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Public Administration and Policy – An Asia-Pacific Journal was first launched in 1992 jointly published by the Hong Kong Public Administration Association and City University of Hong Kong. It was suspended in 2005 due to the departure of the Editor-in-Chief. In Spring 2012, it was re-launched with the support of the new co-publisher, the School of Professional Education and Executive Development (SPEED) of The Hong Kong Polytechnic University (PolyU).

The *PAP Journal* has progressed smoothly in the past six years. The e-version was also introduced in 2013 and has been available for readers through HKPAA and PolyU SPEED's websites. We are delighted to have a successful collaboration partnership with Emerald Publishing Limited in the UK this year. From 2018 onwards, this journal will have online publication and global dissemination on the Emerald Insight Platform. We hope this will enhance the Journal's readership and citations of our authors' articles.

In order to maintain a high academic standard, an International Advisory Board consisting of renowned scholars and practitioners from leading universities in the USA, UK, Switzerland, Canada, Australia, Japan, Korea, Singapore, Mainland China, Taiwan and Hong Kong has been formed. The Journal is devoted to the integration of the theories and practice of public administration and management, with special emphasis on the Asia-Pacific region. It seeks to play a useful role in contributing to the improvement of public sector management by highlighting issues, problems and solutions through efficient and innovative management of public services. Academics, government officials and executives in non-profit and business organisations are welcomed to contribute articles to the Journal. Through the new Emerald platform, we look for articles related to the latest regional development such as the One Belt One Road initiatives and impacts of digital and artificial intelligence on public governance.

In this inaugural issue on Emerald Insight Platform, the first article is by Jon Quah who analyses the Five Secrets of Singapore's Success. It is followed by Habib Zafarullah and Ahmed Shafiqul Huque who explore Climate Change, Regulatory Policies and Regional Cooperation in South Asia. The third article is by Phudit Tejavaddhana, David Briggs, Orapin Singhadej and Reggie Hinoguin on Developing Primary Health Care in Thailand. Alice Te and Gerard Postiglione then review the Admission Scheme of Hong Kong Students Entering Mainland China Universities. This issue concludes with Fanny Lau and Gryphon Sou's article on Assessment for Learning: Hong Kong Needs Territory-wide System Assessment (TSA) or Not.

We wish to thank all the paper contributors in this issue. We also thank the reviewers for their critical comments and constructive suggestions in helping authors to improve their papers. Finally, I thank our editorial team and advisors for their efforts in making the journal publication possible.

Peter K.W. Fong

Editor-in-Chief, PAP Journal

President, Hong Kong Public Administration Association



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Why Singapore works: five secrets of Singapore's success

Jon S.T. Quah
Anti-Corruption Consultant, Singapore

Five secrets
of Singapore's
success

5

Abstract

Purpose – The purpose of this paper is to explain why Singapore is a success story today despite the fact that its prospects for survival were dim when it became independent in August 1965.

Design/methodology/approach – This paper describes the changes in Singapore's policy context from 1959 to 2016, analyses the five factors responsible for its success and concludes with advice for policy makers interested in implementing Singapore-style reforms to solve similar problems in their countries.

Findings – Singapore's success can be attributed to these five factors: the pragmatic leadership of the late Lee Kuan Yew and his successors; an effective public bureaucracy; effective control of corruption; reliance on the "best and brightest" citizens through investment in education and competitive compensation; and learning from other countries.

Originality/value – This paper will be useful to those scholars and policy makers interested in learning from Singapore's success in solving its problems.

Keywords Singapore, Corruption, Education, Policy diffusion, Lee Kuan Yew, Pragmatic leadership, Effective public bureaucracy, Competitive compensation

Paper type Research paper

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Explaining Singapore's success

Singapore is the smallest of [...] Asia's four "Little Dragons" [...] but in many ways it is the most successful. Singapore is Asia's dream country. [...] Singapore's success says a great deal about how a country with virtually no natural resources can create economic advantages with influence far beyond its region. [...] But it certainly is an example of an extraordinarily successful small country in a big world (Naisbitt, 1994, pp. 252, 254).

When Singapore was founded by Stamford Raffles in January 1819, it was a small fishing village inhabited by a thousand Malay fishermen and a few Chinese farmers (Turnbull, 1977, p. 5). Its transformation from a small fishing village in the early nineteenth century to a modern and prosperous city-state today is an incredible story of from rags to riches. Singapore's gross domestic product (GDP) per capita has increased by 56 times from S\$1,310 (US\$428) in 1960 to S\$73,167 (US\$52,962) in 2016 (Department of Statistics, 2017, p. 66; 2018). When Singapore was forced to leave the Federation of Malaysia and became independent in August 1965, Prime Minister Lee Kuan Yew was concerned about Singapore's survival. In his memoirs, Lee (2000) wrote:

We had been asked to leave Malaysia and go our own way with no signposts to our next destination. We faced tremendous odds with an improbable chance of survival. [...] On that 9th day of August 1965, I started out with great trepidation on a journey along an unmarked road to an unknown destination (pp. 19, 25).

Fortunately for Singaporeans, Lee's fears were unfounded as Singapore has not only survived but has been transformed from a Third World country to a First World country

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during the past 53 years. The tremendous changes in Singapore’s policy context from 1959 to 2016 are shown in Table I. First, Singapore’s land area has increased by 137.7 km² from 581.5 km² in 1959 to 719.2 km² in 2016 as a result of land reclamation efforts. Second, as a consequence of its liberal immigration policy, Singapore’s population has increased by 3.6 times from 1.58 to 5.61m during the same period. Third, the most phenomenal manifestation of Singapore’s transformation from a poor Third World country to an affluent First World nation during 1960–2016 is that its GDP per capita has increased by 56 times from S\$1,310 to S\$73,167. Fourth, Singapore’s official foreign reserves have grown by 310 times from S\$1,151m in 1963 to S\$356,253.9m in 2016.

The lives of Singaporeans have also improved as reflected in the drastic decline in the unemployment rate from 14 per cent to 2.1 per cent during 1959–2016. Furthermore, the proportion of the population living in public housing has also increased from 9 per cent in 1960 to 82 per cent in 2016. Government expenditure on education has also risen by 200 times from S\$63.39m in 1959 to S\$12,660m in 2016. The heavy investment by the People’s Action Party (PAP) government on education during the past 57 years has reaped dividends as reflected in Singapore’s top ranking among 76 countries on the Organisation for Economic Cooperation and Development’s study on the provision of comprehensive education (Teng, 2015, p. A1). Finally, as a result of the effectiveness of the Corrupt Practices Investigation Bureau (CPIB) in enforcing the Prevention of Corruption Act (POCA) impartially, corruption has been minimised in Singapore, which is the least corrupt Asian country according to Transparency International’s Corruption Perceptions Index (CPI) in 2016 and 2017.

The following five sections in this paper will be devoted to analysing the secrets of Singapore’s success, beginning with the important legacy of Lee Kuan Yew’s pragmatic leadership. The concluding section advises policy makers in other countries on the relevance and applicability of Singapore’s secrets of success to the solution of their problems.

Pragmatic leadership: Lee Kuan Yew’s legacy

Prime Minister Goh Chok Tong revealed the secret of Singapore’s success in his address to PAP cadres on 15 November 1992:

During the recent Non-Aligned Meeting in Jakarta, the Nepalese Prime Minister asked me for the secret of Singapore’s success. I smiled and replied, “Lee Kuan Yew.” I went on to explain that I meant it as a short form to encapsulate the principles, values and determination with which he governed and built Singapore (Goh, 1992, p. 15).

Indicator	1959	2016	Change
Land area (km ²)	581.5	719.2	+137.7 (×1.2)
Population (in millions)	1.58	5.61	+4.03 (×3.6)
GDP per capita	S\$1,310 ^a (US\$428)	S\$73,167 (US\$52,962)	+S\$71,857 (×56)
Unemployment rate (%)	14	2.1	–11.9
Official foreign reserves (in millions)	S\$1,151 ^b (US\$383.3)	S\$356,253.9 (US\$246,575.3)	+S\$355,102.9 (×310)
Population living in public housing (%)	9 ^a	82	+73 (×9.1)
Government expenditure on education (in millions)	S\$63.39 (US\$21.13)	S\$12,660 (US\$9,164)	+S\$12,596.6 (×200)
Extent of corruption	High	Low ^c	Minimised

Table I.
Changes in
Singapore’s policy
context, 1959–2016

Notes: ^a1960 figure; ^b1963 figure; ^cSingapore was ranked seventh among 176 countries on the CPI in 2016 with a score of 84 (Transparency International, 2017)

Sources: Department of Statistics (1983, pp. 4, 7, 118, 172, 248; 2017, pp. 11, 45, 66, 144, 217, 296; 2018); Chan (2002, p. 15)

In the same speech, Goh (1992, p. 15) concluded that meritocracy was the key to Singapore's success because the "practice of meritocracy in the civil service, in politics, in business and in schools" enabled Singaporeans "to achieve excellence and to compete against others".

In his memoirs, Lee Kuan Yew (2000, pp. 735-736) emphasised the importance of good leadership when he wrote:

My experience of developments in Asia has led me to conclude that we need good men to have good government. However good the system of government, bad leaders will bring harm to their people. [...] The single decisive factor that made for Singapore's development was the ability of its ministers and the high quality of the civil servants who supported them.

Indeed, leaders matter because of their role in "stretching" the constraints of "geography and natural resources, institutional legacies and international location" (Samuels, 2003, pp. 1-2). Applying Richard Samuels' concept of political leadership, Lee and his colleagues have succeeded in stretching those constraints facing them and transformed Singapore to First World status by 2000, 41 years after assuming office in June 1959.

In addition to his belief in the importance of having good leaders, Lee was also a pragmatic leader. In November 1993, Lee advised visiting African leaders to adopt a pragmatic approach in formulating economic policy rather than a dogmatic stance. Instead of following the then-politically correct approach of being anti-American and anti-multinational corporations (MNCs) in the 1960s and 1970s, Lee and Singapore went against the grain and "assiduously courted MNCs" because "they had the technology, know-how, techniques, expertise and the markets" and "it was a fast way of learning on the job working for them and with them". This strategy of relying on the MNCs paid off as "they have been a powerful factor in Singapore's growth". Lee (1994, p. 13) concluded that Singapore succeeded because it "rejected conventional wisdom when it did not accord with rational analysis and its own experience".

After assuming office in June 1959, the PAP government decided on a strategy of industrialisation to deal with Singapore's declining entrepôt trade, high unemployment and absence of natural resources. Accordingly, it invited a United Nations mission led by a Dutch economist, Albert Winsemius, to formulate an industrialisation programme for Singapore. The Winsemius team recommended a crash programme to reduce unemployment and a ten-year programme to attract foreign investment to Singapore with appropriate incentives (Quah, 1998, p. 106). Winsemius advised Lee that the two preconditions for Singapore's success in industrialisation were:

Number one is: get rid of the Communists; how you get rid of them does not interest me as an economist, but get them out of the government, get them out of the unions, get them off the streets. How you do it, is your job. Number two is: let [the statue of Stamford] Raffles [who founded Singapore] stand where he stands today; say publicly that you accept the heavy ties with the West because you will very much need them in your economic programme (quoted in Drysdale, 1984, p. 252).

As a rational and pragmatic leader, Lee took Winsemius' advice seriously, neutralised the communist threat and attracted many MNCs from the USA, Europe and Japan to Singapore. After Winsemius' death in December 1996, Lee acknowledged Singapore's debt as he had learnt from Winsemius a great deal about the operations of European and American companies and how he and his colleagues could attract them to invest in Singapore (Lee, 1996, p. 32). Singapore succeeded in developing its economy because Lee implemented the sound economic policies recommended by Winsemius.

In 1998, Lee described himself as "pragmatic" because he was "prepared to look at the problem and say, all right, what is the best way to solve it that will produce the maximum happiness and well-being for the maximum number of people" (quoted in Han *et al.*, 1998, p. 130).

In his July 2009 interview with American journalist, Tom Plate, Lee elaborated on his pragmatic approach to solving problems:

I do not work on a theory. Instead I ask: what will make this work? If, after a series of such solutions, I find that a certain approach worked, then I try to find out what was the principle behind the solution. [...] What is my guiding principle? Presented with the difficulty or major problem or an assessment of conflicting facts, I review what alternatives I have if my proposed solution doesn't work. I choose a solution which offers a higher probability of success, but if it fails, I have some other way. Never a dead end (quoted in Plate, 2010, pp. 46-47).

In short, Singapore has adopted a pragmatic approach to policy formulation which entails “a willingness to introduce new policies or modify existing ones as circumstances dictate, regardless of ideological principle” (Jones, 2016, p. 316).

A good piano playing good music: an effective public bureaucracy

Sir Kenneth Stowe, a former Permanent Secretary of the UK's Department of Health and Social Security (1981–1987), has described “the efficient and well-tuned public service” as a “good piano” which should not “play bad music” by not “serving ends which are wrong by ministerial design or incompetence” (Stowe, 1996, pp. 89-90). The second secret of Singapore's success is that it has an effective public bureaucracy that plays good music, to use Stowe's analogy. The public bureaucracy in Singapore consists of 16 ministries and 64 statutory boards (Republic of Singapore, 2018) and has grown from 127,279 to 144,980 employees during 2010–2016, as shown in Table II.

The World Bank defines “government effectiveness” as “the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies” (Kaufmann *et al.*, 2004, p. 3). Table III shows that Singapore has performed well consistently on the World Bank's governance indicator of government effectiveness as its score ranges from 1.85 in 2002 to 2.43 in 2008. It has attained 100 percentile ranking for these ten years: 1996, 1998, 2000, 2007, 2008, 2009, 2010, 2014, 2015 and 2016.

Thus, it is not surprising that Singapore is ranked first for government effectiveness in 2016 as shown in Table IV. A comparative analysis of the role of the public bureaucracy in policy implementation in five ASEAN countries has confirmed that Singapore is the most effective because of its favourable policy context and its effective public bureaucracy. The emphasis on meritocracy and training in Singapore's public bureaucracy has resulted in a high level of competence of the personnel in implementing policies (Jones, 2016, p. 319). Conversely, Indonesia is the least effective because of its unfavourable policy context and its ineffective public bureaucracy. Malaysia, Vietnam and the Philippines occupy intermediate positions between Singapore and Indonesia and are ranked second, third and fourth, respectively, depending on the nature of their policy contexts and the levels of effectiveness of their public bureaucracies (Quah, 2016a, p. 72).

Year	Employees in ministries	Employees in statutory boards	Total
2010	75,836 (59.6%)	51,443 (40.4%)	127,279
2011	77,540 (59.1%)	53,688 (40.9%)	131,228
2012	80,210 (59.0%)	55,817 (41.0%)	136,027
2013	81,508 (58.8%)	57,212 (41.2%)	138,720
2014	82,291 (58.4%)	58,574 (41.6%)	140,865
2015	83,713 (58.5%)	59,470 (41.5%)	143,183
2016	84,393 (58.2%)	60,587 (41.8%)	144,980

Table II.
Growth of Singapore's
public bureaucracy,
2010–2016

Source: Department of Statistics (2017, p. 51)

Table III.
Government
effectiveness of
Singapore, 1996–2016

Year	Government effectiveness score (–2.5 to +2.5)	Percentile rank (0–100)
1996	2.10	100.00
1998	2.12	100.00
2000	2.17	100.00
2002	1.85	93.66
2003	1.96	96.59
2004	2.03	96.10
2005	2.00	99.02
2006	2.18	99.51
2007	2.37	100.00
2008	2.43	100.00
2009	2.28	100.00
2010	2.26	100.00
2011	2.17	99.53
2012	2.15	99.52
2013	2.07	99.52
2014	2.19	100.00
2015	2.30	100.00
2016	2.20	100.00

Source: World Bank (2017)

Table IV.
Government
effectiveness of
selected countries
in 2016

Country	Government effectiveness score	Percentile rank
Singapore	2.2	100.0
Denmark	1.9	99.0
Hong Kong SAR	1.9	98.1
New Zealand	1.9	97.1
Finland	1.8	96.6
Japan	1.8	95.7
Australia	1.6	92.3
Taiwan	1.4	89.4
Macao SAR	1.2	85.1
Brunei Darussalam	1.1	81.3
South Korea	1.1	80.8
Malaysia	0.9	76.0
Bhutan	0.5	70.2
China	0.4	67.8
Thailand	0.3	66.3
India	0.1	57.2
Indonesia	0.0	53.4
Vietnam	0.0	52.9
Philippines	0.0	51.9
Mongolia	–0.1	50.5

Source: World Bank (2017)

Sustaining clean government: keeping corruption at bay

Stay clean: dismiss the venal (Lee, 1979, p. 38).

Corruption was a serious problem in Singapore during the British colonial period because of the government's lack of political will and the ineffective Anti-Corruption Branch (ACB), which had only 17 personnel to deal with both corruption and non-corruption-related

functions and was handicapped in tackling police corruption because it was located within the Criminal Investigation Department of the Singapore Police Force (SPF) (Quah, 2007, pp. 14-15). The problem of corruption deteriorated during the Japanese Occupation (February 1942 to August 1945) as civil servants could not survive on their low wages because of the high inflation rate and the scarcity of food and other commodities forced many people to trade in the black market. The Japanese Occupation's worst legacy was "the corruption of public and private integrity: flourishing gambling dens and brothels, both legalised by the Japanese, the resurgence of opium smoking, universal profiteering and bribery" (Turnbull, 1977, p. 225).

As conditions did not improve during the post-war period, corruption was rampant among civil servants because their low salaries, high inflation and inadequate supervision by their superiors provided them with ample opportunities for corruption with a low probability of being caught (Quah, 1982, pp. 161-162). The PAP leaders' exposure of the acceptance of S\$701,593.47 by the Minister for Education, Chew Swee Kee, from foreign donors during their campaign for the 30 May 1959 general election enabled them to capture 43 of the 51 seats and obtain 53.4 per cent of the votes cast (Quah, 2015b, p. 380). After assuming office in June 1959, Lee Kuan Yew explained in his memoirs why he and his colleagues were determined to keep Singapore free from corruption:

We were sickened by the greed, corruption and decadence of many Asian leaders. [...] We had a deep sense of mission to establish a clean and effective government. When we took the oath of office [...] in June 1959, we all wore white shirts and white slacks to symbolise purity and honesty in our personal behaviour and our public life. [...] We made sure from the day we took office in June 1959 that every dollar in revenue would be properly accounted for and would reach the beneficiaries at the grass roots as one dollar, without being siphoned off along the way. So from the very beginning we gave special attention to the areas where discretionary powers had been exploited for personal gain and sharpened the instruments that could prevent, detect or deter such practices (Lee, 2000, pp. 182-184).

As corruption was endemic in Singapore when the PAP leaders assumed office, they learned from the mistakes made by the British colonial government in curbing corruption and showed their political will by enacting the POCA on 17 June 1960 to replace the ineffective Prevention of Corruption Ordinance (POCO) and to strengthen the CPIB by providing it with more legal powers, personnel and funding. The British colonial government's most serious error was to make the ACB, which was part of the SPF, responsible for corruption control with the enactment of the POCO in December 1937 even though the 1879 and 1886 Commissions of Inquiry had confirmed the prevalence of police corruption in Singapore (Quah, 2007, pp. 9, 14, 16). The British authorities failed to observe the "golden rule" that "the police cannot and should not be responsible for investigating their deviance and crimes" (Punch, 2009, p. 245).

The folly of making the ACB responsible for curbing corruption was only realised by the British colonial government in October 1951 when three police detectives and some senior police officers were implicated in the Opium Hijacking scandal involving the robbery of 1,800 pounds of opium worth S\$400,000 (US\$133,333) (Tan, 1999, p. 59). It corrected the first mistake by replacing the ACB with the CPIB in September 1952 as a Type A anti-corruption agency (ACA) dedicated to combating corruption. However, it made a second mistake by not providing the CPIB with adequate legal powers, budget and personnel to perform its functions effectively. The POCO did not provide CPIB officers with adequate enforcement powers and the CPIB was ineffective because its reliance on 13 seconded personnel from the SPF hindered the investigation of police officers accused of corruption offences (Quah, 2017, p. 266).

Unlike the British colonial government's weak political will in combating corruption, the PAP leaders realised from the outset the critical importance of political will by enhancing

the CPIB's legal powers and providing it with the required personnel and budget to perform its functions effectively. The substantial growth in the CPIB's budget and personnel from 2010 to 2015 is shown in Table V and reflected in the increase of its per capita expenditure from US\$2.88 in 2010 to US\$4.55 in 2015. The CPIB's staff-population ratio has also improved from 1:56,408 to 1:26,109 during the same period.

Apart from its adequate legal powers, budget and personnel, the CPIB is an effective Type A ACA for four reasons. First, even though the CPIB comes under the jurisdiction of the Prime Minister's Office, it has operational autonomy because the prime minister and other political leaders do not interfere in its daily operations and its director reports to the secretary of the cabinet. Furthermore, the CPIB's director can obtain the elected president's consent to investigate allegations of corruption against ministers, members of parliament and senior civil servants if the prime minister withholds his consent (Quah, 2007, pp. 40-41).

Second, the CPIB adopts a "total approach to enforcement" and deals with both major and minor cases of public and private sector corruption, regardless of the amount, rank or status of the persons under investigation. The same processes and procedures apply to everyone being investigated, including ministers and chief executive officers of major companies. Both bribe-givers and bribe-takers are equally culpable according to the POCA (Soh, 2008, pp. 1-2).

Third, the CPIB's effectiveness is also the result of its efforts to enhance the capabilities of its officers by sending them for training programmes on management and professional topics in Singapore and other countries. In July 2004, the CPIB created a Computer Forensics Unit to improve the investigative and evidence-gathering skills of its officers by providing them with the knowledge of forensic accounting to enable them to trace ill-gotten assets and retrieve incriminating evidence from seized computers and mobile telephones. The CPIB has also conducted joint operations with the Commercial Affairs Department and the Immigration and Checkpoints Authority to develop networks and partnerships with other public agencies in Singapore (Soh, 2008, pp. 3-4).

