

Chapter 2

Education and the Child

Oon-Seng Tan

In our youth of today are the leaders and citizens of tomorrow.
Lee (1959b)

Abstract Education is the means to freedom: freedom from poverty, freedom from injustice, freedom from illiteracy. In the 1950s, youths and children roamed the streets with little prospect of their future in a society of poverty and racial unrest. Today, Singapore's youth are disproportionally represented on the world's stage, from winning Science Olympiads to internationally benchmarked assessments. Even the weakest of the Singapore cohort made vast improvements and out-performed the average of many developed nations. Mr. Lee Kuan Yew saw education as the key to develop this nation state. His vision for education had a clear mandate on developing every child to his fullest potential. He believed that education must prepare a child for work and also develops him holistically, in terms of his intellectual discipline, attitudes, values and behaviours. This chapter will take a closer look at Singapore's journey from idealisation to reality, paying particular attention to his beliefs of the child and his approach to growing a cultivated mind, developing the good man who could contribute as an active citizen, and building the society.

Keywords Education · Child · Character · Values · Social justice

Education should enable people to live life meaningfully with a sense of responsibility and a quest for truth. We need, not only education for all, but also the right kind of education.

Mr. Lee Kuan Yew saw education as the key to developing the nation state. His vision for education had a clear mandate on developing every child to his fullest potential, which laid the foundation for the creation of a world class education system.

This chapter will take a closer look at Singapore's journey from idealisation to reality, paying particular attention to his beliefs of the child and his approach to growing a cultivated mind, developing the good man who could contribute as an active citizen, and building the society.

O.-S. Tan (✉)

National Institute of Education, 1 Nanyang Walk, S637616 Singapore, Singapore
e-mail: oonseng.tan@nie.edu.sg

Importance of Education

(Education) is the key to the long term future of any people. (Lee 1993)

Lee knew that education was pivotal to the social, political and economic survival of the young nation. He saw education as a vehicle to bring the people together to build a “united people of tomorrow” (Lee 1959b). His vision was of “a community that feels together” and “responds together—this is my country, this is my flag, this is my president; this is my future. I am going to protect it” (Lee 1966c). He was clear that it had to be done through socialisation and the development of shared values and a Singapore identity in schools and the armed forces. He proclaimed:

We are forging a nation. It can only be done in Singapore, by Singaporeans, in the home, in our schools and in the armed forces. We are inculcating common values necessary for national survival. We are acquiring the will and the wherewithal to advance and to protect our national interests ... The most important years for the development of these attitudes are those in school and the armed forces. (Lee 1973b)

Lee also saw education as the means to economic survival. This was especially significant in 1965 and after, where “an intimate link between education and economic development of the small city-state was strongly emphasised” (Goh and Gopinathan 2008, p. 14). Lee’s government took the path of developing new skills and work attitudes to accommodate new economic strategies, and education was essentially to provide manpower for industrial development. To Lee, Singapore’s greatest and only resource is the people, and he had no reservation in investing in education and training to ensure Singapore’s global competitiveness. He shared:

Education and training have been, and will continue to be, crucial in upgrading ourselves, increasing the net worth of human capital. (Lee 1988)

Despite the emphasis on social, political and economic survival, Lee had always believed that education should focus on the child. He saw the value of education in developing a cultivated man and a good man, in terms of his intellectual discipline, attitudes, values and behaviours. In his words,

The ideal product is the student, the university graduate who is strong, robust, rugged, with tremendous qualities of stamina, endurance and at the same time with great intellectual discipline and, most important of all, humility and love for his community; a readiness to serve whether God or king or country or, if you like, just his community. And every society produces this type or they try to. (Lee 1966c)

His definition of an educated man is one “who never stops learning and wants to learn” (Lee 1977). He said:

My test of an educated person is a simple one. Has he been schooled to a point where on his own he continues to probe, to learn, to read, and to solve problems for himself? Has he got an inquiry frame of mind? Does he know where to look for knowledge or data? If he does

not know where to get the data, or does not understand books he has found on the subject, does he know who he can approach to help him understand the subject? In short: Is he continuing to learn, or did his learning stop the day he got his degree? (Lee 1980)

Singapore appears to have a reputation for having an education system that is textbook-based and examination-driven. Ironically, this was never Lee's intention or view. He was adamant that an educated person is not someone who can only read, write or pass examinations (Lee 1966a). In fact, he made a distinction between a "literate but uneducated person" and an "educated person" (Lee 1966b). Lee believed that when we educate a child, we must give him something to start a life-long cultivation of mental and cultural habits so that he can "pick from where he left off in school" and "can continue his interest in life" (Lee 1966a). He also held the view that education must give our young "basic common norms of social behaviour, social values, and moral precepts which can make up the rounded Singaporeans of tomorrow" (Lee 1979a).

