kekal bersatu padu? Satu lagi cabaran demografi Singapura berkaitan dengan kadar kelahiran kita yang rendah. Sejak pertengahan 1960-an, apabila pemerintah melancarkan program mengawal jumlah penduduk, kadar kesuburan (TFR) negara terus menerus merosot.

Dalam tempoh tiga dekad, kadar tersebut berada di bawah paras ganti iaitu 2.1 kelahiran bagi setiap wanita. Malah, sejak 2003, kadar itu berada di paras 1.3 kelahiran bagi setiap wanita. Kesan kadar kelahiran yang rendah itu kian terasa di setiap peringkat, terutama dalam bilangan tenaga kerja. Menjelang 2020, jumlah penduduk setempat yang meyeritai pasaran pekerjaan tanahair dijangka menguncup sehingga 80 peratus.

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Statistik sedemikian bakal merubah dengan drastik keadaan ekor jumlah pesara dengan pekerja baru yang tidak seimbang. Jika masa menyebelahi kita, kesan perubahan demografi mampu ditangani. Masa masih menyebelahi kita, namun ia tidak pula sekadar menanti kita membuat penyesuaian. Dari sudut pembangunan ekonomi – yang begitu kritikal dalam keupayaan negara seperti Singapura yang tidak mempunyai sumber semula jadi untuk kekal berdaya saing – sedekad adalah tempoh yang lama.

Krisis demografi itu kini sudah mula mencengkam Eropah dengan bilangan tenaga kerja di Jerman, Poland dan Rusia kian menguncup, dan kadarnya dijangka terus menderas sehingga 2030. Menurut penyelidikan oleh Boston Consulting Group, Eropah bakal teruk terjejas dan buat julung-julung kali, Korea Selatan dan China juga akan berdepan dengan kemerosotan. Singapura dengan pasaran buruh yang ketat perlu menggandakan usahanya untuk memanfaatkan sepenuhnya sumber manusia yang ada. Rakyatnya perlu terbuka menerima sistem dan pendekatan pekerjaan yang baru – yang memberi penekanan kepada kemahiran mendalam serta bidang dan cara kerja tidak konvensional.

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Ini pastinya bukan tugas yang mudah. Pelbagai ramuan – termasuk bangsa, agama, bahasa dan nilai – yang menjadikannya satu usaha mencabar.

Membentuk identiti

Sedang pembangunan ekonomi dalam lima dekad akan datang bakal membentuk sebahagian besar kehidupan watan, saya juga tertarik dengan cabaran memupuk identiti nasional. Ini pastinya bukan tugas yang mudah. Pelbagai ramuan – termasuk bangsa, agama, bahasa dan nilai – yang menjadikannya satu usaha mencabar.

Dengan meningkatnya kewarakan atau increased religiosity meliputi setiap penganut agama, isu dan nilai keagamaan akan memainkan peranan lebih besar dan penting. Sehubungan itu isu-isu yang bertentangan dengan nilai-nilai keagamaan kita – seperti contoh isu homoseksualiti - mampu menjadi faktor pemisah.

Namun, bukan hanya faktor dalaman sahaja yang mempersembahkan cabaran kepada usaha membangun identiti nasional.

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Dalam wawancara Time itu, Perdana Menteri memberi contoh kebangkitan kuasa China dan bagaimana ia boleh meninggalkan kesan kepada masyarakat Melayu dan India setempat.

“Bagaimana perasaan kita jika perspektif berubah dan kita mendapati diri kita cenderung kepada China? Adakah ia akan menyebabkan ketegangan atau sekurang-kurangnya tekanan?”

Buat masa ini, dengan keharmonian kaum dan perpaduan yang terbina sekian lama, mungkin sukar bagi kita melihat isu-isu sedemikian menjadi faktor yang memisahkan kita. Namun, keadaan pada masa depan, dalam 50 tahun akan datang, sukar diramal. Yang penting bagi masyarakat kita ialah menghargai pencapaian masyarakat dan negara sepanjang 50 tahun lalu serta menyedari pencapaian tersebut tidak dicapai tanpa pengorbanan. Lebih banyak pengorbanan diperlukan dalam tahun-tahun mendatang.

Pada masa yang sama, masyarakat Melayu juga harus turut memikirkan bagaimana kita boleh terus menyumbang kepada pembangunan Singapura – dari segi ekonomi, menangani cabaran demografi dan pembentukan identiti nasional – agar apabila generasi muda menyambut SG100 nanti, mereka dapat merenung kembali dan berbangga dengan sumbangan kita. Hakikatnya, kita harus menyedari, perjalanan kita baru sahaja bermula.

Educational & Career Success:

Reimagining Our Future

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Beyond learning for
grades, to learning
for mastery” and to
go “beyond learning
in school, to learning
throughout life.”



The Adventure of Life is to Learn:

Cultivating the New 3Rs of Learning

By Siti Khadijah Bte Setyo R S

Abstract

In his Budget 2015 speech, Deputy Prime Minister (DPM) Tharman Shanmugaratnam highlighted that, over the last five decades, Singapore has built a first-rate school system where students are continuously performing well in international assessments such as the Programme for International Student Assessment (PISA). To ensure that no student is left behind, students are also given various opportunities to pursue their passion and realise their aspirations through the multiple educational pathways available. As we celebrate these achievements, it is also important to set new strategies and policies that will take Singapore to a higher level for the next fifty years.

In ensuring that Singapore's economy remains competitive and relevant, DPM Tharman highlighted that it is critical that Singapore's next phase of development centres on creating an environment that facilitates the building and mastery of skills through lifelong learning amongst its citizens. Hence, SkillsFuture, a national movement to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points, was introduced. (SkillsFuture, 2015).

Taking an upstream approach, this article posits that as we create an environment that facilitates lifelong learning for all through programmes under the banner of SkillsFuture, certain sets of learning skills and dispositions should be cultivated from young. These skills, dubbed as the 3Rs of learning – Resilience, Resourcefulness and Reflectiveness, should be cultivated and be an integral part of a learner's toolkit from young. The 3Rs influence and

positively shape the way learners view and experience learning, and they indirectly promote the ethos of lifelong learning. Finally, this article also outlines several strategies that both parents and educators can adopt to develop the 3Rs in every learner. It is hoped that awareness on the importance of the 3Rs of learning and strategies will spur our community to go “beyond learning for grades, to learning for mastery” and to go “beyond learning in school, to learning throughout life”.

Introduction

In his reply at the Ministry of Education’s Committee of Supply (COS) debate in March 2015, the then Minister for Education, Mr Heng Swee Keat recollected our pioneers’ visions for a better Singapore and the tenacity they had to work for what they believed in, no matter how tough things got. Fifty years later, this has enabled generations of Singaporeans to build a better life for their family members and themselves. Building on the strengths and legacy left behind by our pioneers, Mr Heng called for a future anchored by deep skills and strong values, and he rallied the generations of today and tomorrow to go “beyond learning for grades, to learning for mastery” and to go “beyond learning in school, to learning throughout life”.

Following recommendations made by the ASPIRE committee, the SkillsFuture Council, chaired by DPM Tharman Shanmugaratnam, was introduced. The Council aims to develop an integrated system of education, training and career progression for all Singaporeans, promote industry support for individuals to advance based on skills, and foster a culture of lifelong learning (SkillsFuture, 2015). This apt and timely policy shift reflects the importance of development and mastery of skills in order to prepare Singaporeans for the future economy, especially amidst rapid technological changes that highly influence the future of work.

While the SkillsFuture initiatives are important in supporting and developing students and employees that are anchored in deep skills and strong values, it is also important that students cultivate the skills and dispositions to be critical, curious and effective learners from a young age. This is especially given that the overarching message of SkillsFuture is the mastery of skills through lifelong learning. In tandem with cultivating the culture of lifelong learning amongst students, it is equally important that students are introduced to social and emotional learning (SEL) at an early age. Social and emotional competence is the ability to understand, manage, and express the social and emotional aspects of one’s life in ways that enable the successful management of life tasks such as learning, forming relationships, solving everyday problems, and adapting to the complex demands of growth and development (Elias, 1997). The Social and Emotional Learning (SEL) framework¹ by the Ministry of Education is anchored on strong values and it highlights the relevant skills and dispositions that every student should possess upon graduation from Singapore’s education system.

¹For more information, please refer to MOE’s Social and Emotional Learning Framework that is accessible via <http://www.moe.gov.sg/education/programmes/social-emotional-learning/>

Building on the existing SEL framework, this article upholds that social and emotional competence is very important, especially in cultivating a culture of lifelong learning. Moving away from the “original” 3Rs of learning – Reading, wRiting and aRithmetic, this article calls for the cultivating of the “new” **3Rs of learning – resilience, resourcefulness and reflectiveness**, and how these skills are influential in shaping students experience of and outlook on learning. Finally, this article will also attempt to outline and share strategies and tips that both parents and educators can adopt to develop the 3Rs in every learner.

Malleability of skills

Skills are capacities to function and they enable people by providing tools with which they can use to shape their lives, to create new skills and flourish. Greater levels of skills foster social inclusion and promote economic and social mobility, economic productivity and well-being. It is important to note that skills are not immutable traits that are cast in stones over the lifespan of a person as skills development is a dynamic process. Research has shown that the early years are important in shaping all skills and in laying the foundations for successful investment and interventions in the later years. Research further demonstrates that during the early years, both cognitive and non-cognitive skills are highly malleable while non-cognitive skills are more malleable than cognitive skills during the adolescent years (Heckman, Humphries and Kautz, 2014).

In the next few sections, this article identifies three important skills that every learner should cultivate and possess in their very own “learner’s toolkit”, namely, resilience, resourcefulness and reflectiveness – dubbed as the 3Rs of learning, that greatly influence and shape students outlook towards learning and education.

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Resilience is dynamic and it involves the accumulation of different skills, abilities, knowledge and insight that a person needs for successful adaptation or to overcome adversities and meet challenges.



Overcoming adversity through Resilience

The International Resilience Project (Grotberg, 1997) that aimed to develop a more culturally sensitive understanding of how youth around the world effectively cope with the adversities they face defined resilience “as a universal capacity which allows a person, group or community to prevent, minimise or overcome the damaging effects of adversity.” The resilient behaviour may be in the form of maintenance or normal development

despite the adversity, or a promoter of growth and social cohesion beyond the present level of functioning. Resilience is dynamic and it involves the accumulation of different skills, abilities, knowledge and insight that a person needs for successful adaptation or to overcome adversities and meet challenges. For Grotberg, resilience consists of inner personal strengths, social and interpersonal skills, and external supports and resources, all of them contributing to essential blocks (e.g. self-confidence, responsibility, independence and trust) that build personal resilience.

Resilience and learning: the power of “growth mindset”

Learning is an adventure and learners are often confronted by, for examples, challenging Math problems or mind-boggling theoretical concepts, and even failures. These uncertainties can be exhilarating and challenging to some while to others, they may be perceived as reflections of their own incompetency. How learners react to these challenges and problems, and subsequently their long-term development, are influenced by one crucial skill – resilience, which is the foundation stone of the learner’s toolkit.

Carol Dweck, the Lewis and Virginia Eaton Professor of Psychology at Stanford University, investigated on what causes people to shy away from learning when it threatens to get difficult. Her research showed that this fragility in the face of frustration is worryingly common, and it is distributed right across the achievement range amongst school-going children. Successful students, as opposed to their underachieving peers, rarely encounter difficulties, but when they do, they are equally likely to withdraw, get upset and/or defensive, and they are likely to regress to more primitive learning and coping strategies (Dweck, 1984).

Dweck dug deeper and asked both fragile and resilient students how they felt when they had to try hard at learning. Resilient students said that they liked it and it felt like they were learning something. This demonstrated that resilient students believed that they might solve the problem and get smarter in the process. On the contrary, fragile students disliked challenges as it meant they had to put in additional effort and they were not bright enough.

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resilient students have, at the back of their minds, a view of their own learning ability as something expandable



Herein lies the key – resilient students have, at the back of their minds, a view of their own learning ability as something **expandable** and they do not succumb to the view of ability as a fixed reservoir of resource. Resilient students believe that “getting smarter” is a real possibility for them and worth investing effort in. Fragile students, on the other hand, believe that ability

is a fixed commodity, and hence their experience of difficulty and of consequent effort implied that they have reached the “ability ceiling”. Naturally enough, fragile students would try to avoid challenges and they are likely to employ defensive and diversionary tactics to protect themselves. Claxton (1999) further argued that the crucial difference between the two groups “was not so much whether they ‘tried’, but what ‘trying’ meant to them.

In her seminal book, “Mindset: the new psychology of success”, Dweck (2006) highlighted the importance of cultivating resilience through having a growth mindset. Dweck argued that individuals with a growth mindset are more likely to continue working hard despite setbacks, and that individuals’ theories of intelligence are influenced by the environment and social interactions one is exposed to. For example, children given praise such as “good job, you are very smart” are much more likely to develop a fixed mindset, whereas if given compliments like “good job, you worked very hard” they are likely to develop a growth mindset. In other words, it is possible to encourage students, for example, to persevere despite encountering obstacles or failures by encouraging them to think about learning in a certain way.

Navigating the “how” of learning by being Resourceful

Once the foundation stone of resilience has been laid, the “how” of learning, makes up the second component of the learner’ toolkit. Unless information is processed, organised and applied, knowledge can become one of the sources of frustration. Students learn to use and apply knowledge as they gain skills in planning, organising, decision making and problem solving. Together, these skills are the building blocks of resourcefulness.

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Resourcefulness refers to the ability to find and use available resources to achieve goals, problem solve, and shape the future.

Resourcefulness refers to the ability to find and use available resources to achieve goals, problem solve, and shape the future. It draws on skills like planning, goal setting, strategic thinking and organising (Price-Mitchell, 2015). Amongst other things, resourceful learners are able to assess and make the most of their preferred learning

approaches and environment, develop and expand the tools and approaches they use for learning and use different approaches and be creative when needed, utilising information and communications technology (ICT) to find information and to communicate effectively in different ways.

Given the plethora of information and knowledge learners encounter, it is thus crucial for learners to be able to tap on a wealth of resources to organise and make sense of what is given to them. The inability to do so often leads to learners to be overwhelmed and, naturally, causes them to view learning as “troublesome” and “confusing”; which eventually causes them retreat or shy away from the whole experience of learning.

Accumulating wealth of resources from young

The ability to learn naturally develops in young children as they are able to pick up social cues through their interactions with the people and environment around them. Claxton (1999) highlighted that during the first year of a baby’s life, he is able to pick up and learn the facial expressions that correspond to different basic emotions; and subsequently, this allows for the baby to adjust their own expressions and behaviours accordingly. By the age of two, toddlers discover all the detailed ways in which their senses match up with their actions (e.g. what kind of sights are produced by moving their hands in certain ways), and they also learn their particular family’s scripts for feeding, bathing and going to sleep (ibid).

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The ability to learn naturally develops in young children as they are able to pick up social cues through their interactions with the people and environment around them.

Based on these developments in the brains of young children, Claxton argued that through sheer immersion in experience, we are all learners and have the capacity tap on a wealth of resources that we accumulate as we develop and grow over the years. He emphasised that we do not progress upwards through a sequence of ever more powerful learning stages, leaving each one

behind as we move on to the next. Rather, we add on new tools into the toolkit, increasing our repertoire of alternatives and the complexity of the learning we can undertake” (Claxton, 1999: 61).

This demonstrates that every learner has the potential to accumulate tools for learning and be resourceful. Coupled with Dweck’s growth mindset theory that learning ability is expandable through hard work and effort, every learner has the potential to succeed. The key lies in creating an environment where parents and teachers play crucial roles in developing resilience and resourcefulness in their children and students; which will be discussed in later part of this article.

Becoming Reflective: the consciousness of good learning

We have now come to the third and final R of good learning, and that is, reflection. After developing the emotional capacity to be resilient in times of challenges and failures, and building broad and flexible repertoire of learning resources and skills, good learners also need to be aware of their strengths and weaknesses. Good learners should also be able to take a step back and reflect of their own learning, and to plan and manage it effectively.

Reflection is a practice that facilitates the exploration, examination and understanding of what we are feeling, thinking and learning and it also involves internal inquiry that extends the relevance of theory and deepens our understanding of the practice of our everyday life and work. Through reflection we challenge our assumptions, ask new questions and try to make sense of our experiences. Instead of being passive receivers of external expert knowledge, we become active creators (and co-creators) of our own knowledge. As reflective learners we test our informal theories (those that we develop through our experiences as practitioners in the world) against formal theories (those that are developed by researchers and academics). We integrate theory and practice through a process of **reflection-on-action**, i.e. trying to make sense of experience after the fact and **reflection-in-action**, i.e. trying to make sense of experience while it is occurring (Schon, 1987).

Benefits of reflective learning

Reflective learning has its benefits and it can help learners to get more out of their studies in many ways. One of the benefits is that by reflecting on their strengths and weakness, learners will be able to set study goals in relation to broader personal and professional goals. Reflection can help learners to define immediate goals, and devise strategies to achieve them. Similarly, reflecting on their weaknesses, for example the tendency to procrastinate, would allow learners to recognise and take responsibility of their habits; and subsequently make changes to their routines.

As mentioned earlier, reflection involves linking a current experience to previous learning and it involves applying what we have learned to contexts beyond the original situations in which we learned something. The ability to reflect and link and adopt

what they have learned (e.g. theoretical concepts) to real life situations allows learners to make sense of their learning experience. It also makes learning more relatable and even enjoyable, as learners are able to appreciate and apply their knowledge and information accessed to the real world.

Strategies to cultivate the 3Rs in every learner

Now that we are aware of the 3Rs – resilience, resourcefulness and reflectiveness, which should be in every learner’s toolkit, subsequent sections of this article will be dedicated to strategies on how parents and educators can play important roles in cultivating the 3Rs in their children and students. It is extremely important that parents, as first educators of their children, play a role in the cultivation of the 3Rs. Similarly, as learners transit into schools and spend majority of their time in schools and institutions of higher learning, educators are equally responsible for creating an environment where students are not only able to develop academic knowledge, but also develop important skills that are influential in shaping their learning experiences.

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A critical aspect of academic resilience is the ability to rise above immediate concerns and respond to academic setbacks with grit and tenacity.