Finally, the most important reason for the CPIB's success is its impartial enforcement of the POCA as anyone found guilty of a corruption offence is punished regardless of his or her position, status or political affiliation. The CPIB has investigated five PAP leaders and eight senior civil servants in Singapore without fear or favour from 1966 to 2014. In November 1986, the Minister for National Development, Teh Cheang Wan, was accused of accepting S\$1m in bribes from two property developers. He was investigated and interrogated by CPIB officers but he committed suicide one month later before he could be charged in court. In July 2013, Edwin Yeo, the CPIB's Assistant Director, was charged with misappropriating US\$1.41m from 2008 to 2012. He was found guilty of criminal breach of trust and forgery and sentenced to ten years imprisonment on 20 February 2014 (Quah, 2015a, pp. 77, 80-81).

The CPIB's effectiveness is confirmed by its 100 per cent conviction rate and the CPIB Public Perceptions Survey's finding that 89 per cent of the 1,011 respondents had rated Singapore positively on its anti-corruption efforts in 2016 (CPIB, 2017, pp. 7, 9).

CPIB	2010	2011	2012	2013	2014	2015
Budget (in millions)	US\$14.65	US\$18.92	US\$20.29	US\$23.39	US\$29.33	US\$25.22
Personnel	90	123	138	156	205	212
Per capita expenditure	US\$2.88	US\$3.64	US\$3.82	US\$4.33	US\$5.36	US\$4.55
Singapore population	5,076,732	5,183,688	5,312,437	5,399,162	5,469,724	5,535,002
Staff-population ratio	1:56,408	1:42,144	1:38,496	1:34,610	1:26,682	1:26,109

Sources: Compiled and calculated by the author from the CPIB's budget and personnel in Republic of Singapore (2010/2017) and Singapore's population in Department of Statistics (2017, p. 11)

Table V.
CPIB's budget and
personnel, 2010–2015

Its effectiveness is also reflected in Singapore’s sixth ranking among 180 countries with a score of 84 on the CPI in 2017 (Transparency International, 2018) and its consistently good performance on the other five indicators of the perceived extent of corruption in Table VI. The sixth indicator, “Public Trust in Politicians”, is included as an indirect indicator because “corruption influences the level of trust” and citizens living in those countries where corruption is widespread would have low trust in their politicians (Rose-Ackerman and Palifka, 2016, p. 259).

Nurturing the “best and brightest”: education and competitive compensation

If we underpay men of quality as ministers, we cannot expect them to stay long in office earning a fraction of what they could outside. [...] Underpaid ministers and public officials have ruined many governments in Asia (Lee, 2000, p. 193).

Education is the key to the long-term future of the population in Singapore which has no natural resources. Former Prime Minister Goh Chok Tong observed in March 1997 that Singapore was “blessed” by its lack of natural resources because it was forced to develop its only resource: its people (Chua, 1997, p. 1). In other words, Singapore has compensated for its absence of natural resources by investing heavily in education to enhance the skills of its population and to attract the “best and brightest” Singaporeans to join and remain in the public bureaucracy and government by its policies of meritocracy and paying these citizens competitive salaries.

The PAP government views education as “a national investment” and has increased government expenditure on education by about 200 times from S\$63.39m in 1959 to S\$12,660m in 2016. Consequently, the enrolment in all educational institutions in Singapore has grown from 352,952 students in 1960 to 651,655 students in 2016, and the literacy rate has also improved from 72.2 per cent in 1970 to 97.0 per cent in 2016 (Department of Statistics, 1983, pp. 231, 248, 249; 2017, pp. 281, 296, 299). Singapore’s intensive investment in education and training during the past 57 years has certainly enhanced the quality of its population as reflected in the excellent performance of its students in many international assessments.

In 1997, the Third International Mathematics and Science Study (TIMSS), which compared the scores of 13-year-olds in mathematics and science tests in 41 countries, ranked Singapore first in both subjects with scores of 643 and 607, respectively, which were significantly higher than the international average score of 500 (*Economist*, 1997, p. 21). In 2015, Singapore students not only retained their top position in both subjects in the TIMSS assessment but also topped the Program for International Student Assessment of 65 countries in mathematics, reading and science literacy skills, and, as mentioned earlier, the OECD’s global school rankings in 76 countries (Goodwin *et al.*, 2017, pp. 1-2).

Singapore was a poor country when the PAP government assumed office in June 1959 and inherited a huge budget deficit because the previous Labour Front government had spent S\$200m. Accordingly, it removed the cost of living allowance for 6,000 middle and

Table VI.
Singapore’s
performance
on six corruption
indicators, 2017

Indicator	Singapore’s performance
Corruption Perceptions Index	6th/180 (84/100)
Diversion of Public Funds	4th/137 (6.2/7)
Irregular Payments and Bribes	3rd/137 (6.7/7)
Organised Crime	5th/137 (6.4)
Ethical Behaviour of Firms	3rd/137 (6.2)
Public Trust in Politicians	1st/137 (6.4)

Sources: Transparency International (2018, p. 2) and Schwab (2017, p. 263)

senior civil servants and saved S\$10m. In 1968, the Harvey Report on public sector salaries recommended salary increases for senior civil servants in the Superscale Grades C to G. The government did not accept this recommendation because it could not afford a major salary revision and the private sector was not viewed as a serious competitor for talented personnel (Quah, 2015b, p. 383).

However, the improvement in Singapore's economy in the 1970s resulted in higher private sector salaries, which led to an exodus of talented senior civil servants to more lucrative jobs in the private sector. In February 1972, the National Wages Council was established to advise the government on wage policies and, one month later, it recommended that all public sector employees be paid a 13th-month non-pensionable allowance comparable to the bonus in the private sector. The salaries of senior civil servants were increased substantially in 1973 and 1979 to reduce the gap with the private sector. A 1981 survey of 30,197 graduates in Singapore conducted by the Internal Revenue Department found that graduates in the private sector jobs earned, on the average, 42 per cent more than their counterparts working in the public sector. Consequently, it was not surprising that eight superscale and 67 timescale administrative officers had resigned from the civil service for better-paid private sector jobs. The government responded by revising the salaries of senior civil servants in 1982, 1988, 1989 and 1994 to reduce the gap with private sector salaries and to minimise their outflow to the private sector (Quah, 2010, pp. 104-110).

On 17 March 1989, Lee Hsien Loong, the Minister for Trade and Industry, recommended a hefty salary increase for senior civil servants because the low salaries and slow promotion in the Administrative Service had contributed to its low recruitment and high resignation rates. He stressed that as the government's fundamental philosophy was to "pay civil servants market rates for their abilities and responsibilities", it "will offer whatever salaries are necessary to attract and retain the talent that it needs". He concluded his speech in Parliament by reiterating that "paying civil servants adequate salaries is absolutely essential to maintain the quality of public administration" in Singapore (Quah, 2010, pp. 107-108).

To justify the government's practice of matching public sector salaries with private sector salaries, a White Paper on "*Competitive Salaries for Competent and Honest Government*" was presented to Parliament on 21 October 1994 to justify the pegging of the salaries of ministers and senior civil servants to the average salaries of the top four earners in the six private sector professions of accounting, banking, engineering, law, local manufacturing companies and MNCs. The adoption of the long-term formula suggested in the White Paper removed the need to justify the salaries of ministers and senior civil servants "from scratch with each salary revision", and also ensured the building of "an efficient public service and a competent and honest political leadership, which have been vital for Singapore's prosperity and success" (Republic of Singapore, 1994, pp. 7-12, 18).

In December 2007, the Public Service Division (PSD) announced that the salaries of ministers and senior civil servants would be increased from 4 to 21 per cent from January 2008. On 24 November 2008, the PSD indicated that their salaries would be decreased by 19 per cent in 2009 because of the economic recession. Consequently, the president's annual salary was reduced from S\$3.87m to S\$3.14m and the prime minister's annual salary was also reduced from S\$3.76m to S\$3.04m from 2008 to 2009 (Quah, 2010, p. 116). However, the economy recovered in 2010 and the salaries of ministers and senior civil servants were revised upwards. Even though the PAP won 81 of the 87 parliamentary seats in the May 2011 general election, the percentage of votes captured declined to 60.1 from 66.6 per cent in the May 2006 general election.

As the high salaries of political appointments were a controversial issue during the campaign for the 7 May 2011 general election, Prime Minister Lee Hsien Loong

appointed on 21 May a committee to “review the basis and level of salaries for the President, Prime Minister, political appointment holders and MPs [Members of Parliament] to ensure that the salary framework will remain relevant for the future”. The Committee submitted its report to Prime Minister Lee on 30 December 2011 and the government accepted all its recommendations and implemented the revised salaries from 21 May 2011 (Republic of Singapore, 2012, pp. i-ii). Table VII shows the substantial reduction in the annual salaries of key political appointments from 2010 to 2011, ranging from S\$1,627,000 for the president to S\$103,700 for the minister of state.

In December 2017, an independent committee formed by the PAP government a few months earlier to review ministerial salaries recommended wage increases for key political appointments as their salaries had not risen since 2011 to keep pace with salary increases in Singapore’s private sector. For example, as the annual salary of an entry-level minister (MR4) is benchmarked to 60 per cent of the median income of the top 1,000 earners in Singapore, the committee recommended increasing his annual salary from S\$1.1m to S\$1.2m. During the debate on the 2018 budget for ministries on 1 March 2018, Deputy Prime Minister Teo Chee Hean did not accept the committee’s recommendations and explained that the government would not be increasing ministerial salaries because the committee had confirmed that the current salary structure was still relevant and sound (Seow, 2018, p. A4). As the salaries of Singapore’s ministers and senior civil servants are already the highest in the world, any further salary increase would be unpopular among Singaporeans and politically costly for the PAP government.

Edgar Schein (1996, pp. 221-222) attributed Singapore’s success to its incorruptible and competent civil service as “having the best and brightest” citizens in government is probably one of Singapore’s major strengths in that they are potentially the most able to invent what the country needs to survive and grow”. Indeed, the PAP government’s policy of paying competitive salaries to attract the “best and brightest” Singaporeans to join the public bureaucracy has been successful as reflected in Singapore’s consistently high scores and percentile rankings on the World Bank’s governance indicator on government effectiveness as shown in Table III.

Learning from other countries: the importance of policy diffusion

The object of looking abroad is not to copy but to learn under what circumstances and to what extent programmes effective elsewhere may also work here. Moreover, the failures of other governments offer lessons about what not to do at far less political cost than making the same mistakes yourself (Rose, 2005, p. 1).

Position	Annual salary 2010	Annual salary 2011	Reduction in salary
President	S\$3,167,000	S\$1,540,000	–S\$1,627,000
Prime minister	S\$3,072,200	S\$2,200,000	–S\$872,200
Deputy prime minister	S\$2,437,500	S\$1,870,000	–S\$567,500
Minister (MR1)	S\$2,368,500	S\$1,760,000	–S\$608,500
Minister (MR2)	S\$2,145,700	S\$1,540,000	–S\$605,700
Minister (MR3)	S\$1,959,700	S\$1,320,000	–S\$639,700
Minister (MR4)	S\$1,583,900	S\$1,100,000	–S\$483,900
Senior minister of state	S\$1,251,200	S\$935,000	–S\$316,200
Minister of state	S\$873,700	S\$770,000	–S\$103,700

Table VII.
Annual salaries of
Singapore’s key
political appointments,
2010–2011

Notes: The average exchange rates were: US\$1 = S\$1.3635 in 2010 and US\$1 = S\$1.2579 in 2011 (Department of Statistics, 2017, p. 217)

Source: Republic of Singapore (2012, pp. 32-37)

An important strength of the PAP government is its willingness to learn from the experiences of other countries by not repeating the mistakes they have made in solving their problems. Thus, instead of “reinventing the wheel”, which is unnecessary and expensive, the PAP leaders and senior civil servants would consider what has been done in other countries and the private sector to identify suitable solutions for resolving policy problems in Singapore. The policy solutions selected would usually be adapted and modified to suit Singapore’s context. For example, the government examined the Japanese and French civil services and the Shell Company’s system of performance appraisal as part of its efforts to improve personnel management in Singapore’s public bureaucracy (Quah, 2010, pp. 79-81). Lee Kuan Yew revealed in his memoirs that he had consulted corporate leaders of MNCs on how they recruited and promoted senior personnel and adopted the Shell Company’s performance appraisal system for Singapore’s public bureaucracy in 1983 “after trying out the [Shell] system and finding it practical and reliable” (Lee, 2000, pp. 740-741).

The reliance on “policy diffusion” or the “emulation and borrowing of policy ideas and solutions from other nations” (Leichter, 1979, p. 42) is an important strategy adopted by the PAP government to deal with problems. The three steps in the process of “pragmatic acculturation” are: problem identification and sending a team of experts and officials on a fact-finding tour of relevant technical centres and organisations in other countries to learn how the same problems are solved; invitation of internationally renowned experts to Singapore to give their professional opinions; and formulation of the policy plan from the ideas selected from what has been learned about the problem and tailored to the specific needs of Singapore. If the ideas and procedures used elsewhere are unsuitable for Singapore’s needs, they are not adopted (Quah, 1995, p. 55). Singapore’s Changi Airport, which is recognised as one of the best airports in the world today, provides a good illustration of pragmatic acculturation as a team of officials was sent initially to several countries to examine the best and worst airports with the aim of building an airport which would be better than Netherlands’ Schiphol Airport (considered the best airport then) and avoiding the problems faced by New York’s Kennedy Airport or Heathrow Airport in Britain.

During the early years after independence, Singapore looked towards such small nations as Israel and Switzerland as role models for inspiration to formulate relevant public policies for defence and other areas. Later, other countries like West Germany (for technical education), the Netherlands (Changi Airport was modelled after Schiphol Airport) and Japan (for quality control circles and crime prevention) were added to the list. The important lesson in these learning experiences is the adoption by Singapore of ideas which have worked elsewhere (with suitable modification to consider Singapore’s context if necessary) as well as the rejection of unsuccessful schemes in other countries.

As a young nation, Singapore has learnt from other countries by avoiding similar mistakes in solving their problems. The best example of this is the PAP government’s decision to reject welfare state policies in Singapore because of the problems plaguing Western European countries and the USA, which have adopted such policies. In June 1976, Goh Keng Swee, the Deputy Prime Minister and Minister of Defence, rejected the adoption of welfare state policies in Singapore because of these negative consequences:

But nothing is for free in this world and the end result of indiscriminate welfare state policies is bankruptcy. [...] In several West European countries, unemployment benefits have been so generous that some workers are better off unemployed! The money to pay for welfare state expenditure must come either from taxes or from the printing press. Increasing taxes, which mainly affects the rich, reduces the amount of money available for investment, thereby slowing down economic growth. Printing paper money to avoid unpleasant tax increases merely results in more inflation (Goh, 1977, p. 166).

Considering the limitations of the welfare state in Western Europe and the USA, the PAP government views social welfare as a consumption good and is concerned that “government provision of social welfare” would result in “an unhealthy dependence on the state and sap individual initiative and enterprise, thereby also undermining growth”. China, Jamaica and Sri Lanka have abandoned their welfare policies as “guaranteed social welfare” is expensive and inappropriate for developing countries. Consequently, the PAP government’s policy is “to reduce welfare to the minimum” and restrict it to “only those who are handicapped or old” (Lim, 1989, pp. 172, 187).

In short, policy diffusion remains an asset for Singapore so long as there is intelligent sifting of relevant policy ideas and solutions tested elsewhere by the policy makers without blind acceptance and wholesale transplantation of foreign innovations without modification to suit the local context.

Applicability of Singapore’s experience for other countries

[...] while it is difficult if not impossible to transfer public administration Singapore-style in toto to other Asian countries, it is nevertheless possible for these countries to emulate and adapt some features of public administration Singapore-style to suit their own needs, provided that their political leaders, civil servants, and population are prepared to make the necessary changes (Quah, 2010, p. 255).

Having identified and analysed the five secrets of Singapore’s success, the question that remains is whether policy makers in other countries could learn from Singapore’s experience to solve similar problems in their countries. After his first visit to Singapore on 12-14 November 1978, Deng Xiaoping “found orderly Singapore an appealing model for reform” and sent many Chinese officials to Singapore to “learn about city planning, public management, and controlling corruption” (Vogel, 2011, p. 291). Consequently, 400 delegations of mayors, governors and party secretaries from China visited Singapore on study missions following Deng’s visit (*Asiaweek*, 1994, p. 24).

Policy makers in other countries who are interested in applying Singapore’s secrets of success to solve their problems must consider three important aspects. First, they must recognise the significant contextual differences between Singapore, which is an affluent, politically stable city-state with a small land area and population, and their countries, which have lower GDP per capita and larger territories and populations. The relevance of Singapore’s approach would depend on the extent to which the policy contexts in other countries approximate Singapore’s policy context. Indeed, the contextual differences would make it difficult for larger countries like China and India with huge populations to adopt in toto Singapore-style solutions to their problems.

In assessing the utility of Singapore as a potential model for China, Lee Kuan Yew cautioned that:

Yes—but there are over one hundred metropolitan areas in China that have a population of Singapore’s size or greater. The Singapore model may work if you can devote all your resources to it—but I don’t know if even the Chinese with all their resources, all their cleverness, and all their determination can do it a hundred times (quoted in Burstein and de Keijzer, 1998, p. 171).

During his second visit to Singapore in 1980, Deng himself acknowledged the burden of China’s huge population and vast territory when he lamented that: “If I had only Shanghai, I too might be able to change Shanghai as quickly [as Singapore]. But I have the whole of China!” (quoted in Lee, 2000, pp. 667-668).

In discussing the applicability of Singapore’s policy models for reform in urban China, Robert Pease (1996, pp. 27-28, 148) wisely acknowledged that:

The successful policy of country A [Singapore] cannot simply be replanted in the soil of struggling target country B [China]. Instead careful attention must be directed to the wider policy

contexts involved as well as to the feasibility of policy transfer. [...] Policies, like garden plants, cannot simply be plucked from one environment to be replanted in another. There are questions of soil type, rainfall, and sunlight just as there are questions of government capacity, efficiency and integrity.

The second consideration for those policy makers interested in applying Singapore's secrets of success to solving their domestic problems is whether they have the political will to allocate the necessary resources and mobilise the required support from various stakeholders to implement Singapore-style policies effectively in their countries. Apart from their contextual differences with Singapore, other countries might lack these prerequisites for the PAP government's effectiveness in policy implementation, namely, political stability; a strong parliamentary majority; economic affluence; a low level of corruption; rule of law; and an effective public bureaucracy.

For example, it would be too expensive economically and politically for many countries to pay competitive public sector salaries to attract the "best and brightest" citizens to join the public bureaucracy and government and to motivate and retain them. In his 2000 National Day Rally speech, Prime Minister Goh Chok Tong emphasised the need to ensure good government in Singapore by "recruiting good people for government and paying them properly". However, Goh (2000) admitted that many western leaders informed him privately that while they "envied our system of Ministers' pay", they added that "if they tried to implement it in their own countries, they would be booted out" (p. 44).

China is ranked 77th among 180 countries with a score of 41 on the CPI in 2017 (Transparency International, 2018, p. 2). This means that corruption remains a serious problem in China in spite of President Xi Jinping's five-year-old campaign to curb corruption among the "tigers" and "flies", which is ineffective because of its failure to address the causes of corruption, the selective enforcement of the anti-corruption laws by the Central Commission for Discipline Inspection (CCDI), and the reliance of the Chinese Communist Party (CCP) leaders on corruption as a weapon against their political opponents (Quah, 2015c, pp. 84-87).

In August 2014, Wang Qishan, Secretary of the CCDI, observed that: "China should learn from the Hong Kong or Singapore model for tackling corruption as both have independent anti-corruption bodies, unlike China which relies on the party investigating itself" (Wang, 2014). As China is a communist state with political power monopolised by the CCP, it is unrealistic to expect the CCP to introduce the necessary reforms to enhance the effectiveness of its anti-corruption strategy by establishing a single independent ACA like the CPIB and provide it with the required personnel and budget to enforce the anti-corruption laws impartially against corrupt offenders, regardless of their status, position or political affiliation and to avoid using corruption as a weapon against political foes (Quah, 2016b, p. 208).

Learning from Singapore's experience, China will only succeed in minimising corruption if the CCP leaders are willing to introduce checks on their power and if they introduce reforms to address the causes of corruption. However, barring unforeseen circumstances, it is highly unlikely that President Xi Jinping and his colleagues would be willing to pay the exorbitant price required for curbing corruption in China because the implementation of the necessary anti-corruption reforms could lead to the CCP's demise (Quah, 2016b, p. 209). In short, do policy makers elsewhere have the political will to pay the high political and economic costs of implementing Singapore-style policy reforms in their countries?

The final consideration is that policy makers in other countries must realise that there is no "quick fix" or magic bullet for solving their difficult problems overnight by simply adopting Singapore-style solutions without considering the political will, preconditions for success and the high political and economic costs of these solutions. When Albert

Winsemius retired as Singapore's Chief Economic Adviser in 1984, he admitted that he did not believe in the Singapore miracle because:

There was never a Singapore miracle. It was simply hard-headed policy. [...] Because governments which dare to face a situation, analyse it and take measures without compromise are rather scarce in this world. [...] If it happened in other countries, it might be a miracle. But what happened in Singapore was not a miracle. It was policy (quoted in Mukherjee, 2015, pp. 33, 47).

As mentioned above, Singapore policy makers have not hesitated to learn from other countries' experiences to formulate relevant policies with appropriate modifications for the local context. However, when Singapore faces problems which other countries cannot solve, the PAP leaders initiate innovative solutions to solve these problems. As the British colonial government failed to solve the serious housing shortage and widespread corruption, the PAP government initiated innovative solutions to tackle these two problems after assuming office in June 1959 (Quah, 2011, p. 122). In February 1960, the Housing and Development Board (HDB) was established as a statutory board to solve the housing shortage by providing low-cost public housing for Singaporeans. In June 1960, the POCA was enacted to strengthen the CPIB's effectiveness in combating corruption.

The HDB's effective public housing programme has resulted in the building of 1,129,236 flats from its inception in February 1960 to December 2016 and increasing the proportion of the population living in public housing in Singapore from 9 to 82 per cent during this period (Department of Statistics, 2017, pp. 134, 144). As discussed in the fourth section above, the CPIB's effectiveness in minimising corruption is reflected in Table VI, which depicts Singapore's good performance on six corruption indicators in 2017. Thus, housing and corruption are no longer serious problems in Singapore today because of the effective and innovative strategies adopted by the HDB and CPIB, respectively, to solve these problems.