In Lee's mind, a man is not defined by his qualifications. He noted:

A man is as good as he is, and the degrees and titles he has after his name does not make him a better or a lesser man. In the last analysis, it is what a man is worth - his innate ability, his intellectual discipline and his drive - which determines his effectiveness and usefulness in society. (Lee 1959a)

However, in his typical pragmatic approach, he conceded that academic qualification is a practical way to classify people (Lee 1959a).

His Views on the Child

Lee held several key beliefs about the 'child' at the centre of the nation's mission. Most notably, he believed that ***every child has his or her gift***. He emphasised:

Our young have to be nurtured, encouraged, restrained and taught to prepare them to meet the future. Each child has his or her own gifts. These gifts may not be in academic matters. Parents must carefully judge what their children's limits are. Their teachers can usually help them decide this. (Lee 1973a)

Second, he held the view that ***we can help every child develop to his or her fullest***. In his words,

We cannot change the genetic make-up of a child. We can help him develop to his fullest. We can increase the ease with which he absorbs knowledge, the means to communicate and other knowledge. (Lee 1979b)

Third, he was unwavering in his belief that ***a child's achievement is not limited by his or her background***. He noted:

Our society has already been transformed. However, further changes are inevitable. Scholars, many of them the sons and daughters of uneducated, unskilled workers, hawkers or drivers, no longer become manual workers and union leaders. They move straightaway

into the upper reaches of the top companies, statutory boards or government ministries. (Lee 1983)

Fourth, he made it clear that we need to *nurture the child with leadership potential*. He expounded:

Not every boy is equal in his endowments in either physical stamina or mental capacity or character but you want to try and get all those with the potential to blossom forth. That is your spearhead in your society; on them depends the pace of progress. (Lee 1966c)

Lee knew that Singapore would not thrive if its people were only good enough to be “clerks, peons, servants, not leaders” (Lee 1966c). He underlined the importance of developing leaders of men in thought and in action that have the qualities needed to lead and give the people the inspiration, the drive to make Singapore succeed (Lee 1966c). He wanted every school to have music bands, uniform groups, sports and clubs that would help students develop qualities of leadership for taking on the responsibility of leading, and of helping his fellow citizens (Lee 1966c). He also advocated the setting up of schools for “all who have potential, near geniuses, people who can read your poetry in three languages if you give them the training, give them the character that goes with it” (Lee 1966c).

Significantly, Lee believed that talents in Singapore could be found in different racial groups and he saw the importance of bringing the talents together in the development of their potential and leadership qualities (Lee 1965). He was unabashed that the Singapore’s education system must be meritocratic in its focus on identifying and developing the very best talent regardless of their race, language, religion or socio-economic background (Yiannouka 2015).

Education Then and Now

Having a vision for educating every child is not sufficient. Lee saw the fulfilment of the education dream as a long haul mission. He set the tone for a paradigm of learning to get the right mindset from the best of East and West. He sowed the seeds for a philosophy of education anchored in a strong sense of values. Most of all, he was pragmatic and knew things had move in phases.

Lee’s view on the role of education was and is the cornerstone of the Singapore education system. Nonetheless, faced with the challenges of political and economic survival of a young nation building, there was a general feeling in the early years that the government was “so concerned with objects and objectives that we lost sight of the fact that we were dealing with children and people” (*The Straits Times* 1976). The situation improved as Singapore grew as a nation. The preparation of ‘a child for life’, and not for ‘a life of work’ became more central to the mission of the Ministry of Education (MOE) as Singapore moved through the Survival-Driven, Efficiency-Driven, Ability-Driven and finally Student-Centric, Values-Driven phases of education.