Resilience

Mindset interventions

A critical aspect of academic resilience is the ability to rise above immediate concerns and respond to academic setbacks with grit and tenacity. Students who subscribe to a fixed mindset view on intelligence tend to be overly focused on short-term concerns about their ability and to view academic setbacks as evidence of their lack of ability or evidences

of incompetence. Consequently, they often withdraw their effort when their ability is threatened or undermined, which unsurprisingly, impairs their learning experience and academic achievement.

This has led researchers to design interventions that aim to change students’ mindsets. A study was conducted with students from a public school in New York City who were facing difficulties in Mathematics to demonstrate the power of changing mindsets in improving learning experiences, which ultimately contributes to better academic performance (Blackwell, Trzesniewski and Dweck, 2007). The students were divided into two groups, with each group receiving a six-session workshop. The control group’s workshop focused on study skills, but students in the intervention group were exposed to both study skills and growth mindset – how the brain grows new connections and “gets smarter” when a student works on challenging tasks and how to apply this lesson in their schoolwork. Among the control group students, math grades continue to decline, while students exposed to the growth mindset showed a sharp rebound in math performance.

This study demonstrates the importance of creating an environment, both at home and in school, which promotes a growth mindset. At home, parents need to clearly articulate and believe that their children’s learning ability is expandable through positive talks and

communication. For example, instead of saying, “good job, you are very smart”, saying “good job, you have worked very hard” is more likely to develop a growth mindset in their children. This is because the values of hard work and putting in the effort were emphasised, and that their children’s learning ability is indeed expandable if they are resilient and face challenges with grit and tenacity.

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It is important that teachers believe that each and every one of their students are capable of learning and improving



Similarly, teachers play an equally important role in cultivating the growth mindset. The first hurdle is for teachers to overcome their own prejudice and develop a growth mindset of their own. It is important that teachers believe that each and every one of their students are capable of learning and improving; and that they have the responsibility to nurture and support the learning experience of their students. Once teachers

are no longer bounded by their personal prejudices, they will be able to galvanise resources and strategies to create an inclusive learning environment where students are able to learn from their mistakes and strive towards success.

Creating an inclusive, supportive and caring learning environment

A teacher’s role should never only be an instructor of academic skills, but also a confident and positive model for personal identification. As a person and a professional, a teacher should be caring and supportive of their students, and this could be done by demonstrating kindness, listening to their students and exercising respect and compassion throughout the educational process.

To foster resilience in classrooms, teachers need to constantly communicate the “Resilience Attitude” (Henderson, 2002) to their students. The Resiliency Attitude is one in which caring and support is expressed in as many ways as possible—in word and in deed. Listening with compassion, validating the pain of a child’s problems while conveying his or her ability to overcome, and providing thoughtful and nurturing gestures – whether great or small – are all part of this attitude (ibid). This requires teachers to go the extra mile to be sensitive to the learning experiences and needs of their students, and at the same time be able to encourage and comfort their students in times of adversities and challenges.

Resourcefulness

Fuelling creativity through imagination

As mentioned earlier in this article, the natural development of babies’ brains allow for the accumulation of resources to begin at an early age through immersion or experience. Thus parents play an important role in facilitating that natural growth from a young age, and a way to do that is by building their young children’s imagination through ‘pretend play’. Imagination lays the foundation for creativity; allowing individuals to explore out of the box and tap on innovative ways to overcome challenges and solve problems.

From about eighteen months, children start to engage in pretend play which enables children to “try out actions and roles that would be either impossible or dangerous in the real world” (Claxton, 1999: 88). Pretend play also allows children to take on the roles of others and they can begin to understand and empathise with variety of people’s situations and emotions; hence building their social skills. This kind of play also opens up many possibilities for the children and it develops their mastery and understanding of the world. These experiences where children are given free rein to explore and wander translate into valuable resources that they could tap on later in their lives.

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Parents should also not shy away from encouraging their children to use their imagination



Thus parents play a pivotal role in creating opportunities where young children are given the opportunity to engage in pretend play. Parents should also not shy away from encouraging their children to use their imagination, regardless of how silly their imagined worlds may be. Parents may also want to designate a space for creating, where their children can exercise their creativity. This

designated space need not be lavish or fancy, as it could even be a tiny corner with building blocks for their children to play with. According to Pam Allyn, the author of “Your Child’s Writing Life: How to Inspire Confidence, Creativity and Skill at Every Age”, the key is to allow young children to have the autonomy and power over their creative spaces.

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Developing effective study skills

As children transit into their school-going years, it is important that they develop effective study skills to facilitate their learning experience. Amongst others, these important skills include time management skills, note taking skills and personal skills. Time is one of the precious resources for students and it is important that they are able to manage and allocate enough time to

study, revise and even play. It is useful for parents to discuss with their children and come to a mutual agreement on a timetable chronicling the respective times for study, revision and play. Parents should also instil a sense of discipline in their children to ensure that they abide by the timetable diligently. Another important aspect of time management concerns sitting for examinations. Given that students are accorded specific amount to complete an exam paper, it is important that both parents and teachers guide their children and students to manage their time properly when sitting for examinations. This entails students reading every question carefully, divide their time accordingly and if possible, attempting easier

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important that they develop effective study skills to facilitate their learning experience.



questions first. To ensure good time management, teachers should also encourage students to plan their answers, especially long ones, on separate sheets of paper.

Note taking skills are also important, especially given the plethora of information and knowledge that students are exposed to. Tapping on their reflective skills, students need to be aware of what is the important information that requires to be noted down. Students could also be taught mind-mapping skills as a way to capture important information in a succinct and visual manner. At the end of each topic, students are encouraged to review on their notes and/or mind-maps to ensure that whatever was taught stays fresh in their minds. Should they require any further clarifications on any topics, students are able to reach out to their teachers for immediate assistance rather than waiting until the end of the year during revision period.

Finally, effective study skills would also include personal skills that allow students to manage their stress levels and be confident and motivated learners. Learning can be mentally, physically and emotionally exhausting, thus it is important that students are equipped with relaxation and breathing techniques. These techniques will come in handy when students are stressed out or when they need to take a breather from their studies. Simple exercises such as breathing exercises or counting from one to ten are useful tools for students to relax and manage anxiety. Building confidence, self-esteem and motivation are also important in facilitating students' learning experience. These skills can be developed through positive talks and encouraging words, and even by adopting a growth mindset as outlined in earlier parts of this article.

These study skills are not fixed, and they can be developed and strengthened through active involvement and guidance by parents and teachers. In other words, these skills can be taught and learnt. Ultimately, these skills are important wealth of reserves that resourceful students can tap on throughout their learning experience and beyond.

Reflectiveness

Guided reflection

Teachers play important role in promoting reflective practices in classrooms and this can be done by organising instructions in ways that encourage students to actively co-create, rather than merely consume, information and knowledge. As a facilitator, teachers act as intermediaries between the learners and the learning and they guide students to approach learning in a strategic way. The teacher helps each student monitor individual progress, construct meaning from the content learned and from the process of learning it, and apply the learning to other contexts

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One strategy to facilitate reflection in class is to encourage and invite students to think about their thinking”

and settings. Thus learning becomes a “continual process of engaging the mind that transforms the mind” (Costa and Kallick, 2008).

One strategy to facilitate reflection in class is to encourage and invite students to think about their thinking, as students will realise that meaning making is important when reflection becomes the topic of discussion. For examples, teachers can conduct discussions about their students’ problem-solving process and invite their students to share their mental maps and processes for monitoring and solving problems. Additionally, teachers can set ten to fifteen minutes before the end of every lesson for students to share what they have learned with their fellow peers, and students can also be guided to look for ways to apply the knowledge gained to future settings.

Guided reflection exercises can also be conducted by parents. It would be useful for parents to, for example, ask their children to share what they have learned in school during dinner. This allows for their children to recall and reflect on what were taught in school and how to apply knowledge gained to the real world. It also opens up communication between parents and their children as parents would be more aware of what is going on in school, thus allowing them to provide relevant support for their children.

Documenting reflections

One effective and common way to encourage reflectiveness in students is to encourage them to write a learning log for students to pen down their personal record of thoughts and impressions they have relating to their own learning experiences. Apart from serving as outlets for students to express themselves, these learning logs are also valuable resources for teachers to track the progress of their students. Teachers may keep a record for each student on whether the student has moved from superficial to in-depth reflections. Indicators of in-depth reflections include making specific reference to the learning event, providing examples and elaborations, making connections to other learning, and discussing modifications based on insights from this experience (ibid).

Concluding remarks

With the shift and emphasis towards deepening and mastery of skills and the introduction of various useful initiatives and support programmes under the banner of SkillsFuture, it is beyond a doubt that the Malay/Muslim community should leverage on them to scale greater heights and realise their dreams and aspirations. As the initiatives and programmes span across various developmental phases of an individual's life – from being a student in school and institution of higher learning right up to his/her professional life, it is clear that the overarching message of SkillsFuture is to develop and master skills through lifelong learning.

While we spur the Malay/Muslim community to pursue their passion and to continuously upgrade themselves through the various training schemes available, it is important that social and emotional competence are cultivated from young, as this competency allows learners to understand, manage and navigate through life tasks such as learning, forming and maintaining relationships and adapting to changes with ease. This article calls for the cultivation of the new 3Rs of learning; namely Resilience, Resourcefulness and Reflectiveness, that would influence one's experience of and outlook on learning. Both parents and educators play pivotal roles in developing these skills in learners from young. It is hoped that awareness on the importance of the 3Rs of learning and strategies will spur our community to go “beyond learning for grades, to learning for mastery” and to go “beyond learning in school, to learning throughout life”.

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To rise above these changes and remain relevant on the global stage, Singapore has embarked on several bold enterprises to upgrade its hard infrastructure – ranging from the Smart Nation vision, to a recent reappraisal of its economic system.



Wired for Change: Grooming a Future Ready Generation in Education and Learning

By Siti Afiyah Mustapha

Abstract

If the past is any indicator, the twenty-first century promises to effect even more profound and extensive changes, brought about by tremendous advances in the technology and innovation space, globalization, evolving nature of work, and rising aspirations of citizens. To rise above these changes and remain relevant on the global stage, Singapore has embarked on several bold enterprises to upgrade its hard infrastructure – ranging from the Smart Nation vision, to a recent reappraisal of its economic system. Yet, a strengthening of these hard infrastructures must go hand-in-hand with investments to upgrade its human, knowledge and skills capital. This paper hones in on efforts on the education front that are underway to nurture and groom a future-ready workforce in both upstream and midstream education levels. Specifically, it looks at how Singapore's current ability-base, aspiration driven education system is getting a boost from national initiatives, most prominently SkillsFuture, in recent years. Against this backdrop, the implications of these shifts for the Malay-Muslim community will be explored, alongside approaches to plug the gaps in education and capitalize on new areas of learning not only to adapt to, but to stay ahead of current and future trends.

The New Economic Future in a Smart Nation

Envisioning the future does not require a crystal ball — just an understanding of cities. From Dubai to Buenos Aires and Copenhagen, every week, it seems, another city is unveiling its blueprint to become the next “smart city”, and get hitched up to the Internet of Things. Since disclosing plans for a new Integrated Infocomm Media Masterplan in June 2013, Singapore is underway to become a living lab for the world’s first integrated smart nation – a hyper-connected country with pervasive, intelligent and trusted ultra-high speed ICT infrastructure connecting sensors island-wide and facilitating the delivery of innovative new services. For denizens, the transformation promises to redefine the urban experience and enhance quality of life in areas spanning healthcare and education, to energy, security and public services.

Apace with this vision is a domestic economy in transition and seeking deeper change. The smart nation will not only be a transformative convenience for citizens, but an economic imperative for society. Cognizant of disruptive technologies radically reshaping the world of work, the convening of The “Future Economy” Committee portends a restructuring and upgrading of the economy towards higher skills, innovation and productivity. With its unique portfolio of industries, the country is looking to capitalise on growth clusters to drive its next phase of economic growth, given its prime location as a gateway to Asian and global markets. These clusters traverse manufacturing and services, such as Advanced Manufacturing, Applied Health Sciences, Smart and Sustainable Urban Solutions, Logistics and Aerospace, and Asian and Global Financial Services (Ministry of Finance, 2015). Manufacturing - the “Physical Economy” - in particular is increasingly being overlaid with the “Digital Economy”, “Knowledge Economy” and “Experience Economy” in the virtual, information and services domains, respectively. The Future of Manufacturing initiative, as an example, looks to advance Singapore as a Global Lead Manufacturing Hub with companies pursuing R&D and adopting new technologies in the domains of Robotics, as well as Additive and Digital Manufacturing.

Both the Smart Nation vision and reappraisal of the economic system are amongst the nation-state’s recent bold enterprises to sustain its relevance as a top-tier city by adapting to and riding on profound changes of the 21st century – changes brought about by tremendous advances in the technology and innovation space, globalization, volatility of interconnected global systems, urban density, and an ageing population. To build a Smart Nation, Singapore will have to turn to data and analytics to discern the impact of these forces and to manage them effectively.

Yet, discussions in literature presenting rosy visions and ideal images of a “smart city” are often unaccompanied by research that tackle the enabling factors of a smart city initiative, that is, what really makes a city smart. In this respect, Nam & Pardo (2011) identify three key conceptual components of smart cities: technology (infrastructures of hardware and software), people (creativity, diversity, and education), and institution (governance and policy). From this perspective smart cities can be viewed as complex ecosystems braced by technological infrastructures that transform citizen engagement, learning and participation.

However, progressive smart cities go far beyond technologies and technological infrastructures; they are often accompanied with investments in human capital, rather than blindly believing that IT itself can automatically transform and improve cities. For cities to be truly smart, its human capital needs to be just as “intelligent” and connected as its urban fabric. The hardware – building the IoT architecture, the deployment of technologies –, while complex, can be bought; growing and sustaining the human dimension to conceive and run this hardware is more challenging. Consonantly, the more complex and differentiated the economic and hard infrastructures, the greater the job variety requiring a wider range of skills and inter-disciplinary approaches to govern them. The workforce of tomorrow has to not only work productively to “consume” technology, but grasp how technology works.

The importance of human infrastructure highlights social learning and education. To maintain its value proposition as a future Smart Nation and keep pace with developments in the new economy, the current Singapore ability-based, aspiration driven education system has been, broadly-speaking, recalibrating itself to nurture the “thinking skills” its young need and the workforce is demanding; reinvent its community to compete in the emerging creative and innovation economy; and in the process, recognize the power of technology to engender greater positive change. Coupled with a greater widening of gateways to higher education and towards deeper vocational and skills training, this emphasis is accompanied by a need to cultivate “21st Century competencies” in learners, and a push to deliver a pipeline of skillsets (particularly related to science, technology, engineering and maths – STEM) more vigorously. As learning becomes more fluid, autonomous and self-directed, the learning space of formal classroom and teacher directed orientations has correspondingly expanded beyond the bell, as peer learning and collaborations come to the forefront.

Marrying Knowledge, Skills and Aspirations in Education

Focusing on education, Winters (2010) examines the growth of smart cities, who moves, and who stays. In his view, a smart city is a centre of higher education, better-educated individuals, and is actively involved in building a skilled information economy workforce. It is also an intelligent city - a city emerging at the crossing of the digital city and knowledge society in which creativity takes precedence and social capital is considered a valuable asset. Its enablers are the “Smart People”, denizens that embody factors like affinity to lifelong learning, social and ethnic plurality, flexibility, creativity, cosmopolitanism or open-mindedness, and participation in public life. Smart technologies moreover do not function in isolation, but require advanced and specialist personnel skills. Referencing the smart cities of Europe, Caragliu, Del Bo & Nijkamp (2009) further suggest that the problems associated with urban agglomerations, for instance, can be solved by means of creativity, human capital, cooperation among relevant stakeholders, and their collective “smart solutions”.

Such insight brings into context and question how ready and equipped schools, academic and vocational training institutes in Singapore are, to develop the innovation and knowledge-based capital in its future workforce, beyond bridging the skills gap. The education system in Singapore has always been characterized as the “cog in the state machinery” that

competently prepares and supplies a harvest of graduates into the labour market annually. With the Republic's history of central manpower planning that revolves around the tight collaboration between the ministries of manpower, trade and education, the government is able to match workforce demands with an optimum supply of well-educated workers, powering the nation's astonishing economic success in the last fifty years.

Now as the country positions itself for the next 25 to 50 years of economic growth and as a future Smart Nation, government and industry leaders have come to realise that today's highly globalised, fast-paced world can guarantee a university qualification neither job security nor save PMETs (Professionals, Managers, Executives and Technicians) from obsolescence. The purpose of education is no longer simply producing manpower to fill existing job vacancies, but anticipating future needs and preparing for jobs that are yet to be conceptualized in the new economy (Tan, Divaharan, Tan, & Cheah, 2011). As the nature of jobs continues to evolve and devolve swiftly, the occupational irrelevance and redundancies that once threatened unskilled and poorly educated workers are now being confronted by white-collared ones. With two-thirds of Singaporeans expected to hold PMET jobs by 2030, grooming a pool of future-ready graduates into highly-skilled PMETs with both core knowledge and 21st century competencies has become a priority. As expressed in a Ministry of Trade Industry report (2014), PMETs constitute the "white space" in labour within which any positive changes made will engender a "multiplier effect on the resilience and adaptability of the economy".

As a result, the ability-based, aspiration driven education paradigm has been undergoing a "renaissance" of its own to re-emphasize the maximal development of talents, abilities and lifelong learning. As in the late 1990s, this education model seeks to 1) ensure all Singaporeans can access a basic level of education to equip them with skills imperative to the workforce; 2) identify and develop varying strengths of every student to capitalize on the future economy; and 3) create a flexible education system that allows every student to attain success via multiple pathways (Ministry of Education, 2008). In recent years the system has been increasingly widening gateways and rebalancing itself towards deeper vocational and skills training in higher education landscape to respond to the twin imperatives of fulfilling individual aspirations and national goals.