In the final analysis, bearing in mind the contextual differences and the preconditions for Singapore's success, policy makers in other countries must have the political will and be prepared to pay the high political and economic price for implementing Singapore-style reforms with appropriate modifications to solve their problems.

References

- Asiaweek* (1994), "Selling success: Singapore has found its most attractive export yet—itsself", 13 July, pp. 24-27.
- Burstein, D. and de Keijzer, A. (1998), *Big Dragon, The Future of China: What it Means for Business, the Economy, and the Global Order*, Simon & Schuster, New York, NY.
- Chan, C.B. (2002), *Heart Work*, Economic Development Board and EDB Society, Singapore.
- Chua, M.H. (1997), "No resources, so Singapore tapped its people", *Straits Times*, 7 March, p. 1.
- CPIB (2017), *Annual Report 2016*, Corrupt Practices Investigation Bureau, Singapore, pp. 1-17.
- Department of Statistics (1983), *Economic and Social Statistics Singapore 1960–1982*, Singapore National Printers, Singapore.
- Department of Statistics (2017), *Yearbook of Statistics Singapore, 2017*, Ministry of Trade and Industry, Singapore.
- Department of Statistics (2018), "Singapore's Per Capita GNI and Per Capita GDP at Current Market Prices, 1960–2016", Department of Statistics, Singapore, available at: www.tablebuilder.singstat.gov.sg/publicfacing/dataTable.action (accessed 26 January 2018).
- Drysdale, J. (1984), *Singapore: Struggle for Success*, Times Books International, Singapore.
- (The) Economist* (1997), "World education league: who's top?", 29 March, pp. 21-22, 25.

- Goh, C.T. (1992), "My urgent mission", *Petir*, Nos 11-12/92, pp. 10-19.
- Goh, C.T. (2000), *National Day Rally Speech on 20 August 2000*, Ministry of Information and the Arts, Singapore.
- Goh, K.S. (1977), *The Practice of Economic Growth*, Federal Publications, Singapore.
- Goodwin, A.L., Low, E.-L. and Darling-Hammond, L. (2017), *Empowered Educators in Singapore: How High-Performing Systems Shape Teaching Quality*, Jossey-Bass, San Francisco, CA.
- Han, F.K., Fernandez, W. and Tan, S. (1998), *Lee Kuan Yew: The Man and His Ideas*, Times Edition, Singapore.
- Jones, D.S. (2016), "Governance and meritocracy: a study of policy implementation in Singapore", in Quah, J.S.T. (Ed.), *The Role of the Public Bureaucracy in Policy Implementation in Five ASEAN Countries*, Chapter 5, Cambridge University Press, Cambridge, pp. 297-369.
- Kaufmann, D., Kraay, A. and Mastruzzi, M. (2004), *Governance Matters III: Governance Indicators for 1996–2002*, revised version, World Bank, Washington, DC.
- Lee, K.Y. (1979), "What of the past is relevant to the future?", *People's Action Party 1954–1979: Petir 25th Anniversary Issue*, PAP Central Executive Committee, Singapore, pp. 30-43.
- Lee, K.Y. (1994), "Can Singapore's experience be relevant to Africa?", *Can Singapore's Experience be Relevant to Africa?*, Singapore International Foundation, Singapore, pp. 1-15.
- Lee, K.Y. (1996), "Singapore is indebted to Winsemius: SM", *Straits Times*, 10 December, p. 32.
- Lee, K.Y. (2000), *From Third World to First, The Singapore Story: 1965–2000*, Times Media, Singapore.
- Leichter, H.M. (1979), *A Comparative Approach to Policy Analysis: Health Care in Four Nations*, Cambridge University Press, Cambridge.
- Lim, L.Y.C. (1989), "Social welfare", in Sandhu, K.S. and Wheatley, P. (Eds), *Management of Success: The Moulding of Modern Singapore*, Chapter 8, Institute of Southeast Asian Studies, Singapore, pp. 171-197.
- Mukherjee, J. (2015), *UNDP and the Making of Singapore's Public Service: Lessons from Albert Winsemius*, UNDP Global Centre for Public Service Excellence, Singapore.
- Naisbitt, J. (1994), *Global Paradox: The Bigger the World Economy, The More Powerful Its Smallest Players*, William Morrow, New York, NY.
- Pease, R.M. (1996), *Policy Learning: The Case of Singapore Policy Models for Reform in Urban China*, MSocSc thesis, Department of Political Science, National University of Singapore, Singapore.
- Plate, T. (2010), *Conversations with Lee Kuan Yew, Citizen Singapore: How to Build a Nation*, Marshall Cavendish, Singapore.
- Punch, M. (2009), *Police Corruption: Deviance, Accountability and Reform in Policing*, Routledge, London.
- Quah, J.S.T. (1982), "Bureaucratic corruption in the ASEAN countries: a comparative analysis of their anti-corruption strategies", *Journal of Southeast Asian Studies*, Vol. 13 No. 1, pp. 153-177.
- Quah, J.S.T. (1998), "Singapore's model of development: is it transferable?", in Rowen, H.S. (Ed.), *Behind East Asian Growth: The Political and Social Foundations of Prosperity*, Routledge, London, Chapter 5, pp. 105-125.
- Quah, J.S.T. (2007), *Combating Corruption Singapore-Style: Lessons for other Asian Countries*, School of Law, University of Maryland, Baltimore, MD.
- Quah, J.S.T. (2010), *Public Administration Singapore-Style*, Emerald Group Publishing, Bingley.
- Quah, J.S.T. (2011), "Innovation in public governance in Singapore: solving the housing shortage and curbing corruption", in Anttiroiko, A.-V., Bailey, S.J. and Valkama, P. (Eds), *Innovative Trends in Public Governance in Asia*, IOS Press, Amsterdam, pp. 121-136.
- Quah, J.S.T. (2015a), "Singapore's Corrupt Practices Investigation Bureau: four suggestions for enhancing its effectiveness", *Asian Education and Development Studies*, Vol. 4 No. 1, pp. 76-100.

- Quah, J.S.T. (2015b), "Lee Kuan Yew's enduring legacy of good governance in Singapore, 1959–2015", *Asian Education and Development Studies*, Vol. 4 No. 4, pp. 374-393.
- Quah, J.S.T. (2015c), *Hunting the Corrupt 'Tigers' and 'Flies' in China: An Evaluation of Xi Jinping's Anti-Corruption Campaign (November 2012 to March 2015)*, Carey School of Law, University of Maryland, Baltimore, MD.
- Quah, J.S.T. (2016a), "The role of the public bureaucracy in policy implementation in five ASEAN countries: a comparative overview", in Quah, J.S.T. (Ed.), *The Role of the Public Bureaucracy in Policy Implementation in Five ASEAN Countries*, Chapter 1, Cambridge University Press, Cambridge, pp. 1-97.
- Quah, J.S.T. (2016b), "Singapore's success in combating corruption: four lessons for China", *American Journal of Chinese Studies*, Vol. 23 No. 2, pp. 187-209.
- Quah, J.S.T. (2017), "Singapore's success in combating corruption: lessons for policy makers", *Asian Education and Development Studies*, Vol. 6 No. 3, pp. 263-274.
- Quah, S.R. (1995), "Confucianism, pragmatic acculturation, social discipline, and productivity: notes from Singapore", *APO Productivity Journal*, pp. 42-64.
- Republic of Singapore (1994), *Competitive Salaries for Competent and Honest Government: Benchmarks for Ministers and Senior Public Officers, Command 13 of 1994*, white paper presented to the Parliament of Singapore, Prime Minister's Office, Singapore, 21 October.
- Republic of Singapore (2010/2017), *Singapore Budget 2010–2017: Annex to the Expenditure Estimates*, Budget Division, Ministry of Finance, Singapore.
- Republic of Singapore (2012), *White Paper: Salaries for a Capable and Committed Government*, Command 1 of 2012, Prime Minister's Office, Singapore, 10 January.
- Republic of Singapore (2018), *Singapore Government Directory*, available at: www.gov.sg/sgdi/ministries/ and www.gov.sg/sgdi/statutory-boards/ (accessed 24 January 2018).
- Rose, R. (2005), *Learning from Comparative Public Policy: A Practical Guide*, Routledge, London.
- Rose-Ackerman, S. and Palifka, B.J. (2016), *Corruption and Government: Causes, Consequences, and Reform*, 2nd ed., Cambridge University Press, New York, NY.
- Samuels, R.J. (2003), *Machiavelli's Children: Leaders and Their Legacies in Italy and Japan*, Cornell University Press, Ithaca, NY.
- Schein, E.H. (1996), *Strategic Pragmatism: The Culture of Singapore's Economic Development Board*, MIT Press, Cambridge, MA.
- Schwab, K. (Ed) (2017), *The Global Competitiveness Report 2017–2018*, World Economic Forum, Geneva.
- Seow, B.Y. (2018), "Govt keeps ministerial salaries unchanged", *Straits Times*, 2 March, p. A4.
- Soh, K.H. (2008), "Corruption enforcement", paper presented at the Second Seminar of the International Association of Anti-Corruption Associations, Chongqing, 17-18 May.
- Stowe, K. (1996), "Good piano won't play bad music", in Barberis, P. (Ed.), *The Whitehall Reader: The UK's Administrative Machine in Action*, Chapter 3.6, Open University Press, Buckingham, pp. 86-91.
- Tan, A.L. (1999), "The experience of Singapore in combating corruption", in Stapenhurst, R. and Kpundeh, S.J. (Eds), *Curbing Corruption: Toward a Model for Building National Integrity*, World Bank, Washington, DC, pp. 59-66.
- Teng, A. (2015), "Singapore tops world's most comprehensive education rankings", *Straits Times*, 14 May, p. A1.
- Transparency International (2017), *Corruption Perceptions Index 2016*, Transparency International, Berlin, available at: www.transparency.org/news/feature/corruption_perceptions_index_2016 (accessed 25 January 2017).
- Transparency International (2018), *Corruption Perceptions Index 2017*, Transparency International, Berlin.
- Turnbull, C.M. (1977), *A History of Singapore 1819–1975*, Oxford University Press, Kuala Lumpur.

Vogel, E.F. (2011), *Deng Xiaoping and the Transformation of China*, Harvard University Press, Cambridge, MA.

Wang, Q. (2014), "Anti-corruption chief says China should learn from Hong Kong, Singapore", *Ejinsight*, 27 August.

World Bank (2017), *Worldwide Governance Indicators 2016*, World Bank, Washington, DC, available at: <http://info.worldbank.org/governance/wgi/#reports> (accessed 8 October 2017).

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Climate change, regulatory policies and regional cooperation in South Asia

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Abstract

Purpose – With climate change and environmental degradation being major issues in the world today, it is imperative for governments within a regional setting to collaborate on initiatives, harmonize their policies and develop strategies to counter threats. In South Asia, several attempts have been made to create a common framework for action in implementing synchronized policies. However, both political and technical deterrents have thwarted moves to accommodate priorities and interests of collaborating states. The purpose of this paper is to assess these issues and existing policies/strategies in selected South Asian countries and evaluate integrated plans of action based on collaborative partnerships.

Design/methodology/approach – Using a broad exploratory and interpretive approach, this paper evaluates how harmonization of environmental principles and synergies among countries can help reduce the effect of climate change and environmental hazards. Based on a review of ideas and concepts as well as both primary and secondary sources, including official records, legislation, inter-state and regional agreements, evaluation reports, impact studies (social, economic and ecological), and commentaries, it highlights several initiatives and processes geared to creating environmental protection standards and practices for the South Asian region.

Findings – Climate change has resulted in devastating impacts on people. It contributed to the proliferation of climate refugees and high incidence of poverty in South Asia. The region faces both political and technical obstacles in developing a sustainable approach to combat climate change. This is exacerbated by non-availability of information as well as reluctance to acknowledge the problem by key actors. The best strategy will be to integrate policies and regulations in the various countries of the region to develop strategic plans. The approach of prevention and protection should replace the existing emphasis on relief and rehabilitation.

Originality/value – The paper provides a critical overview of the climatic and environmental problems encountered in the South Asian region and provides pointers to resolving shared problems through the use of policy instruments for regulating the problems within the gamut of regional environmental governance. It attempts to identify solutions to offset regulatory and institutional barriers in achieving preferred results by emphasizing the need for redesigning regulatory structures and policy approaches for ecological well-being.

Keywords South Asia, Climate change, Environmental policies, Regional synergy

Paper type Research paper

Introduction

The quality of human life is contingent upon ecological conditions. A complex relationship exists between environmental factors and social-cultural dynamics and economic progress. The notion of “environment” is no longer concerned just with natural surroundings or habitats, but about a safe and stable environment, supported by a favorable climatic order, that impacts upon people’s organic state and their psychological and social well-being (Bührs and Barlett, 1993; O’Lear, 2010; Sachs and Ki-moon, 2015; WCED, 1987). Environmental phenomena, either prolonged or sudden, have considerable social,



psychological and ethical impact and thus cannot be understood from economic and technical standpoints alone; rather the social dimension plays a critical role (Dillard *et al.*, 2009; Flint *et al.*, 2000; Giddings *et al.*, 2002). No wonder, environment and climate change issues have become so significant in the world today with governments, regional bodies and international organizations agonizing over ways to control the continuously deteriorating situation. Development will remain an illusion and serve limited purposes if environmental sustainability is not factored into strategies for economic growth and social advancement. In the past, overemphasis on the economic dimensions of modernization and technological progress might have provided some dividends but at the cost of creating environmental imbalance caused by ruthless exploitation of natural resources (air, water and soil) for infrastructure building, industrialization, agricultural mechanization and watershed reconstruction. Some of these meant population movement from rural to urban areas, leaving agricultural lands and water bodies largely unattended. The rapid growth of industrial plants for boosting the economy meant destruction of forests and ecosystems, reduction of biological diversity, extensive use of fossil fuels, emission of massive amounts of carbon and toxic waste, soil erosion and degradation, impeding water systems, and so on (Blewitt, 2014; Sachs and Ki-moon, 2015).

Environmental problems know no political boundaries; these transcend states and regions and thus need to be managed through interregional engagements among governments and institutions (Chasek, 2012; DeSombre, 2006; Kjellen, 2008). They need to collaborate on initiatives, harmonize policies, and develop strategies to counter environmental threats and sustain livelihoods. Indeed, the transboundary nature of environmental problems necessitates collective action involving national, regional and international institutions.

The environmental regulatory regime in each country will need to be redesigned for creating a common framework of action in implementing synchronized policies. However, there are both political and technical deterrents to accommodating idiosyncrasies, priorities and interests of collaborating countries. Mistrust among them at the political level and differences among environmentalists and specialists at the bureaucratic often hinder initiatives. Thus, for shared well-being of the region, harmonized strategies can serve beneficial purposes.

This paper will briefly assess some of the existing policies and strategies in selected South Asian countries and evaluate integrated plans of action based on collaborative partnerships, such as the South Asian Association for Regional Cooperation (SAARC) and the South Asia Cooperative Environment Programme. It will attempt to provide pointers to resolving shared problems through collaboration and harmonization within the gamut of regional environmental governance (REG). It will mainly focus on disaster management strategies and climate change solutions and the need for redesigning regulatory structures and policy approaches for ecological well-being. Based on both primary and secondary sources, including official records, legislation, inter-state and regional agreements, evaluation reports, impact studies (social, economic and ecological) and commentaries, the paper will highlight several initiatives and processes geared to creating standards and enhancing the use of policy instruments for regulating environmental and climatic problems in the region. It will attempt to identify solutions to offset regulatory and institutional barriers in achieving preferred results. This paper is about harmonizing environmental principles and about synergies among countries to reduce the effect of environmental hazards. It does not attempt a political analysis but takes a broad exploratory and interpretive approach in considering the issues.

Environmental governance and regional inter-state synergy

To make “sustainable development” a reality, an integrated and inclusive approach toward creating an environment-friendly planet has become important (Bührs, 2009; ODI/Danida, 2012).

Thus, environmental problems need to be addressed by affected nations jointly with common overarching strategies. These problems have assumed such proportions that outmoded methods in dealing with them have now been replaced by more sophisticated all-inclusive strategic responses, programs and techniques. The traditional command and control (CC) structure is no longer an option and requires replacement by state-of-the-art monitoring capabilities and reinforcement by social-political inputs, in addition to the technical, in resolving environmental issues.

The emergence of global environmental governance (GEG) is a measured response to the daunting worldwide environmental and climatic challenges that cannot be effectively handled by national state agencies without external support. Symmetry of perspectives, and measures and consensus and agreements between nations and regional organizations can sustain initiatives affecting a region or a group of neighboring countries (Evans, 2012). With efficacious environmental governance, sustainable development can be obtained (Najam *et al.*, 2006).

It is imperative for integrated environmental policy covering general issues or specific sectors to establish principles and create instruments for operationalizing them. For instance, in the European Union the principles of subsidiarity (member states free to adopt their own measures if more appropriate and sufficiently efficient than those proposed by the union), integration (incorporating legal, administrative, economic and participatory approaches and combining different sector policies), precaution (being reflexive in adopting measures based on proper risk assessment and periodic reviews) and prevention (anticipating hazards and taking measures to lessen the extent of damage) are the pillars of European environmental governance, while the instruments include regulations (uniform provisions applicable to and mandatory for all states), directives (obliging members states to follow a certain protocol regarding environmental issues), action programs (obtaining accord of members on objectives and priorities) and recommendations (aimed at creating awareness relating to environmental problems) (Musu, 2008, pp. 3-5). Other regional bodies adhere to a similar pattern in environmental governance. ASEAN follows a collaborative way of dealing with environmental problems and abjures intervention in domestic issues, emphasizes consensus-building, prefers national implementation of policies and programs, and works for harmonizing environmental standards (Koh and Robinson, 2002). For GEG to have any positive impact, policy development must have direct inputs from non-state stakeholders relevant to particular environmental concerns rather than from state institutions or regional/global bodies of formal organizations alone. Also, such policies must directly address the core causes of environmental hazards in order to obtain legitimacy and acceptability at the country level before being synchronized at the regional/global (Speth, 1995, 2002). Local problems can be responded to at the local level; however, some problems that geographically affect more than one country must be differently but appropriately addressed. This is when compatibility and convergence and, therefore, harmonization of policy instruments and strategies become essential.

Of special interest in environmental governance are disaster management strategies and climate change solutions. Disaster management is about promoting engagement of stakeholders and citizens in disaster and climate risk management practices and being proactive in coping with calamities. A few measures are important: risk identification, risk awareness, risk mitigation, risk financing and transfers, and improving institutional capacity and involve raising awareness among people in disaster-prone areas, media campaigns, hazard mapping and data collection, building prevention infrastructure and ensuring connectivity, imparting education and training of disaster management personnel, keeping local delivery mechanisms functional and active, inducing collaboration between technical experts and public administrators, forging partnerships between the state and non-governmental organizations and, most importantly, operationalizing national disaster management authorities with all the wherewithal to respond to disasters. These authorities

need to cooperate at the regional level to mitigate the adverse impact of disasters (Chandran, 2012; World Bank, 2012).

Adaptation and mitigation are key approaches in resolving climate change problems. The former is about “responses made to actual or predicted climatic stimuli or their actual or anticipated consequences” that “minimise negative impacts and possibly identify and take advantage of opportunities.” On the other hand, mitigation “refers to the actual reduction in emissions of greenhouse gases” and normally “undertaken through a variety of economic, social, technological and political changes” (UNEP, 2008, p. 5). These are societal responses and complementary measures and thus need integration in addressing climate change issues. However, mitigation approaches are prioritized over adaptation measures for the former’s “ability to reduce impacts on all climate-sensitive systems whereas the potential of adaptation is limited for many systems” (Fussel, 2007, p. 265). While mitigation targets all systems and its effect is global in nature, adaptation is geared to addressing problems in selected systems only and its effect is more local and regional (Fussel and Klein, 2006). Yet, in any sound environmental governance system, both are symbiotically related; mitigation must be followed by adaptation. Countries within a region need to act together to tackle disasters and climate change through concerted initiatives, sound strategies, pragmatic action plans, and effective implementation procedures.

The traditional first-generation CC instruments to monitor and regulate the environment and the effects of climate change are no longer considered efficient and effective. These are now being supplemented and complemented by more advanced instruments that are expected to provide desired results. The CC instruments may have served their purpose when the environment was a purely national matter and when direct governmental regulations and the implementation of uniform standards were regarded enough to resolve in-country problems. The second-generation instruments are said to provide “greater flexibility, efficiency and effectiveness” (Golub, 1998, pp. 4, 5). The emergence of New Environmental Policy Instruments has coincided with the shift from environmental management to environmental governance and “are now the preferred instrument of new environmental policies” in many countries. These are a combination of market- and regulation-based instruments and include: taxes/levies (on carbon emissions, air and water pollution, waste water); cost recovery and user charges; emission tradeable permits (placing a cap on the maximum level of pollution), voluntary or negotiated agreements (between state authorities and companies); and eco-labels (labeling products based on accepted environmental standards). Another very relevant instrument, especially from citizens’ perspective, is free access to environmental information held by public authorities (Tews *et al.*, 2001).

Thus, in REG, multilateral engagement is vital, but bilateralism can also be complementary. For strategic reasons, bilateralism serves specific political and economic objectives. It is also argued that this is often more effective because of the serious approach both parties take in resolving a problem. There is more respect for each other’s interests and more reciprocity. Multilateralism cannot always exact the total commitment of all participating parties as coordination and agreements are difficult to obtain. It is hard to negotiate, bargain and adjust with politicking obscuring them. Nonetheless, there are relative gains in multilateralism especially if there are overly dominant nations in the group seeking to pursue a specific “national” agenda (Lee, 2012, p. 2; Odell, 2000, p. 13; Powell, 2003). Inter-state synergy within an over-arching REG framework can be more effective than mere bilateralism or limited multilateralism. Synchronization of discrete national policies/strategies and relating to environmental and climate change issues and adoption of newer forms of policy instruments can create a robust REG system.