During the early years, Singapore's priority was to provide universal free primary education for all. This was done through the introduction of a Five-Year Plan (1961–1965) soon after Singapore became self-governing (Goh and Gopinathan 2008). The philosophy behind the plan was to provide “equal opportunity for all citizens”; establish “the means of maintaining unity in diversity”, and institute “a programme for training a new generation for the needs of a forward-looking, modern, industrial and technological society” (Ministry of Education 1966). The philosophy, broadly speaking, stays intact even today (Goh and Gopinathan 2008). By 1962, Singapore had achieved almost 100% free primary education, and by 1970, universal lower secondary education. This was a time where schools were built at a tremendous pace and the number of teachers almost doubled, but ‘wastage’ was high (Goh and Gopinathan 2008).

Thankfully, the pioneering generation of teachers had the same sense of urgency to teach and to learn. Teacher training in the early and subsequent years led by educators such as Dr. Ruth Wong Hie King echoed the call to care for the learner as an individual despite policies aimed at meeting more urgent needs (Tan et al. 2015).

Aimed to reduce educational wastage, Dr. Goh Keng Swee (the then Deputy Prime Minister) and his team overhauled the education system with the introduction of streaming in 1979, where students were separated into groups based on their academic achievements (Goh Keng Swee and the Education Study Team 1979). The rationale was to have a system that best addressed the needs of each student according to his or her academic ability. Although the virtues of streaming are much debated, it was successful in reducing attrition rate (Goh and Gopinathan 2008). During the time, we were highly prescriptive in our teaching, and the emphasis was on reducing performance variations across the school system. The ‘child’ was undoubtedly central to MOE’s mission, but there was no denying that Singapore had a more utilitarian approach to education, as seen by Dr. Tony Tan’s (then Minister of Education) announcement that the Singapore education system should be guided by three considerations:

Firstly, preparing the child for work in a Singapore which is rapidly becoming a modern centre for brain services and technological industries ... Secondly, equipping him with a sufficient knowledge of his mother tongue so that he will retain a link with his cultural origins ... Thirdly, inculcating in the child an awareness of the necessity of moral and traditional values so that he will grow up to be a responsible adult, conscious of his obligations to himself, his family, his neighbours and his nation. (*Business Times*, as cited in Goh and Gopinathan 2008)

In the late 1990s, there was a significant decentralisation of administrative and pedagogical authority to individual schools. The focus on student ability during the Ability-Driven phase required schools to be given much greater flexibility and responsibility for how they should teach and manage their students. In line with the focus, the streaming system was also refined in 2008 into subject-based banding, which provided greater flexibility for students by offering them the option of a combination of standard and foundation subjects, depending on their strengths (Ministry of Education 2015). Singapore has never lost sight of the key fundamentals to develop our children holistically, in all aspects—moral, cognitive,

physical, social and aesthetic. The focus became more pronounced at this stage, as seen by Mr. Tharman Shanmugaratnam's (the then Minister of Education) sharing:

We want to nurture young Singaporeans with minds that keep enquiring, and a desire to use their energies to create a better society. We want to help every child find his own talents, and grow and emerge from school confident of his abilities. (Shanmugaratnam 2004)

He went on to emphasise the “uniqueness of each child” by noting:

We should positively encourage a diversity of talents - in intellectual fields, in the arts and sports, and in community endeavour. We should value people with irregular strengths, not make them regular. (Shanmugaratnam 2004)

Finally, in 2011, Singapore entered the Student-Centric, Values-Driven phase, where we see the ‘child’ as our purpose, and the focus of all we do in education. In Mr. Heng Swee Keat's, the then Minister of Education, words:

Ultimately, education is not what we do to our children. Rather, it is what we do with them, and for them, to bring out the best in each of them, so that they grow up to embrace the best of the human spirit - to strive to be better, to build deeper wells of character, and to contribute to society ... Put simply, in the ten years of basic education, we aim for every student to acquire a broad and deep foundation for his lifelong journey. (Heng 2013)

Our emphasis is on making every student an engaged learner, every school a good school, every teacher a caring educator, and every parent a supportive partner. It is an education system that strives to ignite the joy of learning, provide learning support where necessary, and design multiple pathways to suit different learning styles to make every student an engaged learner (Heng 2012). It is also one that places a huge emphasis on the child's values and character. Heng asserted:

The most critical part, and the test of an engaged learner, is how committed a student is in developing the values and character that will enable him to succeed in life and contribute to others. Knowledge and skills can become outdated, but a mature social-emotional core, deep values and strength of character will enable our children to continue to thrive as they grow. It is not cognitive skills alone, but character traits of empathy, graciousness, responsibility and integrity that will enable our kids to succeed. (Heng 2012)

Singapore's approach and achievement in education have given our children freedom—freedom from poverty, freedom from injustice, and freedom from illiteracy. In the 1950s, youths and children roamed the streets with little prospect of their future in a society of poverty, mudflats, gang fights and racial unrest. However, with a strong conviction that people are our most precious resources, Lee, and Singapore, went about with a pragmatic approach in trying to provide equal opportunity for all citizens, and maximising their potential. Singapore's success can be seen in key indicators such as unemployment rates and literacy rates. Specifically, Singapore unemployment rate has decreased from 9.2% in 1966 (Cahyadi et al. 2004) to a record 1.8% in March 2015 (Ministry of Manpower 2015), whilst literacy rate has increased from 82.9% among people aged 15 and above in 1980 (United Nations Educational, Scientific, and Cultural Organization Institute for Statistics, n.d.) to 96% among residents aged 15 and above in 2014 (Department of Statistics Singapore 2015). In addition, over 94% of Singapore's

students go on to pursue post-secondary education today. In contrast, barely 50% moved on to secondary school barely 40 years ago (Heng 2013).

Singapore's youth are also disproportionally represented on the world's stage, from winning Science Olympiads to internationally benchmarked assessments such as Trends in Mathematics and Science Study (TIMSS), Progress International Reading Literacy Study (PIRLS) and Progress for International Student Assessment (PISA) evaluations. For instance, in PISA 2009, Singapore students ranked fourth in science and fifth in reading. In 2012, this improved to second in mathematics and third in science and reading (Davie 2013; OECD 2013). Specifically, Singapore's students improved on their overall performance, with academically weaker students doing better than they did in 2009 (Sreedharan 2013). Ms. Ho Peng, the then Director-General of Education, noted that the Singapore's education system has indeed:

'levelled up' academically-weaker students and given them a strong foundation, while at the same time, stretched high-performing students. (Sreedharan 2013)

More importantly, the PISA results showed that even the weakest of the Singapore cohort out-performed the average of many developed nations. In essence, PISA results showed that better-off students worldwide do better academically. But in some countries like Singapore, China, South Korea and Finland, a larger proportion from lower socioeconomic backgrounds performed better than expected (Davie 2013; OECD 2013). PISA called them the "resilient" students. These students came from the bottom quarter in terms of socioeconomic background in their country, but performed in the top quarter across students from all countries, after correcting for their predicted scores based on their socioeconomic background (Davie 2013; OECD 2013). In PISA 2009, 12% of the Singapore student population or almost one in two (50%) disadvantaged students was resilient. This compared to one in three in the 34 OECD member countries and the PISA average of one in four among 65 countries. In PISA 2012, 15.1% of the Singapore student population, or six out of ten (60%) disadvantaged students were 'resilient'. This compared to 6.4% of the entire student population across OECD countries, or about one in four disadvantaged students (OECD 2013).

In addition, Singapore is one of the countries that has above-average mathematics performance and above-average equity in education outcomes, where equity in education is defined as "providing all students, regardless of gender, family background or socio-economic status, with similar benefits from education" (OECD 2013, p. 27). It is also noteworthy that after accounting for socio-economic status, students in all Singapore schools, regardless of their location, performed above the OECD average in PISA 2012 (OECD 2013). Moreover, Singapore students who attended schools with a relatively disadvantaged student population, in terms of average socio-economic status of students, still managed to achieve a high level of performance in mathematics (OECD 2013).

The term social justice is seldom used in Singapore yet this is a nation that seems to mobilise and leverage on the talent of some of the disadvantaged social groups.