To start with, the university scene is undergoing a "carefully calibrated" expansion that will raise the cohort participation rate (CPR) to 40% by 2020. Many Asian countries are increasingly seeing the world-class university as a necessary driver of more knowledge- and innovation-based economic growth. Institutes of higher learning (IHLs) in Singapore are considering how they would continue to differentiate and excel within a changing global higher education landscape. At the micro level, they are rethinking how to develop graduates that are better able to contribute, excel and compete in such an environment. The higher education landscape has adjusted over the past two decades to incorporate greater breadth, and teaching and assessment approaches that promote more interactive and critical intellectual engagement, in addition to greater emphasis on global education and experiential learning. Illustratively, UniSIM and the Singapore Institute of Technology

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The higher education landscape has adjusted over the past two decades to incorporate greater breadth, and teaching and assessment approaches that promote more interactive and critical intellectual engagement, in addition to greater emphasis on global education and experiential learning.



(SIT) are pioneering the applied degree pathway, with “niche degrees” featuring structured internships integrating work and study in their core curricula. The Singapore University of Technology and Design (SUTD), with its MIT-styled engineering curriculum, brings to the university landscape its mission to become the stronghold of global research and breakthroughs through creative technical research and education anchored in design. To curb the pendulum between specialists and generalists from

swinging too far towards specialists, Singapore’s system is also recognizing the value of traditional academic disciplines with the establishment of its first liberal arts college, even as countries like Japan are retooling its public universities, sacrificing liberal-arts programs in favour of collaborations with the business community eager for better-skilled graduates. The complexity of issues of the future means that creativity would have to cut across boundaries, be it intellectual, cultural or sectoral. Traditional fields like arts, literature, history and social sciences are defended as important, as productive citizens are those who understand the political and social issues of the day, and engage in society.

At the heart of the expanding pathways to higher education is the national SkillsFuture movement. SkillsFuture amalgamates both the recommendations of the Continuing Education and Training (CET) 2020 Masterplan and Applied Study of Polytechnic and ITE Review (ASPIRE). While skills deepening and upgrading has been at the forefront of many discussions for the labour movement for years now, the drive exhorts a more rigorous, extensive programme that develops an integrated system of education, training and career progression for all Singaporeans regardless of family backgrounds and starting points. Ideally this mastery of relevant skills should exist alongside and mutually reinforce the advancement of knowledge.

On the education front, the corpus of SkillsFuture naturally falls within the midstream levels of post-secondary institutions (PSEIs). Initiatives are particularly directed at the sizable proportion of youths funnelled annually into the Technical and Vocational Education & Training (TVET) system with over 40 per cent of each cohort enrolled in the Polytechnics and about 25 per cent in ITEs. From enhanced local internships and opportunities for overseas work attachment, to bolstered Education and Career Guidance (ECG) curriculum and graduate apprenticeship Earn and Learn Programmes (ELP), SkillsFuture not only serves to augment PSEIs’ strong models of pre-employment, but enhance the career prospects of its students. Tighter industry collaboration remains integral in developing a future-ready workforce, with companies strengthening ongoing tie-ups with institutes of higher learning (IHLs) to bring industry-relevant curricula to students. This SkillsFuture thrust is being reinforced by appointment of Sector Coordinators

for 17 strategic future growth industries in PSEIs and the creation of 25 Sectoral Manpower Plans over the next few years.



beyond plugging the education system well into future industry needs, a tighter school-industry nexus will help feed the much needed manpower to fuel Singapore's Smart Nation drive.



In fact, beyond plugging the education system well into future industry needs, a tighter school-industry nexus will help feed the much needed manpower to fuel Singapore's Smart Nation drive. To guarantee service continuity and integrity, the ICT systems that oversee and control a 'smart city' need to be

designed, from inception, with cybersecurity, robustness, reliability, privacy, information integrity, and crucially, resilience, in mind. Foundation and higher level education and skills courses on identifying cyber threats would be crucial in mitigating data breaches in Singapore's increasingly interconnected and interdependent Smart Nation ecosystem. The growing demand for a corps of technical specialists in areas such as cybersecurity, data analytics and network engineering are increasingly being met by talent developed through the IHLs. Singapore Polytechnic, for instance, has launched a Cyber Security Academy to provide cyber-defence assessment services and training. Likewise, local universities are benchmarking cybersecurity specialisations against international standards and introducing new cyber information security degrees at the Bachelors and Masters levels. This manpower pipeline will be gradually developed via on-the-job training and projects in partnership with major global and local employers like Microsoft, Google, DBS Bank and Singtel.

Germane to this discussion are the global debates on the value and future of higher education. While universities are encouraged to think in a more focused fashion about the specific requirements of the workplace, many also want to equip students with a broader range of skills that enable them to adapt to the demands of a rapidly changing world. As such, some degree programmes are moving away from the traditional short modular approach, to a system of longer courses. Students might be asked to undertake a particular module or project designed to develop a particular aspect of their skills – perhaps their critical thinking or their employability skills – but they can choose where and how they do it within the framework of their discipline. Deeper learning approaches and connection between academy and industry will not only equip graduates with cross-functional skills – such as problem solving skills that can extend across several domains like communication or networking –, but vertical, specialized skills potentially useful for integrated healthcare and legal expertise areas. Both types of skills are invaluable for meeting challenges such as urbanisation, ageing population, advances in technology, and shorter business cycles. One of the biggest flexible learning innovations has been the introduction of massive open online courses (Moocs), that enable students to study university-level courses at a distance using internet-based resources and for free. Existing purposefully designed “smart classrooms” with flipped learning approaches in our IHLs allow students to take ownership of their own learning, aided by interactive technology and easily accessible educational resources. While the concept of personalized learning is fairly fluid, it is becoming more apparent that it is individualized by design, varies from person to person, and built around a vision of life-long learning.

Upstreaming 21st Century Skills and Competencies in Learning

While SkillsFuture mostly targets the higher education and work landscape, upstreamed measures to develop the foundations of hard and soft 21st century skills in the younger generations are being implemented in unison. A successful student and lifelong learner will not only exhibit competence in the skills associated with the three “Rs”, but also understands the importance of learning specific academic knowledge, is able to meaningfully apply knowledge in the future, and—most crucially—has gained the disposition and abilities to do so. Wagner (2010) articulates a core set of survival skills for today’s workplace, as well as for lifelong learning and active citizenship – skills that are neither taught nor tested in even the best school systems: 1) critical thinking and problem-solving; 2) collaboration across networks and leading by influence; 3) agility and adaptability; 4) initiative and entrepreneurialism; 5) effective oral and written communication; 6) accessing and analysing information; 7) curiosity and imagination. He advocates using academic content as a means of teaching these skills every day; holding educators and students alike to a new and higher standard of rigor—one that is defined according to 21st century criteria.

Over and above these skills, Dr Vivian Balakrishnan, who heads the Government’s new Smart Nation Programme Office, observed that from learning the three Rs, people must now learn the “ABCs” – an “Aesthetic sense of beauty and design, the ability to Build, and the ability to Communicate effectively”. Entrepreneurship, design, technology awareness, computational thinking and programming are some of the skills needed to make sense of the big data and information increasingly made available to us. Computational Thinking in particular represents a mental discipline at the crux of 21st century fluencies. This computational savvy is vital for understanding and applying the fundamental principles on which computers and networks function, underneath the visible trappings of software and hardware. It is this grounding in computational thinking—not a facility with the latest product or feature—that influences an individual’s early predisposition and cultivates the ability to become successful engineers, inventors and entrepreneurs of the future.

In this respect, new initiatives by the Infocomm Development Authority of Singapore (IDA) such as the IDA Lab on Wheels and Robotics & Maker Academy are gaining momentum to expose students to computational thinking and to “tinker with tech” through activities like

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Computational Thinking in particular represents a mental discipline at the crux of 21st century fluencies.


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game coding and robot programming. The enterprise supplements the Education Ministry’s current third ICT masterplan to develop every Singapore student into “a self directed learner who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning” through the use of ICT to participate in the knowledge society. More than exposing them to hard skills, such initiatives aim to inspire, excite and imbue a pioneering and inquisitive spirit – the “spirit of what if” – in the young as they experience “smart” technologies. The gamification of learning environments is also experiencing rising support among educators globally who recognize that effectively designed games can stimulate large gains in creativity, engagement, productivity, and authentic learning (NMC

Horizon Report, 2014, K-12 Edition). Nevertheless, as gamification and technologies such as tablets and smartphones become more readily accepted and employed to connect curriculum with real life applications in schools, appropriate pedagogy must be applied accordingly to ensure its judicious use.

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Learning itself has to be broadened to develop an acute sense of inquiry and competencies in learning how to learn, including the ability to identify, manage and employ resources, and to independently track one's own progress in learning.



Learning itself has to be broadened to develop an acute sense of inquiry and competencies in learning how to learn, including the ability to identify, manage and employ resources, and to independently track one's own progress in learning. Taking a more philosophical and introspective angle, Morin (2002) argues that as society moves into the new century, students need to appreciate the nature of knowledge as a living and shifting concept, rather than

a tool, ready-made and immutable. He advocates for an education that is capable of confronting uncertainties and teaches elements of the human condition—physical, psychological, biological, historical, cultural and social— that tends to be fragmented in learning within different disciplines. Further, teaching understanding and a mutual comprehension between people, strangers, and different forms of societies, and the ethics of humanity should give one a sense of how to be an individual a member of society, and a citizen of the earth. Such knowledge emerge to challenge existing constructs of disciplines, suggest a re-positioning of perceptions of the “known”, and recentralize education as a way humans learn to adapt to change and uncertainty.

Admittedly, grooming a future ready workforce also starts by growing the younger ones into vocations and professions that they can relate to and hold meaning for them. Exposing the young to a multitude of technologies and nurturing thinking skills is one thing; peaking their curiosity and interest when they personally observe and experience the many possible contributions they can make to their families, society and nation, is another. For this reason, nurturing future ready individuals from young is a bottom-up, inspirational and aspirational process. It is an endeavour that should not only be left to the education system, but to be carried beyond the school by other key influencers in their lives.

A “Game Changer” for the Malay/Muslim Community?

Minister for Communications and Information Yaacob Ibrahim dubbed SkillsFuture a “game changer” for the community (Channel NewsAsia, 2015). But in the larger scheme of things, the initiative is but an element – a microcosm – of the many concurrent changes to adapt the broader education and lifelong learning agenda to developments of today and tomorrow. All these initiatives can be “game changers”, but only to the extent of what is made of them. The community characteristically has a relatively higher youth base vis-à-vis other ethnic groups, with 37% of Malays falling between the ages 0 and 24 (Singapore Department of Statistics 2015). Its human resource could potentially reap significant demographic dividends, and these can only be collected if its people are well-educated, invested in relevant knowledge and skills, and brought up to be productive members of society and economy. If one thing is certain, it is that the Malay/Muslim community must continue its pursuit towards progress, considering these rapid shifts in the economic, technological and educational landscape. The following section is not meant to be prescriptive, merely exploratory.

Creating opportunities towards higher education and skills

The expansion of multiple pathways in the education system appears to be a boon for the community, providing it with multiple avenues for talent development. With widened gateways, those with lower education qualifications or are in the vocational track can aspire to deepen their knowledge and skills at higher levels. In a National Youth Council (NYC) study (2015), Malays were identified as more likely to be in the vocational track, along with students from lower socio-economic status (SES) and males. Despite upward trends in school admissions, with the percentage of the Primary One (P1) cohort admitted into post-secondary institutions markedly rising from 78.4% in 2003 to 89.9% in 2012, the percentage of Malay students ineligible for secondary education remains overrepresented at 7.4% in 2012 (Ministry of Education, 2014).

Given these statistics, it becomes all the more crucial for MM youths to actively ride the SkillsFuture movement which provides vast opportunities, at least in pecuniary terms, to acquire higher skills. But to adeptly do so, keeping abreast of the larger picture, global and national political, socio-economic and technological trends, the kind of skills relevant to future jobs, and the education pathways enabling their access to these skills are paramount. Jobs are on everyone’s mind, but not everyone is aware how jobs themselves will change. At the same time, these efforts must be underlain with motivation, a sense of possibility, personal strive and commitment towards excellence in their chosen fields. Newly-minted Acting Education Minister (Higher Education and Skills) Ong Ye Kung suggested how credentials earned by an ITE graduate, for example, could stack towards a polytechnic diploma, which could in turn, stack towards an applied degree, or qualification certifying mastery in a specific field.

A study on the aspirations and expectations of a group of students by Dr Trivina Kang highlights the importance of considering the aspirations and expectations of the students as well as the roles played by the school, family and community in closing the gap between them (Mohamed Irwan, 2011). Her findings indicate that while students across all streams generally had high levels of aspirations, Normal stream students are predisposed towards lower educational expectations than those in the Express stream. But a student from a Normal stream aspiring towards a degree might have his or her expectations tempered with the possibility of having to go through the ITE. The student needs to excel in ITE before gaining admission in a polytechnic, where only good results can in turn allow entry into university. Even the better performing students of the Normal Technical stream is restricted in mobility to switch into the Normal Academic stream to pursue better educational opportunities, due to “distinct difference(s) in focus of both curriculums” (Zhang, 2014).

Under these circumstances, the student may just resign to settling with something less than a degree. In such cases, Malay/Muslim Organizations (MMOs) are in the prime position to align student aspirations to expectations through constructive advice on the various educational pathways available and concomitantly, the setting of educational targets. Rather than dictating their educational choices, they should help to clarify and acquaint students with the expanded education system, in hopes of setting the foundation for independent decision making about their own futures.

This would mean that MMOs must respectively and intrinsically be thoroughly informed of industry and educational trends. They could even look into the possibility of aligning or structuring educational and career mentoring towards various growth or “smart” sectors, as per the Sectoral Manpower Plan. This means focusing on lead sectors that have more pressing manpower needs, new growth sectors that require a larger pipeline of workers, such as the biopharmaceuticals sector, and sectors facing significant manpower challenges such as retail, and food services. SkillsFuture should be seen as a stepping stone to drive the community towards relevant, higher skills in growth industries. Establishing units such as the proposed SkillsFuture division to be established within Yayasan MENDAKI is one way of promoting and leveraging on national initiatives, without replicating them. These units could then explore outreaching further into existing platforms such as Youth Space@ITE to provide mentorship and development of the individual in transiting between school and work (The Straits Times, 2015).

Building a community of excellence also means building talent in the less ventured fields such as craftsmanship. Rather than viewing technicians as a rank-and-file position, MM youths more inclined in this domain should be encouraged to pursue Master Craftsmanship Programmes to raise their quality of work, which in turn benefits industries as a whole. Nonetheless, in a country where 70% of citizens aged 25 to 29 carry diploma qualifications and above, it is going to take more than top-down government initiatives to convince parents or students that trades-based vocations are as worthy of recognition, much like the highly skilled workers in Japan or Germany’s Mittelstand. Such a transformation of societal

attitudes and mindset will be a major, long term effort from the ground up, “involving collaboration with all stakeholders, including employers, training providers, unions and individuals”.

Specific to the MM community, it might also be useful for educators – parents, teachers and mentors – to look closely at factors of, and barriers to, motivation in students prompting them to further their education and deepen skills, be inclined towards certain subjects and careers, and want to have a stake/ownership in their respective learning journeys. MM parents and family members – regardless the socio-economic status – should be enabled in terms of their ability to contribute to and involved themselves in decision-making processes of their children’s educational and career journey. Bite-sized information on national career programs and industry talks, and access to online career portals, are methods of informing parents so they can, in turn, provide transition support and guard against likely failure of their children to achieve their education and career potential. Complementary to or even within the Community of Pathfinders in Action (COMPACT), working professionals from various occupational backgrounds could dialogue, network, and mentor students through available channels like the Community Leaders Forum (CLF), Young Minds Club (YMC) or Young AMP. The media will also have to play an even larger, extensive role in exposing MM youths to such developments, in addition to shaping mentalities or attitudes towards education, learning and achievement.

Apprising students with these varied pathways must be accompanied with real-life experiential hands-on learning opportunities. With a majority of the citizenry benefiting from SkillsFuture, it is important to identify and provide support to students who fall through the cracks and will not benefit from the initiatives as much as their peers. Junior College (JC) students may not have as many chances to deepen skills or gain work experience as their vocational peers until they reach a higher level of university, presuming they even gain admission, unless they of their own volition actively search for job shadowing or internship opportunities. Due to varying focuses, the ECG curriculum in these institutions is presumably less cogent, with one ECG counsellor for every five secondary schools/JCs/Centralised Institute, compared with six counsellors in each polytechnic and ITE College. Even then, there are ITE and polytechnic students whose courses are not eligible for, or do not academically qualify for the SkillsFuture enhanced internships, at least until these are extended to all ITE and polytechnic courses by 2020.

In such cases, the onus is primarily on the individual to acquire and seek for information and opportunities for themselves. A sense of urgency and responsibility is critical for self-directed learning to build relevant skills and experiences that would either complement their course of study, and/or will enhance their employability. Nonetheless, where possible, MMOs could assist students with seeking attachment opportunities, and in advising, linking up and networking with industry professionals to help students build a steady portfolio of experiences and skillset. Improving the career readiness of madrasah students is another area to look at. As with recent announcements to enhance secular subjects in madrasahs, these institutions could look at greater collaborations with MUIS, other academic

institutions, and firms from a multitude of industries to extend career information delivery and attachment programmes to its tertiary students.

STEM Learning

Another gap to narrow is in improving MM students' attainment of a basic, yet solid grasp of science, technology and mathematics (STEM). Futurologists often allude to how the societies that are best at harnessing multidisciplinary, combinatorial innovations will be those most richly endowed with people who understand the component sciences and technologies involved – that is, those with strong STEM backgrounds. The national education system has consonantly preserved its strong focus in these subjects for flexibility at the system level. For the M/M community, achievement in these subjects is a constant cause for consideration and revision. While there are many students who do well in them, the rate of improvement has plateaued over the last few years. At the primary levels, only six in ten Malay students passed their PSLE Mathematics from 2010 to 2012, with 32% of the Malay/Muslim P1 cohort of 2007 in MOE Learning Support Programmes. In addressing STEM learning, the MENDAKI Education Review Committee (MERC) is looking at revising its educational efforts in four areas: (1) pedagogy of MENDAKI's Education Programmes, (2) Early Years Education, (3) Home – MENDAKI – School Partnership, and (4) Public Education and Outreach. Re-strategizing its pedagogy in teaching mathematics and science entails exploring micro-group teaching, ICTs in collaborative learning, and factor in psychological/mental barriers when learning these subjects. Ultimately, mastery of the subject matter should be rewarded, rather than grading on a curve.