The South Asian situation

Like other regions of the world, South Asia presents challenges to REG because of the differing approach each country adopts on environmental matters, which they basically consider from unique local/national rather than broader geographical perspective. In the past, no efforts were made to synchronize policies/strategies on specific environmental issues stemming from natural disasters (floods, cyclones, earthquakes), climatic factors (drought, water scarcity, insect outbreaks, air pollution) and those not happening naturally (deforestation, bio-diversity damage, pesticide abuse, toxic and hazardous waste). The causes of the human-created problems are: rising population density, eco-unfriendly industrial and infrastructure projects, the rush for increasing agricultural yield using “Green Revolution” ideas, and forceful seizure of lakes, canals and land for urban development (Jha, 2004). While South Asia’s contribution to the global greenhouse problem is marginal[1], the region will not be spared of the effects of global warming. Over the years, the intensity of droughts has increased, agricultural productivity has been threatened, large-scale flooding, earthquake and landslides have become common, the frequency of cyclones has been on the rise, salinity during the dry season in the Bengal delta has had an adverse effect on agricultural production, coastal areas have become exposed to rising sea level, while extensive sedimentation, land-use conversion, and water logging and human infiltration/habitation have altered the nature of wetlands (ODI/CDKN, 2104; SAARC, 1992a, b; Sivakumar and Stefanski, 2011).

The Intergovernmental Panel on Climate Change predicts a grim future for South Asia. Temperature trends suggest further increase in the frequency of hot days; rainfall trends indicate more frequent and heavy rainfall days; and the extent of sea level rise by the next turn-of-century “implies significantly increased risks for South Asia’s coastal settlements, as well as for coastal economies, cultures and ecosystems, particularly if combined with changes in cyclone frequency or intensity” (ODI/CDKN, 2014, p. 10). Only tangible synergy among the South Asian nations can provide some respite from their effects.

A principal challenge facing the region is the fractious relation between nations that negatively impacts upon all policy areas, including the environment. Some countries take bilateral approach in dealing with environmental problems bypassing SAARC – the regional platform for multilateral cooperation and diplomacy that can play a useful role in environmental management. Regional security may come under threat if common environmental problems are not resolved through collaborative initiatives, mainly because the nexus between poverty and environment is so obvious in holistic development. In general, South Asia being an impoverished region with an average GNI per capita of approximately US\$1,610 (2016 figure, with significant variations between countries), poverty impacts upon human and economic development outcomes. Climate change poses potential health risk making it imperative for regional cooperation to gain control. However, the mechanisms for environmental governance are inadequate. River water sharing problem between India and Bangladesh (and to some extent Nepal) has failed to be resolved bilaterally and the former’s unilateral control over the waters of the Ganges and Teesta rivers has had huge ecological impact on the latter (Jabeen *et al.*, 2013).

Regional initiatives

SAARC[2] was initially conceived as a regional body for political and economic cooperation, but its scope has been expanded to include, *inter alia*, the preservation, protection and management of fragile ecosystems. Environmental problems are monitored, operations regulated, mitigation instruments devised. SAARC works toward adaptation and harmonization strategies. Some of the key environmental concerns were identified and the parameters and modalities for regional cooperation established as early as the late-1990s. The Environment Action Plan that emerged directed member countries to formulate their own

national environment action plans and submit reports to the SAARC Secretariat for assimilation and developing a coherent regional plan for South Asia (Goel, 2004).

Environmental issues first found prominence in 1988 when a regional plan – “SAARC-2000-A Basic Needs Perspective” – was launched. It was to “supplement national, bilateral, regional and global efforts to deal with the increasingly serious problems being faced by the region” (SAARC, 2010a). While this was considered significant, nothing remarkable happened in terms of meaningful action with a wide regional focus. Internal tensions resulting from “geopolitical imbalances” among some member countries (India vs Pakistan, in particular) retarded progress and it took twenty years for the leaders to approve the “SAARC Convention on Cooperation on Environment” to tackle problems of climate change. In the interim, some studies on environmental concerns commissioned by the body did keep experts busy but recommended measures were hardly taken seriously at the political level. One commentator remarked 16 years ago, that due to “a lack of unity and commitment to a stronger regional arrangement among its member states [...] SAARC has failed to find meaningful regional cooperation on environmental issues” (Swain, 2002, p. 76). The situation has hardly changed.

Nonetheless, sporadic activities did keep the environmental issue on the regional agenda. Summits and meetings from 2008 onwards recognized the vulnerability of the region to climate change and highlighted the need for a low carbon environment, building governmental capacity to deal with environmental issues, researching and exchanging information on best practice, and taking adaptation measures (SAARC, 2008a). Action plans and “expert” group proposals stressed policy direction and steering at the regional level and aimed at creating opportunities through cooperation of member states, technology and knowledge transfer from other developing countries and supporting the work of the United Nations on climate change (SAARC, 2008b, p. 1). The critical importance of regular consultations among environmental management and pollution control agencies for a concerted response to the challenges of climate change and the integration of climate change adaptation (CCA) with disaster risk reduction (DRR) have been highlighted (SAARC, 2009, 2010b, 2011). Despite these, lack of progress in meeting targets to maintain biodiversity in the region remains because of technical and financial constraints.

Existing policies and strategies in each country

In most South Asian countries, environment-related policies have existed since the 1990s but many governments have not revised or updated them despite so much serious thinking and discussion on sustainable development taking place in recent times. Bangladesh has the most recent policy framed in 2012, while India has had a policy since 2006, Pakistan had one in place a year earlier and Sri Lanka in 2003; Nepal still follows the one it adopted in 1992. While some may have updated their approaches to environmental problems in their periodic national plans and poverty reduction strategies and have also set targets in pursuit of the MDG/SDC goals, these do not follow a common pattern as each country has its peculiar issues with diverse impacts. Their environmental management structures are also different given the nature of their governmental system – some are federal with responsibilities divided between the national government and states/provinces, while others are unitary with distinctive center-periphery relations.

The “overarching” national environmental policies (NEPs) in South Asia consolidate previous policies related to a variety of environmental issues (noted before) and some provide simple expression of goals and objectives. Taken together, the country NEPs focus on a number of issues and instruments: intergenerational equity; environment-economic-social development nexus; science-based economic and efficient resource utilization; effective ecosystem service assessment; governance norms in environmental management (accessibility, transparency, rationality, accountability, participation, predictability and

regulatory independence); polluter pay and reduce, reuse and recycle principles; environmental standards; environmental offsetting; prevention, adaptation and mitigation; decentralization; public-private partnerships; education and awareness programs (Government of Bangladesh, 2013; GOI, 2006; GOP, 2005; Government of Sri Lanka, 2003).

One of the key priorities of sustainable development, as mentioned before, is to create a nexus between poverty reduction strategies and environmental protection mechanisms through “environmental mainstreaming” for long term sustainability (SACEP, 2014). With over 40 percent of the developing world’s poor living in South Asia, national development plans there need to incorporate strategies on environment and climate change with greater compulsion. Most of these plans do cover environmental issues and seek to make the growth process consistent with environmental sustainability. The 12th FYP in India has set clear goals and targets for monitoring and these cover environmental protection, climate change, forests, ecosystems and biodiversity and propose organizational, regulatory, investment and capacity building strategies. On regional cooperation, the Plan has proposed an institutional mechanism “for developing and implementing policies, laws and action plans” (Government of India, 2013, p. 214). The Bangladesh sixth FYP is also seeking to integrate “poverty, environment and climate change into the process of planning and budgeting” (GOB, 2011, p. 439) and like the Indian Plan and Sri Lankan “development framework” it focuses on control of air, industrial and noise pollution, conservation of ecosystem and biological diversities, and waste management (see SLG, 2010). Pakistan’s “Poverty Reduction Strategy Paper” also aims at “combining economic and social development with environmental integrity and poverty alleviation” and environmental concerns are linked to livelihoods, people’s health and their vulnerability to natural disasters (IMF, 2010, p. 107; also, IMF, 2004, p. 103). A similar approach has been adopted in Nepal and there is a clear agenda to strengthen and integrate the economic, social and environmental pillars of sustainable development (Government of Nepal, 2003; GON, 2012). Some of the South Asian countries have made appreciable progress, while others are lagging behind. Although the emission of carbon has increased marginally since the 1990s in South Asia, it is very low compared to the world average, yet continues to be threatening. The withdrawal of renewable water resources remains high compared to the developed region. On the other hand, the number of people having access to drinking water has increased significantly (UNDP, 2014).

Coping with calamities

Natural calamities are frequently occurring phenomena in South Asia. Thus, the need for a wide-ranging agenda focusing on different types of disasters is so vital.

Comprehensive framework on disaster management

The 2004 Indian Ocean tsunami raised serious concerns about disaster preparedness and post-disaster relief and rehabilitation. The response of SAARC came in the form of a “Comprehensive Framework on Disaster Management” (CFDM) for the region in 2007. It was based on the report of the “World Conference on Disaster Reduction” or the Hyogo Framework for Action (HFA), which promoted “a strategic and systematic approach to reducing vulnerabilities and risks to hazards” (United Nations, 2007, p. 1). CFDM’s principal objectives are to establish and strengthen the regional disaster management system to reduce risks and to improve response and recovery management at all levels. DRR was to be mainstreamed into national development policies, coordination and cooperation pursued at all levels, and resilience infused in communities to better cope with calamities through enhanced information, warning and reporting system. It set some clear strategic goals, such as adopting a professional approach to disaster management, strengthening institutional mechanisms at the community level and empowering women, the poor and the

disadvantaged and creating national and regional networks involved in managing disasters and post-disaster activities (SAARC, 2007, p. 2).

In order to harmonize disaster management strategies at the regional level, CFDM proposed standardizing hazard and vulnerability assessments, achieving the appropriate balance in PPRR (prevention, preparedness, response and recovery) programming, developing and standardizing damage, loss and impact assessment methodologies, relief management procedures and training curriculum for disaster management personnel. These were about establishing common practices across the region and ensuring compliance. But how these were to be done, was not clearly spelt out.

The SAARC Disaster Management Center (SDMC) devised a Rapid Respond Mechanism for a coordinated approach to disaster emergencies in the region using existing arrangements – response facilities, search and rescue personnel and equipment, emergency medical facilities, relief material, and disaster management expertise and technology. (SAARC, 2011). Using a participatory process with country experts providing input, SDMC has been instrumental in formulating several protocols on different environmental issues and strategies for CCA and mitigation (PreventionWeb, 2015).

A SAARC Agreement incorporated a range of pre-, midst- and post-disaster activities that would form a regional “disaster management” regime to prevent natural catastrophes, minimize their impact and restore affected areas. It emphasized joint response “to disaster emergencies through concerted national efforts and intensified regional cooperation” (SAARC, 2011: Art 2). SDMC is guided by this resolution and a number of key relevant projects that, to some extent, serve its purpose. One has been the creation of the “South Asian Disaster Knowledge Network” and the other the “South Asia Digital Vulnerability Atlas” (SADVA). The former functions as a platform for numerous stakeholders to share knowledge and information on risk assessment and prevention, mitigation and preparedness, and disaster response, relief, recovery and reconstruction in the region (White, 2015). SADVA’s aims at integrating information on hazards and vulnerabilities and facilitating easy and reliable assessment and analysis of risks of disasters to assist decision makers in South Asia on best risk mitigating measures (Johari, 2015).

Climate change solutions

It is argued that in the South Asian region, “adaptation to current climate change and climate variability is weak and many communities are highly vulnerable” and therefore it is important to adopt “locally appropriate methodologies for analyzing these effects and in increasing understanding of current interactions of climate and environmental and socioeconomic effects and changes” (Ahmed and Suphachalasai, 2014, p. 97). Because of the transboundary nature of the effects of climate change in the South Asian countries, cooperation and collaboration become even more critical as do concerted efforts in building institutional capacity, research and dissemination of outcomes, and exchanging knowledge and best practice (Ahmed and Suphachalasai, 2014, p. 100).

The SAARC Expert Group identified seven areas needing attention: adaptation to climate change; policies and actions for climate change mitigation; policies and actions for technology transfer; finance and investment; education and awareness; management of impacts and risks; and capacity building for international negotiations. In order to mitigate environmental problems, South Asian countries should be willing to share best practices that have been adopted in their mitigation plans and also organize capacity building for clean development mechanism projects and key stakeholders, including a designated national authority in each country. Experts also pointed to the need for “assessing barriers to technology development for adaptation and mitigation options” (SAARC, 2008b, p. 2). At the national level, the focus was expected to be on regulatory measures, technological interventions, stake holder’s participation and institutional arrangements.

However, not much has been done to achieve these. The three-year action plan endorsed in 2011 has not been acted upon at the regional level as anticipated. Specific actions on climate change were evident at the country level long before the SAARC initiative. As an illustration, Bangladesh has had Climate Change Cells since 2004 in “climate-relevant” state bodies mainly to incorporate climate change issues in development initiatives. This was followed by the National Adaptation Programs of Action in 2005 and 2009. In 2008, the government adopted the Bangladesh Climate Change Strategy and Action Plan that focused, among other things, on comprehensive disaster management, mitigation and low-carbon development, capacity building and institutional strengthening. A Multi Donor Trust Fund to finance activities under the Climate Change strategy was also created with the government retaining control over it. This would ensure national ownership of the adaptation agenda (Nicol and Kaur, 2008, p. 2). Other countries have also adopted national adaptation action programs (Bhutan and Maldives in 2006, India in 2008, Nepal in 2010).

The key thrust in climate change solutions is expected to come from the post-HFA SAARC roadmap by integrating CCA and DDR into national/regional sustainable development framework. It prioritizes the development of regional principles and policy guidelines, appropriate financial allocations for implementing policies, integration of local and technical knowledge, utilization of best practices, information-sharing across the region, reinforcing hazard monitoring and climate monitoring systems, and building and building institutional capacity (SAARC, 2014, p. 27).

However, there are some barriers to implementing this roadmap, such as lack of climatic information required in the design of local level adaptation measures, flawed policy guidelines and institutional incapacity, dearth of community participation and absence of sub-national, sub-regional and regional cooperation mechanisms. Most importantly, a lack of political will and disinterest on the part of policymakers offset initiatives in DRR and CCA. Mainstreaming adaptation and mitigation strategies into sustainable development planning thus become difficult.

Environmental management instruments

In South Asia, for now the market-based instruments will not be necessary given the low level of carbon emission by most countries there. Contrarily, it will be more feasible to go for more cost-effective environmental policies and investing in environmental infrastructure across the region. Levies and charges can be applied to reduce traffic congestion, non-use of unleaded petrol in vehicles, improper waste disposal in urban centers, misuse of domestic gas, and for not using cleaner production methods in industries, irrational use of fertilizer and pesticide and water contamination. Emission trading schemes should be introduced only in India, being the highest polluter in the region, and gradually extended to the rest of the sub-continent if the situation becomes confronting (see O'Connor, 2004). For South Asia, SACEP (2014, pp. 28-29) suggests some flexible instruments in dealing with environmental problems and ensuring security by focusing on user-pay principles, pricing regulations, information access, rural electrification, energy-efficient technologies, disaster preparedness and mitigation strategies.

A few of these have been addressed in the country NEPs but should be made consistent and uniform throughout the region for easy monitoring and control. Strategic planning and impact assessments with a regional focus can be key instruments in conserving the environment and combatting the adversities of climate change. Uniform directives, guidelines, action programs and recommendations have been flowing from the SAARC Secretariat but these are not binding upon all states. Some have complied as far as practicable, others defaulted.

Concluding remarks: the way forward

Sustainable development calls for plans and actions that transcend nations and regions, and a partnership of equals would be ideal. But the political, geographic and economic landscape

of South Asia makes sustainable development a challenging issue. In spite of SAARC, relationships among most South Asian governments have not progressed to a stage where mutual trust and interest is evident. These nations vary in size and degree of influence and a preference for bilateral approach does not allow participation of all stakeholders in critical decisions. The problem becomes more complex as efforts are made to combine technical issues with political and bureaucratic considerations. An emphasis on local and national interest, as opposed to a regional approach, results in isolated actions defying any worthwhile intent.

The serious threat of climate change has been impacting upon the livelihood, lifestyle and location of citizens. The proximity of South Asian states allows climate change migrants to move easily to neighboring countries, thus complicating relations among them. Numerous statements and agreements were reached over the years to promote environmental protection, but they remain neglected and seldom revised to address emerging issues. Inconsistencies in strategies and actions thus persist.

Natural disasters, which have been frequent in South Asia for decades, demands quicker response from governments but the focus is mainly on rescue and rehabilitation activities instead of preemptive steps toward prevention and protection. Poverty alleviation remains a priority, but even progress in this area is negated by poor policies, economic problems and externalities. Environmental conservation and sustainable development goals remain unmet as political and policy rhetoric is not translated into reality. Inadequacy of information and unwillingness to acknowledge the intensity of the problem by politicians are principal causes. The driving force appears to be international aid that prompts governments more than the will to deal with the problem. Above all, there seems to be a lack of motivation to go beyond meetings and plans, particularly because South Asian governments are engaged in battling other problems having direct bearing on their survival.

Environmental governance in most of South Asia has, by and large, been state-dominated with direct intervention mainly through regulatory strategies over the use and upkeep of environmental resources. While governmental approaches follow norms of sound governance in environmental matters exemplified in policy documents, more has to be done to create structures for stakeholder participation in the policy process, especially implementation and evaluation. Environmental governance within a country is perhaps gradually feeling its way, but for the greater interest of regional sustainable development, apart from multilateral cooperation at the governmental level, intensified interaction among non-state environmental groups and the private sector is essential. Transboundary environmental governance (TEG) can be facilitated by direct inputs from non-governmental participants from different countries and external actors (World Bank, UNEP, IUCN) in coping with the impact of natural hazards and climate change, especially in relation to adaptation and mitigation measures, devising regulatory instruments and undertaking impact assessments. The sharing of water, forests, natural habitats and biodiversity resources can be more mutually and effectively shared through the structure and norms of TEG in South Asia. For instance, the dispute between India and Bangladesh on the use of the Farakka and Teesta barrages needs quick resolution.

The principle of subsidiarity has been followed, perhaps by default, as South Asian states have been free to adopt their own measures albeit within some guidelines developed by SAARC. However, integration of sector policies with direct or indirect implications for the environment has not happened to the extent desired. Mainstreaming the environment and climate change into an overarching economic and social development regime is yet to materialize. In disaster management, precaution and prevention have had a measure of success with improved outcome prior to and in the aftermath of natural hazards but a more holistic and integrated regional approach will be required to better prepare for natural disasters and minimize dire consequences.

South Asian TEG needs to be designed keeping in view the uniqueness and differences of each country and sub-regions within them. The commitment of the political leadership in each country seems to be there, but they need to resolve their ingrained political conflicts if they really want to move ahead and pursue sustainable development not only in their respective countries but in the region as a whole for environmental conservation and sustained well-being of their people.

Notes

1. India is one country which is tending to stand out, now being the third largest producer of CO₂ emissions (5.7 percent) after China (23.43 percent) and the USA (14.69 percent) (www.statista.com/statistics/271748/the-largest-emitters-of-co2-in-the-world/).
2. SAARC began in 1985 with the first ever summit of the heads of states/governments of seven nations—Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka—in Dhaka. Afghanistan joined over two decades later. Apart from these members, several other nations/bodies have observer status, including the USA, the European Union, Australia and China.

References

- Ahmed, M. and Suphachalasai, S. (2014), *Assessing the Costs of Climate Change and Adaptation in South Asia*, Asian Development Bank, Manila.
- Blewitt, J. (2014), *Understanding Sustainable Development*, 2nd ed., Routledge, Oxon.
- Bührs, T. (2009), *Environmental Integration: Our Common Challenge*, SUNY Press, New York, NY.
- Bührs, T. and Barlett, R.V. (1993), *Environment Policy in New Zealand: The Politics of Clean and Green*, Oxford University Press, Auckland.
- Chandran, D.S. (2012), "Disaster management in South Asia: a regional approach", in Delinic, T. and Pandey, N.N. (Eds), *Regional Environmental Issues: Water and Disaster Management*, Centre for South Asian Studies, Kathmandu, pp. 72-85.
- Chasek, P.S. (2012), "Sustainable development", in Snarr, M.T. and Snarr, D.N. (Eds), *Introducing Global Issues*, 5th ed., Lynne Rienner, Boulder, CO, pp. 253-272.
- DeSombre, E.R. (2006), *Global Environmental Institutions*, Routledge, Oxon.
- Dillard, J., Dujon, V. and King, M.C. (Eds) (2009), *Understanding the Social Dimension of Sustainability*, Routledge, New York, NY.
- Evans, J. (2012), *Environmental Governance*, Routledge, Oxon.
- Flint, R.W., McCarter, W. and Bonniwell, T. (2000), "Interdisciplinary education in sustainability: links in secondary and higher education", *International Journal of Sustainability in Higher Education*, Vol. 1 No. 2, pp. 191-202.
- Fussler, H.M. (2007), "Adaptation planning for climate change: concepts, assessment approaches, and key lessons", *Sustainability Science*, Vol. 2 No. 2, pp. 265-275.
- Fussler, H.M. and Klein, R.J.T. (2006), "Climate change vulnerability assessments: an evolution of conceptual thinking", *Climate Change*, Vol. 75 No. 3, pp. 301-329.
- Giddings, B., Hopwood, B. and O'Brien, G. (2002), "Environment, economy and society: fitting them together into sustainable development", *Sustainable Development*, Vol. 10 No. 4, pp. 187-196.
- GOB (2011), *Sixth Five Year Plan 2011-2015: Accelerating Growth and Reducing Poverty. Part-2 Sectoral Strategies, Programmes and Policies*, Bangladesh Planning Commission, Dhaka.
- Goel, O.P. (2004), *India and SAARC Engagements*, Vol. 1, Isha Books, New Delhi.
- GOI (2006), *National Environment Policy 2006*, Ministry of Government and Forests, New Delhi, available at: <http://envfor.nic.in/sites/default/files/introduction-nep2006e.pdf> (accessed January 12, 2015).
- Golub, J. (Ed.) (1998), *New Instruments for Environmental Policy in the EU*, Routledge, London.

