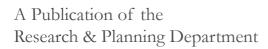
MENDAKI Policy Digest







MENDAKI Policy Digest 2020

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All enquiries seeking permission should be addressed to:
Research & Planning Department
51 Kee Sun Avenue, Singapore 457056
Main Telephone Line: 6245 5555
Research & Planning Department: 6245 5860
Email: rpd@mendaki.org.sg
Website: www.mendaki.org.sg

Series Advisors:

Mr Masagos Zulkifli Masagos Mohamad Minister for Social and Family Development, Second Minister for Health, Minister-in-Charge of Muslim Affairs, and Chairman of Yayasan MENDAKI

Mdm Zuraidah Abdullah Chief Executive Officer of Yayasan MENDAKI

Mdm Aidaroyani Adam Deputy Chief Executive Officer of Yayasan MENDAKI

EDITORIAL TEAM

Editor: Muhammad Faisal Aman
Sub-Editors: Muhammad Farouq Osman, Haikal Sufiyan Haizan,
Siti Syafiqah Abdul Rashid & Syahirah Humaira Amrun
Production Editor: Muhammad Nasiruddin Jumari
Cover Design: Design & Print International Pte Ltd

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Policy Digest 2020



CEO's Foreword

The MENDAKI Policy Digest serves to highlight national and global issues of relevance to the Malay/Muslim community. Over the years, the Digest has been a platform for the discussion of education and socioeconomic matters from the perspectives of the Malay/Muslim community, after which possible solutions are proposed. This year is even more critical as the COVID-19 pandemic has impacted our nation and the world in unexpected ways. Thus, in this year's Digest, we are pleased to have a breadth and depth of topics that discussed specifically on how COVID-19 has affected the Malay/Muslim community.

The theme for this year's Digest is: 'Thriving in a Post-COVID-19 World: Developing a Resilient Community through Lifelong Learning'. COVID-19, as we know, has affected our lives in many ways. For most students, it was the first time they had to experience full Home-Based Learning (HBL). For employees, a good number of us had to work from home, and that came with its own set of challenges as well. Yet, for other workers, the pandemic has brought about worries with the loss of jobs. Here at MENDAKI, we are always thinking of ways to support the Malay/Muslim community to boost its resilience in the face of adversity. To thrive in a future workplace and to be resilient in the face of economic turbulence, we need to ensure that the community is adaptable and nimble in acquiring new knowledge and seizing new opportunities, all in the spirit of lifelong learning. This is true for both students and those already working. Beyond education and career success, lifelong learning also means knowing when and how to seek help, in all matters of our lives.

Indeed, MENDAKI has played a crucial role in providing assistance to the Malay/Muslim community during the Circuit Breaker period earlier this year. MENDAKI is part of the SG Teguh Bersatu Taskforce, set up in April 2020, to support Malay/Muslim families and workers affected by COVID-19. The Taskforce strengthened the last-mile delivery of national COVID-19 support measures – like the Jobs Support Scheme (JSS) and the COVID-19 Support Grant – to the Malay/Muslim community. Based on our engagements with low-income families, we realised that parents with school-going children faced challenges in supporting their children's HBL. We found that several Institute of Technical Education (ITE) students lost their part-time work, and this situation was made worse by their family members also losing their jobs. To help these groups, MENDAKI allocated \$1.9 million to support, among other things, students' HBL by leasing laptops and other learning devices. For ITE students, MENDAKI provided interim allowance to those who had lost their part-time jobs. These are a few brief examples of how MENDAKI has learnt to adapt and respond promptly to changes, so as to provide the most effective help to the community as quickly as possible.

This spirit of gotong-royong (mutual help) is what makes our community special, and it gives me hope and confidence that we can come out of this stronger together. This commitment is also evident through the many article contributions to MENDAKI Policy Digest 2020. The writers have tackled various implications of the COVID-19 pandemic on the Malay/Muslim community and provided valuable recommendations. Thus, the Digest this year hopes to increase awareness on the various ways in which the current adversities have affected the community, how we can turn these challenges into opportunities and be better prepared post-COVID-19 so that we do not leave anyone behind.

I would like to express my deepest gratitude to the writers for their erudite and sincere submissions. Finally, I would also like to thank Minister-in-Charge of Muslim Affairs and Chairman of MENDAKI, Mr Masagos Zulkifli for his guidance and support. Let us all heed his call to make the Malay/Muslim community, a Community of Success that we can be proud of.

Zuraidah Abdullah Chief Executive Officer Yayasan MENDAKI



Editor's

Note

The theme of this year's MENDAKI Policy Digest is 'Thriving in a Post-COVID-19 World: Developing a Resilient Community through Lifelong Learning'. In the fifth Ministerial broadcast on Singapore's post-COVID-19 future, Senior Minister Tharman Shanmugaratnam highlighted the importance of fostering a stronger culture of solidarity in our society. The Malay/Muslim community has embraced this ethos, as Minister-in-Charge of Muslim Affairs Mr Masagos Zulkifli praised our community for its spirit of unity, resilience and compassion during this challenging period. While the fight against COVID-19 is far from over, MENDAKI promises to continue strengthening our schemes and programmes to secure a holistic network of support for our community.

With contributors from different backgrounds and areas of specialisations, this year's edition of the Digest hopes to bring readers up to date with the impacts of COVID-19 and how the community can be resilient moving forward. Firstly, Senior Minister Tharman Shanmugaratnam discusses the current labour market and calls for the need to strategise for the longer term. Mohamad Faiz Selamat provides a commentary on the previous article and how to better support the workforce. The article written by Dr Hana Alhadad acknowledges how difficult it could be for children to transit into a post-COVID-19 world, and emphasises the importance of ensuring that our teachers are equipped with proper skills to help our children. Nur Diyanah Anwar's article addresses ways to adapt to disruptions in order to achieve sustained progress. This is supported by Dr Farhan Ali and Hamidah Aidillah Mustafa who stress on the importance of adopting STEM education to better prepare individuals for future work trends. In a time where uncertainties are rampant and innovation becomes urgent, Liyana Binte Muhammad Fauzi and Shazly Zain discuss how organisations and individuals can navigate themselves towards a tech-centric future. To ensure the collective progress of the community, Nurin Nazurah Saifudin shares her perspective from the ground and the need to support households who may have been left behind. Dr Norshahril Saat adds on by stressing on the need to provide ample opportunities for our asatizahs. Dr Ng Kok Hoe's article on income insecurity and our social policies at home fits well in helping us understand the complexities of those in the workforce. Lastly, Haikal Sufiyan Haizan shares how a multi-faceted approach is required in overcoming these challenges and reflect on new ways to move our community forward.

I urge readers to continue this conversation on building a resilient community by sharing these ideas. I would also like to express my gratitude to our contributors for their tremendous efforts in providing us with thought-provoking articles. We hope that readers will join us in these efforts in the coming year and beyond, as MENDAKI's Policy Digest will be taking on a new and improved look, where we hope to reach out to more groups in our community, and to address even more pertinent issues present. Finally, this publication would not have been a success without the valuable support of Chairman of MENDAKI, Minister Mr Masagos Zulkifli, and the guidance of CEO of MENDAKI, Mdm Zuraidah Abdullah.

Muhammad Faisal Aman

Editor

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Section

Thriving in a Post-COVID-19 World: Developing a Resilient Community through Lifelong Learning



The Global Jobs Crisis and Why We Should Think Longer Term

by Mr Tharman Shanmugaratnam

We are on uncharted terrain. COVID-19 is a historic challenge, but we are really faced with three testing realities at the same time.

We have the immediate challenge of a public health and economic crisis, both of global scale. But tackling this is complicated by the second reality – that of a new future that is already unfolding before us, for which we have to re-gear ourselves. The shape of demand, supply chains and the way work is organised are all changing, and with them the job market. COVID-19 and the fear of future pandemics have brought on a new normal that we must adapt to.

Third, we inherit longstanding legacies, now made more challenging by the COVID-19 crisis: the stagnation of middle incomes in the advanced world, widening inequalities, the growing prospect of pension gaps in many countries, and an ever more serious climate crisis.

It is these three realities interacting together that make this an immensely complex, dynamic and daunting time – for public policy, for society, and for politics everywhere. Focusing on today's problems in themselves, without both addressing the problems we inherit and equipping ourselves for a structurally different future, will make the years to come even more testing, and fraught with danger.

Too early for creative destruction

Policymakers have passed the first phase of tackling the economic crisis, where most nations were focused on avoiding the extreme downsides arising from COVID-19 and lockdowns. We wanted to avoid mass unemployment and a large wave of bankruptcies, which would have led to a self-reinforcing spiral of declining incomes and public spirit.

We are now at a transition point. We cannot protect existing jobs, firms and industry capacity to the extent seen in the first phase. Most countries do not have the fiscal capacity to do so. Strategically too, we have to let some of today's firms and jobs go, to enable new growth and more promising jobs to be created. We have to allow for "creative destruction", to secure vibrant economies over the longer term.

However, we cannot pivot policies too quickly into this next phase. Our economies are still in significant slack, the virus is far from tamed, and there is risk of repeated lockdowns, especially during the northern winter. Even on optimistic assumptions, it will take much more than a year to get back to full economic life.

Furthermore, withdrawing support too quickly will not lead to efficient market restructuring - the rechannelling of labour, capital and other resources that takes us to a better place - in the way we would expect in a typical downturn. We are operating with little visibility of the future, hampering the ability of either policymakers or markets to discriminate between firms that are loss-making today but remain viable for the future and the zombies that limp along on life support. Creative destruction without this visibility will lead to too many good firms and jobs being destroyed.

The central problem: Jobs

The central economic problem of the times lies in labour markets.

First, there is a real prospect of prolonged high unemployment in many economies. It is not at all assured that we will get back to tight labour markets, even with traditional macroeconomic policies working the way they should.

Second, we have to counter the long-term stagnation of median incomes seen in a whole range of advanced economies, with a few like Sweden and Singapore being the exceptions. It cannot be achieved without reviving productivity growth.

Third, we have to address the trend towards a polarised job market – with more jobs being created at the high-and low-skilled ends of the labour market and fewer in the middle, and the growth of an insecure gig workforce.

Each of these is a difficult challenge, and overcoming all three even more so. While employment recovered well in some major economies in the decade after the global financial

crisis, productivity growth weakened (and indeed was part of the reason why employment recovered) and job polarisation became more severe.

There have been some periods in history where we were able to achieve all three objectives. One of the drivers of economic development, which Nobel laureate Arthur Lewis and other economists highlighted, consisted of surplus labour being freed up from low-productivity sectors (originally agriculture) and taken up by sectors which had higher productivity such as manufacturing. That reallocation of labour is how low-income countries became middle income, and some middle-income countries became advanced.

But the experience of recent years in many advanced economies has been the reverse – with labour being shed from industries that are dynamic and at the higher end of the productivity ladder, and channelled into lower-productivity, lower-wage occupations. In fact, the main engine of job growth in the United States and several other countries has been in lower-paid services – in F&B, cleaning, security, and a range of other domestic services.

COVID-19 has introduced a major disruption to this already polarised, barbell-shaped market. The bottom end of the barbell is now itself shrinking. A whole range of service tasks is being eliminated by e-commerce, remote work, virtual presence, and the safe distancing and other new protocols that we will probably have to live with for some years.

What this means is that the market receptacle for labour displaced from higher-productivity industries has shrunk. It was a receptacle of lower-pay and less-secure jobs, but what is even more unattractive now is the prospect of fewer such jobs.

We also face, in particular, the unravelling of some of the gains in women's participation in the labour force and sense of self-determination that were achieved over decades. Women have been disproportionately represented in the human-facing jobs that are being hurt. The closure of childcare and schools, each time it happens, has also unfortunately translated into more women than men staying at home to look after their kids.

We have to apply ourselves now and over the next few years to this central problem of jobs: making sure we have enough jobs, and that people do not get trapped over time in low-skill, low-pay work.

Widening the distribution of good jobs

What are some of the initiatives that we have to focus on? We have to focus not only on macroeconomic stimulus, but increasingly on the microeconomic incentives we create, and on new forms of collaboration between government, business and communities.

First, we have to gradually phase out subsidies for existing jobs and instead provide strong incentive for job creation. In other words, we should shift from subsidising the stock of jobs towards incentivising the flow of new jobs. Singapore is doing so with our Jobs

Growth initiative, as we step down the significant subsidies for today's jobs that our Jobs Support Scheme provided in the first phase of the crisis.

Second, we have to put great energy into the coordination needed to help people who are displaced to get back into jobs, and to avoid as much as possible ill-fitting job matches that could lead to a permanent reduction in their wages.

We must do all we can to avoid people being detached from work for an extended period, to prevent the depreciation of skills and morale that comes with that, and increased barriers to their employment. Economists call it "hysteresis". It is a real risk in the coming months and years.

However, the aim of job matching cannot simply be about speed. It is not about getting someone any job as soon as possible, because that can mean losing the value of the skills they have accumulated. As much as possible, we have to find jobs that build on a person's skills and experiences. A key coordination task, therefore, is to find those jobs with adjacent or complementary requirements, and to move swiftly to top up the skills that the job seeker brings. We cannot take too long to help someone secure a new job, but we have to strive for a good match with the human capital they have accumulated, so that they do not lose it, and society does not lose it.

Getting to this outcome is not easy, because labour markets suffer from imperfect information. It requires joining up career coaching, job matching and skills development programmes. This is a very human enterprise, but greatly aided now by new ICT and AI tools. The most effective systems have involved official agencies playing an active coordinating role, working with employers, job seekers, unions or other social partners, and training providers. In the context of the current uncertainties, significant state subsidies are also required to encourage employers to recruit and train people. If we leave it to the market, we will see longer spells of joblessness.

We have to recognise too, in the wake of the pandemic, that it will take time before hiring for permanent jobs comes back on the scale we need. We have to incentivise firms to take in people on attachments of various forms, even if they cannot take on permanent hires. This means not just youth apprenticeships, but traineeships for mature workers in their 40s and 50s. We have to work with industry partners to curate traineeships, get people back into the workplace, and help them to add to their skills. We must find every way to avoid a long-term detachment from work, and the permanent scarring that comes with that.

Third, we have to go beyond the mantra of lifelong learning, to make it a practical reality for blue-collar and ordinary white-collar workers. All experience, even in northern Europe where the tradition is most established, shows that it has been much harder to get this going for ordinary workers than for high-skilled professionals, which only accentuates existing inequalities.

That has to be a core focus of public-private collaboration – developing quality training options that workers find appealing and relevant to their careers, and using technologies and community outreach programmes that make learning convenient when they are not on the job. It also requires increased agility in the system, to enable firms and workers to develop new skills quickly as the economy restructures.

Fourth, we have to encourage those forms of automation that create new tasks or stimulate new demands that play to human strengths. Technological advances have historically both displaced workers and increased the demand for labour in new areas — either within the same industry or indirectly in the rest of the economy. It has enabled society to stay fully employed while productivity moved up. But that is an empirical regularity, not a law. Serious economists, as well as business and technology leaders themselves, have differing views on whether we can be equally sanguine about an emerging generation of increasingly potent technologies, or whether we are heading for a permanent state of higher joblessness.

We will not know in advance. But we know that some new technologies, like collaborative robots, augmented reality and certain AI tools, generate more demand for human skills, including mid-level skills, than other advances. Tax codes today incentivise automation in almost every form and everywhere, even in countries where labour markets face significant long-term slack. It is not too early to consider how public policy can encourage automation and skills development of the kinds that can complement one another, so we increase the chances of a new era of widely distributed good jobs.

Fifth, we need collectively determined solutions to ensure that growth of worker compensation does not trend below productivity growth, as has happened over the last few decades in many economies. Institutional interventions, involving the state, are especially needed where the problem of low or lagging wages reflects either the weakened bargaining power of workers or increased monopsony power of employers. Ideally too, these interventions should be accompanied by efforts to develop new social and employer mindsets, so that new norms can persist in the labour market without requiring perpetual state intervention. Norms do appear to vary across countries, especially with regard to pay for women and less-skilled workers.

Sixth, we need strategies to ensure that the SME sector survives and adapts to the new, post-pandemic normal, to avoid much larger job losses in time as well as greater wage inequalities. SMEs are disproportionately represented in the service sectors, where jobs have been most vulnerable to the impact of COVID-19 and national lockdowns. They also face greater funding risk than large firms in an environment of uncertainty. While a churn of businesses is inevitable and needed, there is a real risk of a diminished SME sector as a whole, compounding the increases in industry concentration seen over the last few decades in many economies. That trend if it continues will have implications for future economic vibrance. It will likely also have an intangible impact on social capital.

Governments and central banks have been quick to ensure near-term credit support for SMEs. But we have to look beyond this. Quite apart from updated competition policies, what form of cluster strategies can we get to work well, and to enable better diffusion of innovation from the frontier firms to the rest? How do we incentivise test-bedding of innovations in small firms themselves? How do we aggregate and organise skills training for their workers, to address the growing gaps in skill levels between large and small firms? How do we promote digital platforms – and especially inter-operable cross-border platforms – that small firms can plug in to, so they can benefit from the scale economies of the digital economy?

Monetary and fiscal policies: Taking the long view

Governments have done right to pull out all the stops to save their economies and jobs amidst the pandemic. However, we face a different structural future, compounded by the longstanding social and economic challenges that we inherit, that make this much more than a bad but temporary downturn. It requires a longer-term orientation in economic policymaking and in the way we organise ourselves to respond collectively.

Monetary policy has succeeded in buffering economies and financial systems against a severe shock to confidence amidst COVID-19. However, relying chiefly on monetary policy to get economies back to full health will be less effective over time and holding interest rates near zero over a prolonged period may have counter-productive effects.

Fiscal policy therefore has to play a more important role, in concert with labour market and industrial policy reforms. But it also requires a repurposing of the state – to defy secular stagnation, to catalyse the green economy, to rekindle social mobility and build equal opportunities, and to go about these objectives with a spirit of activism.

Expansive fiscal policies will make sense for a while, probably a few years in most economies. But the real debate has to move from questions around immediate stimulus effects, to how we achieve our longer-term goals. We need a different kind of Keynesianism: an active state aimed at long-term recovery and regeneration, nationally and globally.

We have to refocus on public goods, which used to be a fundamental purpose of government budgets. They are now greatly under-invested in, not only in the emerging world but in most advanced economies. The pandemic was a harsh reminder of this, with public health systems overwhelmed in many countries. But this is now a huge opportunity around the world: investments to achieve broad-based quality in public education systems, including regularly refreshed technical and applied training; in more accessible and affordable healthcare; in universal broadband access; in upgraded water and transport networks; in R&D for clean energies, sustainable agriculture and the circular economy.

We will not be able to fund these investments on public balance sheets alone. The redesign of fiscal strategy must also involve catalysing private investment in public goods. There are

many examples of how this can be done, including ways to achieve a fair sharing of the risks on such investments.

Remember that this pandemic is not the last we will face, and the next pandemic may very possibly be more challenging than what we are going through today. So we do need, once we have emerged from this crisis, to rebuild fiscal space to deal with future shocks – and at least avoid a continuing build-up of debt-to-GDP ratios. Most governments will have to strengthen tax revenues. They will have to do so while giving a fair deal to those with lower and middle incomes, and ensuring that fiscal systems meet the challenge of politically durability.

The repurposing of the state requires boldness of imagination, and the marshalling of public support around nations' long-term goals. It will help rebuild broad-based prosperity and cohesive societies, and can put us on course to an ecologically viable future. It may be our only chance.

Author's Biography

Mr Tharman Shanmugaratnam is the Senior Minister and Coordinating Minister for Social Policies. In addition to his role of economic advisor to the Prime Minister, he is also the Chairman of the National Jobs Council which aims to create jobs and training opportunities during COVID-19.

This article was first published in The Straits Times on October 31st, 2020.



Theory U:

Opening Employment & Employability Opportunities

by Mr Mohamed Faiz Selamat

Abstract

This piece is a reflection on Senior Minister Tharman Shanmugaratnam's article titled 'The Global Jobs Crisis and Why We Should Think Longer Term'. As highlighted by Senior Minister Tharman Shanmugaratnam, the central economic problem of the time is to ensure there are enough jobs and better distribution of good jobs. Amidst the strain of a global-scale public health and economic crisis, we are clearly facing the great challenge of living in a volatile, uncertain, complex and ambiguous (VUCA) world. On top of the changing demand and supply chains, there are inherited legacies of stagnating middle-income segment, widening inequalities and the climate crisis. But in such situations of adversity, opportunities also present themselves – especially for those who are willing to break the mould and adopt the right strategies and mindset.

In terms of handling the economic situation arising from the pandemic, the Singapore government had taken a pragmatic approach, adopting measures with care and thoughtful consideration of its impact over the medium and long term. From public health to economic and employment support, the government has released multiple budgets (Gov.sg, 2020) and tapped into its reserves to ensure that its people are protected – health and economic-wise.

Employment and career assistance

In terms of economy and employment, assistance such as the Jobs Support Scheme had ensured people continued to have jobs (Inland Revenue Authority of Singapore, 2020) whilst the COVID-19 Support Grant provided financial assistance to thousands of Singaporeans who were affected and lost their source of income (Ministry of Social and Family Development, 2020). With an eye for the future, the SGUnited efforts were enhanced with the commitment of more than 100,000 places under the Jobs, Skills, Traineeships, and Mid-Career Pathways Programme – as an added boost to the much anticipated SkillsFuture Credit Top-Up.

On the ground, job seeker engagements and upskilling programmes hopped on to the digital bandwagon – just as how schools shifted their learning online. Career fairs had gone digital with virtual career fairs through mobile apps whilst Zoom, Google Meet and Microsoft Teams became the order of the day. People who remain at home, are glued to their screens.

As the situation shifts from Phase 2 to Phase 3, employment assistance appeared to shift from Job Retention to New Job Creation through the Jobs Growth Incentive (Inland Revenue Authority of Singapore, 2020). The easing of measures in Phase 2 became highly sought as the newly coined-term "Zoom fatigue" had become increasingly prevalent.

Dayung sudah di tangan, perahu sudah di air

The Malay proverb, "dayung sudah di tangan, perahu sudah di air", translates to "the paddle is already in your hand, the canoe is already in the water". It means that while opportunities and resources are within reach, individuals have to overcome the internal barriers which are hindering their growth. Henceforth, developing a resilient mindset and taking the initiative to upgrade themselves will help them to gain better career prospects.

With all forms of policies, its ultimate measure would be the response and impact felt on the ground. In this case, it is the ability of various forms of assistance to mitigate the financial and economic impacts of the pandemic through job retention or creation and continual upskilling or reskilling of the community.

The initial figures were encouraging, as Ministry of Manpower announced that 1 in 3 places offered by SGUnited through the Jobs and Skills Package have been taken up (Meah, 2020). Respondents of a poll conducted by MENDAKI Social Enterprise Network Singapore Pte Ltd (SENSE) in June and September 2020, showed that 4 in 5 were more likely to take up courses.

Whilst there is much room for improvement, it was a fair response for a country that is coming to terms with a new norm. This provides a buffer to national and community agencies to synergise and calibrate its resources whilst we approach the tipping point of public response. Ground up responses such as M³ Focus Area 4 (FA4) on employment

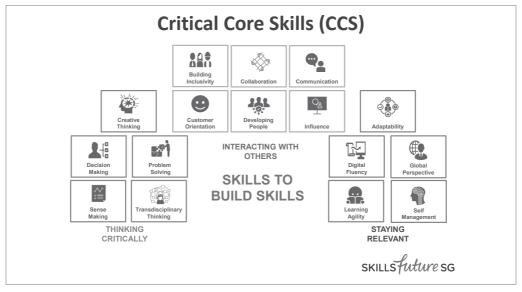
and employability is one of such efforts to galvanise national and community resources to support the community.

SENSE has collaborated with M³ agencies – MUIS, People's Association Malay Activity Executive Committees Council (PA MESRA), and MENDAKI – to promote the utilisation of national employability assistance such as SGUnited Jobs, SGUnited Traineeships and SGUnitedSkills. This initiative is supported by other FA4 partners such as SkillsFuture Singapore (SSG), Workforce Singapore (WSG), Singapore Malay Chamber of Commerce and Industry (SMCCI), MUIS, People's Association and Malay Muslim Union leaders. Besides promoting the utilisation of national schemes through FA4, M³ aims to deliver community-centric initiatives that complement existing national programmes.