However, much of the talk about STEM fields can be intimidating for those without interest in them. Negative media on the effects of accelerating technology like robots or automation hollowing out jobs is counterproductive to growing individuals, much less children, into these subjects. Neither is the push for STEM a push to get children to become the next Steve Jobs of Apple or Salman Khan of Khan Academy. Rather, they should be shown how STEM is involved in their daily lives and put a potential STEM career on the map for future generations. Even with youths and adults, the idea is to reach out to people who do not necessarily view themselves as connected to STEM fields, and meet them where they are at rather than preach. By teaching MM individuals to be curious, innovative, and to utilize critical thinking at a young age, a roadmap for their success in STEM education can be set up by encouraging them to be STEM minded not only at school, but as a lifestyle.

In fact, a more sustainable approach to grow the young into these subjects would be to engage MM families and naturally occurring communities – such as faith groups or residential communities – directly. This method would enable them to bring home ideas for STEM learning, and practice it in the comforts of their own home and community, at a more constant or regular basis. Online courses, games, new programming languages, and even children's books are pushing children and their parents in this direction. STEM education through apps such as Hopscotch, Get the Math, Sound Uncovered, and NASA Visualization Explorer are a useful way to imbue technology into learning and make it interactive. It can start a once-a-week day devoted to invention – an “Idea” Day; making local

science/tech fairs a family affair, or explore teaching these subjects with a historical bent – how the great discoveries of the past were made, and learn about the problems modern scientists are solving, rather than simply driving into rote learning facts and theorems. The organization Scientific American has a feature on its Web site, “Bring Science Home” showcasing simple yet innovative math or science-related projects using available items in the house that families can do together. The MM community could also benefit from creating a “Maker Ed”-type site or central resource depository that enables people to locate not only STEM education projects and events, but information on developments in other fields in Singapore and other countries, for holistic learning.

Drawing on powerful currents in today’s digital culture, various stakeholders within the M/M community should invest in instilling digital literacy and self-directed learning in individuals. Access to basic digital tools and online learning materials has become a civic necessity that community organizations can help fulfil. It has also become commonplace to argue that everyone is better off learning at least basic programming skills—that coding itself is the new, necessary literacy. But in introducing digital literacy programmes in the community, there must be a realization that literacy is also about how to make technology do what one wants and moving beyond a passive relationship with it. Even as coding education becomes ever more popular with websites like Codecademy and Khan Academy, conversations are mounting about the value of simply learning to code. Learning to programme does not necessarily translate to thinking like a computer scientist or thinking about how to build large complex software projects. It is important that people understand what they are learning and what they are not so as to not short-change their own efforts in skilling themselves in the ways of information technology.

Conclusion

In this “Future-Ready” Age, it is no longer enough to be relevant or current. The true challenge lies in being able to anticipate change when one does not even know where the change may be coming from. Leading a smart nation initiative calls for a thorough understanding of the interconnections complexities and linkages among physical, technical and social factors in a city. Technological propagation must not be viewed as an end in itself, but as a means to reinventing a city for a new economy and society, aided by institutional preparation and community governance. The growing importance of education in this changing landscape has necessitated that education reformers address demands for increased, better human capital needed to energize the new knowledge-based economy. Today, the Singapore education system, alongside its economic and social systems, is preparing its citizens for an unpredictable world. Its systems are adjusting and fine-tuning itself to groom a future ready workforce, equipped with the right skillsets for the technology-enhanced “smart nation” and a new economic future. Parallel to the formal education system is a learning revolution happening beyond schools, irrespective of location and time, across all stages of life. It is carried out by people who are proactively taking learning into their own hands as they discover better technology-based products to help them.

While many Malay/Muslim students have proactively seized the opportunities presented by the education system and alternative learning platforms beyond the classroom, the demands of the future workforce will conversely leave those without the foundation and preparation in relevant skills with an arduous time ahead. A widening gap will manifest between those who take advantage of these opportunities, and those who are unable or choose not to do so. In this day and age, members of the community must, all the more, become more conscious, controlled, independent and active in their learning. Above and beyond personal attainment of such knowledge or skills, individuals should also look to building the human, knowledge and intellectual capital of the community by passing them on to succeeding generations in a larger, continuous and mutually-reinforcing process. Such attitudes and mentality towards education and learning could go a long way in building a community of excellence that is, in all respects, ready to face the contingencies of the future. As American philosopher Eric Hoffer waxes lyrical, “In times of change learners inherit the earth; while the learned find themselves beautifully equipped to deal with a world that no longer exists”.

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Family Involvement in Education:

Empowering Low-income Malay Families towards Educational Upliftment

By Muhammad Farouq Osman

Abstract

Accumulative research has determined that parental involvement is strongly related to the child's academic outcomes (Jeynes, 2013). However, it seems that the potential of parents and the family environment takes a backseat in current education policy in Singapore. Public discourse on improving the education system has mainly focused on broad policy strokes, such as scrapping the Primary School Leaving Examination (PSLE) and providing multiple pathways to success by recognising excellence above and beyond the academics (Ministry of Education, 2013). While these are commendable, more attention should be spent on how we can help low-income families become more engaged in their children's education. In particular, schools and the community should be proactive in outreaching to these families. It is only through the provision of a multifaceted ecosystem of support to disadvantaged families that we can uplift the educational attainment of the Malay community as a whole.


Preamble

Much has been written about the link between family environment and academic achievement. Research (Ferguson et al, 2007; Isaacs and Magnuson, 2011; Ng, 2014) has shown that children from low-income homes tend to do poorly in school because their parents lack access to material and informational resources necessary to support the former's learning and development. This correlation between family background and educational performance was acknowledged by then Minister Mentor Lee Kuan Yew who

observed that top schools such as Raffles Institution had more than half their students with university-educated parents (Straits Times, 16 Feb 2011). In contrast, the figure was about 13% in neighbourhood schools. More recently, a 2015 survey conducted by The Straits Times threw the spotlight on the pervasiveness of private tuition – an industry worth \$1.1 billion (Straits Times, 9 Nov 2014) – in Singapore’s education landscape. It found that nearly 80% of the respondents with primary school children paid for tuition, which could cost more than \$200 per month (Straits Times, 4 Jul 2015). Under such circumstances, children hailing from families with limited financial means would more likely find themselves ill-equipped to face the rigour of the school curriculum, being unable to afford the extra leg-up. As it is, the well-to-do spend more than twice on tuition, compared to households below the median income (Gee, 2012). What then are the implications for Malay families – who are overrepresented among the lower-income bracket (Mutalib, 2012; Smith et al, 2015)? Already close to 30% of Malay students (Ministry of Education, 2005 quoted in Association of Muslim Professionals, 2012: 25) were in the Learning Support Programme (LSP) – an early intervention programme for primary school children with weak literacy and/or numerical skills – in 2005. On its part, the government recognises the potential of Singapore’s education system as a social leveller, and has pledged to provide more help for the low and middle classes. For example, in the recent Budget, the government announced plans to enhance the affordability of quality preschool, while augmenting the Ministry of Education’s (MOE) Financial Assistance Scheme for needy students and topping-up Edusave accounts (Ministry of Finance, 2015).

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40 years of international research strongly suggests that family involvement is “one of the strongest predictors of children’s school success”, and that families play a crucial role in their young children’s “cognitive, social and emotional development” (Weiss et al, 2009: 4).



But do these financial measures address the cultural and social capital-deficit of low-income Malay families – that has been a factor preventing greater engagement with their children’s education? 40 years of international research strongly suggests that family involvement is “one of the strongest predictors of children’s school success”, and that families play a crucial role in their young children’s “cognitive, social and emotional development” (Weiss et al, 2009: 4). In contrast, because of their basic educational attainment, these Malay parents are arguably less prepared to help out with their children’s

schoolwork, not to mention navigate Singapore’s increasingly complex education landscape (Tan, 2015 quoted in Association of Muslim Professionals, 2015: 25). The low social capital – defined as resources embedded in social relations – of such families means that they are unable to tap on diverse and extensive networks in strategising for their children’s success. In addition, notwithstanding a high national preschool enrolment rate, children from disadvantaged families tend to have irregular preschool attendance, due to family complications linked to unstable employment, health and marriage (Khoo, 2015 quoted in

TODAY, 1 Aug 2015). The latter could impinge upon the children's school-readiness, and, if left unmitigated in primary school, could have negative cascading effects on their future educational trajectory. Together with the parents' lack of cultural capital – or “endowments such as cultural and linguistic competence” (Bourdieu, 1977 quoted in Abercrombie et al, 2000: 81) – vital for their children's academic success, all the above factors point to the need for policy instruments that go beyond subsidies to supporting greater family involvement in education. Encouraging deeper family engagement could very well prove to be the underrated solution in improving the achievement of children in disadvantaged homes: a US study (Dearing et al, 2006) has shown that parental involvement is strongly and positively associated with the literacy attainment of children in low-income families.

Family Involvement in Education

This paper argues that parental participation forms an integral part of child learning and development, and should constitute a major plank of efforts to uplift the Malay community's educational attainment as a whole. In realising this agenda, schools and the community should endeavour to actively engage low-income Malay parents – in a system of ‘complementary learning’ (Harvard Family Research Project, 2008) – so as to avail to them an ecosystem

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of support. Lately, public discourse on improving the education system has focused on broad policy strokes, such as scrapping the Primary School Leaving Examination (PSLE) and providing multiple pathways to success by recognising excellence above and beyond the academics (Ministry of Education, 2013). While these are commendable and are definitely steps in the right direction, it seems that the potential of parents and the family environment takes a backseat in current education policy. Sociologists such as Vincent Chua of the National University of Singapore (NUS) have warned against ignoring the seemingly routine but fundamental everyday micro social interactions within and beyond the family environment, as these represent an important platform for both the “amplification and attenuation” (Chua, 2014: 104) of inequalities. Therefore, where helping disadvantaged children realise their potential is concerned, there is a need to bring parental participation and engagement to the centre of policymaking and national consciousness. This paper will focus mainly on family involvement in the education of children from early childhood through primary school years – as this period represents the crucial foundation stage of child cognitive and socioemotional growth.

Accumulative research has determined that parental involvement is strongly related to the child's academic outcomes (Jeynes, 2013). But what exactly does parental involvement entail? According to the Harvard Family Research Project (2006), family involvement in

children's education has three components: (1) parenting, (2) home-school relationships and (3) parental responsibility for learning outcomes. Parenting refers to the "attitudes, values and practices" of parents in child-rearing, and it is argued that parent-child relationships that are "nurturing, warm and responsive" are associated with "positive learning outcomes" in early childhood (Harvard Family Research Project, 2006: 2). Research has also indicated that early foundations in mathematical and verbal skills are built more effectively through "informal interaction with adults (e.g. parents at home) than through formal training" (Putnam, 2015: 110). Home-school relationships are both the "formal and informal connections" (Harvard Family Research Project, 2006: 2) between families and their children's educational context. A strong home-school partnership is undergirded by regular communication between parents and teachers, and not limited to attendance at parent-teacher conferences. In Singapore, parents can opt to join the parent support group in their child's school, and "gain support from other parents" (Ministry of Education, 2013) in their parenting endeavour. Lastly, parental responsibility for learning outcomes is defined as an aspect of parenting that places "emphasis on educational activities" (Harvard Family Research Project, 2006: 3) that promote success in school. Simply put, it involves parents consciously putting the effort to create a conducive learning environment anytime, anywhere. At home, parents can read and count with their children, or show them how to write words and numbers. Outside the home, parents can practice what has been termed by educational pedagogy experts as 'mediated learning', with their children. Mediated learning recognises that "the quality of interaction between the individual and the environment via an intentional human being plays a pivotal role in the cognitive development of the individual (Tan, 2003: 55)." For instance, parents can seize a family outing in the park as an educational opportunity for their children to spontaneously identify and count the objects they can see in the surroundings.

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In a groundbreaking US study, University of Kansas academics Betty Hart and Todd Risley found that children from low-income homes are exposed to fewer words, compared to their peers from affluent, professional homes (Hart and Risley, 2003).

Likewise, children will also benefit from learning visits to places such as the library, zoo and museums, because these trips provide the impetus for mental stimulation vital to a child's brain development. In particular, Singapore parents can leverage on the National Library Board's (NLB) kidsREAD programme, which consists of group reading sessions led by volunteers to "promote the love of reading and

cultivate good reading habits" (National Library Board, 2014) among young Singaporeans. Low-income Malay families have the option of joining MENDAKI's Perkasa Keluarga, Baca Bersama (Empowered Families, Read Together) programme, aimed at inculcating a reading culture in families (Yayasan MENDAKI, 2015). For such low-income families, these reading programmes provide a much-needed boost for their children's literacy attainment. In a groundbreaking US study, University of Kansas academics Betty Hart

and Todd Risley found that children from low-income homes are exposed to fewer words, compared to their peers from affluent, professional homes (Hart and Risley, 2003). Over time, this vocabulary gap manifests itself in terms of lower language test scores at the ages of nine and 10, and overall slow educational development for working class children. However, early intervention before the age of three can prevent the cumulative effect of vocabulary deprivation for disadvantaged children. Indeed, the Effective Provision of Pre-School Education (EPPE) study in the UK has demonstrated that frequent library visits positively influence reading attainment for three- to five-year-olds (UK Department for Children, Schools and Families, 2008: 7). It is not a surprise therefore that children whose parents are highly involved and provide a cognitively stimulating environment, are more likely to be school-ready by the time they enter Primary One.

Impact of Poverty on Family Involvement

However, as mentioned earlier in the paper, low-income Malay families may lack the capability to be fully involved in their children's education. In their book *Scarcity: Why Having Too Little Means So Much* (2013), economists Sendhil Mullainathan and Eldar Shafir argue that the minds of impoverished parents function under a strain, which affects their 'bandwidth' to "grasp, manage and solve problems" (quoted in Putnam, 2015: 130). This parental

stress – which is exacerbated by the need to manage multiple schedules, the parents' lack of personal time and having to juggle work and family – is therefore especially onerous for disadvantaged families. Burdened with multiple day-to-day responsibilities, coupled with their low educational attainment, such parents lack the energy and knowledge to help with their children's schoolwork, often reposing high trust in the teachers instead. Harvard public policy academic Robert Putnam in his book *Our Kids: The American Dream in Crisis* (2015: 130) also posits that stressed parents are likely to practice "less sensitive", "less responsive" and "less attentive" parenting, with negative consequences for their children's overall learning and development. The above trends are readily discernable among the low-income in Singapore: a TODAY article (1 Aug 2015) for example documents the plight of disadvantaged parents who encountered difficulties sending their children to preschool because of sickness, shift work and their being big families with expecting mothers. Furthermore, the relatively high divorce rate in the Malay/Muslim community (Association of Muslim Professionals, 2012: 69) points to the diminished ability of affected parents to devote full attention to their children's academic development. International studies paint a bleak outcome – in terms of attenuated life chances – for children in such an unstable family environment: it is argued that children who grow up without their biological father

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At the same time, there is no question that these families understand the importance of education: a MENDAKI report on low-income Malay families found that more than half of the respondents hoped their children would attain at least a university degree (TODAY, 25 Apr 2015).

“perform worse on standardised tests, earn lower grades and stay in school for fewer years” (Putnam, 2015: 78), irrespective of ethnicity and socioeconomic status. All these factors illustrate that on their own, Malay families plagued with income insecurity and unstable structures may not have the wherewithal to play an active role in their children’s educational journey. At the same time, there is no question that these families understand the

importance of education: a MENDAKI report on low-income Malay families found that more than half of the respondents hoped their children would attain at least a university degree (TODAY, 25 Apr 2015). Hence, it behoves policymakers to think of ways to help these families help themselves. Schools and the community-at-large can and should play a more visible role in engaging such families so as to break the cycle of poverty. After all, as the African proverb goes, it takes a village to raise a child.

Complementary Learning

In reality, children need all the help they can get – be it from their parents or teachers – in order to succeed in school. This is where the concept of ‘complementary learning’ is pertinent. Complementary learning is an approach which advocates the integration of “both school and non-school supports” in a systemic way so as to ensure that all children can “have the skills they need to succeed” (Harvard Family Research

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Project, 2008). It recognises that family involvement in children’s education should be situated within a broader ecosystem of multiple players that have a stake in the children’s success – such as educational institutions and the community in general. The existence of such a mechanism is especially salient for low-income Malay families, who, clearly overburdened with work and household responsibilities, are in dire need of additional guidance to navigate the school system. The philosophy of complementary learning lies in the idea that family involvement in education should be a “co-constructed, shared responsibility” (Weiss et al, 2009: 4) that spans across families, schools and communities. By building a network of “mutually respectful” partnerships among these institutions, it increases the likelihood of all stakeholders understanding and sharing “learning goals and commitments” to the child’s development (Weiss et al, 2009: 4). On MENDAKI’s part, its Family Excellence Circle (FEC), which is a social support network for parents to “interact, exchange ideas (and)

share best practices on how to cope with daily challenges and embrace lifelong learning” (Yayasan MENDAKI, 2014) represents the community’s push to foster greater family-school-community engagement. Crucially, this “linked network of supports” (Weiss et al, 2009: 4) ensures that the child can always have access to some help and guidance, should one source of support flounders. In acknowledging this shared responsibility, schools in particular should make the “effort to reach out to parents” (Harvard Family Research Project, 2014: 3) and work together towards the children’s academic success. For example, teachers can get in touch with parents to communicate expectations about daily school work and examinations, or provide initial guidance as to the possible future educational paths for their children. Research has illustrated that such school-home engagements are “associated with students’ homework completion and academic improvements” (Harvard Family Research Project, 2014: 3).

Implications on the Community and Government Policy

Schools, with the support of the broader community, should take the lead in spearheading outreach efforts with low-income Malay families. In a qualitative study of 25 low-income Malay/Muslim households – commissioned by MENDAKI – it was found that while the parents had high hopes and aspirations for their children’s education, they felt ill-equipped to help with the latter’s schoolwork as they were themselves unfamiliar with the curriculum (Brassard, 2015: 7). Moreover, not only did the parents from these households feel socially isolated where finding a listening ear is concerned, they were apprehensive in seeking social assistance from the various government or community agencies, due to the fear of stigmatisation, among others (Brassard, 2015: 8). It is not too far-fetched to suggest that the same factors were at play in preventing these families from engaging their child’s school and teachers directly, hence inhibiting meaningful involvement in their children’s education. The aforementioned study also highlights the need to improve outreach to lower-income Malays, with Minister-in-charge of Muslim Affairs Dr Yaacob Ibrahim recommending the adoption of a “last mile approach” (Sunday Times, 26 Apr 2015) by going door-to-door to speak with these families and provide information on available social assistance.