- GON (2012), *Nepal Status Paper*, National Planning Commission, Kathmandu, available at: <https://sustainabledevelopment.un.org/content/documents/1018nepalnationalreport.pdf> (accessed February 12, 2015).
- GOP (2005), *National Environment Policy 2005*, Ministry of Environment, Islamabad, (accessed January 10, 2015).
- Government of Bangladesh (2013), *National Environmental Policy of Bangladesh*, Ministry of Environment and Forests, Dhaka, available at: www.moef.gov.bd/html/policy/pdf/Environment_policy.pdf (accessed February 12, 2015).
- Government of India (2013), *Twelfth Five Year Plan (2012–2017) Faster, More Inclusive and Sustainable Growth*, Vol. 1, Sage, New Delhi.
- Government of Nepal (2003), *The Tenth Plan: Poverty Reduction Strategy Paper, 2002–2007*, National Planning Commission, Kathmandu, available at: http://siteresources.worldbank.org/INTPRS1/Resources/Country-Papers-and-JSAs/Nepal_PRSP.pdf (accessed February 12, 2015).
- Government of Sri Lanka (2003), “National environmental policy and strategies. available at: www.preventionweb.net/files/15417_nationalenvironmentpolicyandstrateg.pdf (accessed February 12, 2015).
- IMF (2004), *Pakistan: Poverty Reduction Strategy Paper*, International Monetary Fund, Washington, DC, available at: www.imf.org/external/pubs/ft/scr/2004/cr0424.pdf (accessed February 12, 2015).
- IMF (2010), “Pakistan: poverty reduction strategy paper”, Country Report No. 10/183, International Monetary Fund, Washington, DC, available at: www.imf.org/external/pubs/ft/scr/2010/cr10183.pdf (accessed February 12, 2015).
- Jabeen, M., Mahmood, T. and Umar, M. (2013), “Framing the chemistry of Himalayan water conflict in South Asia in perspective of climate change”, *European Journal of Scientific Research*, Vol. 100 No. 1, pp. 12-21.
- Jha, U.C. (2004), “Environmental issues and SAARC”, *Economic and Political Weekly*, Vol. 39 No. 17, pp. 1666-1671.
- Johari, P. (2015), *Digital Vulnerability Atlas of South Asia*, SAARC, Kathmandu.
- Kjellen, B. (2008), *A New Diplomacy for Sustainable Development: The Challenge of Global Change*, Routledge, New York, NY.
- Koh, K.L. and Robinson, N.A. (2002), “Regional environmental governance: examining the Association of Southeast Asian Nations (ASEAN) Model”, in Esty, D.C. and Ivanova, M.H. (Eds), *Global Environmental Governance: Options & Opportunities*, Yale School of Forestry & Environmental Studies, New Haven, CT, pp. 101-120.
- Lee, G. (2012), “Bilateralism versus multilateralism in East Asia”, Policy Brief No. 4, available at: <http://igcc.ucsd.edu/assets/001/503978.pdf> (accessed February 15, 2015).
- Musu, I. (2008), “Integrated environmental policy in the European Union”, in Clini, C., Musu, I. and Gullino, M.L. (Eds), *Sustainable Development and Environmental Management: Experiences and Case Studies*, Springer, New York, NY, pp. 3-14.
- Najam, A., Papa, M. and Taiyab, N. (2006), *Global Environmental Governance: A Reform Agenda*, International Institute for Sustainable Development, Winnipeg.
- Nicol, A. and Kaur, N. (2008), *Climate Change: Getting Adaptation Right*, Overseas Development Institute, London.
- O'Connor, D. (2004), “OECD country economic and environmental policies: what implications for East Asia?”, seminar on The Impact and Coherence of OECD Country Policies on Asian Developing Economies OECD, available at: www.oecd.org/pcd/31970833.pdf (accessed March 17, 2015).
- O'Lear, S. (2010), *Environmental Politics: Scale and Power*, Cambridge University Press, Cambridge.
- Odell, J.S. (2000), *Negotiating the World Economy*, Cornell University Press, Ithaca, NY.
- ODI/CDKN (2014), “The IPCC's fifth assessment report: what's in it for South Asia?”, Overseas Development Institute, London and Climate and Development Knowledge Network, London.

- ODI/DANIDA (2012), "Inclusive and sustainable development: challenges, opportunities, policies and partnerships", Overseas Development Institute, London, and DANIDA, Copenhagen.
- Powell, L. (2003), "In defense of multilateralism", presented at the Global Environmental Governance: the Post-Johannesburg Agenda. Yale Center for Environmental Law and Policy, New Haven, CT, available at: www.yale.edu/gegdialogue/docs/dialogue/oct03/papers/Powell.pdf (accessed November 14, 2015).
- PreventionWeb (2015), "SAARC disaster management centre", available at: www.preventionweb.net/english/professional/contacts/profile.php?id=3329 (accessed March 10, 2015).
- SAARC (1992a), *Regional Study on Greenhouse Effect and its Impact on the Region*, SAARC Secretariat, Kathmandu.
- SAARC (1992b), *Regional Study on the Causes and Consequences of Natural Disasters and the Protection and Preservation of the Environment*, SAARC Disaster Management Centre, New Delhi.
- SAARC (2007), *SAARC Comprehensive Framework on Disaster Management*, SAARC Secretariat, Kathmandu, available at: <http://saarc-sdmc.nic.in/pdf/framework.pdf> (accessed December 12, 2014).
- SAARC (2008a), *Dhaka Declaration on Climate Change*, SAARC Secretariat, Kathmandu, available at: <http://saarc-sdmc.nic.in/pdf/publications/climate/chapter-1.pdf> (accessed February 14, 2015).
- SAARC (2008b), *Action Plan on Climate Change*, SAARC Secretariat, Kathmandu, available at: <http://saarc-sdmc.nic.in/pdf/publications/climate/chapter-2.pdf> (accessed February 14, 2015).
- SAARC (2009), *Ministerial Statement on Cooperation in Environment*, SAARC Secretariat, Kathmandu, available at: <http://admin.indiaenvironmentportal.org.in/files/Delhistatement-Final.pdf> (accessed February 14, 2015).
- SAARC (2010a), "Islamabad Declaration". SAARC Secretariat, Kathmandu, available at: www.saarc-sec.org/userfiles/04-Islamabad-4thSummit1988.pdf (accessed February 25, 2015).
- SAARC (2010b), "Thimphu statement on climate change", SAARC Secretariat, Kathmandu, available at: www.saarc-sec.org/userfiles/ThimphuStatementonClimateChange-29April2010.pdf (accessed February 14, 2010).
- SAARC (2011), "SAARC Agreement on Rapid Response to Natural Disasters", SAARC Secretariat, Kathmandu, available at: www.ifrc.org/docs/idr1/N840EN.pdf (accessed February 12, 2015).
- SAARC (2014), *Input Paper 2015 Roadmap/Framework for DRR in SAARC Region (HFA2)*, SAARC Disaster Management Centre, New Delhi.
- SACEP (2014), *Post 2015 South Asia Development Agenda*, South Asia Co-operative Environment Programme, Colombo, available at: www.irf2015.org/sites/default/files/publications/Post%202015%20SADA.pdf (accessed January 5, 2014).
- Sachs, J.D. and Ki-moon, B. (2015), *The Age of Sustainable Development*, Columbia University Press, New York, NY.
- Sivakumar, M.V.K. and Stefanski, R. (2011), "Climate change in South Asia", in Lal, R., Sivakumar, M.V.K., Faiz, M.A., Mustafizur Rahman, A.H.M. and Islam, K.R. (Eds), *Climate Change and Food Security in South Asia*, Springer, New York, NY, pp. 13-30.
- SLG (2010), *The Development Policy Framework*, Ministry of Finance and Planning, Colombo, available at: <http://203.94.72.22/publications/npd/mahindaChintanaVision-2010full-eng.pdf> (accessed January 6, 2015).
- Speth, J.G. (1995), "The transition to a sustainable society", *Proceedings of the National Academy of Sciences*, Vol. 89 No. 3, pp. 870-872.
- Speth, J.G. (2002), "The global environmental agenda: origins and prospects", in Esty, D.C. and Ivanova, M.H. (Eds), *Global Environmental Governance: Options & Opportunities*, Yale School of Forestry & Environmental Studies, New Haven, CT, pp. 11-30.
- Swain, A. (2002), "Environmental cooperation in South Asia", in Conca, K. and Dabelko, G.D. (Eds), *Environmental Peacekeeping*, Johns Hopkins University Press, Baltimore, pp. 61-85.

-
- Tews, K., Busch, P.O. and Jörgens, H. (2001), "The diffusion of new environmental policy instruments", paper prepared for the ECPR, 2001 Grenoble Joint Sessions of Workshops Workshop No. 1: New Environmental Policy Instruments, Free University of Berlin, Berlin, available at: <http://ecpr.eu/Filestore/PaperProposal/b3f01913-619a-4d43-a0e4-62c71813be6f.pdf> (accessed March 17, 2015).
- UNDP (2014), *The Millennium Development Goals Report*, United Nations Development Programme, New York, NY.
- UNEP (2008), "Climate Change Adaptation and Mitigation in the Tourism Sector: Frameworks, Tools and Practices", UNEP, University of Oxford, UNWTO, WMO.
- United Nations (2007), "International strategy for disaster reduction", Hyogo framework for action 2005–2015: building the resilience of nations and communities to disasters, United Nations, New York, NY, available at: www.unisdr.org/files/1037_hyogoframeworkforactionenglish.pdf (accessed March 10, 2015).
- WCED (1987), *Our Common Future*, Oxford University Press, Oxford.
- White, T. (2015), *A Critical Disconnect: The Role of SAARC in Building the DRM Capacities of South Asian Countries*, Brookings Institution, Washington, DC.
- World Bank (2012), *Disaster Risk Management in South Asia: A Regional Overview*, The World Bank, Washington, DC.

Further reading

- Glasbergen, P. and Cörvers, R. (2003), "Environmental problems in an international context", in Glasbergen, P. and Blowers, A. (Eds), *Environmental Policy in an International Context: Perspectives*, Butterworth-Heinemann, Oxford, pp. 1-29.
- Government of Pakistan (GOP) (2002), *Environmental Challenges and Responses of Pakistan*, Ministry of Environment, Local Government and Rural Development, available at: <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan004673.pdf> (accessed January 10, 2015).
- Jordan, A., Wurzel, R.K.W. and Zito, A.R. (2003), "Comparative conclusions – 'New' environmental policy instruments: an evolution or a revolution in environmental policy?", *Environmental Politics*, Vol. 12 No. 1, pp. 201-224.

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Developing primary health care in Thailand

Innovation in the use of socio-economic determinants, Sustainable Development Goals and the district health strategy

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Abstract

Purpose – The purpose of this paper is to describe progress in an across sectorial approach to primary health care at the district health service (DHS) level in Thailand in response to recent innovative national public policy directions which have been enshrined in constitutional doctrine and publicly endorsed by the Prime Minister. This paper describes one response to the Prime Minister's challenge for Thailand to become the centre of learning in the sub-region in health management.

Design/methodology/approach – The authors utilised a descriptive case study approach utilising an analysis of the Naresuan University initiative of establishing the College of Health Systems Management (NUCHSM). Within that case study, there is a focus on challenges relevant to the socio-economic determinants of health (SOED) and an emphasis on utilising Sustainable Development Goals (SDGs) within the DHS structure.

Findings – The findings describe the establishment of the NUCHSM. A Master of Science (Health Systems Management) by research and a PhD degree have been created and supported by an international faculty. The Thailand International Cooperation Agency recognised NUCHSM by providing scholarships. International students are from Bangladesh, Bhutan, Kenya, Malawi and Timor Leste. Research consultancy projects include two in Lao People's Democratic Republic; plus, a prototype DHS management system responsive to SDG attainment; and a project to establish a sustainable Ageing Society philosophy for a Thai municipality.

Originality/value – The case study on NUCHSM and its antecedents in its development have demonstrated originality in a long-standing international collaboration, and it has been recognised by the national government to provide scholarships to citizens of the countries in the sub-region to undertake postgraduate studies in health management. The concept of learning from each other and together, simultaneously as a group, through action research projects funded to enhance the evolution of DHSs is innovative.

Keywords Primary health care, Sustainable Development Goals, District health services, Socio-economic determinants of health, Health reform

Paper type Research paper

Introduction

According to the World Bank (2017) Thailand “is one of the great development success stories. Due to smart economic policies, it has become an upper middle-income economy and is making progress towards meeting the Sustainable Development Goals”. Figure 1 provides an overview of Thailand's performance and the most recent data are available at www.worldbank.org/en/country/thailand. A wider discussion of Thailand's health system in the broader Southeast Asia context is available from Chongsuvivatwong *et al.* (2011).





- Population 68.86 million
- GNI per capita \$ 5,640 (UMIC)
- Health status
 - Life expectancy 78 (F)/72 (M)/74.6 (T)
 - U5MR 12.0/1,000 LB
 - MMR 20/100,000 LB
- Skilled birth attendance 99.6% (2012)
- UHC achieved by 2002 with comprehensive package, almost zero co-payment
- Health Expenditure (2014)
 - THE 4.1% GDP, \$ 227 per capita
 - Public source
 - 56% THE, 1.9% GDP (2001) prior UHC
 - 78% THE, 3.2% GDP (2014) post UHC
 - GGHE, 13.3% of GGE (2014)
 - Out of pocket 11.9% of THE (2014)

Sources: <http://thailandmap.facts.co/thailandmapof/thailandmap.php>;
World Bank: www.worldbank.org/en/country/thailand

Figure 1.
Thailand at a glance 2016

Of significant importance in our understanding of Thailand is that its population has recently changed from one that has predominantly been typified as having a majority rural and poor population to one that is almost equally balanced between urban and rural populations. The population more than 68m is also ageing with those over 60 years of age at 11.9 per cent in 2010,

and this part of Thai society will become 25 per cent in 2030. Service utilisation of older people is already greater than 2.3 times that of the general population. Health challenges increasingly faced by the under-developed nations are such as non-communicable diseases (NCDs) and risk factors of tobacco, alcohol, high salt and sugar intake (Tangcharoensathien, 2016).

Thailand’s health system

Thailand has a national health system, described in Figure 2 whereby central bodies have responsibility for the health system, particularly in policy making, planning and financing, while delivery of services is at the province level substantially through district health service (DHSs) with an emphasis on primary health care (PHC). The organisational structure of the Thai health system sees a Ministry of Public Health (MoPH) as the national health authority. The MoPH is supported by other autonomous health authorities consisting of the Thai Health Promotion Foundation, the National Health Commission with a central role of invoking engagement and participation of all in the development of public policy. The Emergency Medical Institute role is self-evident, while the National Health Security Office (NHSO) has responsibility for universal health coverage (UHC), purchasing and payment mechanisms. The Health Systems Research Institute (HSRI) is responsible for building research capacity (Tangcharoensathien *et al.*, 2016; Tejativaddhana *et al.*, 2016).

Progressive health reform

The earlier mention of the plaudit from the World Bank about Thailand’s development is also applicable and can equally be applied to the progress made in the Thai health system over the last few decades. That improvement confirms that Thailand is performing at a higher level than many of its counterpart nations and indeed has been innovative in adopting contemporary health policy into practice (Balabanova *et al.*, 2011; Strasser *et al.*, 2016). This progressive public policy approach and the achievements over time have been significant.

Thailand’s health system is based on PHC, and the network of health services provides good overall coverage with solid evidence of its “pro-poor” effect (WHO, 2014). Thailand had become recognised for the creation and now the long-term use of “village health volunteers” (VHV) within local villages and health centres as the first point of contact with PHC and the wider health system. They are citizens trained as the first line of care with a focus on health promotion and prevention (Balabanova *et al.*, 2011).

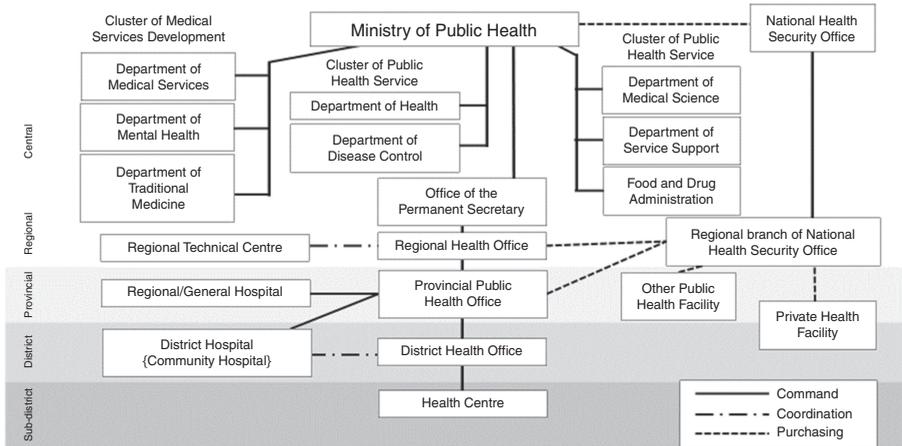


Figure 2.
Thailand’s health system

Source: Tangcharoensathien (2015, p. 23)

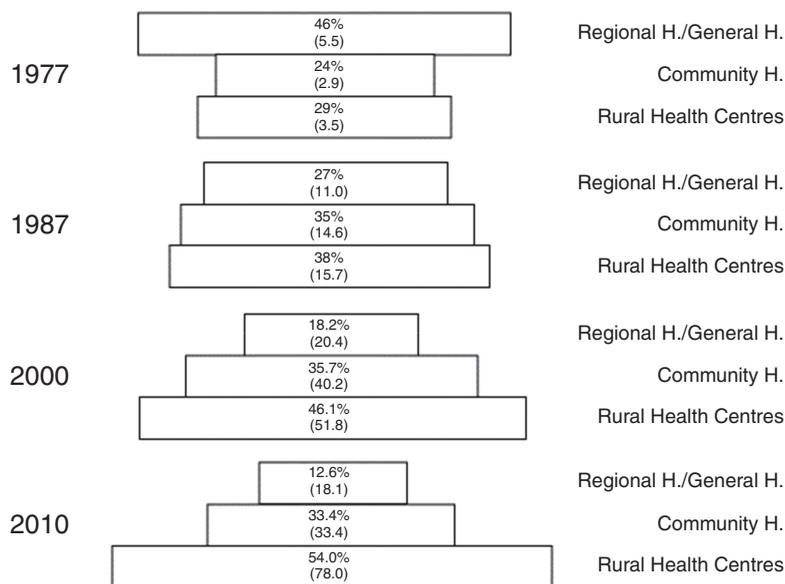
UHC was achieved in 2002 with comprehensive benefits package with free care at the point of service delivery and almost no co-payment. This policy aims to strengthen PHC with a dominant public-sector role in service provision with extensive geographical coverage of DHSs that have become the main contractor for out-patient, prevention and gatekeeping functions (Pongsupap, 2013; Tangcharoensathien, 2016).

Thailand was ranked first amongst the top ten achievers of millennium development goals (MDGs) for MDG 4 (Reduce Child Mortality) performers in the reduction of children under five years of age mortality rate (U5MR) with an 8.5 per cent yearly reduction in mortality during 1990–2006 (Rohde *et al.*, 2008, p. 953). In 2016, the Joint United Nations Programme on HIV/AIDS (UNAIDS) announced that Thailand was the first country in Asia to eliminate mother-to-child transmission of HIV and Syphilis (UNAIDS, 2016).

Perhaps what might be described as the greatest and most recent achievement has been that of convincing Thai society that PHC through the DHS structure is the first point of contact with the health system where previously community hospitals (CHs) and outpatient clinics were the dominant and preferred entry point for most Thais (Tangcharoensathien, 2016). The notable change from the dominant acute outpatient care utilisation to PHC is represented in Figure 3. This significant achievement has been further reinforced in 2017 with the adoption of a new national constitution that clearly states that Thai people will be able to access primary care provided by family doctors (Office of the Council of State, 2017).

Success factors in the development of the Thai health system

Thailand, in both the acute sector and in the PHC system has been an early adopter of health reform internationally as evidenced by the adoption of Australian Diagnostic Related Groups as a costing/funding model for acute care in 2001 was significantly ahead of any general adoption in the Australia’s context (Tangcharoensathien, 2015). Second, Thailand is generally recognised as having stable institutional arrangements at the national level irrespective of the often-changeable nature of occupancy at the



Source: Prakongsai (2014)

Figure 3. PHC utilisation and location service utilisation by level of care: 1970s-2010s

political level. This is strengthened at the policy level by the philosophy espoused by the Late King of Thailand's philosophy of sufficiency economy that proposes moderation, reasonableness and self-immunity set in the context of morality and knowledge. This is espoused as a relatively new philosophy that "aims at improving human well-being as a development goal". This philosophy describes a "middle path" that applies to all levels of society and requires attention to the economic, social and political aspects of society and is particularly relevant to the emergence of Sustainable Development Goals (SDGs) (Mongsawad, 2010, pp. 127-128). The imprimatur of the late King has been reinforced in his practical support of projects that have demonstrated the "way forward", and this approach continues to have consistent, visible Royal support and leadership, particularly in health and education achievement in Thai society.

The other beneficial public policy setting in Thailand that has been pervasive in Thailand's progress is referred to as that proposed by Prof. Prawase Wasi called the "Triangle that moves the mountain". This suggests that the challenge is best addressed in reform agendas by the triangulated use of research-based knowledge; social movement or social learning and political/regulatory approaches. There is a history in Thailand of investment in both research and capacity building before policy adoption (Wasi, 2000; Thammatatch-aree, 2011). This is also evident in the Naresuan University College of Health Systems Management (NUCHSM) approach as described in this case study.

The third determinant of success in the progress of health care in Thailand has been the political adoption of PHC as the cornerstone of Thai health care delivery and, more recently the commitment of the Prime Minister that Thais will be able to access care from medical practitioners at the PHC level (Ministry of Public Health, 2016). Thailand, over the past three decades, has increased its medical workforce and "the proportion of rural physicians [...]" and has reallocated resources to support extensive primary health care systems and to increase access to services" (Strasser *et al.*, 2016, p. 406).

The fourth dimension of success for the Thai health system is the adoption of the concept of DHS as the delivery mechanism for acute and PHC delivery and as the contracting authority for determining the funding directions and allocations. This demonstrates a clear distinction between policy, planning and financing at the national level with an evolutionary delegation for service delivery at the district level (Tangcharoensathien, 2016). While the capacity and capability of the DHS to undertake this role continues to be developed, national policy has also set a higher challenge that planning, and service delivery must be at the "across sector level" that engages not only the DHS but communities, local government, education and other portfolios (Hfocus, 2017).