Shifting Tides

As we attempt to address micro-economic concerns, we also see major shifts on the macro-economic front as many nations struggle with the impact of the pandemic to businesses, especially those in international trade and travel sectors (Ministry of Trade and Industry, 2020). This is a daunting prospect as our economy depends on international trade and travel, due to our small domestic market. Ministry of Trade and Industry has been hard at work to affirm our economic value to other countries and ensure development of viable new markets. The recent announcement on the Regional Comprehensive Economic Partnership (RCEP) is testimony to these efforts (BBC News, 2020).

To address the shifting tides, SSG announced its Critical Core Skills in August 2020 as a means to frame the necessary skills required for workers (SkillsFuture Singapore, 2020). This was a critical move as the roles of humans would be shifting as businesses increased the use of automation and artificial intelligence to enhance productivity.



Source: SkillsFuture Singapore (2020)

Similarly, the flagship programme by SENSE, Job Opportunities, Upskilling, Mobility (Career) and Professional Development (JUMP), was introduced to engage and assist the Malay/Muslim community to provide better access to job and skills upskilling assistance (M³, 2020). Organised independently and with collaborations with course providers and SSG, SENSE offers free online workshops at all M³ towns. The courses offered include financial management, digital literacy and technical skills. The aim was to engage residents within the vicinity to enhance the employability of members of the community.

Theory U: Opening Opportunities

From the book Theory U: Leading from the Future as It Emerges, Otto Scharmer introduced a change management method, Theory U, to meet challenges in a more conscious and strategic way. As mentioned earlier, situations of adversity offer a great amount of opportunity for those who are willing to break the mould, and adopt the right strategies and mindset.

For this, Theory U would be an appropriate methodology with principles that can help policy makers, public agencies and the community to break through unproductive behaviours that prevent empathy for others, and locks individuals in ineffective patterns of decision making (Scharmer, 2007).

The journey through the 'U' develops seven essential leadership capacities of:

- Holding the space: Ability to listen to oneself and others, such that you provide space for people to speak openly
- **Observing:** Ability to observe without judging, such that you are attentive and receptive to others by putting aside your past cognitive schema
- **Sensing:** Ability to connect and commit with your heart, such that you are able to see the interconnected wholes
- Presencing: Ability to connect and commit with your deeper self, through your values and beliefs, such that your actions are holistic (Fong, 2015)
- **Crystallising:** Ability to access the power of intention, such that a group of key persons commits to the purpose and outcomes of the project
- **Prototyping:** Ability to align or integrate the head, heart, and hand such that there is limited interference or obstacles to achieve the goals
- **Performing:** Ability to deliver such that right leaders and good social technology come together to achieve the larger outcome

As a community agency that aims to guide the workforce in their professional development, SENSE can tap on Theory U through its leadership capacities (Annex A). Firstly, while serving members of the community, SENSE officers are encouraged to allow them to speak openly about their concerns that they face regarding their professional development.

Apart from being attentive while listening, officers invite non-judgmental conversation during their interactions. Officers will guide and align their personal values and beliefs with their role in order to connect with the community. They are encouraged to be self-aware and adopt a positive positionality conscious in building good relationships.

Conclusion

With concerted effort from policymakers and community agencies such as SENSE, career assistance programmes would be more effective in ensuring that workers are able to bounce back from the crisis.

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The repurposing of the state requires boldness of imagination & marshalling of public support around nations' long-term goals to help rebuild broad-based prosperity and cohesive societies, and can put us on course to an ecologically viable future.

- Senior Minister Tharman Shanmugaratnam, 2020

In simpler terms, Theory U encourages individuals to adopt an "Open Mind, Open Heart and Open Will" to achieve change and sustainable outcomes. I believe Theory U could help us to achieve the desired outcomes for the state and community – as it would spur boldness of imagination and better rally public support for Singapore's long-term goals.

Author's Biography

Mr Mohamad Faiz Selamat is the Executive Director at MENDAKI Social Enterprise Network Singapore Pte Ltd (SENSE). He is passionate about enhancing business agility through insights-driven management practices and has more than 20 years of management and consulting experiences across private and public sectors.

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Annex A: Essential Leadership Capacities

Essential leadership capacities for Policy Makers & Community Agencies:

- 1. To create space for others to speak openly and listen to oneself and others
- 2. To observe without judging and be receptive to others
- 3. To connect and commit with your heart and see the interconnected wholes
- 4. To connect and commit with personal values and beliefs so that actions are holistic
- 5. To bring together groups that commit to the purpose and outcomes of the project
- 6. To align the head, heart, and hand to limit obstacles to achieve the goals
- 7. To deliver right leaders and good social technology to achieve greater outcomes

Essential leadership capacities for Job Seekers:

- 1. To seek opportunities to listen and speak to oneself and others
- 2. To observe without judging and be receptive to others
- 3. To connect and commit with your heart and see the interconnected wholes
- 4. To connect and commit with personal values and beliefs so that actions are holistic
- 5. To bring together supportive friends and families that support you in your endeavour
- 6. To align the mind, heart, and will to overcome obstacles that you may face
- 7. To find the right resources and support that facilitate even greater outcomes



Fostering Resilient Learners in a Trauma-informed Post-COVID-19 World

by Dr Hana Alhadad

Abstract

This article explores the impact of trauma on children's physical, academic, emotional and social well-being at school, and examines the emergent literature on trauma-informed practices and approach in education. The uncertainties brought about by the COVID-19 pandemic has challenged the education system to transform the ways in which they connect with, teach and support students and families. These challenges and transformation offer the opportunity to infuse trauma-informed practices and approach within the education system, not only to minimise the negative impact of trauma but also to maximise opportunities to strengthen resilience in our students and educators. It argues for the adoption and integration of individual and systemic trauma-informed practices and approach that aligns with social justice goals to effect positive change in our students, educators and the education system as a whole.

Living in pandemic times

2020 has been a year of uncertainty and challenges, of learning and adapting. Many have risen to the challenges and reinvented their approach to doing things. From home environments, to school, to work environments, we all had to adjust how we live, work, study, play and interact with one another to the realities of a COVID-19 world.

2020 has also been a year of revelation. We saw resilience and acts of kindness with the emergence of mutual aid in our communities; and while we saw new relationships built through hard times, we also saw the divide between the "haves" and the "have nots". A year where pre-existing inequity, privilege and disadvantage across economic, health and education systems were exposed and exacerbated by the pandemic.

Experiencing trauma from COVID-19

Living in a COVID-19 pandemic may potentially be traumatic for children and families. Undoubtedly it is a stressful event that is unpredictable and prolonged. The Circuit Breaker¹ measures implemented in response to the COVID-19 pandemic, while necessary, have inadvertently created disruption in the lives of children, causing experiences of stress or trauma² (Chanchlani, Buchanan & Gill, 2020). The lack of control and uncertainty only serves to exacerbate the traumatic stress response, and is compounded for children who are already living in disadvantaged circumstances.

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The Circuit Breaker¹ measures implemented in response to the COVID-19 pandemic, while necessary, has inadvertently created disruption in the lives of children, causing experiences of stress or trauma² (Chanchlani, Buchanan & Gill, 2020)

A report by the Childhood Trust (2020) found that because the pandemic has made online learning essential, the digital inequity faced by children living in poverty is causing them to miss out on the online learning, further setting them back academically. The disconnection from online access is causing higher instances of anxiety, loneliness and depression, and is most evident in concerns about their future schooling. In Singapore, many students from low-income families do not have stable internet access or a personal computer to conduct their home-based learning (HBL)³, Those who do would still struggle to access or complete their HBL on time as they have to share the computer among many family members.

¹ The Circuit Breaker is a series of partial lockdown measures in Singapore, in response to the COVID-19 pandemic.

² Trauma is the experience of, and response to, an event, a series of events, or a set of circumstances that is physically, mentally or emotionally harmful, and has lasting adverse effects on an individual's functioning and mental, emotional, physical or spiritual wellbeing. Trauma can be acute (resulting from a single stressful or dangerous event), chronic (resulting from repeated and prolonged exposure to highly stressful events) or complex (resulting from multiple or different traumatic events).

³ According to the Household Expenditure Survey 2017/2018, over 50 percent of households living in 1- and 2-room HDB flats do not have internet access or a personal computer compared to 95 percent of households in other flats and condominiums. Retrieved from https://www.singstat.gov.sg/find-data/search-by-theme/households/household-expenditure/latest-data.

A study conducted in 2019 by Centre for Family and Population Research at the National University of Singapore found that four in ten rental flats have five or more persons in a household (Wei-Jun, 2020). Living in a confined space would be especially difficult during the Circuit Breaker, with household members having to work from home, study online, do chores as well as carry out caregiving duties. Prolonged living in a crowded household would thus make it difficult for children to concentrate on their learning. Studies have also shown that abuse, violence and vulnerability increase for children during periods of school closures associated with health emergencies, especially for those living in low-income or crowded households (Bhatia et al., 2020; Cluver et al., 2020l Martins-Filho et al., 2020; UNICEF, 2020).

The Childhood Trust report also states that children from low-income families are left extremely vulnerable and are likely to develop anxiety especially when at least one parent is an essential worker. Moreover, parents' anxieties around the pandemic and the consequences of the pandemic (for example, loss of income or employment, being a front-line worker) could transfer to children (Childhood Trust, 2020). Increased economic insecurity could also heighten caregivers' stress levels and increase the likelihood of abuse and violence against children and others within the household (Bhatia et al., 2020). For some, the pandemic brings new grief and loss, while for others, it is added to their pre-existing trauma, adversity and unmet basic needs (NCTSN, 2020). Given the expected increase in anxiety, stress and trauma among children associated with the pandemic, trauma-informed educational practices become paramount not only to mitigate the effects of COVID-19 response measures and minimise the impact of trauma, but to maximise student well-being and resilience as well (NCTSN, 2020; Wall, 2020).

Understanding trauma and its impact on children

Child trauma occurs more often than you think. The soma (mind and body) responds to the trauma the way it knows how, and not how we think it would. The signs of traumatic stress may be different for each child, and younger children may react differently than older children. For example, primary school-aged children may feel guilt or shame, have hard time concentrating or find difficulty sleeping at home, while older children may develop eating disorders, self-harming behaviours, or become involved in risky behaviours (SAMHSA, 2020).

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Traumatic experiences are often referred to as Adverse Childhood Experiences (ACEs) and can include personal trauma such as physical abuse, verbal abuse, sexual abuse, emotional abuse, neglect, as well as trauma related to family members such as substance abuse, domestic violence, incarceration, mental illness, parental disappearance and divorce⁴. More recently, researchers have begun to include community and environmental trauma such as racism, bullying and community violence as part of ACEs (Collin-Vézina, Brend, & Beeman, 2020).

A study conducted in 2017 by the Singapore Children's Society (2019) involving 120 caregivers and children from low-income families found that nine out of ten children faced at least one ACE while almost half the children experienced four or more ACEs. While ACEs have been repeatedly linked to poor health, children who experience one or more ACE may physically live in a constant state of emergency in which their stress response systems to fight, freeze, or take flight are activated for long periods of time (Craig, 2008; Thakur et al., 2020; Wall, 2020). Such prolonged living in persistent trauma often results in diminished capacity to inhibit impulses, make reasoned decisions, and regulate emotions and behaviour (McInerney & McKlindon, 2014; Wolpow et al., 2016; Wall, 2020).

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Children who experience four or more ACEs are over thirty times more likely to have learning or behaviour problems in school than a child with no ACEs (Thakur et al., 2020). Furthermore, children with history of trauma tend to be on high alert, and as a result often react to the slightest stressor. Some children react and respond with dissociative behaviours such as daydreaming, disengagement, withdrawal or passivity (McInerney & McKlindon, 2014), while others who are in a state of hyper-vigilance may respond by acting out with aggression and defiance (Alexander, 2019).

Emotionally, children's feeling of hopelessness in their personal lives could spill over into the classroom causing "learned helplessness", in which they become passive and uninterested in school (Craig, 2008; Wall, 2020). Wolpow et al. (2016) compared the challenge of focusing academically when dealing with trauma to "trying to play chess in a hurricane" (p. 3). Though students are expected to pay attention to what teachers say, trauma-impacted children attend to what they do, focusing their cognitive energy on

⁴ ACEs are ten categories of traumatic or stressful experiences or adversities represented under three domains: Abuse (Physical/Emotional/Sexual), Neglect (Physical/Emotional), and Household Challenges (Mental Illness, Incarceration, Domestic Violence, Substance Abuse, Divorce) experienced before age 18. Recently, researchers have begun to include community and environmental ACEs such as racism, bullying and community violence as they create the same biologic changes as the original 10 ACEs.

scanning for signs of danger rather than attuning to instructional content (Wall, 2020). Trauma-impacted children tend to *act* instead of *plan*, and often struggle with sustained attention, following instructions, information retainment and cognitive organisation (Alexander, 2019; Craig, 2008).

Academically, children who have experienced trauma are more likely to experience cognitive delays, learning problems and struggles with sensory processing, all of which impact their ability to write and read (Alexander, 2019; McInerney & McKlindon, 2014; Wall, 2020). Persistent traumatic experiences can impede development and inhibit healthy functioning (Crosby, 2015; Wolpow et al., 2016) and the toxicity of those experiences – including the COVID-19 experience – could accumulate in a child's memory bank and continually intrude into their consciousness, making it difficult to focus and function (Craig, 2008; Wall, 2020). Research has also shown that children with history of trauma may experience learning problems and behavioural issues, often indicated by lower grades, more suspensions and expulsions, school absenteeism, increased involvement with juvenile systems, as well as long-term health problems such as diabetes and heart disease (Blodgett & Lanigan, 2018; SAMHSA, 2020; Thakur et al., 2020).

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The impact of trauma on the child can last well beyond childhood, and schools can play a critical role in not only minimising trauma's harmful grip but also maximising student's ability to thrive in school and beyond (Ginwright, 2018, Wall, 2020). The counterbalance of trauma is resiliency, and trauma-informed practices can help cultivate resilient learners by providing "a safe, supportive community that enables both students and teachers to feel safe, build caring relationships, regulate their feelings and behaviour, as well as learn" and thrive (Alexander, 2019, p. 86).

Trauma-informed approach has the goal of holistically supporting all students, but especially those who experience trauma, and applying such approach in schools not only make sense but is needed especially in a post-COVID-19 era. A trauma-informed educational system has to ensure that all parties within it, such as educators, administrators and staff, recognise and respond to the impact of traumatic stress on children. This also extends to those who have contact with the system such as parents and caregivers.

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Navigating a new normal in a trauma-informed environment

The pandemic has challenged educational systems to transform the ways we connect with, teach and support students and families. These transformations also offer us a glimpse of what may be possible for education on the other side of the pandemic; to reimagine and reinvigorate our education systems.

A trauma-informed learning environment would promote the wellness and resiliency of students, and ensure students feel safe and supported physically, socially, emotionally and academically (Crosby, 2015; Wolpow et al., 2016). This can be done through a whole-child

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Social emotional learning (SEL) and self-regulation skills such as the pedagogy incorporated into Mendaki Tuition Scheme's concept of Ethics of Care are also essential, especially in a post-COVID-19 world.

approach of promoting healthy interactions between students and teachers, as well as the caregivers and community. Social emotional learning (SEL) and self-regulation skills such as the pedagogy incorporated into MENDAKI Tuition Scheme's concept of Ethics of Care are also essential, especially in a post-COVID-19 world. Studies have shown such restorative practices, including trauma-informed and social and emotional interventions, have increased academic achievement, improved attitudes and behaviour, alleviated negative behaviours and reduced emotional distress (CASEL, 2019; Wallace Foundation, 2019).

Current research on ACEs have also strengthened the narrative about how trauma-informed SEL can positively impact children's learning and behaviours (Foster, 2020; Wall, 2020). Furthermore, trauma-informed educational practices are aligned with the Ministry of Education's 21st century competencies framework, which includes SEL and civic literacy skills among others being taught in schools. In a trauma-informed environment, educators and staff become essential in infusing and sustaining trauma-awareness, knowledge and skills into the classrooms, programmes and school environment (NCTSN, 2020).

Building trauma-informed educators

Being trauma-informed means educators need to have a knowledge base about trauma. However, this does not require them to become experts in trauma, but enough to

understand, know and recognise its many signs. It also requires educators to understand that trauma is less about the events themselves, but more about the child's responses to them, and that it results when the child's support systems and coping mechanisms for that hardship are not enough (Collin-Vézina, Brend & Beeman, 2020).

For example, a change in perspective in viewing difficult or wilful behaviours is warranted as a trauma-informed educator. Rather than seeing the student as "giving us a hard time", viewing it as the student "having a hard time" stemming from student's dysregulation can be helpful (Alexander, 2019, p. 108). Differentiating responses to students is also essential. Holding a student back during recess could be a trigger linked to hunger and hardship, or some students may need "time in" instead of "time out" as the latter could trigger feelings of abandonment or neglect.

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Being trauma-informed also means educators can better collaborate with those involved with the child, using evidence-based approaches to provide safety and facilitate recovery when

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Having a trauma-informed approach will assure parents and caregivers that the school community is strengthening their child's resilience and well-being, thereby underpinning the importance of learning (NCTSN, 2020).

needed, and ultimately support the child's ability to learn and thrive. Having a trauma-informed approach will assure parents and caregivers that the school community is strengthening their child's resilience and well-being, thereby underpinning the importance of learning (NCTSN, 2020). Through a holistic approach, students can also learn in a school climate that recognises, builds and fosters positive relationships with students, educators, parents and their community.

Adopting a strength-based trauma-informed practice

Although a trauma-informed approach attempts to recognise the many signs of trauma and ACEs, including other risk factors such as economic hardship, peer victimisation, bullying, violence and racism, the approach focuses on the strengths of the individual rather than the deficits. For example, it focuses on what individuals are doing well to cope with trauma rather than on what they are doing wrong (Wall, 2020). As outlined by Mental Health Australia, trauma-informed practice is a strength-based framework grounded on respect for diversity and founded on five core principles: safety, choice, collaboration, trustworthiness and empowerment (Kezelman, 2014; ITTIC, 2015).

	Safety	Choice	Collaboration	Trustworthiness	Empowerment
Definitions	Ensuring physical and emotional safety	Individual has choice and control	Making decisions with the individual and sharing power	Task clarity, consistency, and Interpersonal Boundaries	Prioritising empowerment and skill building
Principles in Practice	Common areas are welcoming and privacy is respected	Individuals are provided a clear and appropriate message about their rights and responsibilities	Individuals are provided a significant role in planning and evaluating services	Respectful and professional boundaries are maintained	Providing an atmosphere that allows individuals to feel validated and affirmed with each and every contact at the agency

Figure 1 - Five principles of Trauma-Informed Practice (by Institute of Trauma and Trauma-Informed Care [TTTIC], 2015)

Schools can adopt these five principles in their practice and function as "islands of safety", as Van der Kolk (2014) suggests in his seminal book on trauma and healing, for students to thrive and be their best selves. That way, schools are not only seen as academic centres but also as places where children are truly seen and known, where they can learn self-regulation and resilience strategies as they navigate through the post-COVID-19 world. Children learn better when they feel valued, respected, supported and safe (Stearns, 2020).

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Grounded in these principles are the five core components of trauma-informed approach: (1) safe, supportive relationships, (2) structure and stability, (3) shared agency, (4) self-awareness and self-regulation, and (5) social emotional learning (Wall, 2020).

Safe, supportive relationships to build resilience

The quality of your relationships influences how resilient you can be and relationships built through difficult times can be exceptionally resilient. A relationship built on respect and compassion is one that is built on unconditional support, without judgement and control, while maintaining healthy boundaries (Wolpow et al., 2016). It could mean holding the space for another while someone else holds the space for you for safety and support.

Building safe, supportive relationships is heavily emphasised on a trauma-informed approach, centering on care and compassion over reproach and punishment. The approach

focuses on establishing positive bonds between children and educators as a means of providing healthy, respectful, unconditional care from non-parental adults (Alexander, 2019; Craig, 2008; Crosby, 2015; Wolpow et al., 2016).

Learning to construct supportive and successful connections with peers is also important as feeling a sense of belonging with peers and friends is an essential part of one's social emotional development. All the same, educators should be mindful of bullying behaviour by fellow students and immediately address situations or comments that may shame, embarrass or humiliate to prevent the traumatisation or re-traumatisation of students (Crosby, 2015; Wolpow et al., 2016).

Structure and stability

Predictability provides a sense of safety and stability for those whose lives have been shaken with the uncertainties brought about by COVID-19, and more so for those whose lives were already unstructured and tumultuous. Modes of learning and school routines have to change to adapt to the COVID-19 pandemic. Such unexpected environmental changes may make students feel endangered. Fortunately, in Singapore, students were provided with information in advance to prepare them to adapt and transition successfully during the pandemic. Though there are many options for assistance available for those struggling to transition to the new normal, a more sustained effort in, and implementation of, traumainformed care and practice should be put in place.

Shared agency

Some educators tend to lower their expectations or make exceptions for trauma-impacted students but doing so may send a wrong message; that the educators do not have much confidence in the student or that the students are "too damaged to behave" (Wolpow et al., 2016, p. 16). Instead, educators must maintain the same level of expectation for all students and hold firmly to their expectations, but be flexible in offering alternative coping options (Alexander, 2019). The trauma-informed approach seeks to empower children with agency over their environment by giving them opportunities to negotiate, express interests, share opinions, and allow their voices to be considered (Craig, 2008; Crosby, 2015; McInerney & McKlindon, 2014; Wolpow et al., 2016). The key is not to engage in a power struggle but to make decisions together. Educators adopting a "power with" rather than "power over" attitude would more likely hold the student accountable to their decisions and actions, and it enables the educators and student to strengthen their emotional connection while firmly holding to boundaries.

Self-awareness and self-regulation

Trauma-informed approach and practices underscore the importance of recognising the signs of trauma as well as identifying trauma triggers; some of which are externally received such as a loud noise, a touch, yelling, while others can be internal such as hunger, fear or rejection (Alexander, 2019; Wolpow et al., 2016). While it is critical that educators are able to recognise the signs and identify the triggers, it is equally important for them to build

student self-awareness and self-regulation in the triggering process. The trauma-informed approach equips students to become aware of specific triggers that might ignite their "fight-flight-freeze" reflex and to act quickly to avoid escalation, such as doing mindfulness exercises, signalling the teacher, or moving to a "safe space" where the student can calm down (Wolpow et al., 2016; Wall, 2020).

Educators should also practise self-awareness and self-regulation for themselves as it is essential for their own well-being to be attuned to their own dysregulation and frustration levels. Educators educate better with what they embody so it is vital that they observe their own triggers and act proactively to regulate their own emotions in a healthy manner (Alexander, 2019; Wall, 2020).

Social-emotional learning

Through social-emotional learning, trauma-informed approach and practices seek to equip students with positive coping skills to break harmful cognitive patterns and produce healthy, more productive behaviours (Wall, 2020). By teaching students to name their emotions, students are able to make the connections between triggers and emotions, break their reflexive responses and express their emotions more appropriately. This way, students are better able to regulate their emotions. There is a variety of relaxation and calming strategies that can be done in schools for students who experience trauma, such as mindfulness, yoga, breathing exercises, stress management techniques as well as physical movements to relax the body (Alexander, 2019; Wolpow et al., 2019).

A trauma-informed approach also equips students with skills to strengthen executive functioning such as the ability to plan, organise, evaluate and solve problems. It encourages reflection and deliberation to make responsible decisions, while considering your well-being and that of others. Social awareness skills such as perspective taking, empathy, appreciation of diversity and managing conflict can help improve social competency and empower children to successfully navigate their social environments. Practising pro-social behaviours is also essential in building and maintaining healthy relationships, which is an important factor in fostering resilience.

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Beyond the individual to the system

It is imperative that trauma-informed approach and practices do not focus solely on the individual facing the trauma while ignoring the social conditions that create the marginalisation (Pyscher & Crampton, 2020). The whole-child, holistic approach must also recognise the systemic issues and societal conditions of pervasive trauma and inequality. For example, trauma from economic hardship is a systemic issue and the source of trauma will persist if not addressed at the systemic level. Ignoring the systemic issue and focusing solely on the individual would risk holding children responsible for problems they did not cause or have no full control over (Khasnabis & Goldin, 2020). Such a focus is problematic and can lead to labelling and further stigmatisation (Pyscher & Crampton, 2020).

A systemically trauma-informed approach views trauma as stemming from systemic issues that need to be addressed, while also working on the trauma at the individual level. Keeping trauma-informed approach only at the individual level may have the unfortunate effect of blaming the individuals (students, educators and staff), further neglecting the many strengths and strategies in which the child and educators have deployed in response to the trauma.