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The aforementioned study also highlights the need to improve outreach to lower-income Malays, with Minister-in-charge of Muslim Affairs Dr Yaacob Ibrahim recommending the adoption of a “last mile approach” (Sunday Times, 26 Apr 2015) by going door-to-door to speak with these families and provide information on available social assistance.



Along the same line of thinking, schools, with MOE's backing, should improve their outreach to families in similar circumstances. For example, teachers may need to visit the homes of their students to update the parents about the child's school performance and recommend best ways to support the child's academic progress. These visits allow teachers to gain useful insights into the child's family background and environment in an "informal way", building a relationship of "trust" with the parents (Weiss, 2015). Harvard education academic Heather Weiss posits that such home visits are linked to "improved student attendance, behaviour and test scores (Weiss, 2015)." Even sending simple text messages can enhance parent-teacher communication and reap educational dividends. Columbia University academic Peter Bergman collaborated with a Los Angeles, US school to send text messages to parents of middle and high school students (Bergman, 2015 quoted in New York Times, 17 Jan 2015). The messages were sent whenever the students did not hand up their assignments, and these listed the relevant page numbers and questions to attempt. The results were encouraging: not only did this intervention witness a rise in completed homework and test scores, it improved overall communication between the school and parents. While there is no denying that teachers in some Singapore schools are indeed engaging parents in the above ways, the practices are often not systemic and institutionalised at the school level – apart from the usage of a mobile app where parents could keep tabs on their child's school activities. Teachers who go out of their way to outreach to parents of students from low-income homes are already juggling administrative work alongside teaching. If teachers' workload is the stumbling block that prevents meaningful and deeper parental engagement, then perhaps more support should be made available to the former, in terms of extra manpower or smaller class sizes, for example.

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However, unlike the present government focus on lifelong learning and personal skills development – as evidenced by the high-profile introduction of the slew of SkillsFuture initiatives – family involvement in education does not seem to figure centrally in policymaking, when the latter could in fact make all the difference in a child's academic trajectory.



To be fair, current education policy in Singapore does include some aspects of parental engagement. MOE's National Advisory Council, COMPASS (COMMunity and PArnts in Support of Schools), was established in 1998 to advise the Ministry on "ways in which school-home-community collaboration could be strengthened and promoted" (Ministry of Education, 2015). There is a dedicated MOE website titled 'Parents in Education' which acts as a learning resource for parents who want to help their children succeed in school (Ministry of Education, 2015). In particular, the website features tips which parents can use to facilitate their child's learning at home, along with information on primary and secondary school curriculum. It also encourages parents to "initiate communication with your child's teachers" (Ministry of Education, 2013). This year's MOE Work Plan Seminar too focused on the importance of "partnerships between schools and parents in bringing

out the best in every child” (Ministry of Education, 2015). However, unlike the present government focus on lifelong learning and personal skills development – as evidenced by the high-profile introduction of the slew of SkillsFuture initiatives – family involvement in education does not seem to figure centrally in policymaking, when the latter could in fact make all the difference in a child’s academic trajectory. It has to be noted also that serious parental engagement goes beyond merely providing family learning tips to encompass active outreach to disadvantaged, low-income homes. After all, it is these families who are in need of closer guidance: through no fault of their own, they end up lacking the awareness, knowledge and capability to provide a sound learning environment for their children. Moreover, joining parent support groups and volunteering in schools remain beyond the reach of many time- and energy-pressed low-income parents who have to contend with poverty-related stress, as highlighted earlier in the paper (Mullainathan and Shafir, 2013).

Education experts point out that effective family engagement – especially those targeting the lower-income groups – demands the forming of “linkages” between “out-of-school time programmes, families and...schools”, so as to facilitate information sharing for the benefit of families (Harvard Family Research Project, 2007: 7). This is precisely what MENDAKI advocated: its 2014 Education Review Committee recommended identifying new opportunities to facilitate “connections among families, school and the community” (Yayasan MENDAKI, 2014). On its part, the Malay/Muslim community organisation has been offering mathematics and education-related workshops – such as Tiga M and Cahaya M – for low-income parents, free-of-charge, so that they can be better equipped to help their children (Yayasan MENDAKI, 2015). With such ‘tuition’ for parents gaining currency among the middle class – who are willing to pay as much as S\$500 for a few days’ workshop (British Broadcasting Corporation, 19 May 2015) – free MENDAKI classes for parents represent community efforts to help bridge the educational gap between children of different income origins. Perhaps the government can fund a programme enabling such classes to be replicated on a national scale, so as to reach even more low-income families – regardless of ethnicity.

Concluding Remarks

At a dialogue session with Malay/Muslim community leaders, Prime Minister Lee Hsien Loong impressed upon his audience the determinative role parents play in influencing their children’s educational chances. As Mr Lee put it, “hard as the schools try...the family’s influence on the child is equally if not more important than that. It has to have a nurturing, enriching environment at home (Ministry of Information, Communications and the Arts, 2010).” This paper agrees with the Prime Minister’s sentiments, but with a caveat: it recognises too that not all parents have the means to provide a conducive learning environment at home, due to their socioeconomic circumstances. In order to ensure that our children – no matter their background – can have a fighting chance to ‘make it’ in life, schools and the community should be more proactive in engaging these families. It is only through the provision of a multifaceted ecosystem of support to disadvantaged families that we can uplift the educational attainment of the Malay community as a whole.

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Now, every existing company who wish to expand and market their businesses attempt to catch up with technology in order to retain the interest of their existing and new customers in their businesses.



New Work Order: An Undeclared Battlefield for Future Workers

By Khairun Nisa Bte Yusni

Abstract

Emails, Facebook and Internet were not created until two decades ago and nobody could have expected that undergraduate students who majored in Information Technology (IT), Computer Engineering and related IT courses that were infamous in 1990s compared to Law, Medicine and Engineering will be highly demanded in the current and modern workforce. Now, every existing company who wish to expand and market their businesses attempt to catch up with technology in order to retain the interest of their existing and new customers in their businesses. However, for workers, the realm of workforce has changed dramatically and drastically over the years. In order to be still relevant in the industry, many have to undergo training and equip themselves with new knowledge which they never had known the need to acquire before. For companies and organisations, managing work and leading talent in today's dynamic and mobile economy is tremendously challenging coupled with the domination of technology, globalisation, demographics and environmental predicaments. This article therefore, attempts to examine the key trends in the workplace of the future particularly in Singapore and how will employees stay competitive as workplace undergoes a rapid structure orientation due to the growing availability of technology and globalisation.

Introduction

Before Singapore becomes one of the globalised countries in the world, one should look in retrospect, at the global reasons that made the country able to achieve the reputable status today. One prominent incident that marks a major turning point in history was the industrial revolution. In this era, which happened during 18th century, fundamental changes occurred in agriculture, textile, transportation and metal manufacture (Yale, 2006). In other words, it was the process of change from an agrarian, handicraft economy to one dominated by industry and machine manufacture. The term, Industrial Revolution was first coined by an English economic historian, Arnold Toynbee to mark the tremendous innovations and creations that were brought upon by the event and played important influence on human lifestyle and standard of living.

Most people in Britain, before the advent of industrial revolution, had their daily activities revolved around farming and produced their own food, clothing, furniture and tools which were done in their own homes or rural shops using hand tools and simple machine. One of the reasons that contributed to Britain being the centre of industrialisation was due to its great resources of coal and iron ore, which proved to be essential for industrialisation. It marked a shift to powered, special-purpose machinery, factories and mass production. The iron and textile industries, along with the development of the steam engine, played central roles in the Industrial Revolution, which eventually saw improved systems of transportation, communication and banking (History, 2015).

But it all started to spread across the globe when the transportation industry underwent significant transformation during the Industrial Revolution. In the mid-19th century, steamships were used to carry freight across the Atlantic. With the invention of steamships, the British and Europeans could sail to the East to obtain raw materials from their colonies. For Singapore, this epoch in history has precipitated more ships to visit the country as their port-of-call ensued with Singapore gaining importance in the process of trade and in the collection and distribution of goods. With the arrival of steamships, Singapore became more connected to the world; letters, which took months to arrive, were shortened to weeks. In summary, the Industrial Revolution has produced for Singapore a great increase in trade, an enhanced role in the era of industrialisation and closer connection with the world.

Before the industrialisation reached Singapore, the concept of earning a living in Singapore in the early 1800s was simple, basic and straightforward. At that time, Singapore was populated by Malays, Orang Laut (sea nomads who majority were fisherman), some Chinese traders and Gambier planters (Lee, 2008). The landscape of work however, started to change as industrialisation stepped its foot in Singapore and became more ostensible when Raffles brought with him the idea of remodelling Singapore into a modern city, turning the fisherman village into a free port, providing abundant of work opportunities for natives and immigrants. The evolution of work in Singapore however, did not end there. As Singapore become a newly independent state in 1965 under the leadership of a man named Lee Kuan Yew, the state's economy has undergone dramatic changes to emerge as a very advanced country today.

As a newly independent country in 1965 with little natural resources, Singapore was an infant nation faced with much uncertainty. Amongst the pressing issues was unemployment that needed to be addressed immediately in order to get the wheels of the Singapore economy moving. One of the earliest developments to embattle unemployment was the birth of the Jurong Industrial Estate and the Singapore Economic Development Board (EDB) to entice foreign investments into Singapore.

These two developments marked the start of Singapore’s industrialisation programme that began with factories producing from garments and textiles to wood products and hair wigs, along with capital and technology-intensive projects from companies such as Shell Eastern Petroleum and the National Iron and Steel Mills (Economic Development Singapore, 2015).

Although there was a global economy recession in 1975, Singapore heralded the start of its electronics industry and its manufacturing industry evolved to become more sophisticated. The electronics device that could be found today such as a smartphone, tablet, video game console, or a car navigation system has a high chance that some part of it was designed or made in Singapore. Electronics has become the substratum of the Singapore manufacturing sector, contributing 5.3% to the country’s Gross Domestic Product (“GDP”) in 2013. From its modest beginning as the only TV assembly plant in Southeast Asia in the 1960s, Singapore’s electronics industry has today grown to become a vital node in the global electronics market (Economic Development Board, 2015).

Today, the role of the electronics industry is rapidly evolving. Not only that, devices, machines, and systems are becoming increasingly connected and “smart”. This is magnified with the burgeoning artificial intelligence in many sectors. These will inescapably be the lynchpins that decide the future of work, employment landscape and eventually the next human lifestyle. This article will therefore, explore the future of work in three components; the underlying drivers for the evolving future of work, the emerging landscape and mapping out the future.

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One way of looking at the factors contributing to the changing working landscape is to look at how people connect.

Underlying Drivers; Connectivity and the Rise of Artificial Intelligence (AI)

One way of looking at the factors contributing to the changing working landscape is to look at how people connect. The internet is now the main connecting tool thanks to its ubiquitous nature and cheap alternative. The exponential growth

of the internet over the past two decades has led it to touch upon every aspect of modern life from mobile entertainment to healthcare.

The rise of omnipresent connectivity is bolstered by a report on global internet access, State of Connectivity: 2014, which predicted 3 billion people will be online by early 2015.

This also means that 40 per cent of the world's population are connected to the internet. In developing countries, for example, the number of internet users has doubled in the past five years, from 974 million in 2009 to 1.9 billion in 2014. This incredible milestone is driving the global economic engine, creating new jobs, transforming industries and to such an extent of orchestrating entire new industries.

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Singapore has quickly become one of the most connected nations in the world. Singaporeans spend an average of five hours and 16 minutes surfing the Internet each day and one hour and 57 minutes on mobile.

With such impressive machinery, people from all over the world are changing the way businesses are done, how governments relate to their people and how the people relate to their governments. Singapore government too, has not lost its sight to recognise the internet as a tool for transforming businesses and governance. It has since rolled out national plans to harness this

potential. The National Computer Board, a government agency, in its A Vision of An Intelligent Island: IT 2000 Report said, “In our vision, some 15 years from now, Singapore, the Intelligent Island, will be among the first counties in the world with an advanced nationwide infrastructure. It will interconnect computers in virtually every home, office, school and factory” (Mahizhnan & Yap, 2000). Singapore has quickly become one of the most connected nations in the world. Singaporeans spend an average of five hours and 16 minutes surfing the Internet each day and one hour and 57 minutes on mobile (Aziz, 2014; IDA, 2014). The household broadband penetration stands at 87 per cent today. In other words, 9 out of 10 Singapore homes have broadband.

Another factor leading to the new work order is the surge of artificial intelligence, videlicet, robots. The robots have not just landed in the workplace but they are also expanding skills,

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Rapid advances of technology have long represented a serious potential threat to many jobs ordinarily performed by people. They believe this takeover will happen in two stages. First, computers will start replacing people in especially vulnerable fields like transportation/logistics, production labour, and administrative support. Jobs in services, sales, and construction may also be lost in this first stage. Then, the rate of replacement will slow down due to bottlenecks in harder-to-automate fields such as engineering. This “technological plateau” will be followed by a second wave of computerization, dependent upon the development of good artificial intelligence.

moving up the corporate ladder and performing incredible productivity. These inklings led to the prediction from some of the economists that they will completely shove their human counterparts aside one day (Mcneal, n. d). Certain jobs have succumbed to the influence of machines and robots substitution such as bookkeepers, cashiers, bank tellers and telephone operators. A 2013 study by Oxford researchers from the Oxford Martin School revealed that about 47 percent of America's occupations will be automated within the next twenty years. Rapid advances of technology have long represented a serious potential threat to many jobs ordinarily performed by people. They believe this takeover will happen in two stages. First, computers will start replacing people in especially vulnerable fields like transportation/logistics, production labour, and administrative support. Jobs in services, sales, and construction may also be lost in this first stage. Then, the rate of replacement will slow down due to bottlenecks in harder-to-automate fields such as engineering. This "technological plateau" will be followed by a second wave of computerization, dependent upon the development of good artificial intelligence. This could next put jobs in management, science and engineering, and the arts at risk (MIT, 2013).

Martin Ford (2015) in his book, *Rise of the Robot*, believe that as intelligent machines begin their march on labour and become more sophisticated and specialized, they will soon overhaul the economy. In his vision, a full-on worker revolt is on the horizon, followed by a radically new economic state whereby humans will live more productive and entrepreneurial lives, subsisting on guaranteed incomes generated by amazing machines. He sees the advances happening in technology and becoming evident that computers, machines, robots, and algorithms are going to be able to do most of the routine, repetitive types of jobs. He believes that the takeover will not happen to only lower-skilled jobs but encompasses people with college degrees, even professional degrees, people like lawyers who are doing things that ultimately are predictable. A lot of those jobs are going to be susceptible over time.

The Second Machine Age by Andrew McAfee and Erik Brynjolfsson (2014), generally shares Ford's outlook. The title was produced in contrast to the First Machine Age which is referring to the Industrial Revolution in the 18th century, which marks a major turning point in history. During this era, it denotes the process of change from an agrarian, handicraft economy to one dominated by industry and machine manufacture. To them, the Industry Revolution is not only the story of steam power but more than anything else, it allowed overcoming the limitations of muscle power, human and animal and generates massive amounts of useful energy at will. Eventually this led to factories and mass production, to railways and mass transportation. In other words, it led to modern life. They believe that the Industrial Revolution ushered in humanity's first machine age – the first time progress was driven primarily by technological innovation.

Like the steam engine that helped to overcome the limitations of muscle power, computers and digital technology advances are doing the same, even more for mental power. In this

book, they are declaring that the world is entering a second machine age where computer hardware, software and networks at their core and the world is at an inflection point – where the curve starts to bend a lot because of computers. They are claiming this era would not just be different, but better because both variety and volume of consumption will be increased. Technology can bring more choices and freedom; abundance will be the norm rather than scarcity. With these developments however, less optimistic change will be brought upon by digitisation. But unlike Industrial Revolution which caused soot-filled London skies and horrible exploitation of child labour, modern developments or the so-called second machines are likely to bring economic rather than environmental disruptions i.e. labour displacement.

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Emerging Landscape for the Future of Work; Opportunities and Risks

The promising opportunities that future of work create are countless. For instance, more young people have developed the interest to be entrepreneurs, utilising the advantages that technology

presents to them by lowering the barriers to start up a business. The growth of electronic communications, computing and other low cost technologies have reduced the expenses associated with starting up a new firm and extended the possibility of outreach to new customers. In other words, the technological growth has generated lower barriers for the young people to have high levels of confidence about their capacity to create their own job, to become entrepreneurs. A recent global survey of more than 12,000 millennials found 68 percent of respondents believe they have the opportunity to become an entrepreneur (Telefonica, 2014).

Another prospect that modern technology will bring out is work flexibility. Technology enables individuals to work more flexibly within large organisations, where enhanced communications facilitates a wider range of work practices. Technology is also reshaping workplace flexibility by growing the sharing and on-demand economy where workers have unprecedented autonomy over their hours of work. This sharing economy or peer-to-peer capitalism such as Airbnb, Uber and eBay, enables individuals to share their underutilised assets to generate income. Technology has reduced transaction costs, making sharing assets cheaper and easier than ever—and therefore possible on a much larger scale. The big change is the availability of more data about people and things, which allows physical assets to be disaggregated and consumed as services (The Economist, 2013).

In tandem, the rise of the knowledge economy and advances in communications technology have accelerated the division of labour, leading into what some have called ‘the

age of hyperspecialisation'. For the first time in history, transmitting information around the world is seemingly costless. This presents an enormous opportunity for productivity improvements and greater scope to reach new markets.

Although these forces are in their nascent stages but the dynamics stated above indicate that they will become a feature of the work landscape. Similar to the Industrial Revolution which dispensed preliminary evils of exploitation, pollution and urban squander, the Second Machine Age as coined by McAfee and Brynjolfsson, will bring upon comparable threats, although not in terms of environmental disruptions but rather, on economic front.