This approach, being implemented now, is truly innovative and obviously recognises the context and importance of socio-economic determinants in the improvement of individual health and the health of communities. It also recognises the challenges set by the United Nations (UN) adoption of SDGs and the desire of the Thai Government to address the challenges that present (CHSM, 2017a). The innovation discussed below is demonstrated by the establishment of pilot DHS "StartUPs" that embraced cross-sectorial approaches and the utilisation of SOECD determinant data in the NUCHSM research described below and currently underway and at the time of publication. The progress of this research and outcomes has recently been presented to the Minister of Public Health and Administration Board members of the HSRI.

The underlying and recent national policy initiatives will further focus the health systems strategic approach through the desire to achieve the UN SDGs. Of the 17 SDGs established in 2015 there are 169 targets with the specific SDG 3—"ensure healthy lives and promote well-being for all at all ages". In addition, Thailand has recently adopted a 20-year strategic plan and the 12th National Social and Economic Development Plan 2017–2021 (Setthasiroj, 2016). Importantly, the newly established Constitution for the Kingdom of Thailand prescribes that Thailand will "Set up a primary health care system equipped with family physicians in an appropriate ratio" (Office of the State Council, 2017).

The most potent demonstration of the Thai Government's commitment to this process has been the Prime Ministers Statement at the United Nations General Assembly (UNGA) side event on September 2015, where he stated amongst other things that "Thailand's health policies will focus more on prevention than treating patients after they become ill [...] and Thailand will be the centre of learning in the region in health management and universal health coverage [...]" (Ministry of Foreign Affairs of the Kingdom of Thailand, 2015).

District health services

There are approximately 878 DHSs across Thailand that might serve populations of between 2,000 and 500,000 (Wikipidea, 2017). They essentially include the CH nominally as it has reporting mechanisms through the Provincial Health Office (PHO) to the MoPH and the NHSO. At the same time, the PHC centres (or also called Sub-District Health Promoting Hospitals (SDHPH)) and programs report to the Contracting Unit for Primary Care (CUP) which is the CHs through the District Health Office (DHO). Under the UHC policy, all CHs are assigned to be CUPs. CH and DHO, as well as SDHPH through the order of the MoPH, form the CUP Board to be the organisation that manages comprehensive health care (including primary care, secondary care and referral care to tertiary care institutes) to their responsible population (Taytiwat, 2007). Most of CH directors chair the Board. However, in some districts, CH directors and chief of DHO take turn for their chair positions year by year or every two years. Besides CH directors and chief of DHO, the members of the CUP Board are those representatives from the CH, DHO and SDHPHs. In some districts, they invite representatives from the community such as presidents of local governments (sub-district level), community leaders and VHV.

The structure of CUP Board is very similar to the structure of the District Health Collaborating Committee (DHCC) which is the previous structure before the launch of the UHC policy (Taytiwat, 2007). The DHCC is a platform for those working at CH, DHO and health centres to coordinate their work but was claimed to be ineffective as there is no authority to order or control. The CUP Board seems to have more authority as the CH controls the health budget that supports the CH and the SDHPH. SDHPH reports to the DHO and the DHO reports to the Chief of the District (CD) who is under the management of the Ministry of Interior (MoI) and looks after all the range of public services at the district level. Also, the DHO and the SDHPH need to report to the Provincial Chief Medical Officer (PCMO) at the PHO. The CH does not directly report to the CD but reports directly to the PCMO at the PHO. However, for the general matter, the CH director needs to consult or ask advice from the CD. These co-ordinating mechanisms may appear to be tortuous to the uninformed bystander, but they do reflect current arrangements.

The case study context

In 2016, the MoPH and the MoI together with the NHSO and the Thai Health Promotion Foundation signed the Memorandum of Understanding to pilot 73 districts for setting up District Health Boards (DHB) in which their members come from all sectors in the district including public, private and people sectors (Bureau of Information, Ministry of Public Health, 2016). The major aim of the DHB is to be a platform for encouraging participatory and integrated networking of those in the district to help improve health and quality of life of their population by using people-centred and area-based approach. In 2017, the government expands the project to cover 200 districts. Recently, the Cabinet has approved the draft of the regulations of the Office of Prime Minister on District Committee on Improving Quality of Life on 6 October 2017 (Royal Thai Government, 2017). This regulation will apply to all districts before the end of 2017.

The NUCHSM has been instrumental in the establishment of three research projects demonstrating approaches to DHS innovation, working across sectorial boundaries and focusing on SOECD data and SDG achievement in three projects in six districts, across three provinces. The focus of the studies is the cross-sectorial collaboration through the identification and addressing of a specific health issue. The latter focus in one district

is the ageing population, the second district is focusing on childhood obesity while the third is focused on the DHS StartUp project. The specific outcomes of these projects will be the subject of future published research articles (CHSM, 2017b).

The DHS is a collaborating health system by every sector, not just the health sector in the district. Management style is specific to the context of each district enabling sharing of resources, collaboration through appreciation and affective knowledge management through learning together so that people and communities can be more self-reliant and so “no one will be left behind”. The common goal is “for the health of all people” (WHO, 1987). A typical structure that reflects the DHS organisation and relationships is described in Figure 4.

In the Thai context, the DHS is the appropriate level to bridge between policy and implementation, ensuring that health services are close to communities and that proposed service delivery fits local needs. The approach is useful in effective cooperation and distribution of health resources that strengthen coverage and equity of access. Importantly, it is an effective focus for intersectoral collaboration and engagement of other relevant sectors (Saelee *et al.*, 2014; Tangcharoensathien, 2016). The DHS reform underway sees the DHS as the entity that provides access and delivers services in a local context with the aim of improving health and quality of life through a “good health orientated system which ‘guarantees access to adequate quality health care for all’”. The reform is focused on developing strong collaborative health networks, improving quality, standards, patient satisfaction and that of health professionals and providing an underlying strengthening of primary care (Tangcharoensathien, 2016).

The challenges faced by the health system and the DHS includes the increased urbanisation of what was previously a majority rural population, the increasing ageing of Thai society that is already demonstrating higher utilisation rates than the general population, addressing risk factors of tobacco, alcohol, high salt and sugar intake. Like many countries, the health challenges have mostly become NCDs and emerging diseases (Tangcharoensathien, 2016).

Responding to the challenges in the District Health Construct

Responding to the challenges to the health system and to the policy initiatives of the government have been extensive and multi-dimensional and reflect extensive

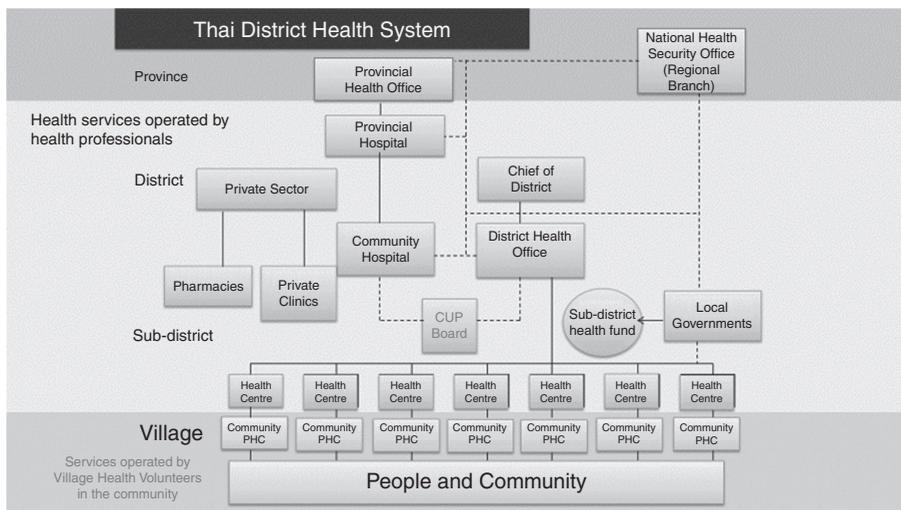


Figure 4.
Thai district
health system

Source: Tejtivaddhana *et al.* (2017)

commitments by individuals and organisations over the last few decades. The authors of this case study describe an international collaborative approach that has been developed and is responding to those challenges over the last two decades. The earlier history of this approach had been described as the “Thai-Australian Health alliance” and had an objective, the development of health management capacity and sustainability for PHC services. The extent of co-operation between Thailand and Australian health and education professionals and institutions was extensive and reported elsewhere. This period of the collaboration also saw the principal collaborators conducted the 1st International Conference on Health Service Delivery Management that had some 470 delegates from 17 countries that led to the creation of the Phitsanulok Declaration “which calls for more resources and new policies to promote leadership, good management and governance to strengthen health systems” (Briggs *et al.*, 2010, p. 7).

A further significant outcome of this collaboration has seen Naresuan University, Thailand take the initiative to establish the NUCHSM to provide a unique and positive response to the public health policy initiatives and health reform initiatives described herein. The College was established in 2016 with a vision to establish a “World-Class College of Health Systems Management”. The purpose was to be innovative and build on the body of knowledge on health systems management which requires an integrated and multidisciplinary approach and aims to develop academic support activities and to exchange knowledge on leadership, management and governance of health systems, ensuring sustainability of health systems and SDG attainment across Thailand and other neighbouring countries in Southeast Asia and in ASEAN (Tejativaddhana *et al.*, 2016, p. 84). The role of NUCHSM is described in Figure 5.

The early initiatives and achievements of NUCHSM are impressive; A Master of Science (Health Management Systems) by research and a similarly entitled PhD have been established. The College is supported by an International Academic Advisory Committee, and further scholarships have been provided by the Thailand International Cooperation Agency and current students come from Bangladesh, Bhutan, Kenya, Malawi and Timor Leste (CHSM, 2017c).

NUCHSM has also implemented DHS research and consultancy projects that include a project to develop the way forward in Lao People’s Democratic Republic (Lao PDR) to ensure the adequate access to needed quality health services without financial hardship,

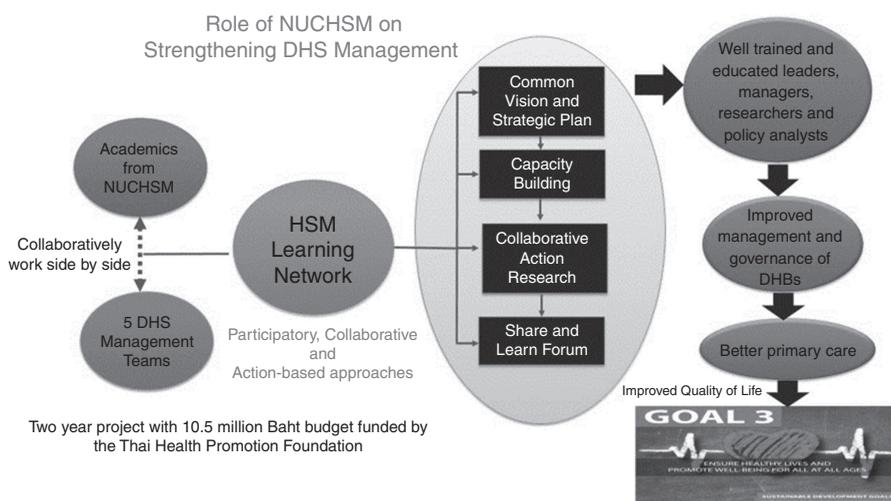


Figure 5. Role of NUCHSM

Source: Tejativaddhana *et al.* (2016)

funded by the WHO, a research project to develop a prototype effective DHS management system that is responsive to SDG attainment funded by the Thai Health Promotion Foundation and a project on policy options and guidelines for urban health system development, funded by the Health Sciences Research Institute (Tejativaddhana *et al.*, 2017). Further current projects include a consultancy funded by WHO to strengthen the institutional capacity of National Health Insurance Bureau staff in Lao PDR and a consultancy project funded by Japan International Cooperation Agency (JICA) to establish a sustainable Ageing Society philosophy for Phitsanulok City Municipality (CHSM, 2017c).

Taken as a case study NUCHSM and its antecedents have demonstrated a long-standing international collaboration, a significant international Conference and the Phitsanulok declaration. It has been identified by the national government to provide scholarships to citizens of the countries to undertake postgraduate studies in health management through a concept of learning from each other and together through action research projects funded to enhance the evolution of DHSs.

The way forward admiring the problem or addressing the SOED of health with the SDGs and DHS strategy

Thailand is using DHS as a platform to integrate health and social services and encourage participation of all sectors to work together to improve their local people's quality of life. This approach recognises that cross-sector collaboration, utilising DHS and PHC as the platform, is required to achieve this goal. It also acknowledges the importance of addressing socio-economic determinants of health (SOCEDH), requiring greater than just a health sector approach. The DHS concept can also encourage people-centred and area-based planning and service delivery. Coupled with the concept of Sufficiency Economy Philosophy (Mongsawad, 2010), it is believed that this is one of the ways to bring the achievement of SDGs in the Thai context.

Health is recognised as a precondition to outcomes to the dimensions of sustainable development. Following achievement of MDGs, attention is now turning towards the achievement of SDGs. Strong political commitment, universal health care, an effective, sustainable health workforce and financing system are prerequisites to addressing SDGs (Tangcharoensathien *et al.*, 2015), and Thailand is now well placed in these contexts.

The pre-conditions for Thai PHC had been set as being accessible, comprehensive delivery at home or in centres, coordinated, providing continuity of care and community orientated (Bureau of Primary Care Development Coordination, 2010). Kitreerawutiwong *et al.* (2017) indicate that their research and research of others in international contexts suggest positive outcomes and that, taken with factors of quality of service performance, can provide a useful measurement of PHC performance.

Addressing the specific SDG 3 to “ensure healthy lives and promote well-being for all at all ages” requires an understanding of social justice, the meaning and differences between equity and equality. Social determinants of health are attributable to “inequities to the circumstances in which people are born, grow, live, work, and age, in addition to the health care systems put in place to deal with illness” (Marmot *et al.*, 2012, p. 181). The authors emphasise that this is not just a context for developing countries but one that can be demonstrated in the social gradients in most countries, giving us sub-groups of populations that do not have equality of access and are deprived of equity. Therefore, the challenge before us is to identify those health inequalities that are deemed “avoidable by reasonable means” (Marmot *et al.*, 2012, p. 182).

Addressing the SDG challenges, for Thailand and many others, will require an inter or across sectorial commitment and the health system needs to ensure “UHC access to high-quality health care, an increased focus on prevention and health promotion, advocacy for action on social determinants and research and public policy that evaluates these approaches and increases the knowledge base” (Marmot *et al.*, 2012, p. 183).

Organisational challenges

While District Health Systems are traditionally described in bureaucratic organisational terms as set out in Figure 4, the reality is that the language supporting this approach suggests “networks of services” which in themselves can be considered complex. However, to extend the vision to one that addresses SOCEDH and the attainment of SDGs means, we are developing a complex but adaptive systems approach to the management and delivery of health services.

This offers the possibility to move from the traditional bureaucratic structure with interconnected but siloed services that reflect acute care, primary health care and rehabilitation services to a network that might more accurately deliver patient centred care and flexibly adapts to local community care needs.

Braithwaite suggests that the gaps in siloed service need to be better understood if we want to “bridge policy-practice disconnections, to better secure resources, remedy shortfalls between poor and idealized care, and for clinicians to provide services across the divides of organisation silos” (Braithwaite, 2010, p. 1). This approach and the language that it uses adds challenges, requiring new practices and the learning on the part of health managers. Braithwaite’s research and that of others suggest that the new language of health managers is about boundary crossing and spanning, engagement and communication, interpretation and understanding (sensemaking), flexible thinking, managing competing interests, critical thinking, big picture visioning, understanding and managing self (Briggs *et al.*, 2012).

Working in complex systems means developing networks of people to work across organisational boundaries. This “requires critical relationships between people from different programs who need to cooperate and exchange information in complex systems” (Hofmeyer and Marck, 2008, p. 145). These authors take a social-ecological approach to the maintenance and development of social capital within the complexity of health systems that are continually under pressure to perform often without adequate resources and in addressing the demand from increased service utilisation. Social capital refers to human resources, assets, economic resources that provide the productive capacity to achieve goals that make a difference (Hofmeyer and Marck, 2008, p. 146).

The human social capital in complex networked systems requires that advanced leaders and managers might take note of this ecological approach. They need to further consider in their capabilities, the importance of trust and solidarity, collective action and cooperation, formation and communication together with social cohesion and inclusion. These authors also talk in terms of bonding, bridging and linking social capital both horizontally and vertically (Hofmeyer and Marck, 2008, p. 146).

Lasker and Wise report on an innovative approach to broadening community participation in problem solving in the US context. They describe a community health governance (GHC) model as a road map to broader collaborative participation, suggesting barriers along the way as politics of interest groups, the eroding sense of community, limited participation. In increasing a sense of community collaboration, they suggest proximal outcomes that might empower people, bridge social ties between individuals and creating synergy in thinking and action. The authors emphasise the importance of leadership and management in the successful development of this model. Leadership and management are said to be critical and different to organisation or service approaches. In fact, leadership and management might be more diffused and involve a variety of people in both formal and informal roles. Leadership and management are more participatory and need to “promote broad and active participation, ensure broad-based influence and control, facilitate productive group dynamics and extend the scope of the process” (Lasker and Weiss, 2003, p. 31).

Best *et al.* in their “realist review” of large system transformation in health care suggest “five simple rules” to enhance success. These initiatives are “blending designated leadership with distributed leadership, establish feedback loops, attend to history, engage physicians and include patients and families” (Best *et al.*, 2012, p. 421). The Commonwealth Fund in their

assessment of some communities' performance in health systems performance suggests that of those who are performing well the factors that stood out in that performance were that local government acted as catalysts for change, health care and other community organisations cooperated to achieve common goals, data often guided action. Their important conclusion was that "collaboration across sectors—not just within health care—appears to be central to advancing local health system performance in both large and small ways" (Klein *et al.*, 2014).

Conclusion

This paper describes the progress of the Thai health system over recent decades. It demonstrates a variety of progressive initiatives within a case study example that have been timely and innovative. The public policy development has been extensive, and the implementation of reform has received Royal Family support and interest, and the direction has been enshrined in constitutional doctrine and publicly endorsed by the Prime Minister. The current initiative is to progress an across sector approach to PHC at the DHS level. This innovative measure is well supported by the health system at both the policy and local levels. The case study describes the recently established Naresuan University, College of Health Systems Management that has responded to the Prime Ministers challenge for Thailand to become the centre of learning in the region in health management and universal coverage. It has become an international centre for health management research and learning and is attracting students from the sub-region. The College is focused on addressing challenges relevant to the SOCEDH with the SDG and DHS focus by imparting a strong understanding of relevant organisational theory and other theoretical constructs relative to health reform and PHC.

References

- Balabanova, D., McKee, M. and Mills, A. (Eds) (2011), *Good Health at Low Costs 25 Years on. What Makes a Successful Health System?*, London School of Hygiene and Tropical Medicine, London.
- Best, A., Greenhalgh, T., Lewis, S., Saul, J.E., Carroll, S. and Bitz, J. (2012), "Large-system transformation in health care: a realist review", *The Milbank Quarterly*, Vol. 90 No. 3, pp. 421-456.
- Braithwaite, J. (2010), "Between-group behaviour in health care: gaps, edges, boundaries, disconnections, weak ties, spaces and holes: a systematic review", *BMC Health Services Research*, Vol. 10, p. 330, available at: www.biomedcentral.com/1472-6963/10/330
- Briggs, D.S., Smyth, A. and Anderson, J.A. (2012), "In search of capable health managers: what is distinctive about health management and why does it matter?", *Asia Pacific Journal of Health Management*, Vol. 7 No. 2, pp. 71-78.
- Briggs, D.S., Tejavivaddhana, P., Cruickshank, M., Fraser, J. and Campbell, S. (2010), "The Thai-Australian alliance: developing health management capacity for primary health care services", *Education for Health*, Vol. 23 No. 3, available at: www.educationforhealth.net/
- Bureau of Information, Ministry of Public Health (2016), "Four organizations hand in hand to improve quality of life of people by using area-based and participation of all sectors approach (in Thai) 30 March 2016", Ministry of Public Health, available at: http://pr.moph.go.th/iprg/include/admin_hotnew/show_hotnew.php?idHot_new=8133 (accessed 8 October 2016).
- Bureau of Primary Care Development Coordination (2010), "Theme for developing of Tambon Health Promotion Hospitals", available at: www.pro.moph.go.th/thos/Files/pointthos.doc (accessed 12 November 2010).
- Chongsuvivatwong, V., Phua, K.H., Yap, M.T., Pocock, N.S., Hashim, J.H., Chhem, R., Wilipo, S.A. and Lopez, A.D. (2011), "Health and health-care systems in Southeast Asia: diversity and transitions", *The Lancet*, Vol. 377, pp. 429-437, available at: www.thelancet.com
- CHSM (2017a), "Strengthening the district health system management", *Challenging Facing Thailand and Thai Health Managers at 6th Annual Global Healthcare Conference (GHC 2017) Hotel Fort*

- Canning, *College of Health Systems Management, Singapore, 24 July*, Naresuan University, available at: <http://chsm.nu.ac.th/en/2017/?p=1410> (accessed 1 March 2018).
- CHSM (2017b), "College of health systems management Naresuan University welcomes new batch of international students for its MSc. Program, College of Health Systems Management (CHSM)", Naresuan University, available at: <http://chsm.nu.ac.th/en/2017/?p=1255> (accessed 1 March 2018).
- CHSM (2017c), "CHSM in cooperation with JICA, gives its support to Phitsanulok city municipality in conducting JICA's pilot project", College of Health Systems Management (CHSM), Naresuan University, available at: www.nu.ac.th/news_view.php?n_id=417&action=view (accessed 20 November 2017).
- Hfocus (2017), "Move Forward: implementing of district health boards in all districts after expansion to cover 200 districts in 2017 (in Thai)", Hfocus News, available at: www.hfocus.org/content/2017/07/14199 (accessed 1 March 2018).
- Hofmeyer, A. and Marck, P. (2008), "Building social capital in healthcare organisations: thinking ecologically for safer care", *Nursing Outlook*, Vol. 56, pp. 145-151, doi: 10.1016/j.outlook.2008.01.001.
- Kitreerawutiwong, N., Jordan, S. and Hughes, D. (2017), "Facility type and primary care performance in sub-district health promotion hospitals in Northern Thailand", *PLoS ONE*, Vol. 12 No. 3, available at: <https://doi.org/10.1371/journal.pone.0174055>
- Klein, S., Hostetter, M. and McCarthy, D. (2014), "All health care is local, revisited: what does it take to improve?", available at: www.commonwealthfund.org/publications/other/2017/sep/all-health-care-is-local-revisited?omnicid=EALERT1278012&mid
- Lasker, R.D. and Weiss, E.S. (2003), "Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research", *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, Vol. 80 No. 1.
- Marmot, M., Allen, J., Bell, R. and Goldblatt, P. (2012), "Building of the global movement for health equity: from Santiago to Rio and beyond", Vol. 379, pp. 181-188, available at: www.thelancet.com
- Ministry of Foreign Affairs of the Kingdom of Thailand (2015), Statement by H.E. General Prayuth Chan-ocha, Prime Minister of Thailand at the UNGA Side Event "The Path towards Universal Health Coverage: the Promotion of Equitable Global Health and Human Security in the Post-2015 Development Era" at United Nations Headquarters, New York, NY, 28 September, available at: www.mfa.go.th/main/en/media-center/14/60697-Statement-by-Prime-Minister-of-Thailand-at-the-UNG.html (accessed 20 November 2017).
- Ministry of Public Health (2016), "Guideline on the operation of primary care cluster for health providers (in Thai)", Ministry Of Public Health, Nonthaburi, available at: http://bps.moph.go.th/new_bps/sites/default/files/Guidelines%20PCC.pdf (accessed 8 October 2016).
- Mongsawad, P. (2010), "The philosophy of the sufficiency economy: a contribution to the theory of development", *Asia Pacific Development Journal*, Vol. 17 No. 1, pp. 123-143.
- Office of the Council of State (2017), "Constitution of the Kingdom of Thailand", B.E. 2560 (unofficial translation), available at: www.constitutionalcourt.or.th/occ_en/download/article_20170410173022.pdf (accessed 20 November 2017).
- Pongsupap, Y. (2013), "Family medicine and community orientation as a new approach of quality primary care in Thailand", in Kidd, M. (Ed.), *The Contribution of Family Medicine to Improving Health Systems: A Guidebook from the World Organization of Family Doctors*, 2nd ed., Radcliffe Publishing, London, pp. 231-240.
- Prakongsai, P. (2014), "Management of Thai health system: the challenges for area health, district health and primary care", presented at Ministry of Public Health, Nonthaburi, 11 December.
- Rohde, J., Cousens, S., Chopra, M., Tangcharoensathien, V., Black, R., Bhutta, Z.A. and Lawn, J.E. (2008), "30 years after Alma-Ata: has primary health care worked in countries?", *The Lancet*, Vol. 372 No. 9642, pp. 950-961.
- Royal Thai Government (2017), "Cabinet approved the draft of the regulations of the Office of Prime Minister on District Committee on improving quality of life (in Thai)", News on Social, Royal Thai Government, available at: www.thaigov.go.th/news/contents/details/7171 (accessed 20 November 2017).