The education system therefore needs to think both individually and systemically. Khasnabis and Goldin (2020) recommend education system to promote a systematically trauma-informed practice in the following ways (p.53-54):

1. Work at the individual level.

Individual-based trauma-based programming has been shown to be generally effective. Educators are critical in this work and can be powerfully impactful, supporting students' resilience.

2. See, recognise, and name the systems that contribute to trauma.

Educators need to be encouraged and supported to think about the larger systemic issues and recognise that they themselves co-construct a system as the institution of the school. When educators realise that they are a system nested within the larger ecosystem, beginning to address a systemic issue at their level seems more plausible.

3. Work together with the school to response to systemic trauma.

Educators could push to devise systemic approaches, within the power of the school system, to support children experiencing trauma or exhibiting challenging behaviours. It could include a multi-tiered approach to achieve a trauma-informed environment involving (i) school-wide, universal supports to change school cultures into learning environments that are more safe, supportive and trauma-informed, (ii) training and capacity-building for school staff and educators to support students and manage disciplinary concerns in accordance with a trauma-informed approach and (iii) intensive interventions for students experiencing the impact of trauma. In addition to meeting the individual needs of students, educators could come together to address

the systems that cause the trauma and to recognise the systems of inequality. This would require educators to go beyond understanding the experiences and needs of students, and to meet those needs through socially-just teaching. Achieving systemic, trauma-informed schooling is complex but necessary, as it has potential to improve outcomes for all students and those aiming to educate them.

Summary

Trauma-informed education is about social justice. Effective educators can do good and effect positive change, especially among uncertainties in a post-COVID-19 world. By building and maintaining safe and supportive relationships, providing a predictable, stable structure as well as shared agency, encouraging self-regulation and lastly, teaching social-emotional skills, educators can reduce challenging behaviour, improve learning outcomes, and promote student resilience and lasting success (Wall, 2020; Wallace Foundation, 2019). A whole-child, trauma-informed approach in education will ensure children can learn in a positive school climate that offers a long-term, secure relationship that supports academic, physical, cognitive, social and emotional development they need to thrive. When done right, an inclusive education system that is trauma-informed could emerge stronger than before COVID-19.

Author's Biography

Dr Hana Alhadad is an Adjunct Research Fellow in the Society and Culture Department at the Institute of Policy Studies. She has been involved in several projects at an international level, such as her work with those affected by the ethnic conflict and tsunami in Sri Lanka as well as with Aboriginal communities in Queensland. Her research area includes the role of the arts in community and civic engagement, as well as in understanding power relations in community participation and grassroots innovation.

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Paradigm Shifts for Sustained Educational and Economic Progress:

Adaptability within the Malay/Muslim Community

by Ms Nur Diyanah Anwar

Abstract

In resilience literature, adaptability is an important feature of societies where proactive preparation ensures its capacity to transform to a new societal equilibrium, or what is often referred to as a "new normal". For the Malay/Muslim community to be adaptable in a post-COVID-19 world, there needs to be paradigm shifts in the following areas for sustainable educational and economic prospects. They are: (i) in developing self-directed learners; (ii) facilitating targeted engagements in the digital age; and (iii) overcoming issues of access. Policymakers and community leaders should be cognisant in encouraging shifts in the three aforementioned areas, to ensure that the community is able to pivot and adapt to changes, while enhancing its competencies into the future.

Commentary

COVID-19 has underscored the need for adaptability in ensuring society's basic functions continue. In resilience literature, adaptability is an important feature of societies where proactive preparation ensures its capacity to transform to a new societal equilibrium, or what is often referred to as a "new normal". One area which has observed much adaptation is in education, where remote learning has enabled schooling and retraining anywhere, and at any time. To thrive in a changed (and changing) environment, societies should continually build resilience by pre-empting future learning needs in tandem with the evolving global economy. This is especially important in Singapore, where education – to include upskilling and professional development for mature Singaporeans – have largely been tailored towards economic development. For the Malay/Muslim community today, paradigm shifts have to be strategic and contextualised in adapting to the digital age in a post-COVID-19 environment.

Learning from the COVID-19 experience

The Singaporean Malay/Muslim community was not spared from the pandemic, and they were impacted in several ways. For example, many had lost their sources of income when the Circuit Breaker measures were put in place. The service, sales and manufacturing industries – which many individuals from the community work in – were critically affected, and employees were especially susceptible to retrenchment. Conversely, certain industries such as information technology (IT) and logistics were much more secure in riding through the pandemic due to the increased dependence on these sectors. Many adapted and turned to the gig economy as an alternative, starting home-based businesses or committing to freelance work. More significantly, surviving businesses were forced to digitise (if they had not) and innovate, to gain traction online during the pandemic. Even so, certain occupations within the gig economy still took a hard hit, such as taxi and private hire drivers.

Schooling was also impacted by COVID-19 and affected the community in several ways. With school closures, students and teachers had to utilise online platforms for remote learning and teaching. However, the pandemic highlighted issues of equity, with disparities amongst students of their access to the Internet and digital devices. The dire economic circumstances compounded the financial difficulties of low-income families with schoolgoing children, and parents may have found it trying when attempting to guide their children in their home-based learning. These challenges may similarly be extended to other

segments in Singaporean society. While mature workers attempted to adapt to changes brought about by the COVID-19 pandemic, some found themselves unable to follow lessons online or conduct their jobs efficiently – because of the lack of access to resources or the steep technological learning curve they faced.

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However, the pandemic highlighted issues of equity, with disparities amongst students of their access to the Internet and digital devices.

The "what" and "how" for sustainable educational and economic prospects

In preparing the Malay/Muslim community to adapt strategically in a post-COVID-19 world, careful horizon scanning and future planning should take place as a collective effort to identify prospective educational necessities and buy-in. It would then be necessary to curate

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The following questions can be posed:

- (i) What should be addressed to boost the community's capacity for the post-pandemic educational and economic milieus; followed by
- (ii) How can it be done?

strategies encouraging the community's adaptability in the workforce and economy. The following questions can be posed: (i) What should be addressed to boost the community's capacity for the post-pandemic educational and economic milieus; followed by (ii) How can it be done? Three fundamental areas should be focused on building the community's resilience and adaptability:

1. Developing a self-directed approach to acquire multi-disciplinary skill sets

Firstly, there would be a need to continuously equip the Malay/Muslim community with more multi-disciplinary skillsets and levels of cognition from an early stage – to prepare students and future employees to be adaptable in any context with possible far-ranging effects. This would call for a mindset shift in how individuals view their learning or professional development, and a more self-directed approach to learning should be encouraged. To promote such autonomy, schools, education providers and workplaces should look at developing metacognition (i.e. having an awareness of one's learning, thinking and growth) within students and learners. This would help by encouraging strategic learning and calculated actions throughout different phases of their careers, for example, by identifying areas for self-improvement. Ultimately, these self-directed learners form learning communities, and contribute to building the community's overall resilience.

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To promote such autonomy, schools, education providers and workplaces should look at developing metacognition (i.e. having an awareness of one's learning, thinking and growth) within students and learners.

2. Embracing technology as well as tailoring school and skilling programmes to be age-appropriate

The pandemic proved to be an inflexion point where various and changing modes of learning arose. For example, schools moved from didactic and blended classroom strategies, to being fully dependent on technology and online platforms to carry out lessons. With a future economy deeply entrenched in the digital age, there is a need to better evaluate how digital natives tend to learn, as well as upgrade the skills of the less technologically-savvy within the Malay/Muslim community. Therefore, schooling and skilling programmes should be reassessed to focus on preparing different segments of the community for the digital evolutions necessary in a post-COVID-19 world. Individuals should be even more adept and comfortable with utilising technology in their learning and work, and subsequently take advantage of the flexibility offered by many platforms in allowing asynchronous and on-demand online learning. More importantly – and building upon the prior point on self-directed learning – this may enable active learning anywhere and at any time.

3. Re-aligning resources to employability, focusing on addressing concerns from lower-income brackets

Resources and types of programmes accessible to the Malay/Muslim community have to be better aligned towards future educational and economic requirements. Present measures under the SkillsFuture Credit scheme and the SG Teguh Bersatu taskforce should be commended for providing swift action and solutions to assuage the socioeconomic repercussions present within the community. However, future measures should focus on increasing awareness and adopting a targeted approach towards the community's supply and skills-based insufficiencies, especially for individuals and families belonging in the lower-income brackets. There should be greater streamlining in terms of assistance available to the community – not just those in conjunction with other Malay/Muslim or public organisations, but with newer partnerships in the private and technology sectors. These measures and collaborations would be crucial to prepare the collective Malay/Muslim community, by corroborating efforts to maximise their potential. This, however, can only take place if the Malay/Muslim community is receptive to such efforts and utilises them to their fullest benefit.

Lifelong learning into a post-COVID-19 world and beyond

Building a resilient community is not just about bouncing back to norms after the disturbance of an event. Instead, resilience is about adapting adroitly and bouncing forward to embrace newer challenges whenever circumstances are about to change. Adaptability will therefore need to be a foremost trait within the Malay/Muslim community for sustainable educational and economic prospects. Policymakers and community leaders should be cognisant in encouraging shifts in the three areas discussed, to ensure the community's continued resilience and competence. Lifelong learning can then be better cultured when individuals understand the value of their

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Building a resilient community is not just about bouncing back to norms before the disturbance of an event. Instead, resilience is about adapting adroitly and bouncing forward to many more challenges whenever circumstances are about to change.

own development throughout their life journeys and are motivated in their learning. In addition, they also need to be comfortable with the inevitable technological changes in a digital age and to have access to the means to do so. In this vein, the community might not only thrive in a post-COVID-19 world but excel in meeting the demands of future education and economic needs.

Author's Biography

Ms Nur Diyanah Anwar is pursuing her PhD at the National Institute of Education (NIE), Nanyang Technological University (NTU), Singapore. She is a recipient of the Nanyang Technological University Research Student Scholarship (NTU-RSS). She is also an Adjunct Research Associate at the Centre of Excellence for National Security (CENS), S. Rajaratnam School of International Studies (RSIS), where she was a senior analyst previously. Her research interests revolve around identity issues, multiculturalism, education and state-society relations.



STEM-ming the Community Post-COVID-19

by Dr Farhan Ali

Abstract

2020 brought enormous challenges to the Singapore society, including the Malay/ Muslim community. Yet, the year has also spotlighted the importance of science, technology, engineering and mathematics (STEM) in Singapore's fight against COVID-19. In this opinion piece, I highlight the importance of STEM and discuss strategies to promote STEM in the Malay/Muslim community, especially among the younger population. I draw upon my own experiences conducting research in biomedical science and data science - two currently prominent STEM fields.

'Fallout'' from COVID-19: Renewed importance on biomedical science and data science

COVID-19 has inflicted much suffering to the whole globe. Singapore, a city-state highly plugged to the global trade of goods, people and services, has been hit hard economically. Yet, thanks in part to long-term investments in biomedical capabilities and digital capabilities supported by a skilled workforce, we have been able to fight the worst of the pandemic. For example, our biomedical expertise has enabled us to perform rapid testing and lead the way in vaccine development. In the field of data science where computer science, artificial intelligence (AI), machine learning and data analytics intersect, technologies for real-time situation report data-driven contact tracing, and AI-enabled temperature sensors have been deployed. The Economic Development Board (EDB) and GovTech have outlined how our biomedical science and data science "chops" have enhanced Singapore's fight against COVID-19 (Economic Development Board, 2020; Government Technology Agency, 2020).

Therefore, one of the bright spots of the pandemic has been the renewed importance of investing in STEM capabilities, notably in biomedical science and data science, areas that I have been involved in on the research end. For the Malay/Muslim community, there are two implications of this trend which is expected to further intensify in the post-COVID-19 world. First, Malay/Muslim students need to develop interest in STEM subjects to prepare for more STEM careers in the next five to ten years. Second, Malay/Muslim institutions can ride on national trends, especially in digital leaning, to develop their own STEM capabilities to lead the community. Below, I share some opinions on these two areas.

Developing an authentic STEM education in the community

For too long, STEM subjects have been associated with content mastery which, in Singapore, is conveyed via examination grades. However, a more sustainable and effective long-term strategy for the community is to focus on authentic experiences for learning STEM among students. This involves authentic activities of inquiry and discovery that engender emotions such as wonder, curiosity and interest which have been shown by research to enhance learning in STEM. The focus is on developing positive experiences beyond grades such that students persist in STEM subjects in the long-term, despite the content challenges. Resources are finite and it is worth asking whether community resources

expended on tutoring programmes can be re-allocated to designing and scalingup interventions for authentic STEM experiences. The Singapore Ministry of Education (MOE) is opening up more pathways for education with less emphasis on examinations, so the community can consider ways to be ahead of the curve.



The focus is on developing positive experiences beyond grades such that students persist in STEM subjects in the long-term, despite the content challenges.

Encouraging STEM at home

While nationwide education shifts are crucial, parental encouragement at home and at a young age has an impact in the classroom. The concept of 'funds of knowledge', which refers to skills and knowledge obtained from daily experiences unique to an individual attests to this, as children are most engaged in their learning when it builds on what they already know, that is, their fund of knowledge. An obstacle in building up the child's fund, however, could be a parent's lack of confidence when it comes to imparting STEM knowledge on their children. To address this, parents should view STEM education in a more holistic manner that involves simple activities at home, like block play or solving puzzles. STEM could be embedded in almost everything, it merely requires a learning experience that is inquiry-driven. As such, parents with young children should take advantage of their child's early childhood years as the start of their STEM education, as young children are naturally curious and are inclined to explore what is around them at that age. Policymakers and community leaders can further assist parents' efforts by curating a comprehensive, long-term training on early parental STEM support, or, at the very least, provide a variety of examples of early STEM exploration that can happen at any time with minimal resources.

Promoting a 'maker and hacker' culture

One form of authentic STEM experience that can be inculcated is that of a 'maker and hacker' culture, loosely defined as a "DIY" culture of designing, creating and tinkering using technologies. STEM fields, particularly the biomedical science, have traditionally had high barriers of entry with expensive equipment and specialised knowledge. However, nowadays one can engage in authentic STEM activities via readily available resources on the Internet (for example, how to build a microscope for less than \$200 or how to analyse blood cells). Data science is increasingly practised with just a computer, an Internet connection, and free programming languages and software combined with readily available data ranging from COVID-19 cases to public transport ridership in Singapore. In all these, 21st century skills including problem-solving and critical thinking are being inculcated albeit in informal settings outside of classrooms. While there have been efforts on the part of the community and MENDAKI on this end, a more systematic, whole-of-community approach should be considered. One concrete proposal is to pilot some MENDAKI Tuition Scheme (MTS) centres as STEM education hubs in the community to promote students' connection to STEM beyond examinations and grades. The reach and scope of the tuition scheme is commendable and can potentially be used in other ways to promote STEM education.

Reducing STEM dropout rate

The Malay/Muslim community including MENDAKI, together with national institutions, has done an admirable job in reducing primary school dropout rates and increasing progression to secondary and tertiary schools. It is now time to consider strategies to reduce STEM dropout rates. There is perception that STEM subjects are either hard or too competitive, especially at higher levels. Anecdotes suggest a sizeable number of students from science stream opting for non-science university majors or new STEM degree holders starting their careers outside of STEM-related industries. One idea is to

have a community-wide tracking of students to have a better understanding of the numbers as well as factors affecting how students decide where to progress. This is analogous to surveying for career choices but at younger age groups. Another issue is the continued participation of girls in STEM at higher levels. At the national level, girls perform as well as boys in STEM subjects at lower educational levels including in Singapore (in some cases, girls have an advantage). However, along the educational pathway, we observe a lower proportion of girls in STEM subjects overall at the tertiary levels. Many explanations have been put forward to explain this phenomenon including cultural and socialisation factors. To fully harness the potential of the community's children, STEM dropout rates should be monitored and hopefully ameliorated, especially amongst girls, if the community were to develop more STEM capabilities.

Institutional STEM capabilities

Many world-class organisations and institutions are increasingly data-driven. Not content to being just technology consumers, they analyse data, produce insights and predict behaviours to better deliver services. MENDAKI's establishment of the digital transformation office is a laudable start. Last year, former Minister-in-Charge of Muslim Affairs Associate Professor Yaacob Ibrahim wrote in the MENDAKI Policy Digest about how MENDAKI should embark on research in digital learning, an area with accelerated importance at the national level, post-COVID-19. I strongly agree. I would go even further and suggest that research into digital learning can be a further means for MENDAKI to build its own STEM capabilities via data-driven analytics of students' learning. MOE is increasingly using data science, artificial intelligence and machine learning technologies to shape the future classroom such as in the areas of automated marking and personalised digital education. The AI in Education (AI.Ed) initiative at the national level is a major effort to transform education in Singapore in the digital age. MENDAKI can similarly take the lead in the Malay/Muslim community. Well-designed research in student's digital learning experiences can generate a lot of data (for example, log times, eye movements and facial expressions) that lends itself to data science methods. MENDAKI can partner with experts such as those in the National Institute of Education (NIE). Beyond self-funding, grants at the national level are readily available as digital learning is one of the key areas of research in Singapore. This research programme can achieve the dual aim of understanding Malay/ Muslim students' digital learning experiences while also bringing community institutions such as MENDAKI further into the data- and digital-driven 21st century. I am of the opinion that for successful "STEM-ming" of the community, it helps to start at the top.

Author's Biography

Dr Farhan Ali is an Assistant Professor in the Learning Sciences and Assessment Academic Group at the National Institute of Education, Singapore. Previously, he was an Associate Research Scientist in the Department of Psychiatry at the Yale University School of Medicine after having received his PhD in Neuroscience from Harvard University in 2014. His research interests lie in the science of learning, especially from the neuroscience perspective, data science and artificial intelligence applied to education.

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Technological Trends and the Future of Work for the Community

by Ms Hamidah Aidillah Mustafa

Abstract

Technology will further enhance our ability to interpret and understand the world around us better. 21st century technology has cutting-edge capabilities that are rapidly changing the way we live. Historically, technological advancements may also lead to new jobs and help our society be better able to address challenges such as more efficient energy usage, reduced cost of living, and increased flexibility for employees. However, technology aside, what is of utmost importance is the willingness to shape young minds to evolve and equip themselves with the right skills to face the future of work. We share some of the key qualities that will forge our young through tomorrow's world.

Introduction

The future of artificial intelligence (AI) and its effect on work in the future might be elusive. But we could all agree on one thing – it will be disruptive. Participants in a study done by Redwood Software and Sapio Research in 2017 indicated they believed that in the next five years, 60 per cent of businesses could be automated. As such, while most may view the future of AI negatively and imagine a future where robots take over the role of humans, the truth is very far from the doomsday images of the end of the world. While that may be one way of looking at it, another is that automation may create even more jobs than it displaces. By offering new tools for entrepreneurs & Tech Gurus, it may also create new lines of businesses that we could not possibly imagine at this point. A study by Gartner, a global research and advisory firm, in 2017 predicts that by 2020, AI will produce more jobs than it displaces.

Furthermore, AI is also able to value-add existing skills and help people carry out their roles better than before. This was aptly described by Paul Daugherty, Accenture's Chief Technology and Innovation Officer at the World Economic Forum in Davos, in which he explained the relationship as "human plus machine equals superpowers." While this view could be seen as optimistic, it is, arguably, representative of our current situation, especially with regard to the operational and strategic changes that many companies have seen when

COVID-19 hit Singapore shores. Companies and organisations realised that had they not been able to innovate and be nimble on their feet, they would be unable to ride the wave and succeed amidst such exceptional circumstances.



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The biggest technological trends beyond 2021 – what the future holds

It is without doubt that today's most pertinent technological trends will go a long way in helping us cope with and adapt to future obstacles and adversities. The shift to working from home, the new rules about how we meet others as well as interact in public spaces, and the new technological trends will be the driving forces in managing such changes.

In many ways, COVID-19 acted as a catalyst for changes that were already on the cards, all of which can be attributed to our increasingly online and digital lives. Things will just take place at a much faster pace now, with necessity as the driving force. While COVID-19 may "magically disappear" in time to come – the changes it has brought to the world will not. We will have to learn to do a lot of things more efficiently and safely.

Artificial Intelligence (AI)

AI has presently become one of the biggest technological trends we have. From 2021, AI will become an even more valuable tool in helping us interpret and understand the world around us better. The volume of data we are collecting on healthcare, infection rates, and the success indicators of curbing the spread of infection will continue to increase. This means that machine learning algorithms have to become increasingly sophisticated to uncover solutions.

Self-learning algorithms can spot connections and insights that could possibly have gone unnoticed by human eyes and analysis. We have seen the advantages of such algorithms in computer vision systems that monitor the capacity of public areas as well as in contact tracing initiatives, where they are used to uncover interactions and proximities of people. This will help us predict demand for services from hospitals and other healthcare providers, thus allowing administrators to make better decisions on when and where to deploy resources.

The challenge for businesses around the world will be to understand the changing patterns of customer and consumer behaviours. As we know, more human activities have and will continue to take place online, from shopping to our interactions with others in both personal and professional settings. Thus, we can anticipate that the tools used to study these behavioural shifts will become more sophisticated in the coming years to fit the budget and infrastructure needs of more organisations.

Robotics, drones and vehicle automation

As public transport passenger volume fluctuates, initiatives for self-driving vehicles will likely increase, even for Singapore. The push for efficient public transport networks will be given a priority by service providers and authorities. A reduction in labour transport costs will help counter the uncertainties in customer demand.

We are also increasingly seeing the emergence of robots in the care and assisted living sectors. These robots will become increasingly important, particularly when it comes to interacting with members of society who are most vulnerable to infection, such as the elderly. Instead of replacing human interaction with caregivers, these robotic devices can be utilised to provide new channels of communication. Some examples include access to 24/7 in-home help, or to simply provide companionship in circumstances where sending nursing staff to homes are not viable. Additionally, companies that require its premises to be maintained while empty, can turn to robotics providers for services such as cleaning and security. As such, these activities have led to soaring stock prices for enterprises that supply robots. Drones used to deliver vital medicine are equipped with computer vision algorithms and are also able to monitor footfall in public areas, making them essential in identifying areas of high-risk transmissions.

The "as-a-service" revolution

"As-a-service" refers to the provision of services that support the way we live and work through cloud-based and on-demand platforms, both of which allow access to other technological developments. It is the reason why AI and robotics are possible for any business or organisation to adopt, regardless of their size or budget. More often than not, "as-a-service" revolution has impacted the consumer markets. Thanks to cloud offerings from companies like Google, Microsoft, Amazon and a growing number of start-ups, any innovator can deploy cutting-edge technology with little up-front investment in tools, equipment or skilled labour.

As the pandemic continues, cloud-abled companies are prospering because they are equipped to provide "as-a-service" scalable solutions. For example, Zoom has quickly become a household name thanks to the speed in which it was able to add servers and enhance coverage and quality of its services. It was possible for Zoom to promptly increase its capacity to meet rising demands because of its cloud-based nature and its partnerships with service providers. As such, from 2021, "as-a-service" is going to become increasingly important and there will be more opportunities for everyone to jump on board.

5G and enhanced connectivity

Faster and more reliable internet does not translate to just webpages being uploaded quicker nor less waiting time for YouTube videos to load. Each advancement in mobile connectivity unlocks new possibilities. 3G made web browsing and data-driven services possible on mobile devices. 4G led to the growth of video streaming and music platforms because bandwidths increased. Likewise, 5G will open more doors in terms of what is possible especially in the area of human connectivity.

5G enables advanced technologies, such as augmented reality and virtual reality to operate. Cloud-based gaming platforms like Google's Stadia or NVidia's GeForce Now can be played anywhere and at any time. These platforms can potentially make cable and fibre-based networks redundant, with the latter's need to be tethered to a particular location. In short, high-speed networks trigger new trends. For instance, complex machine learning applications that rely on real-time access to Big Data sources are now being conducted in the field via automation.

Shaping the minds of our young to prepare them for the future of work

The truth is, our Malay/Muslim community is strong, forward-thinking and resilient. Many of our forefathers were travellers, traders and businessmen. They have worked hard in their various fields and pursuits. The quicker we overcome the inertia of change, the better our chances of success. The faster we embrace technology and its corresponding capabilities to transform worlds, the faster we are able to move our community ahead.

In his 2015 opening speech at the Singapore University of Technology and Design's (SUTD) new campus, Singapore's Prime Minister Lee Hsien Loong highlighted the importance of skills across Science, Technology, Engineering and Mathematics (STEM) in the future development of Singapore. Many would agree that the wave of future economic prosperity lies in a workforce that is well-versed in rising sectors such STEM. There has been an increased investment in STEM initiatives in schools across the board in Singapore.