In recent times, there has been a rife with debate around the world and between governments, economists, experts and scientists on the potential impact of automation on unemployment. The fear of losing job or being unemployed could be strongly intuited when 60 per cent of respondents in a survey by The International Social Survey

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the vast majority of the respondents who were mainly experts and members of the interested public shared their anticipation that robotics and artificial intelligence (AI) will permeate wide segments of daily life by 2025, 15 years from now.



Programme said job security is important in determining their overall happiness at work. Concurrently, a recent report by Foundation for Young Australians (FYA) posited that about 40 per cent of the current jobs are considered at high-risk of automation over the next 10 to 15 years. More than half of young Australian students are currently getting educated for dying jobs; nearly 60 per cent of students are being trained in occupations where the vast majority of jobs will be radically decimated by automation in the next 10 to 15 years. This is also resonated in a 2014 report by Pew Research Centre's Internet Project in commemoration of the 25th anniversary of the creation of the World Wide Web, the vast majority of the respondents who were mainly experts and members of the interested public shared their anticipation that robotics and artificial intelligence (AI) will permeate wide segments of daily life by 2025, 15 years from now.

Although the respondents who were mainly experts, shared similar predictions for the evolution of technology, they were deeply divided on how advances in AI and robotics will impact the economic and employment landscape in the next decade (Smith & Anderson, 2014). When the experts were asked about the economic impact of robotic advances and AI, half of the experts, 48 per cent out of 1,896 envisioned a future in which robots and digital machines have displaced significant numbers of both blue and white collar workers, which they believe will lead to an even greater income inequality, unemployment and breakdowns in the social order. They based their opinions on two arguments. First, the displacement of workers from automation is already happening and about to get much worse. Quoting from Jerri Michalski, founder of REX, the relationship economy

expedition, “Automation is Voldemort: the terrifying force nobody is willing to name”. Secondly, the consequences for income inequality will be profound. A fellow at Harvard University’s Berkman Center for Internet & Society, Justin Reich, said, “Robots and AI will increasingly replace routine kinds of work—even the complex routines performed by artisans, factory workers, lawyers, and accountants”.

52 per cent of experts in the other camp, expected that technology will not displace more jobs than it creates by 2025. This group anticipates that many jobs currently performed by humans will be substantially taken over by robots or digital agents by 2025 but they have faith that human ingenuity will create new jobs, industries, and ways to make a living, just as it has been doing since the dawn of the Industrial Revolution. This group of experts felt positive with technology based on these five arguments; first, technology throughout history has been a job creator, not a job destroyer; secondly, advances in technology create new jobs and industries even as they displace some of the older ones; thirdly, there are certain jobs that only humans have the capacity to do; fourth, the technology will not advance enough in the next decade to substantially impact the job market; fifth, social, legal, and regulatory structures will minimize the impact on employment.

One thing that both groups of experts share in common is their concern on the existing social structures, especially the educational institutions which are not preparing people for the skills that will be needed in the job market of the future.

Another possible risk arising from the blossoming of the technology is its impact on income inequality. On the globalisation front, the most innovative firms are able to use technology to serve bigger markets, often across geographical boundaries and thereby take a greater share of revenue. These large companies are increasingly driving value creation using technology rather than labour inputs. This concentrates the gains in a smaller number of companies and individuals. Many economists worry these trends could potentially worsen the inequality (Foundation for Young Australians, 2015). As working arrangement become more flexible for young workers, lawyers and government officials are concerned about the loss of workplace protections such as compassionate leave, maternity leave, insurance and workers compensation. Given the complex and sometimes ambiguous working arrangements that will likely prevail in the future, there is a need for different industrial relations framework and innovation in products and services that protect workers despite the ongoing debate on how to classify workers on digital platforms e.g. as independent contractors or employees.

Mapping out the Future

The world is now on the cusp of a “Second Machine Age”, one powered by automation, artificial intelligence and robotics. It is clear that they are poised to touch virtually every aspect of human lives – from health and personal relations to government and ultimately workplace. The Industrial Revolution had its dark side but it ended up being a net creator of jobs on a massive scale. Artificial intelligence and automation by contrast, have yet to set a foothold on either being a job destroyer or a whole new level job creator, a hypothetical sequel to the first Industrial Revolution.

As the humans anticipate for the widespread use of automation and AI, it is important to start taking immediate steps to prepare for future job displacement. In order to succeed in a global economy that is digitally enabled, the workforce will need to be increasingly digitally literate. For countries like the United Kingdom, national computing curriculum is mandatory in all supported primary and secondary schools. The objective is to teach students to operate computers with understanding how computer work and how to make computer works for them. In the United States of America, the government is providing resources and tools to educators who deliver digital literacy training (Foundation for Young Australians, 2015).

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Economists have predicted that over the next two decades, the jobs most unlikely to be automated are those that involve creative intelligence, social intelligence and problem solving. Cultivating some of these uniquely human abilities that could not be codified or systemised, is in fact nurturing what is called the 21st Century Skills. Such skills include

confidence, communication, creativity, critical thinking, lateral thinking, team work, digital literacy, financial literacy and global citizenship. These skills could be a necessity in the future to help workers stay relevant and important in the workforce. Promoting creativity and encouraging independent thinking too, might help people to stay ahead of job losses. However, advanced robots will one day be highly sophisticated and well equipped to execute highly complex functions that were once dominated by humans. For this, Holmes (2015) proposed a radical solution that is needed to tackle such mass unemployment, such as the “living income”, an idea that was espoused by Jim Pugh, Director of Analytics for Barack Obama. Living income is a stipend, given to every adult regardless of their employment status (Holmes, 2015). According to Holmes (2015), in a world where AI and robotics have made unemployment the norm, leaving the masses displaced by new technology is hardly a recipe for a bright future. Hence, the living income will allow the wheels of economy to keep turning.

While the concept of living income is being discussed in the United States, the genesis of second machine age would not be able to tell what work will exactly look like in the future or the specific types of jobs that will exist in the next decade. Singapore will not be alone in this but how do we prepare our people to be ready to face a more globalised, connected, technology dominated world? According to Lim Say Leong, assistant vice president of marketing at Swiss automation giant ABB, robots will steal much-needed jobs from human in the near future but not so in Singapore, where industries often struggle with labour shortages. The nascent of more robots presence in industries will help to mitigate the tension felt by companies to employ workers while at the same time ensure consistent quality in output – which is a constant pressure for companies (Shah, 2015).

He added that companies can retain workers to operate the robots. He further posited that the industry now is at a point where the software solutions that are used to control the robots are simple and intuitive, making anyone able to operate them even though they may not have advanced engineering skills. In other words, companies might have to train these workers in this area instead of sending them to learn the conventional needed skills. To him, there is a glut of benefits that human can gain from the robots, robots can do jobs that hazardous in nature such as working in freezer storage units, welding or a place where workers are exposed to fumes that could damage the internal organs in the long run.

Singapore like other countries, have national challenges to be concerned with, especially in the time where technology will be a norm in the human activities. For example, urban density which makes Singapore as the world's third most densely populated nation with nearly 8,000 people per square kilometre. This is expected to increase as the global trends indicate two-thirds of the world population would have migrated to cities by 2050. This is swelled with ageing population with the number of elderly people aged 65 years and above in Singapore is expected to triple to 900,000, a 1 in 5 ratio. These trends will add pressure to the healthcare system, transportation and ability to use resources such as energy, food and water (Smart Nation, 2015).

In response to these issues, Singapore is envisioning to develop itself into a Smart Nation. It aims to build the World's First Smart Nation by utilising technology to improve the lives of citizens, creating more opportunities and building stronger communities. This vision involves pulling together its world-ranked universities and medical facilities, multi-billion annual research and development (R&D) investments, a fast-growing community of tech start-ups and large pools of investment capital. It also centres on the government and private sectors using technology holistically to bring about better lives and greater business opportunities. Prime Minister Lee Hsien Loong described the government's initiative to develop Singapore as a Smart Nation in his speech, "our vision is for Singapore to be a Smart Nation – a nation where people live meaningful and fulfilled lives, enabled seamlessly by technology, offering exciting opportunities for all. We should see it in our daily living where networks of sensors and smart devices enable us to live sustainably and comfortably. We should see it in our communities where technology will enable more people to connect

to one another more easily and intensely. We should see it in our future where we can create possibilities for ourselves beyond what we imagined possible”.

Along the Smart Nation initiative, Singapore has produced its first edition of Sustainable Singapore Blueprint in 2009, outlining plans for a “*Lively and Liveable Singapore, one that Singaporeans love and are proud to call home*” (Ministry of the Environment and Water Resources, Ministry of National Development, 2015). Based on the Sustainable Singapore Blueprint 2015 report, Singapore has even exceeded some of the targets laid out in 2009 Blueprint. Among the targets are; to build smart city pilots with sustainable features at Marina Bay, Jurong Lake District and Punggol; plans to ramp up public transport infrastructure and minimum energy and water efficiency standards for more household appliances. According to a survey conducted with over 2,000 residents in early 2015, the efforts have borne fruit with almost 80 percent viewed Singapore as a liveable and sustainable place.

Recently, there was an inaugural roundtable discussion held by The Straits Times to talk about the future of work and important trends impacting workplaces particularly in Singapore. Panellists at the event said despite of encouraging signs in Singapore such as the strong focus on educating people to take on jobs in up-and-coming industries and the vibrant entrepreneurship scene, Singapore companies can do better in areas such as training and human resource management and the use of new technologies (The Straits Times, 2015). Singapore Management University president Arnold De Meyer noted that not only jobs are changing but they are evolving more rapidly. Technological disruptions may traditionally have affected lower-skilled jobs but medium-skilled jobs such as accountant and stock analysts are also increasingly impacted.

Singapore companies are seen as not as flexible as those in the United States in optimising technology due to fear of failure and risk aversion. However when it comes to education in Singapore, it is understood that the government’s initiatives (e.g. SkillsFuture, ASPIRE etc.) are in the right track by creating mindset that there are alternatives and equally good ways to be successful.

While the future of work presents incredible opportunity for young people who would be the future workforce, it comes with great uncertainties. It would not be easy on workers or the society by any measure but with careful policy design, government’s intervention plans and mental or physical preparation, it is hoped that technology would always generate new and exciting opportunities for humanity. If technology and robotics helps to eliminate heavy workload and hazardous workplace environment from employees and revert time for families to bond, it might not be such a bad trade after all.

Implications for Malay/Muslim Community

In 2010, there were 232, 484 Singapore Malays that were economically active or were in the workforce (Census of Population, 2010), a 2 percent increase from year 2000. Together with this, the Malay fertility rate stands at 1.73 in 2014, the highest across all ethnicities (Population in Brief, 2015). Based on these data, it could be inferred that there is an increasing trend of more Malays entering the workforce in the future and have a potential make up of a larger proportion than previous years especially with many Malay women joining the workforce (Census of Population, 2010). However, with more technology displacing low and middle-skilled jobs, how would the Malays retain their employment or for the young people, be employed?

The key to finding the jobs in the future will be of course, knowing where to look. Thanks to the government's effort of shifting the mindset from harping on only a degree paper to a more provision of multiple pathways that one can partake to be successful in the future. Given the high number of Malay students in ITE, polytechnics (Census of Population, 2010) and other higher learning institutions that emphasise vocational and learn-on-the-job pedagogy, the Malay students will enjoy greater benefits from the shift.

The advances in technology have the potential to transform jobs not only involving manual work but also cognitive and complex tasks. In addressing this, co-Acting Education Minister Ong Ye Kung (Davie, 2015) mentioned that in order to prepare people well for this reality, the education institutions will have to evolve within these larger social, economic and technological contexts but it will also need to take into account the "bottom-up" aspirations of Singaporeans. However, how would the aspirations of the Malays be heard?

As highlighted by Mr Ong in his first major speech at the opening of the OECD-Singapore Conference on Higher Education Futures (Davie, 2015), there are opportunities for mobility and progress for societies that technology and Internet have caused. As a result, SkillsFuture that was launched last year come into play to provide Singaporeans with the opportunities to develop to their fullest potential throughout life, regardless of their starting points.

As a corollary, the call for a mindset shift provides a broader definition of merit and success for the Malays as well as Singaporeans in general. To achieve that, it is vital for the Malays to recognise the importance of upskilling in order to stay relevant in the changing landscape of the workplace. As reflected in Randstad Q1 2015 Workmonitor, more than nine in ten (91 per cent) employees in Singapore believe that refreshing their skills and competencies every five years will enhance their employability (Randstad, 2015). Ultimately, the Malays should not alienate themselves from the clout of automation and robotics that are increasingly gaining control over jobs, leading to displacement of many low and middle-skilled professions.

Furthermore, the rise of machineries and automation will continue to marvel workers with their efficiency and productivity. Yet, skills like critical thinking, empathy, creativity and judgement and other basic human qualities proved to be hard to code by automation. Sectors like healthcare, education, and caring for the elderly and children are all seen as occupations that would still require a human touch. In return, the Malays in taking preparatory steps should start equipping themselves with relevant 21st century skills that would not be mastered by automation anytime soon, to be constantly valuable in the eyes of the labour industries.

The Malays although being the minority in this cosmopolitan country, they share similar aspirations as others to excel in all areas be it education, economic or healthcare. Despite of the many challenges they encounter as a minority community, the Malays have achieved significant progress over the last decade, as cited by Minister Yaacob (Today, 2015), “We are what we are today - with higher household incomes, high home ownership, talents in many fields, movers and leaders in our own right - not because of privileges, not because of subsidies, but because we persevered and gave our best”. Should the similar perseverance and high aspirations to excel continue to persist among the Malays, the emergence of such battlefield in the near future, optimistically would not be a hindrance for the Malays to conquer if they are armed or equipped with the right paraphernalia.

Section

II

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

General Scan of Education Policies

By RPD Team

RPD Team

Aidaroyani Adam | Sabrena Abdullah | Khairun Nisa Yusni | Muhammad Farouq Osman |
Siti Afiyah Mustapha | Siti Khadijah Setyo R S

A. Early Years Education

1. Enhancements to the Kindergarten Fee Assistance Scheme (KiFAS) in Kindergartens run by Anchor Operators (AOPs)

Gross income eligibility for KiFAS increased from



\$3,500 to
\$6,000
per month

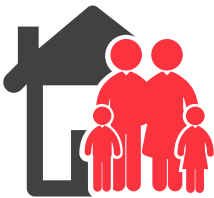
or

per capita income (PCI) of up to



\$1,500
per month

Lower-income families are also eligible for higher subsidy quantum of up to



\$170

*in fee assistance, compared to
\$108 previously*

Through the enhancements to KiFAS, Malay/Muslim students enrolled in PAP Community Foundation (PCF)-run kindergartens are able to benefit from higher subsidies, as well as affordable and quality preschool education. Example: A family with a gross household income of \$2,500 or a PCI of \$625 may receive up to \$170 (inclusive GST) in fee assistance.

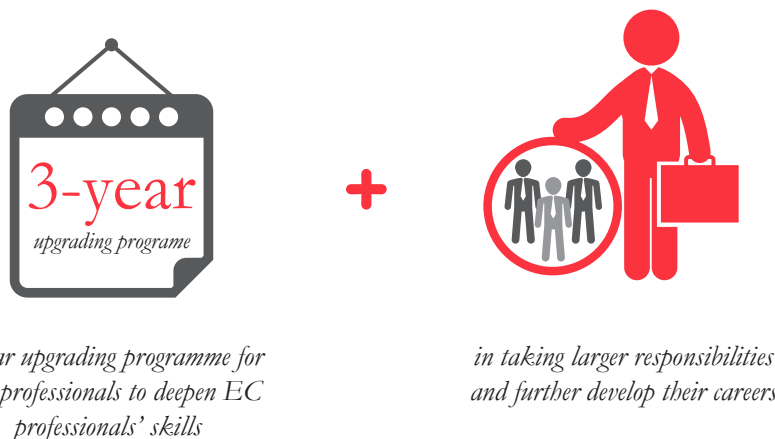
2. Enhancing the capacity of preschool teachers and improving the quality of preschool education

As part of SkillsFuture, the Early Childhood Development Agency (ECDA) introduced a new Early Childhood Capability Grant to support child care centres and kindergartens that host **enhanced internships** for students from the full-time Early Childhood Care and Education (ECCE) courses in Polytechnics and ITEs.



Enhanced ECCE internships to include: (1) Standardized internship duration of 22 weeks, (2) More comprehensive learning outcomes, and (3) Structured mentoring by experienced early childhood teachers.

Professional Development Programme (PDP) is a structured



Aspiring Malay EC professionals in Polytechnics and ITEs can gain better learning opportunities through the enhanced internships, while existing professionals can look to improved career progression through the PDP.

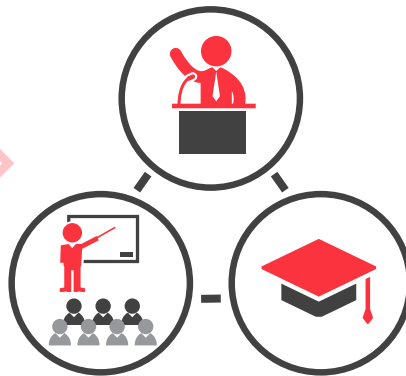
3. Enhanced support for child care operators

Under the **Partner Operator (POP)** scheme, operators will receive funding to:



Reduce their current fees to a cap of about \$800 for full-day child care services

Invest in improving the quality of childcare services through Singapore Preschool Accreditation Framework (SPARK) certification



Enhance continuing professional development and career progression opportunities for their centre leaders, teachers and educators

Complementing the existing Anchor Operators (AOPs) scheme, the POP scheme calls for more Malay/Muslim-run kindergartens and child care centres to continuously improve their quality through adherence to structured frameworks such as SPARK, and to subsequently attain AOP status.

B. Primary to Tertiary Education

1. Waiver of National Examination Fees

Fees for national examinations administered by the Singapore Examinations and Assessment Board (SEAB) for Singapore citizens in government-funded schools, and examination fees for Singapore citizens enrolled full-time in ITEs and Polytechnics, will be waived.

With savings up to \$900 in national examination fees from primary through pre-university, students, particularly those from lower-income families, will be able to use the funds to finance other educational needs.

2. Transport Subsidy in Financial Assistance Scheme (FAS)

Students from eligible families who take the public transport will be provided with \$120 in transport credits per annum. For students taking the school buses, FAS will cover 50% of the regular school bus fare.