Conclusion

In our youth of today are the leaders and citizens of tomorrow. (Lee 1959b)

Lee was visionary in terms of his view on the role of education. Even at a time when education was ‘driven’ and ‘delivered’ as in the industrial world of commodity production and distribution (Hargreaves and Shirley 2012), he planted the seed that education must educate the ‘whole child’ and the ‘whole person’. Years before educators started the discussion on education in the 21st century, he advocated that education cannot be “dissemination of information and recalling of facts”; it must lead to life-long learning and involve shaping and moulding of character. Nonetheless, in the face of challenges such as the social, political and economic survival of the nation in the early years, it is not difficult to imagine Lee, being the pragmatist that he was, focusing more on the utilitarian approach to education—nation building and global competitiveness. It is heartening that Singapore has now redressed the balance and the child is our purpose and our focus. We have truly moved from developing ‘human resources’ to developing ‘human beings’.

It is no mean feat that in five to six decades, Singapore managed to provide universal education at primary and secondary levels, and also improved access to education at higher levels—polytechnics and universities, through various scholarships and bursary schemes. Lee proudly proclaimed:

We have given every student, regardless of language, race or religion, equal opportunities for education and employment. Hundreds get scholarships every year, over 150 to go to universities abroad. All are judged and rewarded according to their performance, not their fathers’ wealth or status. Economic progress has resulted from this and made life better for all. (Lee 2013)

Social justice is seldom used to discuss education, but education has indeed been a social leveller in Singapore. The improved access to education has levelled the playing field and enhanced the ability of Singaporeans, regardless of socio-economic status, race or religion, to realise their human talents and to pursue their goals. The closing of literacy gap, numeracy gap, or technology gap across all of society provides equal opportunity for everyone to compete for employment. Traditional sources of social inequality—wealth or social status—are not limiting factors in terms of access to a good education and the knowledge and skills it provides. In some countries, the quality and effectiveness of schools and education institutions varies enormously across neighbourhoods, towns, or regions in ways that reinforced patterns of prior advantage and disadvantage.

In the Singapore context, all public schools are fully funded by the MOE. There is also a commitment by the MOE to help every school develop its niche area so that “every school is a good school”. We are proud of our elite secondary and tertiary academic institutions, but we are equally proud of the system of hundreds of neighbourhood schools, the Institute of Technical Education, and polytechnics that provide high-quality education for all (Yiannouka 2015). Whilst gaps between

schools are widening in many countries, Singapore has achieved above-average equity in education outcomes and has been described as moving from good to great.

Singapore's world-class education system will be one of Lee's most enduring legacies. We need to continue to build on his legacy and fine-tune our education system so that our children develop a deep love for learning, a curious and inquisitive mind to ask questions and find connections, and a deep sense of responsibility to the community and the environment (Tan et al. 2012). We need to continue to rebalance our education system so that our children dare to take risks and are creative, innovative and entrepreneurial.

Challenges Ahead

In a system that is now well-resourced, our children face a different kind of poverty. In Singapore, financial poverty is remote in the manner that developing countries suffer from. Singapore does have a segment of low-income families and families which are struggling financially. The poverty we speak of is across all socio-economic levels, and it has to do with the character of the child.

Rather than nutritional or financial poverty, our children in today's world may suffer from character poverty, if we may draw this analogy. They are exposed to so many risks to their holistic and emotional well-being. One risk comes from technology which is now so easily available. While technological advancement has improved our lives overall, we realise it also has drawbacks. Many children place a lot of significance, meaning and importance on social media. If they or their posts are not 'liked' enough, their esteem drops. They become 'poorer' in confidence and purpose in life which, unfortunately, becomes tied to their social media identity. Do they have a rich sense of who they are or are they defined by the number of 'followers'? Do they recognise their own talents and abilities or are they influenced by social affirmation and popular values? Do they fall prey easily to 'popular' culture and an increasing sense of 'entitlement'? Do they show the self-reliance needed for the uncertain world ahead to work in any situation, good or bad, that may come their way or are they heavily dependent on easy way-outs? Are they 'rich' enough in character to make the effort to solve problems or are they the sorts who run to someone to provide solutions? Can they be life-long learners, as Mr. Lee had envisioned?

Education that is holistic and not simply formal is much needed and ever so important. Will we as teachers, educators or parents allow our children to be poor in any aspect? We need to be vigilant against these challenges and risks facing our children in ways that build their character, not their grades. We need to inspire self-reliance and help them realise their talent and potential. Singaporeans have worked hard to raise Singapore from its third-world beginnings to its present first-world status. We cannot succumb to a poverty of character and a poverty of values. Our children deserve better. We believe Mr. Lee would have agreed, too.

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