STEM-based education extends more than just science and mathematics concepts. The emphasis on hands-on learning with real-world applications helps develop a variety of skill sets. These include creativity and 21st century skills such as media and technology literacy, productivity, communication, flexibility and initiative. Other skills attained through STEM education include problem solving, critical thinking, curiosity, decision making, leadership, entrepreneurship and acceptance of failure. These skill sets make learners "future-proof" and will go a long way in preparing them to be innovative.

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The emphasis on hands-on learning with real-world applications helps develop a variety of skill sets. These include creativity and 21st century skills such as media and technology literacy, productivity, communication, flexibility and initiative.

In today's world, it is impossible to dissimilate these fields from one another. If you pick any item from your household or office and try to categorise it in just one of the STEM subjects, you will find it impossible to do so, for everything is integrated with each other. Science and mathematics lead to various technological developments, most of which are applied to engineering concepts to solve real-life problems.

STEM education encourages our young to experiment, make mistakes and learn from their experiences to reach the best outcomes, rather than relying on textbooks. It then becomes pertinent for Malay/Muslim families to evolve and encourage their children to be more involved in holistic learning across various disciplines. This will allow them to be better in tuned with regard to the future of work. The truth is, we cannot teach our young to compete with machines and infrastructural hardware but we can instil in them values and skills that no machine could replicate.

Conclusion

The World Economic Forum has come up with ten qualities that future employers will look out for in future employees, given the vast technological changes that will be taking place across the globe. They are (i) complex problem solving, (ii) critical thinking, (iii) creativity, (iv) people management, (v) coordinating with others, (vi) emotional intelligence,

(vii) judgement and decision making, (viii) service orientation, (ix) negotiation and (x) cognitive flexibility. As such, these are also the same ten qualities that should be instilled in our Malay/Muslim children come 2021 and beyond. Fortunately, these very skills could be harnessed and grown over a period of time and I believe they could be inculcated in our young from their childhood days.

For our young to thrive in a workplace in 2030 and beyond, our community has to provide them with the adequate tools and environment for them to learn to adapt and succeed.

Author's Biography

Ms Hamidah Aidillah Mustafa is the founder of Parrot Social Pte Ltd, a consultation agency that specialises in Data Analytics through the use of Artificial Intelligence (AI) in predicting future trends for businesses and organisations. She is a participant of the ASEAN Youth Fellowship Programme and has been involved in community activism for the past 15 years. Her background also includes 10 years of experience in communications and public relations.

Annex B: Singapore's Approach to AI

In 2019, Singapore won top honours at the prestigious World Summit on the Information Society (WSIS) Prizes in Geneva. Its work on Artificial Intelligence (AI) Governance and Ethics was recognised during the World Economic Forum.

Singapore's AI Governance and Ethics initiatives aimed to build an ecosystem of trust to support AI adoption. These include: (i) Asia's first Model AI Governance Framework released in January 2019; (ii) an international and industry-led Advisory Council on the Ethical Use of AI and Data formed in June 2018; and (iii) a Research Programme on the Governance of AI and Data Use established in partnership with the Singapore Management University in September 2018. These initiatives advance Singapore's vision to be a leading Digital Economy and Smart Nation through balancing business innovation with consumer trust and confidence in adopting AI.

The model framework maps key ethical principles and practices that apply to AI deployment processes across these four areas:

- 1. Internal Governance Structures and Measures: Adapting existing or setting up internal governance structure and measures to incorporate values, risks and responsibilities relating to algorithmic decision-making
- **2. Determining AI Decision-making Model:** A methodology to aid organisations in setting its risk appetite for the use of AI determining acceptable risks and identifying appropriate decision-making models for implementing AI
- **3. Operations Management:** Issues to be considered when developing, selecting and maintaining AI models, including data management
- **4. Customer Relationship Management:** Strategies for communicating to consumers and customers, and the management of relationships with them

Minister for Communications and Information Mr S Iswaran said, "Singapore's win of the WSIS Award is affirmation of our approach that AI practices must be transparent, explainable and fair. These are important principles that will guide businesses in implementing AI solutions that are human-centric, while spurring innovation in a digital economy."

At an organisational level, it would be important to build trust and confidence. With regard to the use of AI at the workplaces, employees need to understand the implications, especially its application and benefits in their work processes.

At the community level, it is then important to 'demystify' AI. Questions like, 'what could it do? and 'how does it apply to everyday life?' debunk myths and highlight its beneficial uses upon society. These questions also highlight the community's concerns of data and privacy implications when using AI.

Thus, Singapore has to strike a balance in the realm of data regulations. This is to ensure that personal data is protected while promoting business innovation, so that the rights of organisations to collect and use data for product innovation and service improvements are upheld as well. The model framework thus assists companies in navigating the out of bounds (OB) markers and help open up a 'flexible' space where innovation can flourish while safeguarding personal data.

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Using Lean Principles to Innovate in a Post-COVID-19 World

by Ms Liyana Binte Muhammad Fauzi

Abstract

The current pandemic has created uncertainty and impacted cash flow and resources for many organisations — both for-profit and not-for-profit. As a result, in a climate where organisations must be frugal, leaders will want to be sure that the time and money invested in innovation activities will be impactful. Embarking on innovation may seem necessary yet risky. Given the risks of innovation activities, organisations may be in a dilemma of whether to explore new ideas or hold back. Hence, the critical question is, how can organisations innovate and explore new ideas without wasting resources?

Lean Start-Up

In a post-COVID-19 world where there are no clear answers, organisations may have to think of themselves as start-ups that operate in a space with limited information.

Eric Ries coined the term "Lean Start-Up" in his book of the same title – inspired by Toyota's Production System which discovered that small batches made their factories more efficient. Similarly, Lean Start-Up also suggests that innovation can follow a process that reduces wastage of resources by adopting the Build-Measure-Learn approach. The Build-Measure-Learn approach is akin to the scientific method we learnt in school – the process of observing, making a hypothesis with limited information, experimenting and analysing test outcomes to determine next steps.

Various organisations such as DropBox, P&G and 3M have adopted the Lean Start-Up approach. DropBox generated 5,000 subscribers by publishing videos showing how the service would work (Eisenmann et al., 2014). Instead of developing a prototype, which would have taken much more time and effort, Dropbox used videos as a Minimum Viable Product (MVP) to showcase the main idea behind the file sharing service. The videos proved that the idea was worth pursuing, because in a single day, DropBox added 75,000 more early adopters to their mailing list.

MVP and Validated Learning

With Build-Measure-Learn, organisations "build" an MVP – which can be any medium that can explain the idea well, such as the video in Dropbox's example, demonstrating the main idea or feature to get user feedback at the earliest onset to validate the MVP's hypothesis. Testing an MVP with real users will enable organisations to test assumptions in the fastest, and least expensive, way. Feedback and data from the MVP are then used to "measure" the reception to the MVP in order to "learn" and "build" again for further testing. At the measure stage, the Lean Start-Up Methodology promotes the use of innovation accounting where it is important to select key metrics that can help measure progression, and not be distracted by vanity metrics that look good but do not provide any insight.

With each iteration, organisations should check if they are on track to meeting their objective; here they can decide to either pivot (to try a new tactic) or persevere (to continue the current path). With this incremental approach, organisations are listening to and engaging their consumer base to verify their hypothesis based on actual user needs, and not just implementing based on assumptions. In addition, the incremental approach reduces wastage as resources are invested only when there is a need to do so.

In my current role as a Product Manager, getting user feedback is key to the success of a product. Recently, we had to build a dashboard to report on project metrics. Collecting all the data and developing a digital dashboard would have taken at least a month. Instead, to get feedback from our users quickly, we used a simple PowerPoint slide to show what the dashboard could look like and how the data would be presented – we did not even use real data!

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We then shared this PowerPoint slide with our users to get feedback and generate more ideas on how the dashboard could meet their needs. This shortened the time for getting feedback and gave us real insights into what the users wanted for the dashboard. The early feedback also helped us identify features of the dashboard to proceed with, and features that we should consider dropping.

Resiliency through agility

As we adapt to an uncertain COVID-19 world, being nimble in adapting to the uncertainties around us will be a key characteristic of resilient organisations. The questions that organisational leaders will face in a post-COVID-19 world will revolve around the needs of its users or customers – how to meet those needs; how to engage users or customers whom they may never meet in person; and how to deliver new initiatives and products faster, without losing impact.

Organisations should carefully consider these five steps towards adopting the Lean Startup approach:

1. Get personal buy-in

The first step is to secure buy-in from the team – this is key as the Lean methodology is about cultivating an environment with shared leadership where organisation members contribute to continuous improvements.

2. Experiment early

The French philosopher, Voltaire, said: "Perfect is the enemy of good". Leaders should break out of the mindset of being perfect when pushing out new ideas. Adopting this mindset at the leadership level would cascade down to others within the organisation. A safe space to raise raw ideas within the organisation will set the stage for engaging external users for early feedback.

An example would be the distribution of masks, that the Singapore government had to execute when COVID-19 hit. A team from GovTech recognised the importance of having accurate information and raising awareness of the location of the mask distribution centres. They worked on developing a digital solution, and within twelve

hours, the team rolled out its first MVP. The first iteration was a simple website which used data from the posters created by the town councils with information on where to find masks. The website went viral shortly after, thus reinforcing the need for a solution.

After receiving feedback, further iterations were made to enhance the features of the website. The MaskGoWhere experience demonstrated that the earlier an experiment goes out to the market, the quicker it can receive feedback to improve the solution so that resources can be saved.

3. Start small

Organisations will never have all the information they need to roll out a new strategy or product. The unpredictability of COVID-19 further exacerbates this. It is important, though, to start testing new products or strategies through experimentation. Organisations should consider using MVPs to conduct experiments to test the validity or reception toward the main idea behind a product or strategy.

For example, the TraceTogether contact tracing app developed by the Government Technology Agency of Singapore started as a project by several software engineers who wanted to test the idea that Bluetooth technology could be used for contact tracing. Over a weekend in February 2020, a few software engineers got together to develop a demo that was used to push the concept further.

When it was launched in March 2020, the intention was to launch it on a small scale with key features. The algorithm behind TraceTogether also gradually improved through manual experiments to test the contract tracing capability. Up till April 2020, members of the team would walk around the office area and track their movements in a physical logbook.

Today, the TraceTogether programme has more than 2.7 million registered app users, and it has expanded to also include a physical token for the digitally excluded and interested parties who may prefer a physical device instead (TraceTogether, 2020). What was once seen to be an impossible idea – contact tracing through Bluetooth signal exchanges – is now a viable and effective programme, and more than 50 countries have expressed interest in developing a similar technology (Ryan-Mosley, 2020).

4. Seek feedback from real users

The concept of Build-Measure-Learn is to build solutions using limited information, while testing with actual users to obtain real feedback to validate ideas. As we are still generally operating in a work-from-home environment, organisations must find opportunities to observe real users interacting with your product or idea, and one way could be via video chats. While surveys and polls could be useful, having the opportunity to observe the user is more valuable as you would be able to uncover insights relating to how the customer interacts with the solution.

As a graduate student, I often conducted observational interviews to validate ideas. For example, for an internship with Shutterstock, my team and I carried out observational interviews to understand how users interacted with Shutterstock's developer portal. For these interviews, we gave users a task – to access the internet and find developer tools for incorporating media assets in their projects. Users then had to talk us through their process of completing the task without any interruption or prompting.

This exercise enabled me to observe parts of the process that the user had difficulty with, such as moments when a user exclaimed frustration out loud or spent too much time on a certain step, providing an understanding that would not have been possible through a survey or a poll.

5. Leverage the developer community

If you are considering rolling out a digital solution, there are many avenues to get help for starting fast and experimenting early before getting tied up in contracts with IT vendors.

For non-profit organisations with limited resources, reaching out to local developer community leaders to bounce off ideas for technology adoption may be a wise first step. The developer community today promotes open sourcing and collaboration, where developers share codes for others to reuse, and it is easier for the developer community to help build simple experiments to test ideas.

COVID-19 saw many ground-up initiatives by the citizens and developer communities who wanted to help. For example, KampungKakis is a neighbourhood buddy system to support those affected by the COVID-19 lockdown. KampungKakis was a collaboration between a Product Manager who has been in the tech industry for several years, and a grassroots leader – bridging the connection between tech and the mission (KampungKakis, 2020).

The platform matches volunteers with seniors, low-income families, or persons with disabilities, who live within a 20-minute walking distance of each other. They first piloted the idea in their neighbourhood at Gek Poh when the Circuit Breaker began. In just six months, they now have about 1,000 registered volunteers and are supporting close to 400 beneficiaries island wide.

Today, KampungKakis has formed partnerships with many other ground-up movements and non-profits to meet the spectrum of their beneficiaries' needs, such as Willing Hearts for daily meal assistance, and Nanyang Technological University Tutoring Club for free tuition.

Conclusion

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The Lean Start-Up philosophy is a change in mindset, and not a technological one.

The Lean Start-Up philosophy is a change in mindset, and not a technological one. In a post-COVID-19 world, a different approach, as illustrated by the Lean Start-Up philosophy, will enable organisations to produce far greater impact at a far larger scale. The earlier we can push an idea out to be validated by real users, the faster we can pivot or proceed, thus achieving impact in a shorter period. In a climate ripe

with uncertainty, and where organisations must be frugal, leaders will want to make sure to make the right decisions progressively instead of putting all eggs in one basket and hoping for the best. This will enable organisations and leaders not just to survive but thrive in this new normal business environment.

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The earlier we can push an idea out to be validated by real users, the faster we can pivot or proceed, thus achieving impact in a shorter period.

Author's Biography

Liyana Binte Mohamad Fauzi is a Senior Manager in the Strategic Planning and International Division at GovTech, where she studies developments in Digital Government and Smart Cities through several engagements with international organisations. During her free time, she volunteers with the The Codette Project which is an initiative that aims to enable more minority women to enter the tech industry. Her interest includes exploring how technology can further support the betterment of lives.

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Embracing a Tech-centric Future:

Adopting a Counter-Intuitive Approach

by Mr Shazly Zain

Abstract

A post-COVID-19 society will find itself in a tech-centric future. As technology advances and becomes commonplace in everyday life, employment in a tech-centric future will be different from employment today. It is therefore vital that the Malay/Muslim community ensures its members are comfortable with technology and have the necessary skills and attitudes to thrive in a tech-centric world. This article proposes three recommendations that seemingly run contrary to achieving a tech-centric tomorrow: an emphasis on informal education, promoting non-STEM related courses and tapping on the elusive entrepreneurial spirit in the Malay/Muslim community.

Understandably, most people are apprehensive on the utilisation of things and ideas that are new such as digitalisation, robotics, genetics and artificial intelligence (AI). Perhaps, their apprehensions were shaped by pop-culture's dystopic imageries of Skynet, I-Robot and Ultron but such suspicions may have some basis. With COVID-19, privacy concerns over location-based tracking devices and applications such as TraceTogether had emerged. In addition, COVID-19 exposed the fragility of Singapore's job and labour markets where there was an over-reliance on foreign talent in critical industries such as technology. While Singapore's open, globally integrated economy had previously attracted and retained the best talents within its shores, the sudden closure of borders, location lockdowns and abrupt termination of jobs have stemmed the fluid circulation and flows of goods, people and services. Indeed, integration creates efficiency gains but it also exposes a system's fragility (Low, 2020).

A post-COVID-19 world will likely be a tech-centric one with technological advancements and innovations. Interestingly, people and technology are still required to work together as a team. Although technology is designed to augment, it is unlikely to replace people. As an enabler, technology analyses huge amounts of data at high computational speeds, outperforming people within well-defined parameters and calculated simulations. For technology to reach its fullest potential, people need to tap on their adaptability, creativity and social skills to find a viable solution. When harnessed in a constructive way, technology has the potential to uplift communities, create new jobs and improve people's quality of life. The opposite is also true. It is therefore critical for the Malay/Muslim community to have an in-depth appreciation and understanding that future employment will be different from today's employment.

Overcoming challenges in pursuing education

For the Malay/Muslim community to transition and pivot towards growth and technology sectors, it has to reflect on its current employment base and profiles. There is an overrepresentation in jobs characterised by low, hourly rates. Not surprisingly, these jobs are at risk of being technologically obsolete. In the 2015 General Household Survey, approximately 11 per cent of total resident workforce were Malays. Yet, 11 per cent of Malays were machine operations, 15.5 per cent for transportation and storage, 10.4 per cent for cleaning and 17.2 per cent for clerical support. A mere 2.34 per cent and 4.34 per cent of Malays were in the information technology (IT) and financial sectors respectively. Employees may need to put in more hours or even irregular hours to make a decent wage. Robust research in behavioural economics has shown that other related socio-economic factors such as education level, financial status and stress impact individuals' decision-making capabilities (Schilbach, Schofield, & Mullainathan, 2016). Due to changing circumstances, it is therefore challenging for important decision-making processes to be consistent and committed for these employees.

Coupled with the limited available time to themselves and interaction with new and unfamiliar support networks, these employees have less opportunities to pursue new skills or courses which may require longer commitments of their time. This is a concern as there is a need to refresh skill sets to constantly keep up with technological developments. As such, this article's recommendations on the various means of self-development place importance on learning essential skills like empathy and logical thinking, so that the Malay/ Muslim community is equipped to build networks within and beyond the community.

Informal education to prepare for a tech-centric future

Given the diverse nature of advanced technologies, it is important that people are equipped with the right skills to thrive in this new tech-centric world. Traditionally, formal education served as a platform to impart skills and knowledge which allows people to become gainfully employed. However, technology has upended that norm. In Singapore, tertiary institutions such as the Institute of Technical Education (ITE), polytechnics and universities are grappling with the rapid changes occurring in the working environment. Constant curriculum changes are a norm to ensure that graduates leaving these institutions find themselves relevant in their respective working environments.

It is important for communities to be strategic in their selection of new skills in a tech-centric world. The Malay/Muslim community in Singapore has rightly focused on improving outcomes in formal educational environments. In 2015, a respectable 6.15 per cent of Singaporeans with diplomas, degrees and other professional qualifications were from the Malay/Muslim community with 31,700 Malays attaining at least a diploma. However, traditional ladders of advancement through formal education systems may perhaps lag in adapting quickly to technological changes. Hence, there is a need for Singapore at large and the Malay/Muslim community to develop alternative pathways for critical thinking and creativity that will allow them to adapt to the world of the future. Therefore, there should be an emphasis on the importance of informal education.

Informal education can take the form of apprenticeships, internships and online courses. Informal education differs from its formal counterpart by focusing less on theoretical knowledge and more on practical skills and applied knowledge. In the IT sector, getting a Google Cloud certification, Coursera's IBM Applied AI Specialisation, or a Red Hat certification, which is arguably one of the most valuable certifications in the IT sector, can be personally learnt online and does not require formal education pre-requisites. Singaporeans can tap on the various SGUnited traineeships, SkillsFuture credits and online platforms such as Coursera and Skillshare. The Malay/Muslim community can also rely on additional support from MENDAKI SENSE, a social enterprise dedicated to life-long learning which provides a variety of courses at affordable rates. The Codette Project offers avenues for women of minority communities to pick up coding and other digital skills. These new skills will motivate many new entrants into the IT sector or encourage them to apply digital solutions to their existing jobs.

Educating beyond science, technology, engineering and mathematics

While it is tempting to focus on science, engineering, technology or STEM-related skills, upskilling for a tech-centric world involves more than STEM. In 2018, Microsoft's President Brad Smith shared that in a tech-centric world, computers will behave more like humans. Given that technology is ubiquitous in society today, and designed with a human user in mind, it is important to ensure that people maximise the potential of technologies.

Apart from a mathematical logic approach in STEM subjects, there is a need to consider other forms of logic such as formal, informal, or symbolic logic. These forms of logic are taught in other social sciences and humanities courses. Social sciences and humanities

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Social sciences and humanities will be more important as humans interact with newer technologies such as AI.

will be more important as humans interact with newer technologies such as AI. Skills such as critical thinking and creativity and subjects like psychology and anthropology will be just as important as STEM subjects in ensuring people remain resilient in a tech-centric world. An overreliance on mathematical logic and reasoning could inhibit Singaporeans' abilities to adapt to advancing technologies, putting the entire country and society at risk of being irrelevant. While education policies evolve to incorporate informal education with formal education, the importance of diversity in different disciplines cannot be forgotten.

Entrepreneurship lessons by the community, for the community

Home-based businesses may prove to be a unique advantage to the Malay/Muslim community. While recent statistics and breakdown of ownership by race are unavailable, there

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While providing an important source of income to low-income families, home-based businesses reflect the entrepreneurial spirit in the Malay/Muslim community.

were 20,600 home-based businesses reported in 2013. The numbers are inferred to be significantly higher in 2020. While providing an important source of income to low-income families, home-based businesses reflect the entrepreneurial spirit in the Malay/Muslim community.

The SGUnited Traineeships encourage hands-on learning of technical skills from an expert. Perhaps, using this format, a potential mentoring scheme could be formed to promote the development of home-based businesses within the Malay/Muslim community. Members of the Malay/Muslim community could be given seed money through small business grants and loans, community-level microfinancing and venture capital to develop a business within six months. Existing grants and loans offered by Enterprise Singapore could be tapped on as part of the financing programme.

Community-based microfinancing operates on a rotating savings and credit system. Typically made of friends, relatives or community members, they mobilise funds for business ventures. Their main advantage is that they are formed by people who are known to one another. Community-based microfinancing has seen success in Sri Lanka, India and South Africa, where financial resources are less available to lower income or disenfranchised communities.

Drawing from the natural pool of entrepreneurial talent in the Malay/Muslim community, entrepreneur mentors could provide business traineeships to potential entrepreneurial trainees, teaching important lessons such as raising funds for proposed ventures, marketing and cultivating customer relations.

The dense business networks could provide a positive business ecosystem and generate employment opportunities in the community. In the 2015 General Household Survey, 6.43 per cent of employed Malays were self-employed or employers themselves with the national average being at 13.6 per cent. The potential for new businesses being created organically by the Malay/Muslim community to provide entrepreneurship or employment opportunities for the community provide exciting possibilities.

The natural pool of entrepreneurial talent in the Malay/Muslim community also allows the value-adding of career counselling for Malay/Muslim organisations. For instance, MENDAKI, AMP Singapore and The Codette Project have already conducted student and professional network events to connect students and budding professionals to established entrepreneurs and professionals with diverse backgrounds. It is important to ensure aspiring members of the Malay/Muslim community receive constant guidance in their endeavours as Singapore heads towards the tech-centric future.

Conclusion

Technological advancements and challenges brought by COVID-19 should not deter but be regarded as opportunities. Though one appreciates technological developments, these should often be viewed at different angles and approaches to maximise potential. Advanced technology will create new employment opportunities and the Malay/Muslim community should seize those opportunities. It remains possible to promote self-development through both formal and informal education, taking into consideration the merits of different types of thinking and experiences.

Author's Biography

Mr Shazly Zain is a Research Assistant in the Governance and Economy Department at the Institute of Policy Studies (IPS). He specialises in economic and technology related topics such as state-business relations, political economy in Asia, AI adoption and ethics. Shazly's past experiences include stints at the European Union Delegation to Singapore in the Economics and Trade section and the ASEAN University Network (AUN) in Thailand. His work there focused on international trade, technology adoption in Singapore and promoting education institutional development in South East Asia using technology.

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COVID-19 and its Impact on Future Singapore Asatizah

by Dr Norshahril Saat

Abstract

Two months after the first COVID-19 infection was reported in Singapore, the Ministry of Foreign Affairs (MFA) urged Singaporeans living abroad, including students, to return home. While a majority of those studying in the United States and the United Kingdom returned immediately, those in Egypt and Saudi Arabia were initially reluctant to do so and were then unable to leave when all commercial flight services were suspended. On 7 April 2020, with assistance from the MFA and the Islamic Religious Council of Singapore (MUIS), 211 Singaporean students from Al-Azhar University in Cairo returned. Subsequently on 24 April, students studying in Saudi Arabia followed suit. The factors for the students' delayed decision to return were manifold, which included worries about monetary costs, uncertainties over the completion of their degrees as well as lockdown conditions back home. More generally, COVID-19 also tested graduated seniors in different ways. For example, freelancers who teach religion part-time are struggling to make ends meet, following mosque closures and class suspensions. Most have taken their classes online, but face stiff competition in an already saturated market. The severely reduced job opportunities at this time may induce some Islamic Studies graduates to consider acquiring skills for work in secular sectors.