Financial support extended to students taking school buses would accord greater flexibility for Malay/Muslim parents to manage their time (i.e. parents need not worry about having to rush in between going to work and sending their young children to school safely – especially for parents working odd hours).

3. Increased Income Criteria for Edusave Merit Bursary (EMB)

The income criterion will be raised to a gross household income of not more than

For larger families, the per capita income (PCI) criterion



Greater support for madrasah students

Currently, there are about 3,500 students enrolled in six madrasahs in Singapore. At the National Day Rally 2015 (NDR), it was announced that the Government will provide more support to madrasahs in Singapore, especially in strengthening the teaching of secular subjects. Collaborating closely with MUIS, the Government will provide financial support to create training opportunities for asatizahs and enhance their capacity to teach secular subjects.

Better equipped resources such as science labs, and for the learning of Mathematics and Science will be introduced to enhance the learning experience of its students. Funds will be provided to set up suitable award schemes to recognise and celebrate excellence achieved by madrasah students in secular subjects.

General Scan of SkillsFuture Initiatives

By RPD Team

RPD Team

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Background

SkillsFuture, which is overseen by the Ministry of Education (MOE) and Workforce Development Agency (WDA), is a national movement that seeks to help Singaporeans learn at every age and develop mastery and flair in every field, throughout life.

Learning throughout Life

01 Individual Learning Portfolio (ILP)



ILP is a one-stop education, training and career guidance online portal that will empower every Singaporean to plan their education and training into their working life. Individuals can also use ILP to search for suitable jobs and manage their careers. This will be rolled out in 2017.

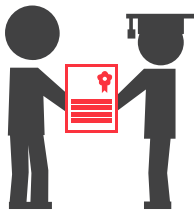
02 Education and Career Guidance (ECG)



With the help of trained ECG counsellors recruited by MOE, students in primary and secondary schools will be exposed to a wide range of education and career options, and given opportunities to make informed post-secondary education choices. This will continue in ITE, polytechnics, junior colleges and universities.

Measures for Students

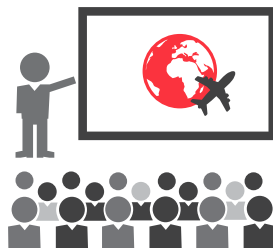
01 Enhanced Internships



rolled out to
2/3
of polytechnic courses and half of ITE
courses over the next two years

Students can learn through meaningful work assignments and industry exposure to deepen and apply both technical and soft skills.

02 Young Talent Programme (YTP)



The overseas market immersion programme will be extended to polytechnic and ITE students, beyond local university students.

Measures for Employees and Employers

01 SkillsFuture Credit



to support his or her learning needs at every stage of life, including those seeking to re-enter the workforce. The credit can be used for workskills related courses supported by public agencies. This will be rolled out in 2016.

02 SkillsFuture Earn and Learn Programme



This is a place-and-train programme for fresh polytechnic and ITE graduates, so that they can be placed with an employer and have opportunities to learn through structured on-the-job training and institution-based training. Those who successfully complete this programme will receive industry-recognised qualifications and a sign-on incentive.

03 SkillsFuture Study Awards



will be given to 2,000 individuals
per year, on top of the normal
course fee subsidies.

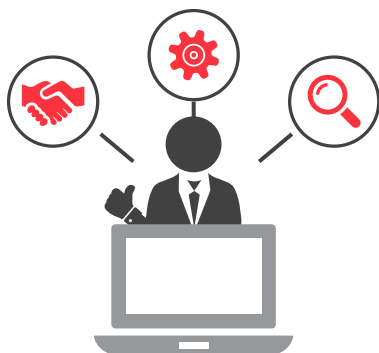
This programme is for those in their early and mid-career so they can develop and deepen their skills in future growth clusters.

04 P-Max



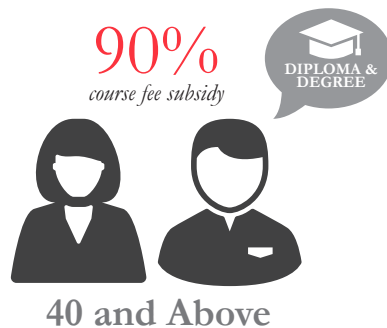
P-Max is an enhanced Place-and-Train programme that seeks to help Small and Medium Enterprises (SMEs) better recruit, train, manage and retain their newly-hired Professionals, Managers and Executives (PMEs), encourage the adoption of progressive human resource practices within SMEs, and help to place job-seeking PMEs into suitable SME jobs.

05 Skills-Based Modular Courses



There will be a wider range and scale of short, skills-focused modular courses relevant to industry needs to give Singaporeans more opportunities to acquire relevant skills.

06 SkillsFuture Mid-Career Enhanced Subsidy



All Singaporeans aged 40 and above will receive up to 90% course fee subsidy for WDA-funded courses, including modular courses in publicly funded post-secondary education institutions, and additional reductions in MOE-funded diploma and degree courses.

07 SkillsFuture Fellowships

\$10,000

cash given up to 100 individuals with deep skills expertise to recognise their skills and enable them to achieve mastery in their respective fields.



This programme seeks to develop individuals with deep skills expertise or mastery in growth and priority sectors. This will take effect in 2016.

08 SkillsFuture Leadership Development Initiative



Under this initiative, there will be increased collaborations with companies to design and enhance developmental opportunities for high-potential talents.

09 Sectoral Manpower Plans (SMP)

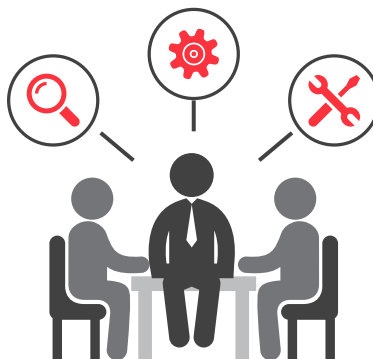


*This will be rolled out in
23 key sectors by*

2020

*Under the SMP, there will be **tighter efforts** with industry and unions to encourage employers to proactively develop every worker, **career pathways** and **value mastery of skills** as employees **advance in their careers**.*

10 SkillsFuture Mentors

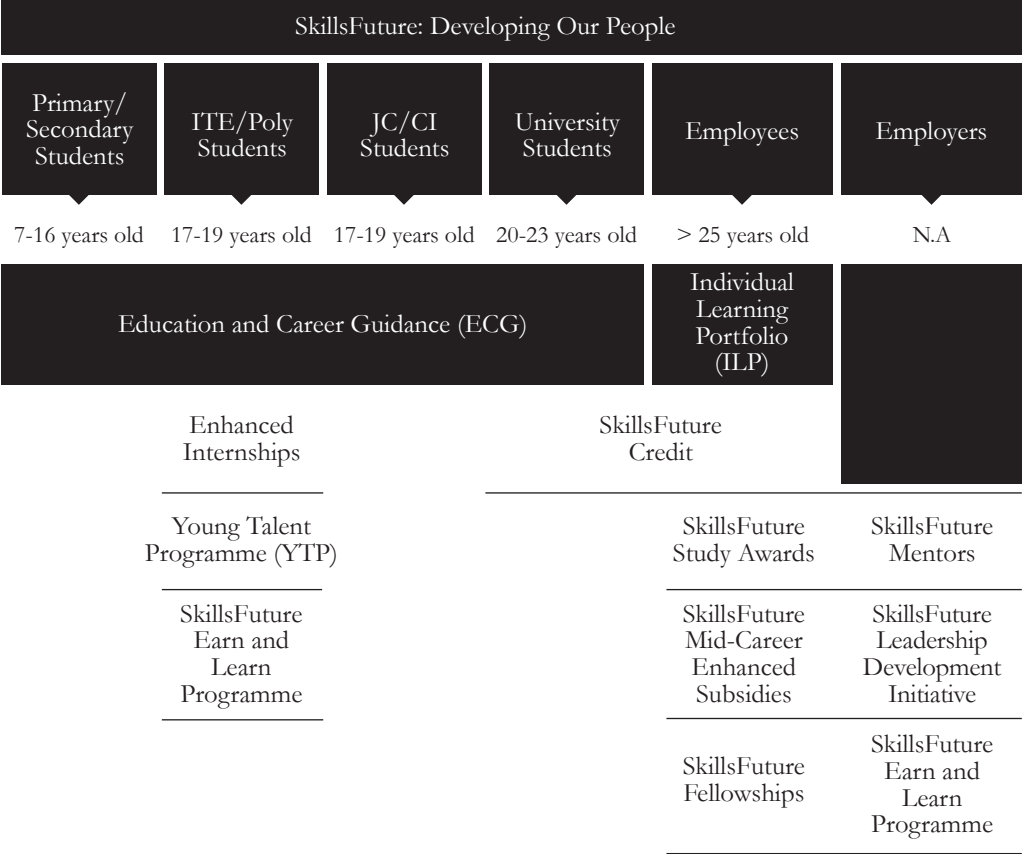


central pool of

Mentors

There will be a central pool of mentors who specialise in industry-relevant skills to provide guidance to SMEs in the implementation of skills deepening initiatives.

SkillsFuture Initiatives throughout the Lifespan



Source: Yayasan MENDAKI (2015)

Implications on the Malay/Muslim Community

Policy Announcement

Education and Career Guidance (ECG) throughout the Lifespan

Potential Implications

- Malay parents should encourage their children to take advantage of services offered by ECG counsellors in our schools and institutions.
- This is so as to give our Malay students a clearer picture of what lies ahead for them, in terms of post-secondary education choices and career options.
- Malays have a high representation among ITE and polytechnic students.
- Special focus should be placed on promoting the services of ECG counsellors among the above groups so that they can explore varied job options and be more career-ready.
- There is also a need to reduce the higher-than-average attrition rate among Malay ITE students.

Enhanced Internships

- Malay polytechnic and ITE students should sign up for internship opportunities as these will provide real-world training and industry-relevant experience, giving students a head-start in their careers.
- Students will also gain from the guidance of mentors. These promising sectors should be targeted by our Malay students: information technology, engineering and chemical and life sciences.

SkillsFuture Credit

- Those 25 years and above, i.e. 58.3% of Malay/Muslims (284,197) stand to benefit from SkillsFuture Credit (Census 2010).
- This represents an opportunity for Malay workers to build ancillary skills outside one's area of specialisation but nonetheless related to the latter, e.g. a baker taking courses on running a small business to sell his/her cakes.
- In addition, Malay housewives, who number around 74,995, can consider using the Credit to prepare themselves for employment in line with efforts to get more women into the workforce (Census 2010).

| Policy Announcement | Potential Implications |
|---|--|
| SkillsFuture Earn and Learn Programme | <ul style="list-style-type: none"> • Upon graduation, Malay ITE and polytechnic graduates should leverage on the Earn and Learn Programme so as to build up skills in a structured manner and receive an industry-recognised qualification while getting paid. • This is a chance for the Malay community to diversify towards key growth industries of the future e.g. advanced manufacturing, applied health sciences, smart and sustainable urban solutions and logistics and aerospace. • Currently, 25.6% of working Malays are in the manufacturing line (Census 2010). |
| SkillsFuture Mid-Career Enhanced Subsidy | <ul style="list-style-type: none"> • Those 40 years and above, i.e. 39% of Malay/Muslims (190,362) stand to benefit from education and training support from the SkillsFuture Mid-Career Enhanced Subsidy for mid-career Singaporeans (Census 2010). |
| Skills-Based Modular Courses | <ul style="list-style-type: none"> • Together with the Skills-Based Modular Courses and Sectoral Manpower Plans (SMP) in place, these three initiatives will enable mid-career Malays to upgrade their skills and get better paying jobs. |
| Sectoral Manpower Plans (SMP) | |

General Scan of Family & Elderly Policies

By RPD Team

RPD Team

Aidaroyani Adam | Sabrena Abdullah | Khairun Nisa Yusni | Muhammad Farouq Osman |
Siti Afiyah Mustapha | Siti Khadijah Setyo R S

A. Pro-family Policy

Baby Bonus Scheme

| Child Order | Born between 26 Aug 2012 and 31 Dec 2014 (for each child) | Born on or after 1 Jan 2015 (for each child) |
|---|---|---|
| 1 st & 2 nd Child | \$6,000 | \$8,000 (inclusive of \$2,000 Baby Bonus Plus) |
| 3 rd & 4 th Child | \$8,000 | \$10,000 (inclusive of \$2,000 Baby Bonus Plus) |
| 5 th and higher | \$0 | \$10,000 (inclusive of \$2,000 Baby Bonus Plus) |

Medisave Grants for Newborns

All Singapore Citizen newborns born on or after 1 January 2015 or have an estimated date of delivery (EDD) on or after 1 January 2015 qualify for the enhanced

Those born on or after 26 August 2012, but before 1 January 2015, qualify for a grant of



Medisave Grant for newborns. With the enhanced grant, a CPF Medisave account will be opened for each newborn, and the grant increase of \$1000 will be credited automatically.



Paternity Leave

For fathers of citizen children born from 1 January 2015 onwards, they may get up to 1 additional week of Government Paid Paternal Leave (GPPL), provided the employer voluntarily agrees to it. Each week of GPPL is capped at \$2,500, including CPF contributions.

| Arrangement | Up to 2 Weeks |
|--|---|
| Default, without any mutual agreement with employer | <ul style="list-style-type: none">• Take 1-2 continuous weeks within 16 weeks after the birth of the child. |
| Flexibly, by mutual agreement with employer | <ul style="list-style-type: none">• Take 1-2 continuous weeks any time within 12 months after the birth of the child.• Split the 1-2 weeks into working days and take them in any combination within 12 months after the birth of the child. |

The Baby Bonus, the Medisave grant and the Paternity leave changes will apply with effect from the 1st of January 2015 in commemoration of the Jubilee year.

B. General Help for Households

Foreign Domestic Worker Concessionary Levy

Reduced to **\$60 per month** (originally \$120)



for households with caregiving needs



*Extended to households with children
below 16*

GST Vouchers

Based on the 2015 Budget Speech, the GST Voucher will see an increment of \$50 across the board.

| GSTV-Cash | \$50 increase across the board |
|---|--------------------------------|
| GSTV-Cash (for those 54 & below) | \$150 - \$300 |
| GSTV-Cash & Seniors' Bonus (for seniors 55 to 64) | \$300 - \$600 |
| GSTV –Cash & Seniors' Bonus (for seniors 65 & above) | \$300 - \$900 |

One-off Rebate for Service and Conservancy Charges

Around 800,000 Singaporean HDB households can expect to receive about \$80 million worth of Service & Conservancy Charges (S&CC) rebate in 2015. In total, each eligible Singaporean household will receive one to three months of S&CC rebate, depending on HDB flat type.

The rebate will be disbursed over the months of April, July and October 2015 as follows:

| HDB Flat Type | 2015 S&CC Rebate (no. of months) | | | |
|-----------------------------|----------------------------------|-----------|--------------|----------------|
| | April 2015 | July 2015 | October 2015 | Total for 2015 |
| 1- and 2-room | 1 | 1 | 1 | 3 |
| 3- and 4-room | 1 | 0.5 | 0.5 | 2 |
| 5-room | 0.5 | 0.5 | 0.5 | 1.5 |
| Executive/Multi- Generation | 0.5 | 0.5 | - | 1 |

Potential Implications for Malay/Muslim Community (MMC)

| Key Initiatives | Potential Implications for MMC |
|--|---|
| <p>Pro-family Policy:</p> <ul style="list-style-type: none">• Baby Bonus Scheme• Medisave Grants for Newborns• Paternity Leave | <p>In 2014, there were 6,067 Malay/Muslim live births (Yearbook of Statistics 2014). With that estimation, it could gauge the number of Malay/Muslim parents who will enjoy these benefits and more.</p> |
| <p>General Help for Households:</p> <ul style="list-style-type: none">• Foreign Domestic Worker Concessionary Levy• GST Vouchers• One-Off Rebate for Service and Conservancy Charges (S&CC) | <p>Malay/Muslim families with elderly or children who employ a foreign domestic worker would have to pay the concessionary levy at half of the original amount. This scheme is meant to alleviate the family’s burden of either caring for their parents or children, or both.</p> <p>In terms of GST Voucher which will be given to all Singaporeans, there will be an increase of \$50 across the board. Around 59,100 Malay/Muslim seniors aged 55 to 64 years old will be entitled to receive GST Cash Voucher from \$300 up to \$600 while 38,200 Malay/Muslim seniors aged 65 and above will be receiving cash vouchers of \$300 up to \$900.</p> |

C. Elderly Policy

Pioneers to Get Large Medisave Top-ups Each Year

Approximately 440,000 Pioneers will receive the Pioneer Generation Medisave top-up in July. The Pioneer Generation Medisave top-ups are in addition to the Medisave top-ups for older Singaporeans under the GST Voucher. The amount of Pioneer Generation Medisave top-up for each Pioneer ranges from \$200 to \$800 annually.

- *An older pioneer who is 85 this year, lives in an HDB flat and does not own a second property, would receive a total of*



- *A younger Pioneer who is 71 this year and in similar circumstances would receive a total of*



Successful Ageing

The Action Plan for Successful Ageing includes about 60 initiatives covering 12 areas, namely, health and wellness, learning, volunteerism, employment, housing, transport, public spaces, respect and social inclusion, retirement adequacy, healthcare and aged care, protection for vulnerable seniors and research. The full Action Plan report will be released next year. It will serve as the blueprint to help Singapore transform into a Nation for All Ages.

Potential Implications for the Community

Malay/Muslim Seniors are encouraged to exercise active ageing. By 2030, more amenities for active ageing will be implemented such as Active Ageing Hubs in residential estates, senior-friendly parks and Passion Silver Card for every Singaporean aged 60 and above. Although in 2010, Malay seniors aged 55 or older were found to be the least independent (3.4%) when comes to their Activities of Daily Living (ADL) such as bathing, dressing and feeding compared to other Chinese (1.5%) and Indians (1.6%), it is hoped that in the years to come, many Malay seniors would be able to lead a healthy lifestyle, live independently, confidently and gracefully in their homes and communities.