- Saelee, D., Tiptaengtae, S., Tonsuthepweerawong, C. and Yana, T. (2014), *Karn Kub Kluen Rabob Sookkapab Amphur Chabub Prated Thai [The Movement of District Health System, Thailand version]* (in Thai), 1st revised ed., Ministry of Public Health, Nondhaburi, p. 4.
- Setthasiroj, B. (2016), "Thailand 4.0 policy: which development model will achieve sustainable development?", presented at the 9th National Health Assembly, Grand Diamond Ballroom, Impact Muang Thong Thani, Bangkok, 23 December.
- Strasser, R., Kam, S.M. and Regalado, S. (2016), "Rural health care access and policy in developing countries", *The Annual Review of Public Health*, Vol. 37, pp. 395-412, doi: 10.1146/annurev-publhealth-032315-021507.
- Tangcharoensathien, V. (Ed.) (2015), "The Kingdom of Thailand health system review, health systems in transition", *Asia Pacific Observatory on Health Systems and Policies*, Vol. 5 No. 5, available at: www.wpro.who.int/asia_pacific_observatory/hits/series/thailand_health_systems_review.pdf (accessed 20 November 2017).
- Tangcharoensathien, V. (2016), "Thailand UC Scheme: achievement and challenges. presentation at health systems management: health security and financing management for better health equity seminar", National Health Commission Office, Bangkok, 26 August, available at: <http://chsm.nu.ac.th/en/2016/?p=454> (accessed 8 October 2016).
- Tangcharoensathien, V., Mills, A. and Palu, T. (2015), "Accelerating health equity: the key role of universal health coverage in the Sustainable Development Goals", *BMC Medicine*, Vol. 13, p. 101, doi: 10.1186/s12916-015-0342-3.
- Tangcharoensathien, V., Pitayarangsarit, S. and Patcharanarumol, W. (2016), *Achievements and Challenges. Policy Note-Thailand Health System in Transition. Asia Pacific Observatory on Health Systems and Policies*, Health Systems Review: World Health Organisation.
- Taytiwat, P. (2007), "Understanding the role of Thai community hospital directors in implementing the universal health coverage policy in relation to primary health care", Doctor of Health Services Management Thesis, University of New England.
- Tejativaddhana, P., Briggs, D.S. and Isouard, G. (2017), "Developing health management workforce and research towards achievement of Sustainable Development Goals (SDGs): a journey of the college of health systems management at Naresuan University (NUCHSM)", presented at SHAPE Conference 2017, Sydney, available at: www.shape.org.au/
- Tejativaddhana, P., Briggs, D.S. and Thonglor, R. (2016), "From global to local: strengthening district health systems management as entry point to achieve health – related Sustainable Development Goals", *Asia Pacific Journal of Health Management*, Vol. 11 No. 3, pp. 81-86.
- Thammatach-aree, J. (2011), "Draft background paper 10", *World Conference on Social Determinants of Health*, available at: www.who.int/sdhconference
- UNAIDS (2016), "Press release: Thailand is first country in Asia to eliminate mother-to-child transmission of HIV and syphilis", available at: www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2016/june/20160607_Thailand (accessed 20 November 2017).
- Wasi, P. (2000), "Triangle that moves the mountain and health systems reform movement in Thailand", *Human Resources for Health Development Journal*, Vol. 4 No. 2, pp. 106-110, available at: www.who.int/hrh/en/HRDJ_4_2_06.pdf (accessed 20 November 2017).
- WHO (1987), "Declaration on strengthening district health systems based on primary health care", WHO, Harare, available at: http://apps.who.int/iris/bitstream/10665/61958/1/WHO_SHS_DHS.pdf (accessed 20 November 2017).
- WHO (2014), *Thailand Health Profile*, World Health Organization, available at: www.who.int/countries/tha/en/ (accessed 1 September 2014).
- Wikipedia (2017), "Amphoe (district)", available at: <https://en.wikipedia.org/wiki/Amphoe> (accessed 6 November 2017).
- World Bank (2017), "The World Bank in Thailand", available at: www.worldbank.org/en/country/thailand

Further reading

Javanparast, S., Maddern, J., Baum, F., Freeman, T., Lawless, A., Labonte, R. and Sanders, D. (2017), "Change management in an environment of ongoing primary health care system reform: a case study of Australian primary health care services", *International Journal of Health Planning and Management*, pp. 1-13, doi: 10.1002/hpm.2413.

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Hong Kong students entering Mainland China universities: a review of the admission scheme

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Abstract

Purpose – Studying abroad is not new for Hong Kong students, especially those from the middle class. For a variety of reasons, traversing to Mainland universities has been an unconventional path confined mostly to students who pursued specific programs, or had family or social ties. Beginning in 2012, an admission scheme was launched for Hong Kong students applying to Mainland universities. The purpose of this paper is to review the admission scheme.

Design/methodology/approach – This paper draws on both quantitative and qualitative data sources. It includes statistics from official records of students' application and enrollment figures, and documents obtained from multiple sources, as well as qualitative data through interviews of Hong Kong students who are studying in the Mainland universities.

Findings – The key findings are that since the implementation of the admission scheme, the number of applicants is rather stable irrespective of the changing socio-economic and political context. With the preferential treatment for Hong Kong students, low tuition fees, government financial assistance and scholarships, most students still consider studying in the Mainland a backup plan rather than a first choice. The academic performance of the students and academic/career aspirations have influenced their choice and decisions.

Originality/value – This paper contributes through providing both primary and secondary data to help understand the level of acceptance on the scheme since its implementation. It also reveals the perceptions of the students who have made their choice to study cross the border. In facing the emergent economic, socio-cultural and political challenges, some policies recommendations are proposed to boost the acceptance of the scheme. Moreover, it fills the research gap on student mobility from Hong Kong to Mainland China in the corpus of literature.

Keywords Student choice, Study abroad, Hong Kong students, China universities

Paper type Research paper

Introduction: an admission scheme to universities in other parts of Mainland China

Hong Kong is a dynamic and heterogeneous society which has undergone unprecedented political, economic and social changes in the past 20 years. It has transitioned from being a British colony to a Special Administrative Region of the PRC under a “One Country, Two Systems” arrangement with a high degree of autonomy, according to the Basic Law of the HKSAR. This includes autonomy in formulating its own educational policies. Yet, deeper collaboration and integration is inevitable. With the implementation of the new Hong Kong Diploma of Secondary Education (DSE) in 2012, students have new and multiple pathways to higher education, one of which is a path to enter one of the top 100 universities in Mainland China.

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Some of the data presented in this paper are extracted from the first author's PhD research in the University of Hong Kong. The authors would like to thank the guidance of Professor Law Wing-Wah.

HKPAA



Under the “Scheme for Admission of Hong Kong Students to Mainland Higher Education Institutions” (DSE Admission Scheme), students can be admitted to undergraduate programs in Mainland universities based on their DSE examination results, without taking the “Joint Entrance Examinations for Students from Hong Kong, Macao, Taiwan and Overseas Chinese-Resident Areas and Countries for Universities in PRC” (JEE PRC). This scheme is unique as it is the only government-to-government initiative supporting Hong Kong students studying outside Hong Kong. For 2018/2019 academic year, students can select from 102 Mainland universities, of which 26 are under the top-tiered Project 985/211, and half are Project 211 universities. When compared with millions of students in Mainland China, who need to compete through the National College Entrance Examination, this is a much easier track signifying the preferential treatment toward Hong Kong.

This scheme has been implemented since 2012. To what extent has it been accepted by Hong Kong students is worth investigating. To start off, this paper reviews the contextual background toward studying abroad. Second, it analyses the policies and practices of Hong Kong students studying in Mainland universities at the pre-2012 and post-2012 phases. Third, it presents findings on the acceptance of the scheme, based on secondary data, as well as first-hand data collected from Hong Kong students and administrators in Mainland universities. Then, five scenarios of student choice are identified. Finally, some policies recommendations are proposed for facing the emergent economic, socio-cultural and political challenges in the coming years.

The transition from elite to mass higher education

Under the colonial period, Hong Kong has a long history of sending students abroad. Back in 1975, over 26,000 studied overseas, whereas the enrollment in Hong Kong’s own universities was only about 11,000 (Bray and Koo, 2005, p. 136). With the scarcity of local university places, studying abroad was an alternative, primarily dominated by the elite and affluent classes, which included children of senior government officials. Those officials of the colonial government whose children chose to study in the UK could enjoy the privileges of local tuition fees. Almost all other popular destinations for overseas education were Anglo-Saxon countries, such as the USA, Australia and Canada (Oleksiyenko *et al.*, 2013).

Many upper-class families even sent their children to western countries for secondary schools to prepare them for higher education (Waters, 2006). According to the data from Hong Kong Census and Statistics Department’s 2001 household survey, 32.3 percent of 74,100 persons commenced study outside Hong Kong at age 11–15, and 11.1 percent at age 10 or below. A survey revealed the top two reasons: “to receive a different mode of education” (47.1 percent) and “to improve English proficiency” (38.8 percent) (Hong Kong Census and Statistics Department (HKCSD), 2002). The large school sector with English as the medium of instruction in Hong Kong also broadened the opportunity for students to enter universities overseas (Postiglione, 2007, 2013).

Nonetheless, most households could not afford the high tuition fees and other expenses for sending their children abroad. Under the backdrop of massification of higher education in Hong Kong that began in the 1990s, most students could pursue some form of post-secondary education as a normal path of progression. According to World Bank UNESCO (2017) data, the Gross Tertiary Education Enrollment Ratio of Hong Kong reached 68 percent in 2015, an increase from 31 percent in 2003, as compared to the 2015 world average figure of 35.7 percent. The rapid transition from elite to mass higher education in Hong Kong was made possible by the large self-financed post-secondary education sector with strong governmental policy support. Although a small territory with only 7.4m people, Hong Kong has a total of 20 degree-awarding higher education institutions, including the eight universities funded by the public through the University Grants Committee (UGC) and

a host of self-financing institutions. Such skyrocketing enrollment in higher education transformed higher education in Hong Kong (Kember, 2010; Trow, 1973). Jung and Postiglione (2015) argued that Hong Kong has entered a post-massification stage.

The Chinese Mainland as a study destination: before and after reunification

Much research on international student mobility investigates students traversing from developing to developed countries, mainly from east to west (USA, UK, Australia, Canada) (Altbach, 1998; McMahon, 1992). Mainland China hosts the third highest number of foreign students. There is a bundle of favorable factors pulling students to study in Mainland China, namely, reputation of the country and its institutions, cost, safety and security (Hu *et al.*, 2016; Cao *et al.*, 2016), optimistic belief in China’s future development, bright prospects of learning Chinese language, and scholarships (Jiani, 2017). Many students are attracted to the Chinese Mainland primarily by future economic gains and immediate financial considerations. While these favorable pull factors may be applicable in attracting Hong Kong students, the uniqueness lies in the relationship between Hong Kong as a Special Administrative Region and the Chinese Mainland, as well as the shared heritage of Chinese tradition and socio-cultural linkages between the two systems.

Pre-2012 phase: policies and practices

Before the retrocession to Chinese sovereignty in 1997, Hong Kong’s educational policies and practices were much akin to the British system, with the 5-2-3 system: five years of secondary school, two years of matriculation for entering university and three years of undergraduate education. This system remained in place until the reform and implementation of the Senior Secondary Curriculum and four-year university curriculum under the 3-3-4 system which began in 2009. A comparison of the old and new academic structure is shown in Figure 1.

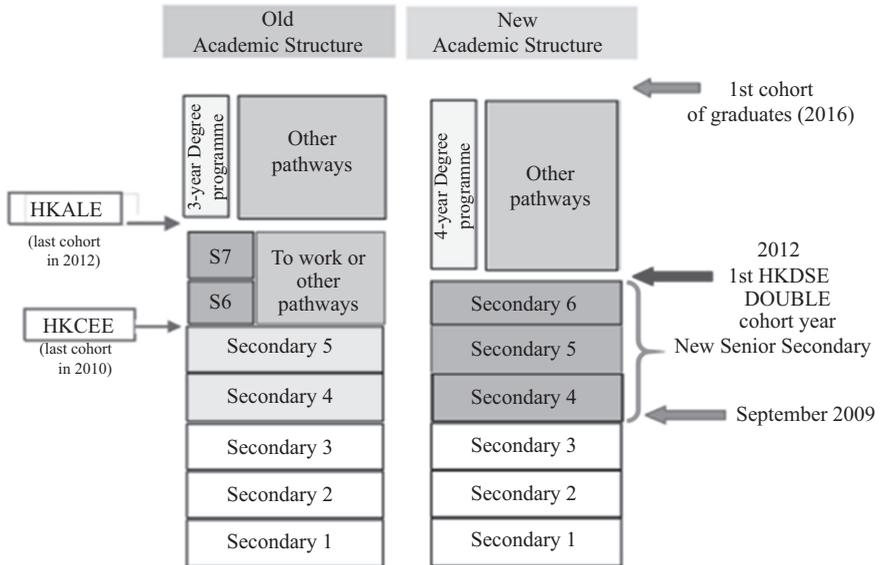


Figure 1.
Comparison of old and new academic structures of Hong Kong

Source: Adapted from the Report on Review of the Academic Structure of Senior Secondary Education on May 2003 (Hong Kong Education Commission, 2003)

Prior to 2012, the Hong Kong 5-2-3 academic system was not aligned with the (3-3-4) system in Mainland China. The main admission path for Hong Kong students to enroll in Mainland universities was through the JEE PRC which was commissioned in 1981. The structure of the JEE PRC follows that of National College Entrance Examination in the Mainland but the subjects and syllabus are modified. Under this examination, Hong Kong students had to take five subjects, namely, Chinese, Mathematics, English, plus two subjects (Physics and Chemistry for Science stream, and Geography and History for Arts stream). This syllabus is different from Hong Kong's public examination for secondary graduates. It meant that the students need to prepare separately for this examination. The Hong Kong Examinations and Assessment Authority was authorized to administer the applications and arrange for the examination in Hong Kong. Students were eligible to take the examination as long as they held a Hong Kong identity card, whereas they can complete their secondary education either in a Hong Kong or in a Mainland school.

Other than this JEE PRC, three universities have had a long heritage of enrolling overseas Chinese students, including those from Hong Kong. The first was Sun Yat-sen University in Guangzhou. As one of the most sought-after universities under JEE PRC, it obtained the approval of State Ministry of Education to arrange an individual examination which started in 2003 in Hong Kong. The syllabus follows that of JEE PRC and the students only need to take three subjects, namely, Chinese, English and Mathematics. In 2010, 104 students applied for this examination, and 57 were admitted. The admission quota is kept stable at around 60 students per year. Western Medicine is one of the most popular subjects of Hong Kong students and the curriculum was integrated with Zhongshan Medical University.

The other two universities, Jinan University in Guangdong and Huaqiao University in Fujian, also have a long tradition of hosting Hong Kong students. There are multiple enrollment channels. Besides JEE PRC, they offer the "Two Universities Joint Entrance Examination" (TU JEE) for Hong Kong students since 1979. Students have to take four subjects. For the academic year of 2017, the minimum admission score of Jinan University is 350 marks (full mark is 600, 150 per subject), whereas that of Huaqiao University is 320 marks. Moreover, for students obtaining 300 marks or 240 marks may also apply for the one-year preparatory Course of Jinan and Huaqiao Universities, respectively, then articulated to undergraduate programs afterwards. Besides, these two universities also admit students through the Secondary Principal Nomination Scheme in Form 6. The stratification of the three universities is clear to the students. With their long heritage and relations in the society of Hong Kong, and with liaison offices set up locally, as well as the strong alumni networks, their reputations are well established. Coupled with the aggressive recruitment strategies, they have attracted Hong Kong students who are interested to study in the Mainland.

Moreover, studying in Mainland China universities is generally considered as a lower cost option as Hong Kong students enjoy the same tuition fees as Mainland students. Students who cannot gain admission through the 15,000 UGC-funded first-year university places can opt for the self-financing programs in Hong Kong but demanding a much higher tuition fees. A government subsidized undergraduate program in Hong Kong costs HKD42,000 per year, whilst that for a typical program in Mainland universities is only around RMB5,000 (HKD6,000) per year.

In summary, at the pre-2012 phase, given the different academic systems crossing the border, and the requirement of taking separate entrance examinations, only specific groups of Hong Kong students have interest to go northwards. Some could have been attracted by specific discipline of study, or the low tuition fees. Another group of students are migrants from the Mainland who already have strong family and social ties in their motherland. During this period, the policies and practices of Hong Kong students to study northwards were primarily driven by the Mainland Government and its universities. The role that Hong Kong Government played is minimal.

Post-2012 era: DSE Admission Scheme to Mainland universities

2012 marks a new era in Hong Kong's educational system with the new Secondary Academic Structure of 3-3-4. One of the major reasons for the launch of DSE Admission Scheme to Mainland universities is to tackle the surge of demand for university places in the double cohort year. The first cohort of senior secondary graduates who had completed the three years' curriculum and took the first DSE examination amounted to 73,074 candidates. In the same year, the last cohort of the Hong Kong Advanced Level Examination who had completed the two years' matriculation program was 41,500 candidates, making a total of 114,574 secondary school graduates. However, the number of university places was limited. It gave tremendous pressure to the students, parents and government administrators.

Back in April 30 and July 12, 2010, a Legco member, Ms Starry Chan, asked the questions in the Panel of Education of whether HKSAR government can "liaise with its counterparts in the Mainland and explore the possibility of exempting local students from the joint entrance examination and accepting the HKDSE examination results for university admission" (Hong Kong Legco, 2010). And yet the response was that "giving preferential treatments to local students might be seen as unfair to other candidates." It was only until August 2011 when Li Keqiang, then Vice-Premier of State Council, visited Hong Kong and announced a package of support measures covering a wide range of areas, which included waiving the entrance examinations for Hong Kong students. On November 2011, State Ministry of Education announced the pilot scheme under which 63 Mainland Higher Education institutions will consider admitting Hong Kong students based on their results in DSE and Advanced Level Examination (Hong Kong Legco, 2012). It reflects that this specific scheme is very much driven by Mainland China.

For the relevant policies in relation to the qualifications of programs offered by Chinese Mainland universities, back in 2004, under the "Memorandum of Understanding between the Mainland and Hong Kong on Mutual Recognition of Academic Degrees in Higher Education," it stipulates that the holders of Bachelor's degrees from recognized higher education institutions in the Mainland China can apply for admission to postgraduate or professional studies in universities in Hong Kong. It indicates that upon return to Hong Kong, the students can further their education. For employment, after individual assessment by the Hong Kong Council for Accreditation of Academic and Vocational Qualifications, the degrees obtained by these graduates are recognized under the Qualification Framework as Level 5 or bachelor degree level, and thus eligible for applying for civil service jobs in Hong Kong. The recognitions on the credentials are imperative when the students are considering the option to study northwards.

Under the DSE Admission Scheme, the students are admitted based on their DSE examination results. The minimum admission criterion is the same as that for students to enter a university in Hong Kong. The students have to attain 3-3-2-2, that is level 3 or above in both Chinese Language and English Language, and level 2 or above in Mathematics Compulsory Part and Liberal Studies. In March of each year, students can apply through a centralized system, and select four Mainland universities, with four programs for each university. The list of universities has been expanded gradually from 63 to 102 during the period from 2012/2013 to 2018/2019. After the DSE examination results are announced, the results will be passed directly from the educational authorities from Hong Kong to the Chinese Mainland universities.