Introduction

On 17 March 2020, Singapore's Ministry of Foreign Affairs (MFA) issued an advisory encouraging all Singaporeans studying overseas to return home (MFA, 2020). Within a week, a large number of Singaporeans residing in the United Kingdom and the United States returned home, and they were required to observe 14-day stay-home orders at hotels (Chew, 2020). Students pursuing Islamic studies in Middle Eastern universities were also asked to return. The governments of Egypt, Jordan and Saudi Arabia – the countries that host some 400 Singaporean students – had also begun to shut their borders and enforce curfews.

While there are no official reports to confirm the numbers, it is believed that a majority, if not all, Singaporean students in Jordan had returned home. There had been 178 students enrolled in Jordan universities in total: 78 in Yarmouk University and 56 in the University of Jordan (Nurulkhasanah, 2020). On 7 April 2020, 211 students studying in Al-Azhar University in Cairo arrived in Singapore with assistance from the Islamic Religious Council of Singapore (MUIS) and MFA (CNA, 2020). There were about 250 students studying in Al-Azhar University (Nurulkhasanah, 2020), some of whom had felt that it was safe to remain in Egypt, but changed their minds after the situation worsened. Similarly, a number of students studying in the Islamic University of Madinah (IUM) decided not to return to Singapore at first, even though Saudi Arabia was also badly hit by the virus. Visits to the country have already been banned, and visas for *umrah* (minor *hajj*) pilgrims to Mecca have been suspended. Compared to other countries in the Gulf, Saudi Arabia has, to date, one of the highest number of infections. It was only on 24 April 2020 that 40 students studying there returned, coming back with their dependents (Tan, 2020).

Singapore's Malay/Muslim community has come forward to assist these affected students through donations and other relief measures. COVID-19 has spread to hit the Islamic teachers' sector as well, affecting both the undergraduates and their seniors who have graduated. This article examines the challenges that current undergraduates and graduates of Islamic studies face in the midst of the COVID-19 crisis. Focusing on students who are studying in Egypt and Saudi Arabia, it highlights their anxieties upon receiving the request to return home. Their fears include the uncertainty over whether they can graduate on time, as well as the costs of flying home to Singapore and back once the pandemic is over. Harsh conditions enforced by the Egyptian government throughout the lockdown were also another concern.

Challenges of returning home

The decision by the Egyptian and Saudi Arabian governments to lock down their cities took a toll on Singaporean students. Not only had the universities shut down, so had daily life. Four days after the closure of schools, the Abdel Fatah al-Sisi government suspended all flights in and out of the country, followed by transport on highways (The Arab Weekly, 2020). Thus, Singaporean students could not fly home, and it was only with MFA's assistance that 211 students in Egypt were able to return. This episode is a repeat of the 2013 political crisis, as students then were also asked to return home (Trager, 2016).

Of those who remained, their reasons for staying put are structural rather than theological. The cost of returning home can be one of the reasons, to the extent that MUIS has pledged to use money collected from the zakat¹ (tithe) to help affected students purchase flight tickets. MUIS announced this commitment in response to ongoing online crowdfunding efforts by the Malay/Muslim community to help these students return (Berita Harian, 2020a). On 23 March 2020, the Parent and Alumni Support Group for Al-Azhar University Undergraduates (AWSALA) made a public appeal for donations to help parents with children studying in Egypt and Jordan bring them back to Singapore. The appeal was made through their Facebook page. The letter stated,

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...there are concerned parents who wish to get their children back home to Singapore, unfortunately, not all parents can afford the flight tickets. AWSALA is making an appeal to raise funds for families who are financially affected to bring their child back to Singapore." (AWSALA, 2020)

The Singapore government had already assisted by chartering a special flight to bring them back. The students had to pay \$900 for economy class seats and \$2,200 for business class seats, both of which are lower than average prices during pre-COVID-19 situations2.

The more pressing problem for the students was whether they could resume their studies after the situation was back to normal. The university had not communicated with them about the resumption of their examinations and, for that matter, whether they could graduate. This was one reason why some of them decided to stay put instead.

Initially, students who were currently in Madinah did not seem to be affected by the call to return. To begin with, there was not much media coverage about their situation. An article in Berita Harian ran a paragraph of 106 words indicating that Singaporean students in Saudi Arabia were resolute in their decision to stay where they are. On 5 April 2020, the media reported that learning is carried out as normal via online platforms and home-based learning (Berita Harian, 2020b). On 24 April 2020, with assistance from the Singapore Embassy in Riyadh and the Singapore Consulate-General based in Jeddah, some 40 students and their dependents returned to Singapore. The students might have to defer their studies and even have their graduation delayed.

What can they learn from their seniors?

While most of the students in the Middle East had safely returned home and completed their mandatory 14-day stay at home order in hotels, the COVID-19 crisis has also hit those who have graduated. Now, the more pertinent issue is how COVID-19 has impacted those who are currently considered to be the pool of *asatizah*, or religious

¹ The zakat is an obligatory tax paid by Muslims.

² The figures are quoted on the Perkemas Facebook page.

teachers. While COVID-19 has affected many sectors such as tourism, aviation and the gig-economy, freelance religious teachers have also been badly hit by mosque closures since the middle of March, almost a month before the government imposed the Circuit Breaker measures on 7 April 2020. Mosque closures, followed by the suspension of Friday services and classes, have forced these graduates to conduct their classes online. As in September 2020, Friday prayers have resumed but congregation is limited to 100 persons at any one time in a mosque.

When mosques were required to close in mid-March, a couple of weeks before the Singapore government implemented the Circuit Breaker, part-time *imams* lost the ability to earn additional income by leading Friday services and daily prayers. The fact that the Circuit Breaker coincided with the month of Ramadhan, where in normal years *asatizahs* could earn more income due to increase religious activities, further hit them badly. Even a full-time *imam* at

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a local mosque had come out publicly to share how his income has been badly affected. He shared that his full-time job as a mosque officer did not pay enough and that he was unable to manage without supplementary income from part-time work (Zulaiqa, 2020). In addition, all classes had also been suspended and had to be moved online. COVID-19 has thus pushed the *asatizahs* to embrace digital platforms to ensure sustainable incomes.

However, conducting classes online meant that the religious teachers were facing greater competition due to a saturation of such religious classes online. Some conducted their classes on Facebook pages administered by mosques, while others conducted them on their personal pages. Already, they had to compete with established asatizahs in Singapore, such as MUIS officers and teachers who already had an audience base in mosques. There is, at present, an online initiative called the Asatizah Youth Network, where 27 graduates are tasked to create online content for the Muslim.sg website, which targets millennials. However, it remains doubtful how many more the network can recruit. Popular preachers from Malaysia and Indonesia, as well as international preachers like Nouman Ali Khan, Ismail Menk and Zakir Naik, further saturate the online preaching scene. Malaysian religious teachers also took their classes online after their government enforced a lockdown from 18 March 2020. A large number of Singaporeans also follow their sermons because of similarities in the language (Bahasa Melaya) used. Some of these Malaysian teachers also conduct Quran lessons online. Furthermore, the number of "likes" and "page views" alone is not indicative of how these online classes are received. Community acceptance of these classes differs, and a high volume of followers does not guarantee the amount of donations.

The public came forward to assist the asatizahs, but this was limited to donations from

the Malay/Muslim community only. Again, donations were spread thinly to mosques, madrasahs, religious teachers and freelancers. The Singapore Islamic Scholars and Religious Teachers Association (Pergas) also pledged \$320,000 to help religious teachers affected by COVID-19 (Berita Harian, 2020c). A Pergas-registered teacher could receive between \$940 and \$2,200 in total for the next three to six months, and non-Pergas members were entitled to between \$700 and \$1,150 for the same period.

Graduates who run travel agencies for *hajj* and *umrah* services were also hit hard because of new visa restrictions put in place by the Saudi Arabia government. No visas were issued for pilgrims for the month of Ramadhan, which was from 24 April until 23 May 2020. Pilgrimage during the fasting month is popular among Singapore Muslims and is a huge source of revenue for travel agencies. The situation was so dire that visa suspension stretched to include the *hajj* season, which fell between end-July and early August 2020. In the same year, the Saudi Arabian government restricted the annual event to only those already living in the country. In other years, the *hajj* gathers about three million Muslims in the world, including an estimated 800 Singaporeans.

With all these challenges in mind, fresh graduates from Islamic universities will have to find a niche if they want to survive in the industry. As such, they have been encouraged to consider other fields such as counselling and not confine themselves to theology. However, training a professional social worker and counsellor takes many years and resources, and professional degree programmes offered by the departments of social work at the National University of Singapore (NUS) and Singapore University of Social Sciences (SUSS) will take at least three years to complete. *Asatizahs* who wish to move into that sector must be prepared to undergo training from scratch, as their first degree had only dealt with theology, jurisprudence and the Arabic language.

Conclusion

The COVID-19 pandemic has led to uncertainties for Islamic studies undergraduates about whether they can complete their studies. In fact, graduates have been hit even harder, with many suffering a reduction in incomes and being forced onto online platforms.

There is plenty that undergraduates can learn from their seniors. Although many have already established themselves in the online preaching world with some assistance from the Malay/Muslim community, it is still important to ask how many more Islamic studies graduates the industry can absorb. The religious studies sector will have to ask hard questions such as whether the supply of graduates is more than what the market can currently support.

While one solution is to encourage fresh graduates to learn new skills through undergoing full, and not-partial, training, it is also an opportunity to reflect on Islamic education in general. Most certainly, more time needs to be invested on career guidance for madrasah students before entering university. Those who have just completed their pre-university diplomas or certificates must decide whether or not they want to pursue a career as

religious teachers. If not, they might be better placed in non-Islamic studies courses and degree programmes such as those in social sciences, humanities, languages, engineering and sciences. COVID-19 has forced the Malay/Muslim community to ask these hard questions and to think about allocating our resources effectively.

Author's Biography

Dr Norshahril Saat is a Senior Fellow at ISEAS-Yusof Ishak Institute. He is a recipient of various awards, such as the MUIS PhD Scholar Award in 2012 and the Syed Isa Semait Scholar Award in 2015. He received his PhD in International, Political and Strategic Studies at the Australian National University. His research interest includes Middle East influence in Southeast Asia and its geopolitical implications, as well as Malay heritage and culture.

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Ensuring Accessibility and Opportunities for Lifelong Learning in a Pandemic – From the Ground's Perspective

by Ms Nurin Nazurah Saifudin

Abstract

News of the economic recession, retrenchment rates and new government schemes to tide people over during this COVID-19 crisis have dominated our screens. For some, privileges have been revoked. For others, the impact of the pandemic is more severe. Fresh graduates who are entering the workforce this year feel the pinch amidst many retrenchments and a shrinking economy. Many graduates from Institutes of Higher Learning (IHL) find their job hunts drawing blanks – seeing that job vacancies have reduced from 84 for every 100 job seekers to 71 this year, compelling them to take up freelance and account work such as delivery and private transport (Awang & Lee, 2020). Maybank Economists Chua Hak Bin and Lee Ju Ye predicted 150,000 to 200,000 job losses in Singapore this year, despite monetary payouts from the government (Phua, 2020). The economic impacts of the pandemic will be enduring. Even before the pandemic some professionals, managers, engineers and technicians (PMETs) with many years of experience in their industry find themselves retrenched as companies continue to cut back on manpower in order to stay afloat (Seow, 2020).

Thus, it is imperative for Singaporeans to inculcate a lifelong learning mindset to ensure that they are resilient and adaptable to a volatile economy that is constantly subject to external pressures. In order to avoid redundancy and to keep one's skills invaluable, embarking on lifelong learning and upskilling oneself is imperative to tide the waves during these difficult times. However, how have we ensured that opportunities to upskill are accessible for all?

What the pandemic means for the Malay/Muslim community

The devastating economic impacts have been felt by the Malay/Muslim community. Members of our community in the lower income group who have already been economically vulnerable before the pandemic are now even more susceptible to retrenchments and plummeting incomes. Only 6 per cent of PMETs are Malays, while Malays make up 17 per cent of the rank-and-file industry – one of the industries most affected by the outbreak (Juhari, 2020). Meanwhile, 10 per cent of the Singapore Malay Chamber of Commerce and Industry (SMCCI)'s 850 members are home-based business (HBB) owners (Majid, 2020). These HBB owners, who are usually self-employed, were affected by the temporary ban on HBBs as part of Phase One of Circuit Breaker measures during the fasting month – a period where businesses for HBBs selling foods and snacks like Hari Raya cookies will usually boom. The ban has caused a significant reduction in income for many of these owners, who were hard-pressed to find an alternative source of income (Lai, 2020). As a result, HBB owners from the Malay/Muslim community were greatly affected by the COVID-19 outbreak.

However, the take-up rate for upskilling courses through the SkillsFuture Credit scheme has remained low, with only 8.4 per cent of Malay workers utilising this scheme to upgrade themselves (Juhari, 2020). This shows that although there are public assistance schemes available, it has yet to garner a take-up rate that will allow workers to fully harness the benefits that these upskilling and learning opportunities have to offer. This is a pressing concern because in this volatile economy, our community needs to ensure they can remain resilient against such pressures by ensuring that they have the necessary skills to retain their relevance in the workforce.

Lifelong learning as the key to standing out amidst job uncertainty and obsoletion

Managing Director of the International Monetary Fund (IMF) Kristalina Georgieva recently spoke of how job uncertainty has become increasingly pervasive in today's economy – with many jobs becoming redundant or displaced by technology, by extension, the skills one possesses will only "remain relevant so as to continue to make one employable" (Georgieva, 2020). This is especially pertinent where widespread technological innovation and disruption has occurred in many industries, making one's ability to attain job security an increasingly uncertain prospect. Many jobs are now easily replaced by state-of-the-art technology such as Artificial Intelligence (AI) (Kassim, 2020). Hence, the need to diversify and expand one's skill set becomes even more imperative in the advent of this climate of job insecurity which has been compounded by the COVID-19 pandemic.

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Diversifying and expanding one's skill set is especially relevant to students of IHLs who are due to graduate soon and enter a job market that has been battered by the pandemic. Students must diversify their skill set and competencies so that they are able to cast their nets wide during their job hunt and be able to explore opportunities in other sectors and industries.

Students can diversify or upskill by taking up courses in different disciplines through various online learning platforms such as Coursera, EdX, LinkedIn Learning and Google. These platforms offer a variety of courses from a vast array of disciplines such as Digital Marketing, Accounting, Coding, Data Analytics and many more. Platforms like Coursera and EdX partner with universities to offer online courses, of which some are either free of charge, subsidised by universities, or come at a price of about USD \$100-300 for a verified certificate upon completion of the course. Meanwhile, other platforms such as LinkedIn Learning and Google offer courses for both professionals and students looking to upgrade themselves to a higher level in certain skills or to gain foundational knowledge in a new skill or discipline, opening more doors for their career exploration in the future.

Ever since the implementation of Circuit Breaker measures, many have been forced into their homes, replacing traditional learning environments such as physical classrooms to virtual environments facilitated through web-conferencing platforms like Skype and Zoom. As a result, to fill their time, many have decided to take up online learning courses either to earn some credits or spend their time productively to upgrade themselves, by learning new skills and honing old ones. Platforms like Coursera have seen a 360 per cent spike in enrolments ever since the pandemic struck, given the surge of students seeking a productive means to spend their time while they wait for a sense of normalcy to return to their lives (Chaudhary, 2020). For example, Nanyang Technological University (NTU) have rolled out Massive Open Online Courses (MOOCs) over the course of the Circuit Breaker to allow students to complete modules that will count towards their degree transcript. Enrolling in new courses enables students to venture into different disciplines and subjects regardless of their major, thus allowing them to diversify their knowledge and skills during a period that requires one to differentiate themselves from others.

Our community should capitalise more on available schemes such as the Workfare Skills Support Scheme, SkillsFuture Credit scheme and online learning courses available through

the aforementioned platforms. These opportunities for lifelong learning have become a beacon of hope for those who intend to embark on lifelong learning and continuously upgrade themselves as an individual and worker.

A pandemic of privilege

As we resume our lives under the new normal, the inconvenience of certain safety measures, disrupted plans and having to move a majority of our daily activities online has drawn complaints. However, how many of us are aware of our privileged positions when making these complaints?

What many people may not realise is how this pandemic has starkly highlighted our privilege in being accustomed to such convenience and comfort, as compared to those who are not as privileged. An overwhelming majority of people in Singapore own a computer or laptop, and a whopping 81 per cent of the population have access to the internet (Statista, 2020). While it is easy for many of us to gain access to such upskilling and learning opportunities, we must be cognisant of the fact that there exist many people who need to capitalise on such opportunities but are hard-pressed to gain access to them.

These are people of lower income who live from paycheck to paycheck, rely on government assistance to get by, work long hours to make ends meet, and most times provide care for their dependents. While many of them could most certainly benefit from upskilling programmes that could earn them promotions and higher incomes, they are beset by a great number of challenges that may be overlooked by many.

A new initiative launched during the Circuit Breaker period, Mind the Gap, aimed to assist low-income women whose livelihoods have been disproportionately affected by the pandemic. The project was spearheaded by several social service agencies and non-profit organisations like AWARE and Beyond Social Services. Through an interview with the beneficiaries in September 2020 about their experiences with upskilling programmes, it was found that there were many barriers they faced to upgrade themselves which reduced their chances of improving their job prospects. Several challenges that the low-income groups may face that prevent them from harnessing these learning opportunities will be discussed in the next section.

Challenges to pursue lifelong learning

Parents working long shifts for up to 7 days a week had highlighted that they may not have time to go for training courses due to their urgent need for money, making them unable to afford any time off work. In addition to long work hours, some are also full-time caregivers to their children and elderly dependents, giving them even less time to set aside for training. This issue is especially pertinent to single parents, of which Malays make up a large proportion at more than 40 per cent (Mohammad, 2019). These parents face the additional time and financial burden of being a caregiver, on top of being the sole breadwinner. Their situations may be exacerbated by the lack of support networks that can

support their lifelong learning endeavours. For example, several of the Malay women from the project face the issue of not having time and alternative care arrangements that could enable them to go for courses. One of these women, who works as an elderly caregiver, has expressed her desire to go for full-time training courses for dealing with dementia patients. However, her need to take care of her two children who are beset with medical issues and the expensive cost of full-time courses prevent her from doing so. Thus, while low income people can benefit most from upgrading courses to earn higher wages, many of them are hindered by familial duties and the lack of support networks to do so.

Moreover, the underprivileged may not have the resources to facilitate upskilling. Functioning laptops, a stable internet connection and a conducive workspace to carry out work-from-home (WFH) or home-based-learning (HBL) arrangements may not be as easily accessible to the low-income. Some of the interviewees have had their internet services cut off due to their inability to pay outstanding bills, on top of other debts and arrears accumulating from unpaid rent and utility bills. Furthermore, those who live in cramped homes with

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Furthermore, those who live in cramped homes with family members living under the same roof – especially with young children – may find that their home environments are not a conducive space to learn, preventing them from gaining substantial benefits from these courses.

family members living under the same roof – especially with young children – may find that their home environments are not a conducive space to learn, preventing them from gaining substantial benefits from these courses. Some of the findings from the interview with Mind the Gap beneficiaries include the following cases:

- 1. An interviewee who lamented that her children's constant noise in their 2-room rental flat often gives her migraines, highlighting that stress from childminding and other environmental factors may adversely affect her ability to attend upskilling courses.
- 2. An interviewee who mentioned how she would prefer attending physical lessons as she finds herself unable to concentrate in online lessons. However, due to social distancing and crowd control measures, most physical training courses have been discontinued and moved online, which is an arrangement that is less feasible for some.

Such challenges are not limited to working adults. Students of IHLs who are from low-income households may also face the challenges in upskilling, especially if they bear some financial or caregiving responsibilities alongside their parents. Many students tend to take up part-time jobs during their course of study such as tuition, administrative work, retail, F&B and as such to earn extra pocket money to ease the burden on their parents. Furthermore, some may bear the responsibility of taking care of their younger siblings

when their parents are away at work, taking away their free time to take up new skills through online courses. This would prevent them from having the opportunity to diversify their skills and competencies that could increase their value in their workforce, compared to their peers who do not face such challenges to obstruct them from such opportunities.

The path forward: improving access to lifelong learning opportunities for the low-income

Thus, it is important for stakeholders such as policymakers, training institutions, IHLs and employers to be cognisant of such challenges faced by the low-income. To better accommodate to their circumstances and increase access to lifelong learning opportunities, stakeholders have been taking the right steps in the following ways:

1. Providing subsidised training opportunities to those in dire need

Currently, Workforce Singapore has implemented the Workfare Skills Support Scheme to offset the costs of training for low-wage workers. The scheme encompasses Training Allowances that compensate workers \$6/hour when they attend training courses in lieu of work and Absentee Payrolls which subsidise participating companies 95 per cent of costs to send their workers for training (Workforce Singapore, 2020a). While these measures are a step in the right direction, many employees still face structural and financial barriers to pursuing such opportunities. The allowances are not enough to compensate for their lost earnings which they may urgently need for meals, medical bills and outstanding arrears. Thus, Workforce Singapore could explore measures to improve the accessibility of these opportunities especially for those with caregiving responsibilities and medical conditions, as well as those who are lacking a conducive home environment for learning. Hence, with a more nuanced understanding of one's difficulties, low-wage workers are able to have access to assistance and opportunities that they truly need.

2. Opening satellite centres for career development in accessible locations

Workforce Singapore has placed satellite jobs and skills centres in various community clubs to guide Singaporeans with their career development (Workforce Singapore, 2020). Workforce Singapore could further collaborate with these community clubs to provide designated workspaces or classrooms for people to pursue courses in a conducive environment. As a result, Singaporeans pursuing courses online could come to these accessible workspaces to attend live online classes or complete modules within designated time slots while complying with social distancing measures. This ensures that they have an allocated time to upskill themselves outside of work or school commitments in a conducive environment.

3. Setting up of Skills Training Fund among self-help groups

Self-help groups such as MENDAKI and CDAC have set up their own Skills Training Funds dedicated for low income workers and students who wish to attend training and upskilling courses (MENDAKI, 2020; CDAC, 2020). These organisations can help to complement Workforce Singapore's efforts in widening access to lifelong learning opportunities for the low-income.

However, to further support low-wage workers who wish to upskill themselves, Workforce Singapore could explore establishing partnerships with social service agencies and respite care centres such as Daughters of Tomorrow, AWWA Rehab Day Care Centres and Jamiyah Senior Care Centre. This additional support would temporarily ease the caregiving burden of the workers or students who wish to go for upskilling courses. With the provision of free childminding and respite care services, their mental, physical and financial burden of caregiving are eased while they pursue lifelong learning. Thus, this could be a viable option in widening the support networks available to the low-income, especially single parents.

Conclusion

The pandemic has undoubtedly left impacts on everyone's lives. In the climate of increasing economic and job uncertainty, the government has made a push towards reskilling, upskilling and encouraging lifelong learning among professionals and workers who find themselves vulnerable to retrenchments. Our Malay/Muslim community must stay resilient and ride the wave by actively embarking on these learning opportunities, ensuring that they remain valuable and adaptable to an ever-changing workforce and volatile economy. While we are aware of these lifelong learning opportunities made available and accessible to us, we must still be cognisant of our privilege that has enabled us to stay afloat and embark on these opportunities thus far.

We must still be conscious of and look out for those who fall through the cracks and are unable to fully harness these opportunities, no matter how useful they may be. Stakeholders such as policymakers, training institutions, employers and IHLs could continue to reassess the accessibility of such learning opportunities for the low income, and how they can widen their outreach such that a more nuanced understanding of the different trying circumstances that individuals face is achieved. This serves to expand the accessibility of such opportunities to a wider group of people regardless of their unique circumstances, such that everyone is equally able to realise their full potential by being able to capitalise on these lifelong learning opportunities.

Author's Biography

Ms Nurin Nazurah Saifudin is an undergraduate from the School of Social Sciences at Nanyang Technological University (NTU). She is currently pursuing her Bachelor's Degree in Public Policy & Global Affairs and is a scholar under the NTU-University Scholars Programme. She was also an active volunteer at Mind the Gap – an initiative to help low-income families during the COVID-19 pandemic.

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Why it is Time for a Different Approach to Income Security

by Dr Ng Kok Hoe

Abstract

Since the start of the COVID-19 pandemic, we have seen how it exploits existing fault lines in society. The problems that have flared up in its wake can often be traced back to challenges that governments had failed to overcome before the pandemic. In Singapore, the emphasis on jobs and training in the COVID-19 strategy reflects long-running concerns about income security. Over the years, a 'work-first' approach that stresses work participation above all else and makes financial assistance conditional on finding work has not solved problems with employment security and wage adequacy, especially for older and self-employed workers. There is opportunity now to take a different approach to income security that recognises the limitations of work and makes better use of social policies as buffer against uncertainty.