Source: Ministerial Committee on Ageing (TODAY newspaper)

General Scan of Housing & CPF Policies

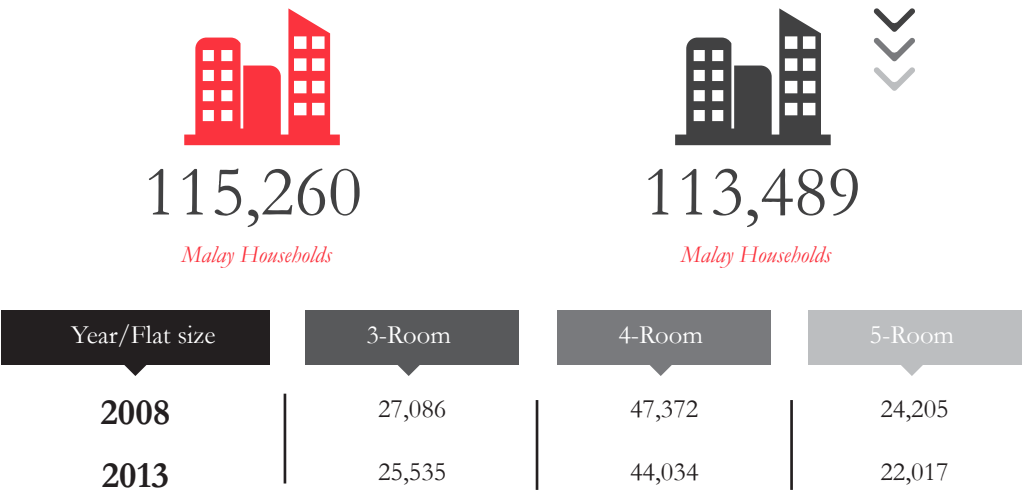
By RPD Team

RPD Team

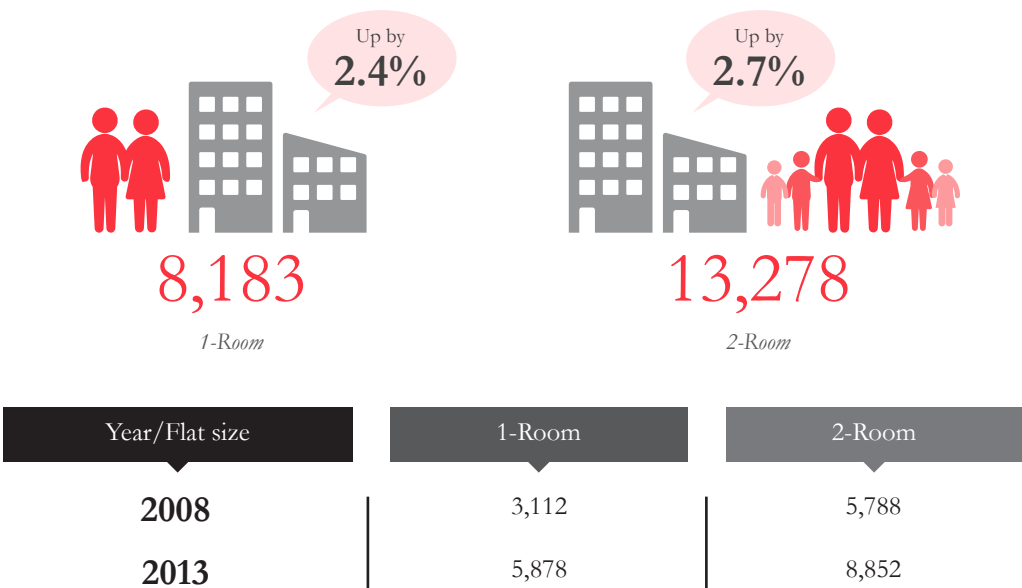
Aidaroyani Adam | Sabrena Abdullah | Khairun Nisa Yusni | Muhammad Farouq Osman |
Siti Afiyah Mustapha | Siti Khadijah Setyo R S

Overview of MMC Housing Trends: Type of Dwelling, Household Size and Structure

From 2008 to 2013, there is a **decrease in Malay households** from **115,260** to **113,489**. There are no significant changes in types of dwelling typical of Malay households, with most households living in or acquiring 3-Room, 4-Room and 5-Room flats.



There is however a surge in the number of households acquiring 1-Room (up by 2.4%) and 2-Room flats (up by 2.7%). The number of Malay households living in rental flats has also increased from **8,183** in 2003 to **13,278** in 2013.



Housing Policy

A. Ministry of National Development–Housing Development Board (MND-HDB) Committee of Supply (COS) 2015 Announcements

The main thrust of the housing policy in 2015 is to strengthen social security by helping Singaporeans own their homes and build strong families.

| Status Quo | Objective | Policy Changes | Specifics |
|---|--|--|---|
| <p>Up to 30% of the 2-room BTO flat supply in the non-mature estates set aside for eligible singles</p> <p>Options for elderly (>64yo) to monetise their flat to supplement retirement income, based on needs, preferences and family circumstances, including:</p> <p>a) Subletting bedroom(s), or the whole flat and live with children for family support</p> <p>b) Taking up the Lease Buyback Scheme (LBS)</p> <p>c) Moving to a Studio Apartment (SA) or smaller flat and take up the Silver Housing Bonus (SHB)</p> | <p>Provide greater assurance to singles</p> <p>Greater support for elderly’s housing needs</p> | <p>2-room BTO flat quota for singles will be raised from 30% to 50%, starting from the May 2015</p> <p>Enhancing LBS and SHB</p> <p>Changes will take effect from 1 Apr 2015</p> | <p>Up to 30% of the 2-room BTO flat supply in the non-mature estates set aside for eligible singles</p> <p>Participating households will receive up to \$10,000 cash bonus per household</p> <p>Income ceiling for SHB and LBS households raised from \$3,000 to \$10,000</p> <p>Elderly households given the flexibility to choose length of lease to retain based on age and preferences, instead of the standard 30-year lease</p> |

| Status Quo | Objective | Policy Changes | Specifics |
|---|---|---|--|
| 2-room flat scheme and Studio Apartment (SA) scheme | To better cater to the diverse housing needs of families, singles and elderly | <p>New 2-room Flexi Scheme</p> <p>At least 40% of 2-room Flexi flats in a BTO project will be made available to elderly. Under a new Senior Priority Scheme to be introduced, half of this quota will be set aside for the elderly who apply for a unit to live near their current flat or married child.</p> | <p>Flexi Buyers First-timer and second-timer families and first-timer singles will continue to be offered 99-year 2-room Flexi flats</p> <p>Flexi Lease Elderly citizens ≥55 years old can choose to buy a 2-room Flexi flat on short lease as a monetisation option, regardless of whether they have enjoyed housing subsidies previously or own a private residential property</p> |

Potential Implications for MMC

Benefits for Households

- Given the high percentage of Malay/Muslim households living in 4-room flats, extension will allow more households to be eligible for LBS.
- With both the LBS and short-lease option in the 2-room Flexi scheme, Malay/Muslim elderly will have the option of having a new home for life while monetising more from their existing property to supplement their income stream in retirement.
- Malay/Muslim elderly can choose to capitalize on elder- friendly apparatus with Flexi Fittings under the 2-room Flexi Scheme to ensure comfortable ageing-in-place.

Caveats to Note

- Malay/Muslim households however need to fully understand the terms and conditions of the LBS and 2-room Flexi schemes, including:
 - Restrictions that apply to the LBS in situations where the lease is terminated prematurely or if they were to live beyond the lease period.
 - Each elderly citizen can only enjoy the SHB or LBS bonus ONCE.
 - For the 2-room Flexi Scheme, the purchase will have to be financed through cash or CPF savings, and not a mortgage loan, so as not to burden the elderly with debt.
 - Short-lease 2-room Flexi flats cannot be resold or sublet. If the owners do not need the flat, they can return the flat to HDB and HDB will refund them the value of the remaining lease of the flat.

B. Housing Measures Announced during the National Day Rally 2015

1. Raised income ceiling for citizen households to buy HDB flats and Executive Condominium (EC)



For new HDB flats and resale flats with the CPF Housing Grant: Income ceiling raised from **\$10,000** to

\$12,000



*For Singaporean singles:
raised from **\$5,000** to*

\$6,000



*New EC units with tiered CPF Housing
Grant: raised from **\$12,000** to*

\$14,000

More middle-income Malay/Muslim families at the higher end of households will become eligible for subsidized housing. Increasing the income ceiling will avail more Singaporeans the option of buying a new HDB flat, instead of a resale flat or a private property. Elderly citizens can also benefit from increase in income ceilings from \$10,000 to \$12,000 to qualify for monetisation options, including the LBS, SHB and short-lease 2-room Flexi flats.

2. Raised income ceiling for Special CPF Housing Grant (SHG)

*Income ceiling will be increased
from **\$6,500** to*

\$8,500



&

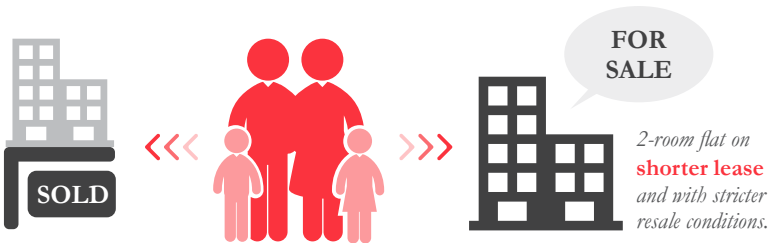
*The maximum SHG amount will
be doubled from **\$20,000** to*

\$40,000

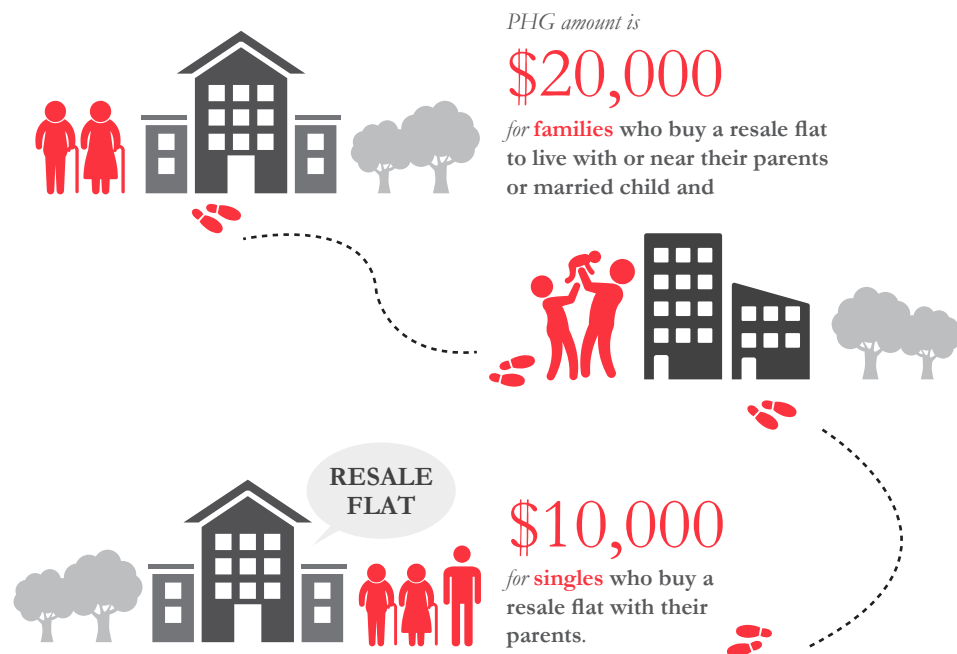


3. Introduction of Fresh Start Housing Scheme

The scheme is catered to families with young children who have previously sold their HDB flats, are currently living in HDB rental flats, and are looking to start afresh with a 2-room flat on shorter lease and with stricter resale conditions.



4. Introduction of Proximity Housing Grant (PHG)



*All Singaporeans are eligible for PHG once. Grant recipients and their parents or married child must live with or in close proximity to each other for **at least 5 years**.*

The grant will help married couples looking for a home near their parents to facilitate visits or caregiving arrangements between grandparents and grandchildren. Based on the National Survey of Senior Citizens 2011, elderly Malays were more likely to help their adult children look after their children, with 35 per cent carrying out this activity compared with 28 per cent among elderly Chinese and 27 percent among elderly Indians.

Malay/Muslim families can look to use the PHG to complement other measures to help buy a new HDB flat with or near parents or married child, including the Married Child Priority Scheme, Multi-Generation Priority Scheme, Senior Priority Scheme and the Three-Generation flats.

CPF Policy

A. Measures announced during the Ministry of Manpower and Ministry of Health Committee of Supply (COS) Debate in Parliament and National Day Rally 2015

1. Increase in CPF salary ceiling

The CPF salary ceiling will be raised from **\$5,000** to **\$6,000**



In line with the higher CPF salary ceiling, the contribution cap will be **increased** within the Supplementary Retirement Scheme (SRS), which offers tax incentives to encourage voluntary retirement savings.

Both changes will take effect from 1 January 2016.

2. Enhancing progressivity of the CPF system

To encourage CPF members to retain savings in their CPF accounts, and make top-ups to the CPF accounts of family members, an additional 1% Extra Interest (EI) will be paid on the first \$30,000 of CPF balances from the age of 55.

The additional 1% EI builds on top of the existing 1% EI provided on the first \$60,000 of balances.

CPF interest rates for members aged 55 and above from 1 January 2016

| CPF Balances | Interest Rate |
|------------------------|---------------|
| First \$30,000 | 6% |
| Next \$30,000 | 5% |
| Amounts above \$60,000 | 4% |

This will take effect from 1 January 2016.

3. Increase in CPF Contribution Rates for Older Workers

To boost the retirement adequacy of older workers, the CPF contribution rate for workers aged 50 to 65 years will be restored to the same level as for younger workers. The table below indicates the respective increases in contribution rates:

| Employee Age (Years) | New Contribution Rates from Jan 2016 (% of wage) (% point increases are in brackets): | | |
|----------------------|--|----------|-------------|
| | Employer | Employee | Total |
| Above 50 to 55 | 17 (+1) | 20 (+1) | 37 (+2) |
| Above 55 to 60 | 13 (+1) | 13 | 26 (+1) |
| Above 60 to 65 | 9 (+0.5) | 7.5 | 16.5 (+0.5) |

The changes will take effect from 1 January 2016.

4. Enhancements to the Temporary Employment Credit (TEC) for employers

The TEC will be enhanced in two ways.

The TEC will be raised to **1% of wages in 2015**. This will provide additional support to firms for their labour costs, or The TEC will be **extended by two years** to help employers adjust to cost increases due to additional CPF changes.



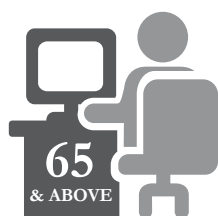
The changes will take effect from January 2016.

Details of the enhancements are:

| | |
|-------------|--|
| 2015 | <ul style="list-style-type: none"> Additional TEC of 0.5% of wages, up to the CPF salary ceiling of \$5,000 |
| 2016 | <ul style="list-style-type: none"> TEC of 1% of wages, up to the CPF salary ceiling of \$6,000 |
| 2017 | <ul style="list-style-type: none"> TEC of 0.5% of wages, up to the CPF salary ceiling of \$6,000 |

5. Encouraging Re-employment beyond 65

Employers will be provided with an additional Special Employment Credit (SEC) of up to



3%

of wages for workers aged 65 and above in 2015. This is on top of the 8.5% wage offset that employers will receive in 2015.

6. Supporting Singaporeans in Retirement Years

- A pilot one-to-one retirement planning service will commence in the second half of 2015 to help members approaching 55 make informed decisions about their CPF savings.
- From January 2016, members need only choose their CPF LIFE plans at the point when they wish to start payouts from CPF LIFE, instead of making the choice at 55.
- The Silver Support Scheme will provide an income supplement of \$300 to \$750 per quarter to 20-30% of elderly Singaporeans with lesser means in their retirement years. The eligibility assessment will be done automatically and will take into consideration:

A person's lifetime wages, reflected by the total CPF contributions accumulated by a person over the years

Type of flat the person lives in - Silver Support will be extended to those who are staying in 5-room HDB flats or smaller;

A person's household income



The Scheme will be implemented in the first quarter of 2016.

The permanent Silver Support Scheme will add to incomes in retirement of both Malay/Muslim seniors today and in the future, just as Workfare supplements the incomes and retirement savings of older lower-wage Singaporean workers and provides funding support for their training.

With a rising percentage of Malay/Muslim households opting for 1- or 2-room flats, Malay/Muslim elderly living in such flats may stand to benefit from the scheme, with a smaller proportion of those living in larger HDB flats qualifying.

The tripartite criteria ensure that eligibility for the scheme will not be determined solely by housing type. Malay/Muslim seniors living in larger flats but had low wages for most of their lives and hence limited savings, and/or live with children who themselves do not earn much, may be considered for the scheme. With a significant proportion of Malay/Muslim households consisting of extended or multinuclear families, the scheme may potentially benefit lower-income retired Malay/Muslim couples staying with their children and grandchildren, and have a lower household income per capita, regardless of flat size.

Malay/Muslim seniors or elderly should concurrently be made aware of the other schemes complementing Silver Support, particularly in healthcare assurance, as well as voluntary and community initiatives, to maximize the benefits of the initiative.

7. Medisave Contribution

From 1 January 2016, the Medisave Minimum Sum will be removed. A CPF member withdrawing CPF monies from the Ordinary and/or Special Accounts upon reaching age 55 will no longer be required to top up his/her Medisave Account.

The Medisave maximum sum will be renamed Basic Healthcare Sum (BHS). As a start, the BHS will be set at \$49,800 on 1 January 2016 for all CPF members.

B. Other CPF Announcements

Improved support for Postgraduates

Singaporean students pursuing graduate studies by research in the five autonomous local universities will receive an increase in monthly stipends from August 2015.

Master's students, who previously received a monthly stipend of \$1,500, will now receive another \$1,000.

PhD students, who used to draw a stipend of between \$2,500 and \$3,300, will receive \$200 more.

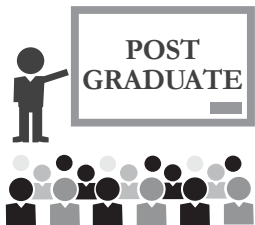
\$1,500
+
\$1,000



Will receive
\$200
MORE



Previously, postgraduate students who were not bonded to their universities did not receive CPF contributions. The enhancements mean they will now receive a 17 per cent CPF contribution monthly from their universities.



17%
CPF CONTRIBUTION
MONTHLY FROM
THEIR UNIVERSITIES.

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