Across the world, governments have launched extensive policy interventions in response to the COVID-19 pandemic. Suspension of international travel, business and school closures, and limits on social interactions would have been unimaginable a year ago but have become new norms now. Vast emergency budgets have been passed to fund social and economic policies even among governments that traditionally advocate welfare austerity.

In these unusual times, some observers see a chance to renegotiate the blueprints of entire welfare regimes. In public policy theory, crises are said to create 'critical junctures', where weaknesses in old institutions are exposed, political demands for change gain force, and it becomes possible to displace established thinking.

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However, systemic policy change is not inevitable. Policy institutions are remarkably durable and have ways to adapt in order to preserve the status quo. Faced with new problems, policymakers may innovate or repeat familiar strategies. Crises demand attention to immediate needs rather than comprehensive reform. They also put a strain on the fiscal resources required for welfare expansion. Policies introduced in extraordinary times may be withdrawn once the pressure subsides.

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Income security and 'work-first' policies

Since the start of COVID-19, we have seen how it exploits existing fault lines in society. In the United States, the disease has exacted a disproportionate toll on Black and Latino people, consistent with contemporary analyses of racial inequalities (Pilkington, 2020). The alarming number of deaths in elderly care homes in the United Kingdom has been linked to welfare austerity in recent years, alongside institutional and political factors (Savage, 2020). In these and other cases, the problems that have flared up in the wake of COVID-19 can be traced back to challenges that governments had been grappling with – and failed to overcome – long before the pandemic. They confirm that the old ways have fallen short.

In Singapore, jobs and training are a central plank in the COVID-19 strategy. There have been many unprecedented measures, like the Jobs Support Scheme (JSS) which subsidises employers' wage bills, the Self-employed Persons Income Relief Scheme (SIRS) to provide income support for workers in this category, SGUnited and SGSkills to promote training opportunities for new job seekers and those who have lost their livelihoods, and SGUnited Jobs to encourage and support hiring. The focus on jobs and training is necessary and timely. Many other countries are doing the same.

These measures also reflect long-running concerns about income security, to which the response has been a 'work-first' approach that stresses, above all, work participation. This has taken many forms over the years. Re-employment laws require employers to offer contract extensions to older workers. Subsidy schemes such as the Special Employment Credit, Jobs Credit Scheme and Wage Credit Scheme reduced wage costs for employers. The Workfare Income Supplement (WIS) boosts the earnings of older, low-wage workers. Since the establishment of the Workforce Development Agency in 2003, there have been many initiatives for skills 'upgrading', of which SkillsFuture is the latest iteration. Some of these schemes provided the frameworks for additional interventions during the pandemic.

As people were urged to seek income security in work, old age notwithstanding, income assistance outside the wage economy took on a similar work-first orientation. Through a long line of schemes from 2003, such as the Work Assistance Programme, the Self-Reliance Programme, Work Support and the ComCare Short-to-Medium-Term Assistance, financial help for low-income households became more explicitly contingent on the demonstration of effort to find work. Today, the Social Service Offices (SSOs) perform dual functions, giving limited assistance while redirecting people back into the workforce.

Such efforts did not solve problems with employment security and wage adequacy, especially for older workers who were more likely to be in part-time, short-contract and low-paying jobs. Research on elderly household budgets found that the Progressive Wage Model (PWM) and WIS allow older workers to reach merely a basic standard of living. But the PWM has not been extended beyond the initial three occupations since its introduction in 2013. Recent debates about workers facing a situation of low wages or no wages are sharp reminders that we have not done enough with wage protection before COVID-19 hit.

The nature of work has also been changing in dramatic ways, most visibly in platform jobs enabled by new technologies, such as private car hire and food delivery. In 2019, more than 210,000 people were categorised as own account workers, with half of them aged 50 and above, and around 40 per cent with, at most, a secondary education (Ministry of Manpower, 2020). They reported concerns with finding sufficient work and having no medical benefits. They are also not covered by the CPF except for Medisave contributions and face serious risks of income insecurity in old age. These issues were known before COVID-19 and will remain after SIRS ends.

A different approach

The overall picture is one of increasing 'squeeze'. Income security in Singapore is traditionally premised on continuous employment and stable earnings throughout adulthood. The CPF provides the mechanism for accumulating savings from work and converting these into retirement income, housing and healthcare. Employment disruptions and wage inadequacy mean that this economic life course no longer holds for everyone, posing troubling questions about the meeting of immediate and long-term basic needs. Yet policies have increased the reliance on work and even made income assistance for poorer people conditional on finding work.

As the COVID-19 pandemic wears on and the relief measures taper off, the risks and costs of income insecurity may grow. These risks and costs must land somewhere. If wages are volatile and insufficient for a basic standard of living, and public assistance is inaccessible and inadequate, then individuals and families will bear the costs by sacrificing some of the things we all need for a decent life. It is possible to choose a different approach, to build an income security system that is based on an accurate and realistic understanding of the limitations of work and makes better use of social policies as buffer against uncertainty. If we succeed, it will give people the stability they need to rebuild their livelihoods after this crisis and prepare for the future.

Author's Biography

Dr Ng Kok Hoe is Senior Research Fellow and Head of the Case Study Unit at the Lee Kuan Yew School of Public Policy. He also leads the Social Inclusion Project, a research programme that analyses the role of public policies in creating opportunities for participation. His research focuses on retirement income security, minimum income standards, social housing and homelessness.

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Overcoming Impacts of COVID-19:

Being Resilient Together

by Mr Haikal Sufiyan Haizan

Abstract

COVID-19 has emerged at the forefront of public discourse worldwide. Being an unprecedented event, governments around the world have been employing various resources to mitigate it. The pandemic has indeed affected everyone, from school-going children to working adults. However, the magnitude of the problems faced by each may be different. From many published reports and newspaper articles, those from disadvantaged backgrounds were seen to suffer more. Hence to ensure the scheme is targeted and effective, there is a need to dutifully understand the impacts of this pandemic. This article will explore the impacts of COVID-19 across the different aspects of the society and examine current measures employed to mitigate them.

Introduction

Global, Regional and Local Situations of COVID-19

As of July 2020, COVID-19 has 12 million confirmed cases worldwide. This pandemic is not just a health crisis. To date, many social and economic problems have emerged around the world.

Variations in impacts between different groups in the society were also apparent. For instance, in New York City, minority groups such as the African Americans have a higher death rates compared to the whites (Mays & Newman, 2020). This variation in death rates may be due to the jobs the minorities held and the weak accessibility to healthcare and quality housing (Ford, Reber, & Reeves, 2020).

The South East Asia region was also a hotspot for the virus. More than 170,000 cases were reported in July 2020. Given the asymptomatic nature of the illness and the lack of testing in most of these countries, unreported cases in the community continued to spread.

The virus has paralysed major parts of the economy. In South East Asia, employment in the informal sector accounts for as high as 70 per cent of a nation's employment level (OECD, 2020). With many countries implementing containment measures to curb infection rates, people from this sector have faced a loss of employment and income. Since the people who were employed in this sector have lower incomes, they are more vulnerable to the infection as they lack access to healthcare and quality living conditions.

Clearly, the negative impacts of COVID-19 are serious and may affect the people in the long run. Impacts such as economic disruptions, the social and economic struggles among the people and multitude of other pressing issues may further lead to more dire problems in the future.

Impacts of COVID-19

a. Political Impacts

The Singapore government has laid out various support schemes and programmes for the people. However, issues faced by the people are often complex. They overlapped between different ministries and required an integrated approach to be addressed holistically. On 22nd January 2020, an inter-ministerial taskforce was formed and led by then National Development Minister Mr Lawrence Wong. The taskforce's main objective was to ensure efforts across different government agencies were coordinated to combat the issues relating to COVID-19 (Baker, 2020).

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However, issues faced by the people are often complex. They overlapped between different ministries and required an integrated approach to be addressed holistically. On top of its annual budget, the government has also introduced three supplementary budgets to assist Singaporeans and businesses during the pandemic. In total, the government has allocated about \$\$92.9 billion into the four budgets (Ministry of Finance, 2020). The aim is to help the people from different layers of the community to improve their livelihoods. One of the supplementary budgets introduced was the Resilience Budget which was worth \$\$48 billion (Ministry of Finance, 2020). Key aims of the budget were to save jobs, to help businesses and to help the people to be resilient during the economic crisis.

Besides utilising monetary resources, the government had imposed measures to curb the spread of the virus. On 3rd April 2020, Prime Minister Mr Lee Hsien Loong announced that the country will implement a lockdown, also known as the Circuit Breaker, to contain the pandemic.

Under the charge of the inter-ministerial taskforce, the Circuit Breaker has transitioned Singaporeans into a new normal. With the need for social distancing and the prevalence of remote working, the pandemic has transformed the way people work. Jobs that were available prior to the outbreak, such as those in the hospitality and manufacturing industries, may have become non-existent. Many have seen a drop in their household income due to retrenchment or involuntary leave of absence. A survey conducted by Ipsos on 500 Singaporeans and permanent residents found that two-third of the respondents agreed that their household income has been negatively affected by the 'Circuit Breaker' (Ipsos, 2020).

In addition, the inter-ministerial taskforce was tasked to manage the rapid increase of cases in the foreign workers dormitories which has gathered public attention. The nature of COVID-19 requires the Singapore government and its agencies and ministries to think across lines rather than in silos. Since the issue involved the Ministry of Manpower, Ministry of Health and businesses, the taskforce had to find solutions to control the infection rates in the dormitories quickly. Some of the solutions include testing all workers for the virus (Tjendro, 2020) and relocating some workers to new residences (Koh, 2020). Six months later, the number of cases among foreign workers has stabilised. However, the government remained vigilant and has rolled out more measures such as piloting a rapid test for foreign workers in October 2020 (Ong, 2020).

Based on the number of daily community cases, it can be said that the Circuit Breaker was largely effective. It has managed to curb the spread of the virus in the country. Number of daily cases has dropped drastically from average of 1000 cases per day in April 2020 to single digit community cases per day in October 2020 (Gov.SG, 2020). The achievement was possible due to inter-ministerial taskforce's continuous assessment and actions despite the complex and uncertain nature of the impacts posed by the virus. The success of Circuit Breaker has also urged countries such as United States of America to implement similar intervention (Sheffield, Williamson, & York, 2020). Singapore is currently in its phase two of the Circuit Breaker. More businesses and economic activities have resumed. However, this does not reduce the efforts put in by the government to help the people in the country.

Collaborated Approach for the Community

There has been an increase in efforts to help Singaporean livelihoods affected by the pandemic, especially people from the Malay/Muslim community. The pandemic has shown that the Malay/Muslim community is taking proactive steps to be resilient together through SG Teguh Bersatu and engage multi-faceted challenges like education and jobs. A variety of measures and programmes have been introduced under the SG Teguh Bersatu initiative to strengthen the last-mile delivery of national COVID-19 support measures. Given the nature of the issues brought about by COVID-19 is multifarious, SG Teguh Bersatu also took a similar approach to that of the Singapore government of involving different organisations in its efforts to help the people. Driven by MENDAKI, MUIS and MESRA (People's Association), the initiative involves other partnering organisations to help the community. The initiative looks into religion support, family and student support and lastly businesses and employment support (M³, 2020).

As previously discussed, jobs of Singaporeans were widely affected. Hence, in addition to the existing programmes under the SG Teguh Bersatu, Minister in-Charge of Muslim Affairs, Mr Masagos Zulkifli, has taken proactive effort to set up a new taskforce to investigate employment and employability issues faced by Malay/Muslim workers. Led by Senior Minister of State, Mr Zaqy Mohamad, one of the key plans of the taskforce is to work closely with national agencies to help workers and fresh graduates to upgrade their skills and guide them to the suitable career opportunities.

b. Social Impacts

While COVID-19 is a physical ailment that affects the human's respiratory system, it also brings about negative psychological effects to the people. Living during the pandemic may lead to detrimental effects on the emotional, psychological and social well-being of the people. For instance, to curb the spread of COVID-19, people were expected to stay at home and were not allowed to meet and socialise with others. This social isolation and loneliness can increase stress and anxiety in the people (Centers for Disease Control and Prevention, 2020).

A survey by a Hong Kong-based consultancy, Sandpiper, conducted on 1,200 respondents across Asians countries found that 60 per cent of respondents from Gen Z complained about experiencing mental stress since the start of the pandemic (Consultancy Asia, 2020). Despite facing mental health strains, a substantial portion of these youths refused to voice out their concerns to the people around them (Consultancy Asia, 2020). Hence, without proper communication, it may bring about more grave issues concerning mental health in the future.



A survey by a Hong Kong-based consultancy, Sandpiper, conducted on 1,200 respondents across Asians countries found that 60 per cent of respondents from Gen Z complained about experiencing mental stress since the start of the pandemic (Consultancy Asia, 2020). In Singapore, recent reports on local newspapers have shown a dire increase in the number of mental health cases. On 9th May 2020, The Straits Times has reported that 40 per cent of the calls to National Care Hotline required psychological first aid (Goh, 2020). Out of this 40 per cent, about 1,000 of them needed further help from counselling centres or specialised helplines. From these figures it was apparent that intervention is especially critical during this pandemic.

Besides mental health, domestic violence has also increased. Both developed and developing countries have seen a significant increase in such cases since the pandemic started. For instance, Jingzhou, a city in China's Hubei province, has experienced threefold increase in domestic violence cases (Zhang, 2020). According to a research done on domestic violence during the Great Recession, it was found that increasing unemployment, financial stress and anxiety have been some of the factors that can aggravate domestic violence (Schneider, Harknett, & McLanahan, 2016). The increase in domestic violence cases also happened in Singapore. From 7th April to 6th May 2020, the Singapore Police Force has received 22 per cent increase in domestic violence cases (CNA, 2020). The efforts to address mental health and domestic violence cases have been further improved to involve more parties.

Efforts in the Community

Recognising the growing need to have a more "all hands on deck" approach in managing the wellbeing of the people, Prime Minister Lee Hsien Loong has established a taskforce

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Recognising the growing need to have a more "all hands on deck" approach in managing the wellbeing of the people, Prime Minister Lee Hsien Loong has established a taskforce that aims to tackle mental health issues among Singaporeans,

that aims to tackle mental health issues among Singaporeans. Currently, to assist Singaporeans with mental health and social issues, the National Care Hotline was launched by the Ministry of Social and Family Development. The 24-hour helpline is manned by 300 professionals from 50 agencies. The helpline offers emotional support to the caller and will direct them to social agencies if required. Besides the National Care Hotline, Samaritans of Singapore and Silver Ribbon Singapore have also opened helplines for people to seek help.

With the prevalence of mental health cases among youths in the country, a more upstream approach is needed to engage them. Under the Ministry of Education's revised Character and Citizenship Education (CCE) curriculum, students will undergo mental health lessons from 2021 onwards to help them recognise mental health symptoms and how to seek help and care for those with mental health issues (Co, 2020). Besides students, teachers will also be trained to identify students who have mental health issues. Such approach is crucial in helping the youths cope with mental health issues.

In our Malay/Muslim community, there is a need to fight stigma and dispel myths regarding seeking help for mental health or social issues. According to ClubHeal, an organisation

that helps people with mental issues, especially from the Malay/Muslim community, stigma surrounding mental health was one of the biggest barriers for people to seek help (Radiah, 2017). The stigma may cause mental health patients to ignore their problems or treat it lightly which may deteriorate their conditions further. In Club Heal, there are community-based efforts to reach out to those at risk with mental illness. Under the Community Resource Engagement and Support Team (CREST), the initiative aims to increase public awareness of mental health and promote recognition of early signs of mental health issues (Club Heal, n.d.). Hence a proactive approach is needed in reaching out to the community with regards to mental health.

c. Education Impacts

Besides the political and social impacts, COVID-19 has also affected the education sector. Schools were closed as countries were put on lockdowns to limit the spread of the virus. About 90 per cent of students in the world have been affected by school closures (United Nations, 2020). To ensure continuity in learning, schools around the world have ramped up their efforts to adopt digitalisation. While digitalisation is seen as a possible solution to the pandemic-induced issues in the education front, it did bring along its own set of challenges.

Digitalisation in the form of home-based learning has been beneficial to most of the students. Within a short notice, teachers and educators were tasked to prepare and deliver their lessons online. Parents were also involved in preparing their homes and supervising their children for home-based learning. Home-based learning has given students the opportunity to interact with their peers and teachers despite the closure of schools. This adaptability was helpful in preventing most of them from being socially isolated and falling behind in their academic progress (Elmer, Mepham, & Stadtfeld, 2020).

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However, home-based learning has also exposed the education system's inadequacies and inequities. Due to home-based learning, students needed to be largely dependent on their own resources to ensure learning continuity.

However, home-based learning has also exposed the education system's inadequacies and inequities. Due to home-based learning, students needed to be largely dependent on their own resources to ensure learning continuity. Some of these resources include access to internet connection, laptops and conducive learning area at home (Sheffield, Williamson, & York, 2020). While students from well-off families were able to continue their learning with little disruptions, those from less well-off households were put at a disadvantaged position (Lee & Yeo, 2020). For instance, there had been cases of students in Singapore calling up their

schools for food and students feeling overwhelmed by online learning (Davie, 2020a). Education observers in April 2020 has further noted that students from disadvantaged backgrounds may stay away from schools even after home-based learning has ceased due to their disrupted routines caused by COVID-19 (Tan S. H., 2020). Hence, these inadequacies

and inequities need to be addressed promptly to prevent other issues such as long-term absenteeism and increase in dropout rates. Globally, according to the United Nations it was projected that an additional 23.8 million children may drop out or have no access to school in 2021 due to COVID-19 (Feuer, 2020).

Addressing the Inequities

In Singapore, various ministries and schools continue to provide support for students during this pandemic period. For instance, in June 2020, then Minister for Education, Mr Ong Ye Kung, announced that schools have loaned out over 20,000 digital devices and 1,600 dongles to students who did not have such devices (Davie, 2020b). Furthermore, to ensure this issue is tackled promptly, the Ministry of Education has pledged that all secondary school students will receive personal learning devices by 2021. These efforts are not only aimed at ensuring lesser disruption in learning but also to foster social mobility (Yuen, 2020).

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The pandemic has shown that the students from financially disadvantaged families were unable to fully reap the benefits of online learning and were put at a precarious position. Given such circumstances, the Ministry of Education's UPLIFT Programme Office becomes increasingly crucial as ever. The Ministry of Education has set up The UPLIFT Programme Office in 2019. The programme aims to support underperforming students from disadvantaged families (Chia, 2019). Under the programme, identified students will be recommended to suitable community programmes or assistance. The setting up of the programme showed the commitment of the government to social mobility and helping students develop holistically in the long term.

Beyond the UPLIFT programme, students especially from disadvantaged backgrounds should be supported throughout their academic pursuit to realise their potential. Equity in education begins with good early childhood education and continues as students move along the academic pathways and into their respective careers. There are already other programmes that supports students such as the KidSTART that ensures every child is given opportunities to have a good start in their academic journey.

MENDAKI has also been actively helping Malay/Muslim students in meeting their educational needs. In April, MENDAKI lent laptops to students to ensure they have little disruptions during their home-based learning. Besides securing laptops for the students, MENDAKI has also spent a huge portion of funds on financially helping ITE students

and reopening the application for the Tertiary Tuition Fee Subsidy (ITFS). Hence, while the pandemic has brought about problems in the education sector, it has also exposed areas which the government, schools and community need to continually address to ensure the educational inequalities were not exacerbated.

d. Economic Impacts: Employment and Employability

In June 2020, Singapore entered the second phase of reopening the economy. Singapore's industrial production has increased for a second consecutive month in September 2020 due to the promising rebound in the biomedical and pharmaceutical industry. The Singapore economy may potentially be on the right track for recovery albeit slowly (Subhani, 2020a).

The fight with COVID-19 is far from over. The pandemic has still paralysed the global economy and disrupted the livelihoods of many worldwide. Industries such as tourism, hospitality and the aviation industry have all been involved in laying off and furloughing their staff to minimise their costs. In the United States, global corporations have announced 200,000 job cuts globally in October 2020 (Bloomberg, 2020). Worryingly, 5,280 Singaporean workers have been retrenched in the first half of the year (Heng, 2020). The retrenchment of these workers does cast a shadow on the shaky recovery of the global economy.

The Singapore government was concerned about the livelihoods of low wage and gig economy workers. A movement by gig economy workers, "I Lost My Gig", in Singapore and Australia found that a total of \$215 million has been lost as of early April 2020 (Loh, 2020). As mentioned besides gig workers, low wage workers have also been affected by the pandemic. Based on the Ministry of Manpower's Labour Market Report in September 2020, non-PMET workers made up 49 per cent of total number of locals retrenched in the second quarter of 2020. The figure suggest that more retrenchment has occurred among low wage workers (Seow, 2020). One possible reason is these vulnerable groups of workers were mostly employed in sectors that will be affected by long term structural changes. Hence, there is an urgent need for them to take on careers with better long-term prospects.

Despite the dire economic situation and many jobs at risk, the take-up rates for some of the government support schemes have been slightly lacklustre. For instance, out of the 6,500 training slots available under the SGUnited skills programme, SkillsFuture Singapore has only received 1,300 sign ups as of July 2020 (Awang, 2020). Moving forward, more efforts can be done to promote and increase the outreach of such initiatives.

As the pandemic continues to wreak havoc in the global economy, there were certain sectors that have been able to withstand its impacts. The financial and information and technology (IT) sectors have managed to weather the impacts of the pandemic well. According to the Monetary Authority of Singapore, the financial sector has registered a 5 per cent growth in the first half of 2020 despite the gloomy economic backdrop (Aw, 2020). These sectors have evidently adopted digital transformation in their daily operations in the form of increasing telecommuting, virtual conferences, online banking, utilising Internet of Things and big data (Nam, 2020). Since the financial and IT industries were able to withstand the

negative impacts from the pandemic, current job seekers should be encouraged to find ways to join such industries.

According to the General Household Survey in 2015, only about 6.6 per cent of the Malay/Muslim community were employed in the financial and IT industries. Conversely, a higher percentage of the community were employed in the wholesale and retail trade and transportation and storage sectors. These two sectors have registered negative growth rates in the second quarter of 2020 with reference to table 1. Furthermore in 2015, compared to the whole population, there were more Malay/Muslim workers employed in lower skilled jobs such as clerical support and labourers (Table 2).

Industries	Percentage of Malay/Muslim Workers	Percentage of Sectoral Growth Rates in 2 nd Quarter 2020
Transportation & Storage	15.5	-39.2
Wholesale & Retail Trade	11.0	-8.2

Table 1: Percentage of Malay Workers by Industry and Sectoral Growth in Second Quarter 2020, General Household Survey 2015 & Ministry of Trade and Industry's Economic Survey of Singapore Second Quarter 2020

Occupation	Percentage of Malay Workers	Percentage of Resident Workers
Associate Professionals & Technicians	20	20
Service and Sale Workers	18	12
Clerical Support Workers	17	12
Plant & machine Operators and Assemblers	11	7
Cleaners, Labourers & Related Workers	10	7

Table 2: Percentage of Resident and Malay Workers by Occupation, General Household Survey 2015

From the figures mentioned previously, there were fewer Malay/Muslim workers employed in the growth industries. Seeing how beneficial the growth industries were, more job seekers and mid-career individuals should be encouraged to join them. Besides moving to the growth industries, Malay/Muslim workers should also be proactive in upgrading themselves to ensure their relevance in the economy. For instance, having skills in data competencies is beneficial as 90 per cent of employers showed keen interest in hiring employees who are data literate (Subhani, 2020b).

Based on a survey done by MENDAKI's Research and Planning Department in 2020 on 200 youths, 9 in 10 youths believe in the importance of upgrading their skills. The high level of awareness to skills upgrading is critical as it showed that they know the landscape and requirement of the job market. However, awareness alone is not enough. Malay/Muslim workers should actively seek out opportunities to improve themselves. As of October 2020, Second Minister for Education, Dr Maliki Osman, said that approximately 83,000 Malay/Muslim individuals have utilised their SkillsFuture Credit. According to Dr Maliki, while

the number was encouraging, he hoped more members of the community would utilise it by translating their positive beliefs and aspirations into actions such as taking advantage of the SkillsFuture Credits.

The current schemes such as SGUnited Jobs and Skills package can be utilised by job seekers if they are interested in being employed in the growth industries. The package tailors to different experience profiles from fresh graduates to mid-career individuals.

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To better assist the Malay/Muslim community, organisations such as SENSE has also organised career fairs (virtual and physical), career helplines and skills programmes for the community. The responses received for programmes were encouraging.

To better assist the Malay/Muslim community, organisations such as SENSE has also organised career fairs (virtual and physical), career helplines and skills programmes for the community. The responses received for programmes were encouraging. SENSE reported that its recent physical career fair at Marsiling Community Centre in October 2020, has attracted 141 job seekers. Since COVID-19 has affected the household income of many families, AMP Singapore has ramped up their efforts to help these families. In addition to their current assistance schemes, AMP has announced that they would provide additional financial support worth \$100,000 to affected families (AMP Singapore, 2020). Besides SENSE and AMP, other Malay/Muslim organisations were also working together with ministries and other national organisations to better communicate the national and community schemes to the Malay/Muslim Community (Berita Harian, 2020).

How has MENDAKI been impacted by COVID-19?

Being a self-help group, MENDAKI has been discerning towards the Malay/Muslim community's needs especially during this trying period. MENDAKI has experienced an increase in number of calls to the satellite centres for NEU-PC Plus enquiries and COVID-19 Support Packages. In April 2020, the number of calls received by the centres almost doubled the average monthly number. The increase in number of calls in April also coincides with the commencement of Circuit Breaker measures.

As mentioned previously, MENDAKI has actively engaged the community. On the education front, MENDAKI has spent additional \$1.9 million from its reserve to mainly secure laptops for students and financially support students from the ITE. Furthermore, with the financial difficulties surrounding some of the families due to COVID-19, MENDAKI has also reopened the Tertiary Tuition Fee Subsidy registration for students in institutes of higher learning. In total \$43 million were spent for the scheme and MENDAKI has supported more than 91,000 beneficiaries. Besides education, MENDAKI has also worked together with other ministries and organisations to support households whose livelihoods

have been affected by COVID-19. Efforts such as career fairs and career helplines have also been successful in helping the community secure jobs.

While the measures were certainly beneficial, MENDAKI is constantly strengthening its aims for the community. In the education aspect, MENDAKI would continuously ensure each student does not lose out in their academic pursuit. This means that students from disadvantaged background would be given additional support such as having access to learning devices and financial support.

With regard to employment matters, MENDAKI aspires to build a resilient and future-ready Malay/Muslim workforce. To achieve this, a more concerted effort to engage the community through SENSE and the recently launched M³ Focus Area 4 was produced to encourage the community to attend skills upgrading and retraining courses. M³ Focus Area 4 consists of various national and community organisations such as Ministry of Manpower (MOM), National Trade Union Council (NTUC), SkillsFuture Singapore (SSG), Workforce Singapore (WSG), MENDAKI SENSE, Singapore Malay Chamber of Commerce and Industry (SMCCI), MUIS and Singapore Muslim Women's Association (PPIS).

With the interconnectedness of the global economy, our workers would be encouraged to apply for overseas job opportunities to increase their employment chances and to cultivate a global mindset. Furthermore, in preparing the future workforce, a strengthened upstream approach would be taken to guide students in choosing the industries which are growing amidst the uncertain global economy.

Additionally, given the vulnerability of those working in the gig economy, a concerted effort is needed to formulate better working conditions for such workers. To be resilient together, MENDAKI and SENSE could work with other agencies such as NTUC and other companies to better protect them.

Conclusion

Nearly a year into the fight against COVID-19, countries have started to implement lockdown measures again as a new wave of the virus emerged. Until a vaccine is widely available to the people, there leaves no room for complacency.

In his National Day Message to the people, Prime Minister Lee encouraged everyone to be resilient and strong to overcome this crisis. He said,

"

Each time the outlook was ominous, and we feared the worst, but each time we worked hard to secure our position, gritted our teeth, and came through together." (Prime Minister's Office, 2020)

These words should motivate us to be confident that we will get through this crisis by being resilient together. The number of daily cases in Singapore has nose-dived to single digit figures which prompts the implementation of a more relaxed Phase 3 in early 2021 (Ministry of Health, 2020). While the fight is far from over, seeing the numbers reduce over the months was certainly encouraging for Singaporeans.

Community efforts and self-help organisations have been quick to assist the community. MENDAKI and other Malay/Muslim organisations have rallied together to provide assistance such as through the SG Teguh Bersatu initiative among others. It could be said that the initiatives done by the various Malay/Muslim organisations have helped the community. Hence these initiatives were largely effective in achieving what they aimed to do. The experiences gained could only serve as learning points for the organisations involved to improve their actions and be resilient together in overcoming the impacts of COVID-19.

Author's Biography

Mr Haikal Sufiyan Haizan is a Research Officer at Yayasan MENDAKI. He is interested in economic and social issues in Singapore.

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Section

General Scan of Key National Policies & Initiatives in Singapore



Education

A. EARLY CHILDHOOD EDUCATION

Good and Affordable Pre-School for All Singaporeans

- Seven New MOE Kindergartens Opening in 2023
 - a. MOE will be opening seven new MOE Kindergartens (MKs) across Singapore in 2023
 - This is part of MOE's planned expansion to have at least 60 MKs by 2025, to provide parents with more choices for quality and affordable preschool places
 - These MKs will be sited within primary schools and offer Kindergarten Care (KCare) services, each offering about 120 Kindergarten 1 (K1) places



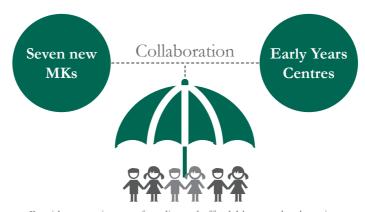
There will be

providing a total of about

50 MKs by 2023 **>> 7,200** K1 Places



- b. The seven new MKs will collaborate with Early Years Centres (EYCs) operated by PCF Sparkletots
 - This collaboration provides a continuum of quality and affordable pre-school services for children aged two months to six years old
 - Under the MK-Anchor Operator EYC pilot announced in February 2017, all eligible Singapore Citizen and Permanent Resident Nursery 2 (N2) children who are enrolled in these EYCs will be offered a K1 place in a nearby partner MK



Provides a continuum of quality and affordable pre-school services for children aged two months to six years old

S/N	Area	New MOE Kindergarten and Address	Partner Early Years Centre and Address
1	North	MOE Kindergarten @ Yishun Yishun Primary School 500 Yishun Ring Road, Singapore 768679	PCF Sparkletots Preschool @ Nee Soon East Blk 223 Blk 223 Yishun Street 21 #01-520 Singapore 760223
2	South	MOE Kindergarten @ Alexandra Alexandra Primary School 2A Prince Charles Crescent, Singapore 159016	PCF Sparkletots Preschool @ Kreta Ayer-Kim Seng Blk 79 Blk 79 Indus Road #01-465 Indus Garden Singapore 161079
3	East	MOE Kindergarten @ Bendemeer Bendemeer Primary School 91 Bendemeer Road, Singapore 339948	PCF Sparkletots Preschool @ Kolam Ayer Blk 39 Blk 39 Bendemeer Road #01-01, Multi Storey Carpark Singapore 330039 PCF Sparkletots Preschool @ Kolam Ayer Blk 26B Blk 26B St. George's Lane #01-37 Singapore 322026
4	East	MOE Kindergarten @ Fengshan Fengshan Primary School 307 Bedok North Road, Singapore 469680	PCF Sparkletots Preschool @ Kampong Chai Chee Blk 409 Blk 409 Bedok North Ave 2 #01-26 Singapore 460409
5	East	MOE Kindergarten @ Temasek Temasek Primary School 501 Bedok South Avenue 3, Singapore 469300	Details will be provided later on MOE and PCF's websites.
6	West	MOE Kindergarten @ Princess Elizabeth Princess Elizabeth Primary School 30 Bukit Batok West Avenue 3, Singapore 659163	PCF Sparkletots Preschool @ Hong Kah North Blk 446 Blk 446 Bukit Batok West Ave 8 #02-01 Singapore 650446
7	West	MOE Kindergarten @ Shuqun Shuqun Primary School 8 Jurong West Street 51, Singapore 649332	PCF Sparkletots Preschool @ Jurong Spring Blk 515 Blk 515 Jurong West Street 52 #01-17 Singapore 640515

Table 1: New MOE Kindergartens Opening in 2023

2 Maximum Subsidy for Public Rental and ComCare Families

- **a.** Building on enhancements to the Special Approval Framework in COS 2019, the Early Childhood Development Agency (ECDA) will, upon application, automatically qualify families under:
 - 1 HDB's Public Rental Scheme
 - 2 ComCare Short-to-Medium-Term Assistance
 - 3 ComCare Long-Term Assistance for the working mother Basic Subsidy and maximum Additional Subsidy for children, regardless of the mother's working status
- **b.** Unlike the current support via Special Approval and Child Care Financial Assistance, this **subsidy will hold until the next point of assessment** (e.g. end of Nursery 2)
 - If such families opt for half-day kindergartens run by Anchor Operators (AOPs) or MOE, they will also automatically qualify for maximum subsidies under the Kindergarten Fee Assistance Scheme (KiFAS) upon application



- **c.** In addition, MSF will facilitate applications for **Start-Up Grants (SUG)** for new enrolments into childcare centres or kindergartens from these families
 - The grant will help defray the initial costs of enrolment such as uniforms and deposit
 - These families need not submit supporting documents for SUG applications if prevailing criteria have already been met

3 Extension of Preschool Opportunity Fund for Lowincome Families

- **a.** The Preschool Opportunity Fund (PSOF), which **helps children access developmental activities** such as excursions and speech & drama programmes at their preschools for free, will be **extended**
 - PSOF benefits children from families with monthly household income not exceeding \$4,500, or who are assessed to be at risk



- **b.** Under PSOF, preschools can be given **up to \$1,300** for each qualifying child for each project
 - Projects will be funded for up to one year
 - Funding may be renewed, subject to assessment of project outcomes



\$1,300 for each qualifying child up to one year

4 Scaling up and Growing Together with KidSTART

- a. KidSTART currently benefits over 1,000 children in three regions¹. The Government will **expand KidSTART** to more regions **to reach another 5,000 children** over the next **three years**
 - KidSTART will first expand to the Woodlands and Bedok regions in 2020, which already have ComLink sites



b. The monthly household income ceiling has been raised from \$1,900 to \$2,500 from April 2020, so that more families can be eligible for KidSTART



¹ The three regions are Kreta Ayer/Bukit Merah, Taman Jurong/Boon Lay and Geylang Serai.

5 Extension of Partner Operator Scheme

- **a.** MSF will be extending the Partner Operator (POP) scheme for another five-year term from 2021 to 2025 and lowering the fee caps
 - MSF aims to appoint more POP childcare centres in the new term
- **b.** POPs will have to meet lower monthly fee caps of \$760 for full-day childcare, compared to \$800 today
 - With this, the industry median fees are expected to go down
 - · Fee caps for infant care will also be lowered

Making Pre-schools More Inclusive

1 Support for Children with Developmental Needs

- a. The Early Intervention Programme for Infants and Children (EIPIC) provides young children at risk of moderate to severe developmental delays with early intervention (EI) support
 - EI centres also provide caregiving training to family members so that they have the skills to ensure that intervention can continue for the child beyond the centre for more sustained outcomes
- **b.** Beyond EI centres, many preschools strive to adopt a more inclusive approach and enrol children with varying needs.
 - To support inclusion within preschools, the Government has introduced various EI programmes at preschools
 - Currently, about 550 preschools offer the Learning Support (LS) and Development Support (DS) programmes for children with learning and mild developmental needs respectively
 - Preschools that are DS-LS providers receive government funding to train their Learning Support Educators and procure therapy services
 - The new DS-Plus programme allows children who have made sufficient progress under EIPIC to receive intervention within the preschool setting instead



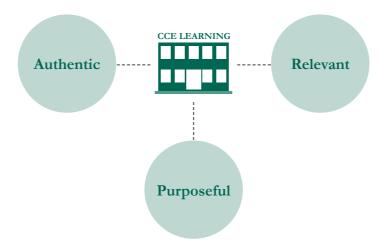
 Early childhood educators are also taught the basics of identifying and working with children with developmental needs during pre-service training

B. PRIMARY, SECONDARY AND TERTIARY EDUCATION

Learn for Life: Ready for the Future

1 Curriculum Refresh in Three Areas

- a. Character and Citizenship Education 2021 (CCE 2021)
 - MOE will be rolling out an enhanced CCE curriculum in 2021 to anchor students on a strong foundation of moral values, good character and resilience
 - MOE will make the learning of CCE more **authentic**, **relevant**, **and purposeful** for students by further integrating CCE into lessons and activities



- ► MOE will do so by providing more opportunities for students to learn CCE through key Student Development Experiences (e.g. cohort camps, Values in Action, and cohort Learning Journeys) and redefining the experiences of Co-Curricular Activities (CCA), to support students' interests and talents
- MOE will emphasise the **teaching of moral values during CCE (MTL) lessons** in **primary schools** through stories, songs, fables and proverbs
- For secondary school students, teachers will facilitate the regular discussion of contemporary issues during CCE lessons to broaden students' perspectives and identify ways in which they can contribute to their community and nation
 - ► MOE will train a select group of specialised CCE teachers who will role model the effective facilitation of CCE lessons and mentor other teachers



b. Strengthening Digital Literacy

- The **National Digital Literacy Programme** will be launched for schools and Institutes of Higher Learning (IHLs)
 - ► The programme aims to enable students to acquire the digital skills required to navigate the digital age through four components in the 'Find, Think, Apply and Create' framework

Find	Gather and evaluate information and use digital resources in a safe and responsible manner.
Think	Interpret and analyse data to solve problems.
Apply	Use software and devices to facilitate the use of knowledge and skills in different ways.
Create	Produce digital products and collaborate online.

Table 2: 'Find, Think, Apply and Create' Framework

Ві	ended learning to be an integral feature of the curriculum from 2021
At the primary level:	 There will be greater emphasis on cyber wellness education as part of CCE 2021 Students will get to learn computational thinking and experience simple coding through the 'Code for Fun' programme
At the secondary and pre- university levels:	 Accelerated roll-out of personal learning devices (PLD) to all secondary students by end-2021 Every secondary student will own their own school-prescribed PLD, which they will use in tandem with the Singapore Student Learning Space (SLS) and other educational technology to personalise and enhance their learning More schools will offer O-Level and A-Level Computing subjects MOE will deepen computational thinking through the Mathematics curriculum A revised Lower Secondary Science syllabus will be rolled-out in 2021 The syllabus will help students develop a better understanding of emerging technologies such as Artificial Intelligence (AI) and other advancements in technology
At the Institutes of Higher Learning (IHLs):	 MOE will enhance baseline digital competencies, including computational thinking and data competencies (e.g. quantitative reasoning), across all the Autonomous Universities (AUs), polytechnics and ITE by AY2021 MOE will also deepen the coverage of digital competencies in relevant courses All polytechnic and ITE students will be taught AI-related topics Those in sectors that are ripe for AI adoption, such as the finance, manufacturing, logistics and cybersecurity sectors, will be equipped with higher proficiency in AI competencies

c. Knowing Asia

- MOE will roll out an enhanced Humanities curriculum, with a deeper focus on ASEAN, at the secondary and pre-university levels from 2021 to 2023
- MOE will also provide schools with **planning and curriculum resources** to help them **design rich overseas learning experiences in ASEAN countries**
- More schools will also offer Conversational Chinese and Malay programmes for interested students to learn additional languages, beyond English and their Mother Tongue Languages
- MOE aims to achieve a '70-70' target for cohorts entering IHLs in the next few years, where 70% of local IHL students will participate in overseas exposure programmes, and 70% of this group of students will have exposure to ASEAN, China or India

2 Education as an Uplifting Force

a. Enhanced Financial Support for Students

1 MOE Financial Assistance Scheme (FAS)

MOE Financial Assistance Scheme (FAS)	
Types of Assistance	Details
Enhanced transport subsidies	• The MOE FAS monthly public transport subsidy has been increased from \$10 to \$15 in April 2020
	• This revision also applies to the FAS for Special Education (SPED) schools and to students receiving the 100% fee subsidy under the MOE Independent School Bursary (ISB)
	• The monthly school bus subsidy coverage for primary school students will also be increased from 50% to 60% of the monthly school bus fare
Enhanced meal subsidies	• Meal subsidies for MOE FAS recipients in secondary schools will be increased from \$2.50 to \$2.90 per meal
	• Eligible students will continue to receive meal subsidies for 10 meals per school week
	• This revision will similarly apply to the FAS for SPED schools and students receiving 100% fee subsidy under the MOE ISB
Bursary Quantum	• Bursary quantum for pre-university students on MOE FAS will be increased from \$900 to \$1,000 per annum

- 2 Higher Education Community Bursary and Higher Education Bursary
 - From AY2020, full-time ITE students enrolled in Nitec and Higher Nitec programmes who are on Government bursaries will receive an annual cash bursary increment of between \$50 and \$200
 - Students with a Gross Household Income (GHI) of up to \$2,750 or Per Capita Income (PCI) of up to \$690 will receive a 100% tuition fee subsidy on top of the cash bursary
 - This addition was implemented when the new semesters for Higher Nitec and Nitec began in April 2020 and July 2020 respectively

Bursary	Eligibility Criteria	Revised Government Bursary Quantum from AY2020 (Increase)
Higher Education	GHI ≤\$2,750 or PCI ≤ \$690	100% tuition fee subsidy + \$1,500 (+\$510/\$690)
Community Bursary	GHI \$2,751-\$4,000 or PCI \$691-\$1,000	\$1,250 (+\$200)
Higher Education	GHI \$4,001-\$6,900 or PCI \$1,001-\$1,725	\$600 (+\$50)
Bursary	GHI \$6,901-\$9,000 or PCI \$1,726-\$2,250	\$400 (+\$50)

Table 3: Enhanced Annual Government Bursary Quanta for full-time ITE students enrolled in Nitec and Higher Nitec programmes from AY2020

- 3 Community Development Council/ Citizens' Consultative Committee (CDC/CCC)-ITE Scholarship
 - From the semester beginning in April 2020, ITE students who are awarded the CDC/CCC-ITE Scholarship will also receive a 100% fee subsidy, on top of the scholarship cash award of \$1,600 per annum
 - The scholarship will also be re-named as 'ITE Community Scholarship'

b. UPLIFT Initiatives to Support Disadvantaged Students

- 1 Strengthening after-school care and support
 - In 2020, all 185 primary schools have been equipped with a school-based Student Care Centre (SCC)
 - ► Enrolment in these SCCs have increased from 3,000 in 2012 when MOE announced plans to expand the number of school-based SCCs to about 27,000 in 2020
 - With more places in SCCs, MOE will step up efforts to identify, enrol and provide support to students who would benefit most from the after-school care

- More Affordable Student Care Services for Lower-Income Families
 - ► To ensure that student care remains affordable, MSF provides children from lower-income families with monthly subsidies for student care fees, under the Student Care Fee Assistance (SCFA) scheme
 - ► These subsidies are administered through MSF-registered SCCs
 - ► From 1 July 2020, MSF will:
 - Increase the quantum of subsidies, such that eligible families will receive up to \$60 more in student care subsidies each month, and
 - Broaden the income criteria so that more families can qualify for SCFA

Qualifying Income Criteria	Before 1 July 2020	After 1 July 2020
Monthly household income ceiling	\$4,000	\$4,500
Per capita income ceiling	\$1,000	\$1,125

• These enhancements are expected to benefit around 9,000 children

Family with monthly GHI	SCC out-of-pocket cost monthly cost (after subsidies)
\$1,500	\$5 (down from \$10)
\$2,600	\$59 (down from \$92)
\$3,500	\$177 (down from \$237)

Table 4: Examples of Out-of-Pocket Cost for SCC fees after enhanced SCC subsidies

2 Strengthening school-community partnerships

 UPLIFT has worked closely with MSF to coordinate upstream, communitybased support for disadvantaged students with emerging attendance issues at three towns:



- An UPLIFT Town-Level Coordinator (TLC) is stationed in each of the Social Service Offices (SSOs) to match the needs of students and families to appropriate local programmes and resources.
- The UPLIFT Community Pilot integrates support from schools and the community, including the SSOs, Family Service Centres (FSCs), Social Service Agencies (SSAs) and volunteer befrienders, to meet the needs of vulnerable families
- More than 300 students could benefit from this coordinated support ecosystem in the three pilot towns from 2020 to 2022

- c. Support for Students with Special Educational Needs (SEN) in Mainstream Schools and Institutes of Higher Learning (IHLs)
 - 1 SEN Professional Development (PD) Roadmap
 - To better support students with SEN in coping with the national curriculum and learning in large group settings, MOE will introduce a structured SEN PD roadmap to enhance training for educators in mainstream schools
 - This aligns with SkillsFuture for Educators, which prioritises six Areas of Practice for educators, one of which is "Support for Students with SEN"



2 Extension of SEN Fund

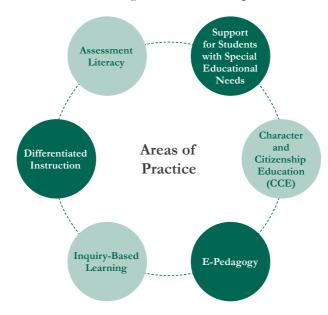
 The SEN Fund available in polytechnics and ITE will be extended to support students with a wider range of SEN



• With effect from 1 April 2020, full-time Singapore Citizen students with learning and language difficulties (e.g. dyslexia) or social and behavioural difficulties (e.g. Autism Spectrum Disorder or Attention Deficit/Hyperactivity Disorder) will be able to tap on the SEN Fund to purchase Assistive Technology (AT) devices, up to a cap of \$5,000

3 SkillsFuture for Educators

- To guide teachers in acquiring the necessary competencies and encourage them
 to deepen their mastery of skills, MOE will introduce an enhanced Professional
 Development (PD) Roadmap for teachers "SkillsFuture for Educators"
 (SFEd)
- MOE will focus on enhancing teachers' PD in six prioritised Areas of Practice:



4 Multiple Pathways Throughout Life

- a. Reduce over-emphasis on academic achievements
 - ► From 2021 onwards, the **PSLE will be scored with wider bands**
 - ► The scores will **reflect the student's individual performance** and not his performance relative to his peers
- b. Phase out streaming and implement Full Subject-Based Banding (SBB)
 - ► Full implementation of SBB in all secondary schools will be completed by 2024
 - ► This will offer students more opportunities to pursue subjects at a level suited to their strengths and interests
- c. Expand post-secondary progression pathways
 - ► More opportunities for ITE graduates to upgrade beyond NITEC over the course of their career
 - To cater to ITE graduates' different interests and learning needs, MOE will
 continue to increase the number of places in ITE's Work-Study Diplomas
 and full-time Higher Nitec programmes, as well as the number of places for
 working adults in full-time Polytechnic diploma programmes



- ► Increased adoption of **Aptitude-Based Admissions** across six Autonomous Universities (AUs)
 - For aptitude-based admissions, all six AUs use **various means of assessment**, including personal essays, group and individual interviews, portfolios and even aptitude tests, such as coding tests for computing-related courses



Economy, Employability & CPF

A. ECONOMY

1 Capability-building Grants

- Extension or enhancement of capability-building grants for businesses seeking to internationalise, transform and digitalise
- E.g. Market Readiness Assistance Grant, Productivity Solutions Grant, Enterprise Development Grant, and PACT Programme

2 Temporary Bridging Loan Programme

• Extension of the Temporary Bridging Loan Programme till September 2021 at reduced levels to provide working capital for business needs

3 Enterprise Financing Scheme

 Adjustment of support under the Enterprise Financing Scheme to help Singapore enterprises access financing in areas such as trade and project needs

4 Startup SG Founder Programme

- Up to \$150 million aimed to boost the pipeline of new innovative start-ups in Singapore
- Raised the start-up capital grant amount from \$30,000 to \$50,000
- Raised the Government matching ratio from 3:1 to 5:1
- Introduced three-month venture building programmes

5 Enhanced Aviation Support Package

- Support measures in the Enhanced Aviation Support Package extended up to March 2021
- Cost relief for our airlines, ground handlers, cargo agents, and airport tenants
- · Support local carriers to regain Singapore's air connectivity to the world

6 SingapoRediscovers Vouchers

- \$320 million to boost domestic tourism through SingapoRediscovers Vouchers
- \$100 worth of vouchers for each Singapore citizen, aged 18 years and above in 2020, that can be used on hotel stays, attraction tickets, or tours
- Subsidies for child/youth tickets for attractions and tours

B. EMPLOYABILITY

1 SGUnited Jobs and Skills Package

• SGUnited Jobs: **40,000 new jobs**, with 15,000 offered by the public sector and remaining 25,000 offered by the private sector



- SGUnited Traineeships: **21,000 traineeships** to help local, first-time job seekers gain valuable and relevant experiences in high-demand areas
- SGUnited Mid-Career Traineeships: 4,000 traineeships to help local, unemployed midcareer job seekers gain new skills and start new careers
- SGUnited Skills: **30,000 local job seekers** can upgrade their skills while looking for a job, with **training allowance of \$1,200 per month** to cover basic expenses

2 SkillsFuture Next Bound

- \$500 SkillsFuture Credit top-up for Singaporeans aged 25 and above
- Special \$500 SkillsFuture Credit top-up for Singaporeans aged 40 to 60



3 Enhanced Training Support Package

- Six-month extension till 30 June 2021
- Enhanced course fee subsidies of 90% for hardest-hit sectors, including the Marine and Offshore sector
- Absentee payroll support rate will be lowered to 80% from 2021, capped at \$7.50 per hour

4 Jobs Support

- Support for wages extended until March 2021, bringing total coverage up to 17 months of wages
- Up to 50% support, based on projected recovery of the different sectors

5 Jobs Growth Incentive

- \$1 billion programme to support firms in increasing their headcount of local workers from September 2020 to February 2021
- For each new local hire, the Government will co-fund the first \$5,000 of gross monthly wages for up to 12 months
 - ► Up to 25% for those below 40 years old
 - ► Up to 50% for those 40 years old and above
 - ► Up to 50% for all persons with disabilities (PWDs)

6 Workfare Special Payment

- Eligibility widened to those who received Workfare Income Supplement (WIS) for work done in 2020, and who are not already receiving the Special Payment
- One-off payment of \$3,000 to be received from October 2020 onwards

7 Supporting Self-Employed Persons (SEPs)

- SEP Income Relief Scheme (SIRS)
 - ► Eligible Singaporean SEPs received 3 quarterly cash pay-outs of \$3,000 each in May, July and October 2020
- SEP Training Support Scheme
 - ► Extended till end of 2020
 - ► From 1 May 2020, training allowance was enhanced to \$10/hour
- Point-to-Point Support Package
 - ► Special Relief Fund payments of \$300 per vehicle per month for eligible taxi hirers and private hire car drivers, till end-September 2020
- Enhanced Workfare Special Payment
 - ► Benefits about 50,000 lower-income SEPs

8 Ensuring Fair Competition

- Local Qualifying Salary threshold raised from \$1,300 to \$1,400 from 1 July 2020. The
 threshold determines the number of locals that count towards a firm's quota to hire S Pass
 and Work Permit holders
- Raise Employment Pass minimum qualifying salary from \$3,600 to \$3,900. The qualifying salaries for older and more experienced EP candidates will also be raised in tandem, from 1 May 2020

C. CPF

1 Higher CPF Contribution Rates Deferred

 Defer the planned increase in CPF contribution rates for senior workers for one year, from 1 January 2021 to 1 January 2022

2 Helping Singaporeans Save for Retirement

- Match cash top-ups made to CPF Retirement Account of eligible Singaporeans, aged 55 to 70, up to \$600 annually from 2021 to 2025
- Match Contribute-As-You-Earn (CAYE) contributions made by self-employed persons in 2020, capped at \$600
- Increase Enhanced Silver Support Scheme quarterly cash pay-outs by 20% from January 2021, to help those with less in retirement





Family, Social Development & Housing

A. FAMILY & SOCIAL DEVELOPMENT

Policy/Initiative		Specifics		
Marriage & Parenting	CPH Online Counselling Triple P Online	 CPH Online Counselling is a free service for married couples that Psychology Hub This service aims to equip em concerning marriage, divorce as v As an effort to encourage participate anonymously and is available on: Live Chat, Monday to Friday holidays) and Email, 24/7 In light of COVID-19, Triple P (already existing Positive Parentin Parenting Support Providers (PS) It is an interactive course branched TPOL Programmes Toddlers to Tweens (0 – 12 years) Triple P has been proven to help to the parenting Parenting Support Triple P (Triple P) 	otional support vell as parenting ion, this online server from 9am to 6p. Online (TPOL) is ng Program (Trip) model into two TPOL p. No. of modules	on various issues vice can be utilised om (Except public an addition to the tiple P) under the rogrammes: Duration 30-60 mins each
Children & Youth	Family Guidance Order	 Triple P has been proven to help parents raise children in a loving and safe manner Following the increased importance placed on the role of family, the initial label of "Beyond Parental Control" for a Child or Young Person (CYP) has been changed to "Family Guidance Order" from July 2020 CYP and their family members would need to complete a programme before an application is submitted to the Youth Court, as an FGO label would only be given to CYPs with serious behavioural problems Otherwise, CYPs and their families could head to Family Service Centres or youth agencies for assistance 		
Strengthening Partnerships Through Technology	Connecting Clients to More Agencies through Video- Conferencing	 Clients are now able to video-call Social Service Offices (SSOs) at their convenience Currently, clients can use this function for financial, employment and housing matters Moving forward, MSF is looking to expand this function to include family, legal advisory as well as healthcare services 		

Policy/Initiative		Specifics	
Strengthening Partnerships Through Technology	Development of a Sector Digitalisation Roadmap	 The Sector Digitalisation Roadmap aims to provide convenient and smarter ways in which data can be used by and across various SSAs to deliver social services effectively and promptly With this, MSF is developing two new systems: Digitalisation and data sharing Digitalising process to make referrals and assessments across agencies easier Both systems aim to utilise data sharing across the SSAs to make processes more user-friendly With access to the data, frontline officers will also have the means to make a more holistic evaluation and assist users effectively As of now, around 5,000 frontline officers have already started utilising these systems 	
Support for the Vulnerable during COVID-19	Partnership with Partners Engaging and Empowering Rough Sleepers (PEERS)	 MSF is also working together with a workgroup to address and alleviate the problem of food insecurity in Singapore Food insecurity here can be understood as the lack of economic and physical access to enough food to lead a healthy lifestyle Even with several solutions and schemes already available, a study by Singapore Management University and Food Bank Singapore found out that majority of those who fall in this category are not receiving food support Thus, to address this, there are two new initiatives being implemented: Having a database of beneficiaries to better identify and assist those in need A centralised database would help reduce food wastage Testing of "local food support coordinators" in new areas 	
Financial Support	Community Capability Trust (CCT)	 The Invictus Fund was set up by National Council of Social Service (NCSS) to assist SSAs to ensure safe and effective social service efforts during COVID-19 Criteria for this support are as follow: Agency's total reserves ratio is below one year and Agency experienced a drop in income of at least 30% over the last six months Besides having received private donations, the Fund also received a top-up of \$18.3 million by the Government The Community Capability Trust (CCT) provides long-term funding support to SSAs from 2022 to the end of 2031 to support capability-and capacity-building projects Currently, there is a 2:1 matching for donations to CCT in the first five years, from 2020 to 2024, i.e. a dollar donated to CCT will be matched with two dollars The next five years will follow up with a 1:1 matching, where each dollar donated from 2025 to 2029 will be matched dollar-for-dollar 	

COVID-19 Support Grant



- The COVID-19 Support Grant is open to Singapore Citizens/ Permanent Residents aged 16 and above who, due to the pandemic, are either:
 - a. Involuntarily unemployed due to loss of job OR
 - b. On Involuntary no-pay leave (NPL) for at least **three consecutive** months OR
 - Facing at least a 40% decrease in their monthly income for three consecutive months or more
- Those under a) and b) will receive a monthly cash grant of maximum \$800 for three months and job and training support programmes organised by Workforce Singapore or the Employment and Employability Institute
- Those under c) will only receive a monthly cash grant of maximum \$500 for three months

Extension of CSG Support:

- From Oct 2020 onwards, recipients are also able to apply for an extended CSG support for **three months**, with a revised eligibility criterion:
 - ► Gross monthly household income of less than \$10,000/ monthly per capita income of less than \$3,100 before the pandemic
 - ► Living in a property with an annual value that is lower than \$21,000
 - ► Maximum of **one** property owned

For unemployed applicants:

- To be eligible for the COVID-19 Support Grant,
 - ► Applicants need to have been actively job searching or enrolling in training programmes
 - ► Applicants must not be under any ComCare assistance
 - Applicants are not under the Self-Employed Persons Income Relief Scheme (SIRS)
 - Applicants must not be on SGUnited Mid-Career Pathways
 Programme-Company Training or any SGUnited Skills programmes
 - ► Applicants must not be NSmen or interns

The Courage Fund

 The Courage Fund provides monetary relief specifically for those directly affected by COVID-19:

Dependants of individuals who have succumbed to COVID-19

- Families of healthcare workers will receive \$30,000
- Families of frontline workers and community volunteers will receive \$20,000
- Families of those not under either category will receive \$10,000
- Dependants of healthcare workers, frontline workers and community volunteers can also receive the Education Grant

Financial Support

Policy/Initiativ	e	Specifics		
The Cour Fund	Contraction of C	VID-19 in line of duty	Monetary Relief	
	Healthcare work	3	\$5,000	
	Frontline workers	Frontline workers and community volunteers		
Financial Support	Lower-Income Households Affe by COVID-19	COVID-19, and is also one household membe a Stay-Home Notice (sof Absence (LOA), or Household with a grothan \$6,2000 or a gincome lower than \$2	ited to the contraction of open to those with at least r who was placed either on SHN), a compulsory Leave a Home Quarantine Order ss monthly income lower ross monthly per capita,000 prior to the pandemic at a 10% loss of household hold income per capita, \$651 - \$1,350	

B. HOUSING

Policy/Initiative		Specifics	
Housing Grant	Lift Access Housing Grant	 In addition to the Lift Upgrading Programme (LUP), the Lift access Housing Grant (LHG) is available for Singapore citizens who: require direct lift access immediately, for reasons such as medical conditions or mobility constrictions require financial assistance in purchasing an HDB flat with lifts LHG provides a maximum grant of \$30,000 for Singaporean families and \$15,000 for singles However, to receive the maximum amount, the chosen flat would need to have enough lease to cover at least the youngest buyer/spouse till he or she reaches the age of 95 The amount will otherwise be pro-rated 	

Policy/Initiative **Specifics** Alternative • The Ministry of National Development (MND) is currently collaborating with the Ministry of Health (MOH) to test assisted living, in which Housing seniors are able to purchase a flat equipped with care services Options for Seniors · Seniors' feedback on these assisted living models have been taken into consideration, and the pilot is as follow: ► There will be communal spaces on every floor of the flat, functioning as an area for intermingling among residents ► These flats will be 32m², equipped with many senior-friendly features, such as larger bathrooms **160** senior-friendly units built in Bukit Batok in May 2020 Housing Scheme HDB Open • The HDB Open Booking System is a new system in place of the previous Re-Offer of Balance Flats (ROF) system **Booking** System • Now, any unsold BTO flats after the Sale of Balance Flat (SBF) rounds will be available for open booking • With this new system, viewing and applying for these flats can be done promptly and immediately all year round to accommodate those who require housing urgently Single, unwed • Previously, only two-room flexi flats in non-mature estates as well as resale parents can flats were available for purchase by single, unwed parents apply for • Now, this group can purchase new three-room flats in non-mature estates as well bigger HDB flats Two-room flexi flats in non-mature estates New three- room flats in non-mature estates Defer • Individuals affected by the pandemic can now defer repayment of their Loans and Insurance Repayment residential property loans up to 31 December 2020 Commitments of Residential • They can choose to either **Property** ► Defer repayment of the principal or Loans ► Defer both the principal as well as interest amount • It should be noted that deferring payments and extending the tenure would result in an increase in total amount of interest paid

should not defer their payments

• Thus, a proper evaluation should be done and unless needed, one

Policy/Initiative

HDB Green Towns Programme



Specifics

- The HDB Green Towns Programme is a ten-year plan that aims to lower the energy consumption in HDB towns by 15% from the current levels
- This is done to increase the sustainability and liveability of these towns to make them more environmentally friendly

Key Initiatives of Programme:

- 1. Setting up of smart LED lighting in HDB estates
 - This smart LED lighting will utilise sensors to detect the presence of residents in common areas
 - When occupied, the system will brighten up. Otherwise, it will dim itself
- 2. Utilise more renewable energy sources to power communal services in HDB services
 - ► By 2030, 70% of HDB flats will have solar panels installed on the rooftops
 - ► This is an increase from the current 50% today
- 3. Recycle rainwater and reduce chances of floods
 - ► An underground water detention will be tested
 - ► The rainwater that is collected can be used for **non-potable purposes** to wash HDB floors or watering of plants
- 4. Use of "cool paint" on HDB estates
 - ► Based on the preliminary testing and study, "cool paint" was found to reduce the heat absorbed by buildings
 - ► The paint will be **tested on several neighbourhoods** before recommending the change for all estates
- 5. Upgrading the top-floor of suitable multi-storey carparks into urban farms and community gardens
 - Aim to increase green cover and provide more green spaces and amenities for residents



Elderly & Health

Policy/Initiative

Specifics

Adjustments to CPF



- There is a need to keep on updating and improving our CPF policies over time, so that they remain appropriate for each cohort
- The Basic Retirement Sum will be adjusted by 3% per year for the next two cohorts to be in line with increasing income levels
- The Basic Retirement Sum will be \$93,000 for cohorts turning 55 in 2021, and \$96,000 for those turning 55 in 2022
- These modest continuing adjustments are necessary for the pay-outs to keep up with basic retirement expenses

Matched Retirement Savings Scheme

- The aim of this initiative is to help elderlies with less CPF savings to save more
- The government will match every dollar of cash top-up made to their CPF Retirement Account, up to an annual cap of \$600
- This is a way of encouraging and augmenting family support for our seniors with fewer means in retirement
- About 435,000 Singaporeans will be eligible

Enhancing the Silver Support Scheme

- The Silver Support Scheme provides additional support for elderly Singaporeans who have had low incomes, and who now have little or no family support
- The scheme will have a raise in its quarterly cash pay-outs by 20%
- The threshold for lifetime wages and per capita household income will be expanded to cover more seniors
- A new pay-out tier to seniors whose monthly household incomes per person are between \$1,300 and \$1,800

Enhancing Medishield Life



- MediShield Life premiums will increase to improve benefits of Singapore's national health insurance scheme
- To cushion the premium increase, the government has committed about \$2.2 billion for premium subsidies and support over the next three years

Higher coverage for sub-acute care at community hospitals

Higher annual claim limit of \$150,000, from the current \$100.00

Enhanced Medishield Life

Higher claim limits for treatments such as intensive care, dialysis and psychiatric care

MediShield Life will, in future, also cover treatment for attempted suicide, self-injury, substance abuse and alcoholism

Additional claim of \$200 a day for daily ward charges for the first two days of hospitalisation

Lower deductible of \$2,000 (down from \$3,000) for people 80 years and older for day surgery

Policy/Initiative	Specifics		
Top-ups to ElderCare Fund	• In the Budget 2020 speech, Mr Heng Swee Keat has announced a top-up of \$750 million to the ElderCare Fund		
	 The ElderCare Fund provides operating subsidies to intermediate and long-term care providers, such as nursing homes run by volunteer welfare organisations 		
Enhancing the Silver Housing Bonus and	• In March 2020, Mr Lawrence Wong has announced enhancements to the Silver Housing Bonus and Lease Buyback Scheme		
the Lease Buyback Scheme	• The enhancements have taken immediate effect for those who have applied for either scheme but have not yet received their bonus		
	• Under the Silver Housing Bonus, seniors will only need to top up the first \$60,000 of their proceeds		
	 HDB will not require the elderlies to sell their larger flat for a smaller one. Seniors can register for the Silver Housing Bonus provided they purchase a 3-room or smaller flat 		
	\bullet Under the Lease Buyback Scheme, the cash bonus has increased by 50% across all flat types		
Support the mental wellness of our entire population	 Ministry of Health has worked with Agency of Integrated Care (AIC) to develop support services under the Community Mental Health Masterplan AIC has set up 43 community outreach teams as of end-2019 		
population	► These teams have reached out to more than 300,000 individuals and helped over 23,000 people at risk of developing mental health conditions or dementia		
	Approximately 210 doctors have been trained to treat people with mental health conditions		
	Silver Ribbon has launched a mental health resource kit to promote mental health, reduce suicide rates and build resilience		
	 Samaritans of Singapore (SOS) has launched its text messaging service for individuals in distress, which is available through Facebook Messenger or on the SOS website 		
Inter-agency task force to respond to	• In October 2020, the COVID-19 Mental Wellness Taskforce was convened by the Ministry of Health and the Institute of Mental Health		
mental health needs of Singaporeans	• The taskforce will review impacts brought about by the pandemic and will identify gaps to better meet the mental health needs of the population during this pandemic		



Community, Culture & Youth

A. SOCIAL SERVICE, CHARITY AND VOLUNTEERISM

1 Helping donors make more informed giving decisions through the Charity Portal

- From 2021, information on a charity will be better presented on the Charity Portal, allowing for donors to make more informed decisions when giving
- This will increase transparency, strengthen public trust in charities, and facilitate safer giving

2 Building Charities' Digital Capabilities

- The Commissioner of Charities (COC) will publish a Digitalisation Toolkit in 2020 to support charity organisations in their digitalisation journey
- COC will also work on introducing sector-specific solutions by the end of 2020 for smaller charities to help enhance productivity and protection against digital threats

3 Serving Community Needs and Building Partner Capabilities

- Eight more SG Cares Volunteer Centres (VC) will be appointed by the end of the year, in addition to the six appointed in 2019
- VCs aim to build volunteer management capabilities, broker sustained partnerships amongst
 volunteering groups and work with service providers to meet their needs for volunteers at
 the town level

4 Empowering Youths to Give Back

- Youth Corps Singapore (YCS) will continue championing youth volunteerism through *Programme X*
 - ► The programme equips youths to create impactful community projects
- SG Cares Volunteer Centres will work with YCS to grow youth volunteer networks at the neighbourhood level
 - ► A pilot is currently being run in Woodlands in partnership with Care Corner Singapore and Republic Polytechnic

5 Supporting Active Citizenry and Topping up of Our Singapore Fund

- MCCY will invest up to \$175 million to encourage active citizenry, develop ground up partnerships and grow partners' organisational capabilities to address societal needs from 2020 to 2025
- This includes a \$20 million top-up to Our Singapore Fund which supports impactful ideas and initiatives initiated by Singaporeans

B. YOUTH

1 Asia-Ready Exposure Programme (AEP)

- ITE, polytechnic and university students will be given more opportunities to visit ASEAN, China and India under the AEP
- It is intended at allowing youths to learn about different industries and culture, as well as enable interactions with their counterparts overseas

2 Transforming Somerset Belt into a Vibrant Youth Precinct

- MCCY and NYC have been engaging youths since 2019 to co-create spaces in Somerset into a vibrant youth-oriented precinct
- The Somerset Belt Masterplan will feature an active area for exciting activities and programming, which includes a quiet area as well

C. SPORTS

1 Enhancing Access to Sports

 Singaporeans aged 65 and above will be given free access to ActiveSG gyms and pools from 2020 to encourage active seniors



- The **Team Nila Silver Champions** scheme will be introduced to allow seniors aged **60** and above to stay active through **sport volunteerism**, where they may promote sport and exercises at ActiveSG Sport Centres
- The **SportCares** programmes will help vulnerable segments of society have more opportunities and access to sporting programmes
 - r OO
- These programmes will reach out to 4,500 children and youth this year through the Communities of Care's efforts
- \$600,000 worth of grants are planned to be disbursed to **18 projects** and **31 SportCares** bursary recipients
- Since 2013, SportCares has reached out to more than 36,000 individuals

Opening Facilities and Access to Meet Needs

- · New Sport-in-Precinct facilities will be introduced at Sengkang South and Pasir Ris East
- The Kallang Football Hub is slated to be ready by 2020 and the development of the Kallang Tennis Centre will start later in 2020
- SportSG is studying the feasibility of a velodrome in Kallang
- SportSG will open all suitable indoor sports hall and fenced fields in public primary and secondary schools for public use by 2021



- SportSG will convert all ActiveSG gyms to be inclusive and senior friendly by 2026
- Currently, 8 are considered inclusive and senior friendly
- The National Youth Sports Institute satellite facility will shift to a bigger space at the former Police Coast Guard Headquarters at 5 Stadium Lane
- It will be equipped with a multi-disciplinary integrated sport science support, and an all-weather training base

3 Supporting Our Athletes in Realising Aspirations

- The Temasek Foundation Inspire Fund for Athletes will provide campaign funding for athletes who represent Singapore in international competitions and who do not already receive support from the High Performance Sports System
- 1ST
- \$100,000 will be made available annually, administered by SportSG and the National Youth Sports Institute
 - ► A grant call **twice a year** for athletes to apply will be made

D. HERITAGE, ARTS AND CULTURE

1 Increasing Access to Heritage, Arts and Culture

- The new WeCare Arts Experiences will **enable the less privileged to** attend ticketed arts presentations for free
- The National Heritage Board will expand Museum-based Learning to complement learning in schools
- All Primary 6 and Secondary 2 students will visit the Asian Civilisations Museum and National Museum of Singapore respectively to better experience our heritage and history



2 Taking Ownership of Our Shared Heritage

- The National Heritage Board will partner shop owners to co-create "mini-museums" in heritage districts that showcase the history of their businesses
- The initiative will commence in five precincts by 2022
- It is hoped that this partnership will encourage the community to **embrace their heritage** and **develop capabilities in heritage promotion and conservation**

3 Hawker Culture UNESCO Nomination

 The results of Singapore's bid to inscribe Hawker Culture in Singapore on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity will be revealed in December 2020

4 Helping Smaller Arts Organisation Be Sustainable

- The National Arts Council will partner the private sector to offer funding support (stART Fund) to encourage smaller arts organisations to develop robust governance structures and management of funds to enable them to put on higher quality programmes
- The fund aims to support approximately 100 groups

5 Increasing Access to Arts Content for Research and Education

- The National Arts Council (NAC) and National Library Board will collaborate to create a national online repository of Singapore arts
- The arts community will be engaged to digitise content, including local work
- The repository is hoped to build capabilities in research and documentation in the arts community as well as enable knowledge capturing

6 Enlivening everyday spaces through the arts with the enhanced Busking Scheme

• Busking@*SCAPE is a new platform for young performers to showcase their talents without having to audition



• NAC will introduce busking zones and a digital scheduling tool for buskers

7 Children's Museum

- The Singapore Philatelic Museum (SPM) will re-open as a children's museum in 2021
- It will utilise immersive, multisensory displays and role-play exhibits to teach young visitors about the heritage and culture of Singapore and the region



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Our Contributors

Mr Tharman Shanmugaratnam

Member of Parliament, Jurong GRC and Coordinating Minister for Social Policies

Mr Mohamad Faiz Selamat

Executive Director, MENDAKI SENSE

Dr Hana Alhadad

Adjunct Research Fellow, Society and Culture Department, Institute of Policy Studies

Ms Nur Diyanah Anwar

PhD candidate, National Institute of Education and Research Associate, S. Rajaratnam School of International Studies

Dr Farhan Ali

Assistant Professor, Learning Sciences and Assessment, National Institute of Education

Ms Hamidah Aidillah Mustafa

Founder, Parrot Social Pte Ltd

Ms Liyana Binte Muhammad Fauzi

Senior Product Manager, GovTech Singapore

Mr Shazly Zain

Research Assistant, Governance and Economy Department, Institute of Policy Studies

Mr Norshahril Saat

Fellow and Co-coordinator, Indonesia Studies Programme, ISEAS Yusof-Ishak Institute

Ms Nurin Nazurah Saifudin

Undergraduate, Nanyang Technological University

Dr Ng Kok Hoe

Assistant Professor, Lee Kuan Yew School of Public Policy

Mr Haikal Sufiyan Haizan

Research Officer, Yayasan MENDAKI



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Section II

General Scan of Key National Policies & Initiatives in Singapore

Education

Economy, Employability & CPF

Family, Social Development & Housing

Elderly & Health

Community, Culture & Youth

References

Our Contributors

Research & Planning Department

Wisma MENDAKI 51 Kee Sun Avenue Singapore 457056

Tel: 6245 5555 Fax: 6444 8959 Website: www.mendaki.org.sg EmaiB rpd@mendaki.org.sg



9789811489556