From the Mainland Government's policy perspective, as a preferential treatment to Hong Kong students, their tuition fee is the same as Mainland students which is substantially lower than that in Hong Kong. From the Hong Kong side, the Education Bureau launched the Mainland University Study Subsidy Scheme in July 2014 to support students in need. Students who pass a means test will receive a full-rate subsidy of HKD15,000 or half-rate subsidy of HKD7,500 per year (Hong Kong Legco, 2016). Started

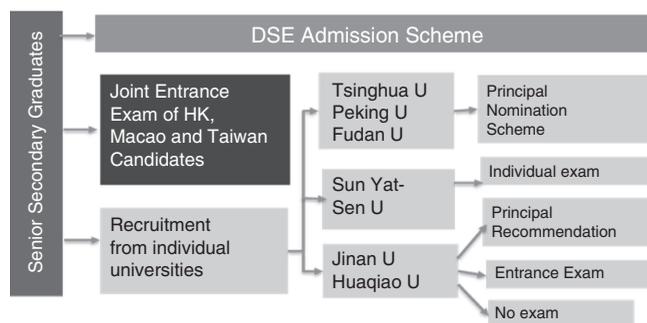
from 2016/2017, the funding scope was expanded to more Mainland universities, irrespective of their admission channels. Packaged under the HKD5bn funding for education in Chief Executive, Carrie Lam’s maiden Policy Address in 2017, a subsidy of HKD5,000 per year is granted to students, waiving the financial screening.

Figure 2 summarizes the admission channels for students to pursue undergraduate education in Mainland after 2012. For the recruitment by individual universities, three elite universities, namely, Tsinghua University, Peking University and Fudan University, offer a Secondary Principal Nomination Scheme which give conditional offer to students even before they take DSE examination. This fast track initiative was originated from the Lee Shau Kee Scholarship, first offered to Hong Kong students entering Fudan University in 2006, later expanded to Tsinghua University and Peking University in 2009. Some traditional elite secondary schools and pro-Beijing patriotic schools in Hong Kong are invited to nominate top performing students. The places available are limited to around ten students per year per university.

Other promotional activity from Hong Kong Government includes a large-scale Mainland China Higher Education Expo held around November or December of each year since 2012. In this two-day event, there are talks by State Ministry of Education on the application procedure and admission arrangements. Briefing sessions are conducted by universities on the characteristics and career prospects of individual programs. Exhibition booths are set up to provide information on features of programs, admission criteria, number of places. During sharing sessions, some Hong Kong graduates from Mainland share their study life, and some senior managers of corporations give talks on career prospects after graduation. Moreover, Education Bureau also arranges the recruitment staff of the Mainland universities to give talks in six secondary schools across Hong Kong Island, Kowloon and New Territories, so that the students and teachers can receive first-hand information.

Students’ perspectives on admission to China’s universities

This section presents findings on the students’ responses to the DSE Admission Scheme, as well as their choice and perceptions toward studying in Mainland. It is based on three types of data sources: first, official records of students’ application and enrollment statistics, and other documents obtained from multiple sources, including Hong Kong Government’s reports, Mainland China Government’s reports and published data of China Education Exchange (HK) Centre, an organization commissioned by State Ministry of Education to



Source: Adapted from Handbook on the Scheme for Admission of Hong Kong Students to Mainland Higher Education Institutions 2012/2013

Figure 2. Admission channels for Hong Kong students to undergraduate programs in Mainland China

process Hong Kong students' applications; second, data collected through semi-structured interviews with 51 Hong Kong students pursuing undergraduate programs in Mainland universities, and five staff from various Mainland universities conducted in 2017; and, third, information gathered through observations during 13 orientation seminars delivered by Mainland universities to Hong Kong students in 2017, and the Mainland Higher Education Expo in 2016 and 2017.

Applications and enrollments

First, as shown in Table I, except the double cohort year in 2012/2013, where there were over 4,000 applicants, the percentage of students applying for the DSE Admission Scheme is rather consistent at around 4 percent per year. For demographic reasons, the total numbers of DSE candidates have dropped significantly and continuously in the past few years, from 82,350 students in 2013/2014 to only 61,669 in 2017/2018. Figures in 2017/2018 showed that the number of applicants to the scheme is 2,568 (4.2 percent of DSE candidates), with a slight increase in the percentage, although the absolute number is declining.

Second, around half of the students who applied for the DSE Admission Scheme are admitted by the universities. The success rate is quite steady throughout the years. Notably, for years 2014/2015 and 2015/2016, the number of final enrollments, i.e. the students accepted the offer and studied in the Mainland, was 474 and 458, respectively, representing only around 30 percent of the number of students admitted. It can be explained that the students apply for the scheme as a backup plan instead of first choice, and they may have opted for local programs after DSE results are announced. The general (un)willingness of Hong Kong students to study in Mainland China can be reflected from the number of applications to the scheme.

On the other hand, according to the State Ministry of Education, in 2016, there were over 15,000 Hong Kong students studying in the Chinese Mainland, including postgraduate students. The number of undergraduate students is estimated to be around 13,500. The number of Hong Kong students entering the first year of undergraduate studies in

Academic year	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
No. of DSE candidates	73,074	82,350	79,615	74,170	68,167	61,669
No. of applicants to DSE Admission Scheme	4,248 ^a (3.7%)	2,279 (2.8%)	3,249 (4.1%)	2,988 (4.0%)	2,689 (3.9%)	2,568 (4.2%)
No. of students admitted by DSE Admission Scheme	971	1,188	1,535	1,444	1,391	1,295
(final enrollments) ^b	–	–	474	458	–	–
No. of participating institutions (DSE Scheme)	63	70	75	78	84	90
No. of students admitted through JEE PRC ^c	1,900	1,900	1,903	1,778	1,770	2,095

Notes: ^a2012/2013 is the double cohort year. The large number of applicants is probably due to the additional number of candidates from HKAL Examination (41,500) as they can also apply to this scheme; ^bthe final enrollment figures are obtained from LC Paper No. CB(4)812/15-16(02) in 2016; ^cJEE PRC refers to the "Joint Entrance Examinations for Students from Hong Kong, Macao, Taiwan and Overseas Chinese-Resident Areas and Countries For Universities in PRC." The number of students who actually enrolled after admission is not available

Sources: *Handbooks on the Scheme for Admission of Hong Kong Students to Mainland Higher Education Institutions* (from 2012/2013 to 2018/2019) and Legco document (2016), Statistics from HKEAA (from 2012 to 2017)

Table I.
Number of applicants and final enrollments to Mainland universities

Mainland through different channels was over 5,800 in the two academic years of 2014/2015 and 2015/2016. Of them, only 16 percent were admitted under the DSE Admission Scheme (Hong Kong Legco, 2016). Other than this scheme, major admission channels are the JEE PRC and direct recruitments from Mainland universities, especially in Guangdong and Fujian, as elaborated in the earlier section. According to the interview of a school principal which provides preparatory courses for students taking JEE PRC in Hong Kong, each year, there are around 500 students who entered through JEE PRC, 1,500 students admitted to Jinan and Huaqiao Universities, and 60 to Sun Yat-sen University. He considered this scheme to be unsuccessful because most of the students are not locally bred Hong Kong students, but mainly migrants from the Chinese Mainland who are taking the JEE PRC or applying to Jinan and Huaqiao Universities directly.

According to the findings from interviews of staff in both Jinan and Huaqiao Universities, the numbers of Hong Kong students who entered their undergraduate programs in the last two years are summarized in Table II. Around half of the students who were admitted finally accepted the offer. The students are taken in through different channels. Table III reflects that JEE PRC and TU JEE remain the major admission paths for Huaqiao University.

As regards the most popular universities, the top three are Sun Yat-sen University, Jinan University and Guangzhou University of Chinese Medicine as shown below, all located in Guangdong province (Table IV).

The disciplines of study mostly aligned with the interests of Hong Kong students are business and management. Medicine (including western Medicine and Chinese Medicine). They are also key attractions of some universities (Table V).

To sum up, it is estimated that there are around 2,900 first-year students entering Chinese Mainland universities each year, of which over 60 percent (around 1,700 students)

No of students	2017/2018		2016/2017		Table II. Number of students admitted and enrolled in Jinan and Huaqiao universities
	Admitted	Enrolled	Admitted	Enrolled	
Jinan University	2,584	1,300	2,549	1,365	
Huaqiao University	800+	424	700+	374	
Total		1,724		1,739	

Admission channels	No of students	Table III. Breakdown of admission channels for Huaqiao University in 2017/2018
DSE Admission Scheme	66	
Joint Entrance Examination, PRC	103	
Two Universities Joint Entrance Examination	148	
Secondary School Principal Nomination Scheme	55	
Preparatory Course	52	
Total	424	

Three most popular universities by applications		Location	Table IV. Popular universities – applications to DSE Admission Scheme (2017/2018)
1	Sun Yat-sen University	Guangzhou	
2	Jinan University	Guangzhou	
3	Guangzhou University of Chinese Medicine	Guangzhou	

Source: China Education Exchange (HK) Centre (2017)

go to Jinan and Huaqiao Universities. The DSE Admission Scheme opens a new pathway for all students, whereas the JEE PRC and other existing channels remain the dominant admission paths of the students.

Students choice: five scenarios

After presenting students’ application and enrollment statistics, based on the findings of interviews of 51 students, the research revealed that students’ academic performance and academic/career aspirations are important factors which influence their choices. Based on the decision scenarios that we discovered, it is possible to classify all students into five types, namely, the Cream, Achievers, Opportunists, Loyalists and Passive Recipients, as shown in Figure 3. In this study, academic performance is operationally defined as the students’ DSE scores. Their clarity of academic/career aspirations refers to whether they have set a clear goal of entering specific program or discipline of study, or aspire to embark on certain types of jobs after graduation.

Scenario 1: the cream

The Cream refers to the first quantile of students with DSE marks of 19 or above in four core subjects. Compared to all other DSE candidates, the Creamers may choose to study in either local universities or overseas universities.

Table V.
Popular disciplines of study – applications to DSE Admission Scheme (2017/2018)

	Disciplines of study	Applicants (%)
1	Medicine (include western Medicine and Chinese Medicine)	11.7
2	Economics, management, finance and trade	11.1
3	Language	4.8
4	News and communications	3.3
5	History	2.1

Source: China Education Exchange (HK) Centre (2017)

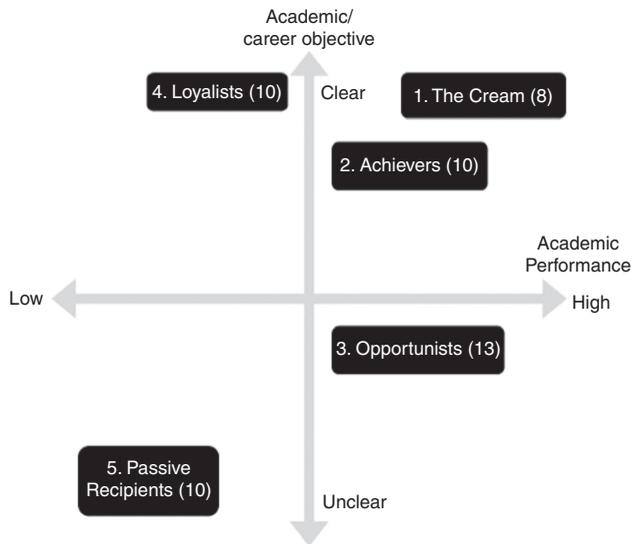


Figure 3.
Five scenarios of students’ choice

Note: The numbers in the bracket are the number of students in each scenario

The first scenario involves eight students who have high academic performance and clear academic or career objectives. Five of them are males, and three are females. Six of them are locally born in Hong Kong. For the two born in the Mainland, one has migrated to Hong Kong for 12 years, and another for 7 years. All eight students entered Project 985 universities. As shown in Table VI and Figure 4, three of them are in Beijing and five in Shanghai. As regards the admission channels, six of them are admitted through the Secondary Principal Nomination Scheme to the three elite universities (one to Peking University, two to Tsinghua University and three to Fudan University). They received the Lee Shau Kee Scholarship of HKD50,000 per year, of which HKD30,000 in cash, and HKD20,000 to finance study trips arranged by themselves. They commented that this financial support was very attractive. During the winter and summer holidays, they plan for trips in Mainland China. For the remaining two students admitted through DSE Admission Scheme, both are aspired to be medical doctors, and entered Fudan University (Student S01) and Shanghai Jiaotong University (Student S06).

The first characteristic of the Cream is that before taking the public examination, they are confident that their DSE scores will be good enough for university admission. The final results proved it as they have received multiple offers from universities in Hong Kong, the Mainland, etc. For example, Student B02 now studying Economics and Finance in Tsinghua University had to make a choice amongst three offers: Imperial College in UK, Hong Kong University of Science and Technology (HKUST) in Hong Kong and Tsinghua University in Beijing. The reasons of choosing Tsinghua University are the reputation of the program and the University, and the social network in Mainland.

	Location of universities					Total
	Beijing	Shanghai	Guangdong	Fujian	Others	
The Cream	3	5	0	0	0	8
Achievers	5	2	2	0	1	10
Opportunists	2	3	5	2	1	13
Loyalists	1	1	7	0	1	10
Passive recipients	0	0	2	5	3	10
Total	11	11	16	7	6	51

Table VI. Students' choice under five scenarios by location of university

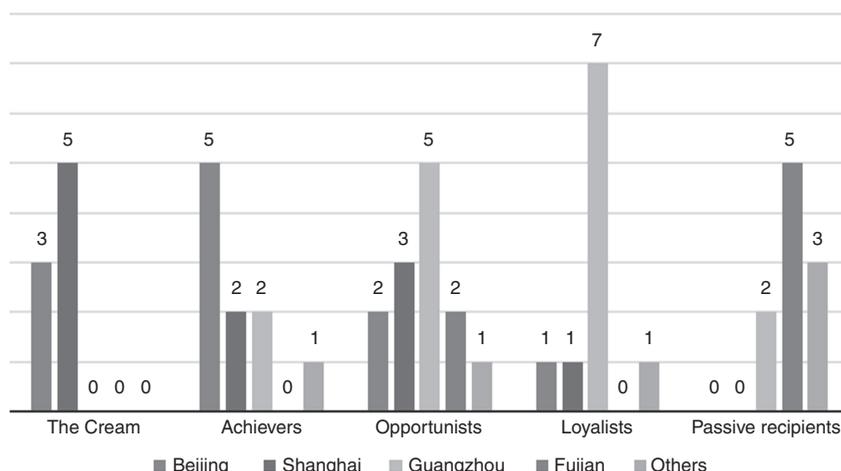


Figure 4. Students' choice under five scenarios by the location of university

The second characteristic of this group of students is that they have clear academic or career objectives which enable them to undertake well-planned actions in fulfilling their aspirations. Eventually, they are successful through enrolling in diverse field of study, including western Medicine (Students S01, S06), Law (Student B01), News and Communication (Students S02, S03), Economics (Student B02), English Language (Student S04) and Data Sciences (Student B03). Some of these subjects are career oriented toward the traditional professions like medical doctors, lawyers, etc.

The third characteristic is that most of these students are locally born, from middle to upper class, studied in traditional elite or pro-Beijing patriotic schools in Hong Kong. Their socio-economic status, social origins and the secondary schools they come from may have influenced their choice of study path.

Scenario 2: the achievers

The second scenario involves ten students, who have attained relatively good examination scores (15–18 marks in four core subjects), also with clear academic or career objectives before entering universities. Three of them are male, and seven are females. Half of them (five) are locally born. For the other five students born in Mainland, two are new migrants who have settled in Hong Kong for less than seven years. The Achievers are studying in more diverse locations: five in Beijing, two in Shanghai, two in Guangdong and one in Nanjing as shown in Figure 4. Instead of enrolling in the top three elite universities, half of them (five) are studying in Project 985 universities, such as Beijing Normal University, Renmin University, Nanjing University, whilst the rest have entered Project 211 universities, namely, China University of Political Science and Law, Jinan University.

Most of them (eight) are admitted through the DSE Admission Scheme. Their field of study varies a lot, covering Law, Accounting, western Medicine, Chinese Medicine, Chinese, History, Sociology, Politics. Like the Cream, the Achievers have keen interest on certain subjects, and yet more of them are attracted to Social Sciences or Humanities subjects instead of the traditional professions.

Similar to the Cream, most of the Achievers (seven) have alternate offers of undergraduate programs from different universities with their DSE scores, but these offers are not their most preferred choice. For example, Student G03 got a scholarship from her secondary school to study Mechanical Engineering in a UK university, an offer from City University of Hong Kong for Multimedia Studies, as well as an offer from Wuhan University in Medicine. She decided to enroll Sun Yat-sen University's medical program as she has aspired to become a medical doctor since primary school, and the location is closer. Another Achiever, Student B07, claimed that she never thought she could study Law in Hong Kong. Her DSE results are 4, 3, 3, 4 in four core subjects, which is far lagging behind the admission criteria of Law schools in Hong Kong. She felt lucky when known that she was admitted by China University of Political Science and Law, hence giving up the offer of Marketing program from Hong Kong PolyU. It entails a choice between multiple options, and the quest for specific subjects has become the major reason of the decision to study in Mainland universities. This reflects that with clear academic or career aspirations, the Achievers have adopted proactive strategy to plan their study path through applying different admission channels for Bachelor programs. The family background and the secondary schools of the Achievers are more diverse as compared with the Cream.

Scenario 3: the opportunists

The third scenario involves 13 students who have average academic capability (from 10 to 17 marks in four core subjects) and do not have clear academic or career orientation. Ten of them are females, and three are males. Six of them are locally born, and four are new migrants. They are neither targeted to pursue on a specific field or discipline of study, nor

have any clear career goals. Instead, they have multiple interests, and are more dynamic in making their study choice. They are studying in diverse locations when compared with the other four scenarios (Figure 4). Five of them are in Guangdong, three in Shanghai, two in Beijing, two in Fujian and one in Wuhan. Nine of them are admitted through DSE Admission Scheme. One of them has taken the Individual Entrance Examination of Sun Yat-sen University, and three of them entered through the Direct Admission channel of Jinan University after DSE examination results were announced. The deficiency in English is one factor limiting their choice. Four students got Grade 2 in English Language in DSE examination which made them unable to enter Hong Kong universities.

Amongst the Opportunists, six of them got alternate offers of Bachelor programs from Hong Kong. However, most are not the generally recognized top three, namely, HKU, CUHK and HKUST. For example, Student G04 enrolled in Medicine from Sun Yat-sen University, and gave up a Nursing program from a public hospital in Hong Kong, which will path her way to become a registered nurse. When looking back after one year's study in Mainland, she started to realize that the academic pressure was so huge that she felt regretful of not accepting the nursing offer.

Another five students received offers from Associate Degree in Hong Kong. To them, the option of going to the Mainland is more appealing as they can have a Bachelor degree directly, without having the hazard of finding an articulation for degree after the two-year program. The decision of this group of students is much easier.

For the selection of Mainland universities, the Opportunists do not have strong preference to enter specific program or university; rather, it is a matching of the admission criteria and their examination scores. Some selected integrated universities, like Wuhan University, Xiamen University. Although these are renowned universities in Mainland China, some interviewed students were not familiar with them when they made the decision to enroll the programs. For example, when asked why choose Wuhan University, Student M01 said:

No particular reason. Just that I meet the minimum admission requirement [...] September when the semester begins, that is the first time that I been there.

His ideal university is Xiamen University as his parents came from Fujian.

Most of the students (eight) are studying business-related subjects, like Accounting, Management, Law, etc. It is interesting to identify that some students entering professional programs, such as Law, Medicine and Chinese Medicine, have made the selection based on the opportunities that arise at the moment, instead of having clear aspiration and early planning. For example, Student S06 studying Law in China University of Political Science and Law said that this was her fourth (the last) choice in DSE Admission Scheme. Her most preferred program was German and so she selected Tongji University with heritage from Germany as her first choice. As she only got Grade 2 in Mathematics, she missed it. Nevertheless, she got offers of Bachelor program on Journalism from both Hang Seng Management College and Hong Kong Shue Yan University. Her rationale of choosing Law in Mainland university is primarily for a future job prospect as a lawyer.

Scenario 4: the loyalists

The next scenario comprises of ten students who selected to study in Mainland universities as their first choice. The three groups of students previously discussed fundamentally treat this as a backup or second-rated option. Half of them (five) are locally born, and three are new migrants. There are five males and five females. Most of the Loyalists (seven out of ten) chose Guangzhou as their ideal location of study as shown in Figure 4, of which four enrolled in Sun Yat-sen University and two in Jinan University.

The subject of study is a major reason for them to choose Mainland as their most preferred study path. Three students are studying Chinese Medicine, one in Beijing (Student B10), one in Shanghai (Student S09) and one in Guangdong (Student G16). Becoming Chinese Medicine practitioners is a strong pull factor for them to go northwards. For example, Student S09, whose mother is a registered Chinese Medicine practitioner, entered Shanghai University of Traditional Chinese Medicine through JEE PRC. Similarly, Student B10 also entered through this examination as she considered her English standard is a hindrance of getting a good job in Hong Kong. Studying Chinese Medicine becomes her aspired career path.

Two students (Students G02 and G05) chose Medicine program in Sun Yat-sen University as they conceived that its quality is amongst the highest in the southern part of Mainland China. Both have strong interest to pursue the career of a medical doctor, but consider their academic scores not eligible to enter Hong Kong universities. As recalled by Student G05:

When filling in JUPAS, there are over 20 choices. As I am aspired to become a doctor, I know my academic scores are definitely not adequate, but I still want to give myself some hope. Besides Medicine, I put PolyU's Physiotherapy etc. those related to medical.

With clear academic and career aspirations, half of them (five) entered the Mainland universities through DSE Admission Scheme. The other through different admission channels, one through Secondary School Principal Nomination Scheme, two through JEE PRC, one through Individual Examination (Sun Yat-sen University) and one through Direct Admission (Jinan University). Similar to the Achievers, they have adopted proactive strategy to plan their study path through applying different admission channels for their aspired programs in Mainland.

Regarding the academic performance of the Loyalists, it varies. For example, Student G07 attained 19 marks aimed at Sun Yat-sen University as inspired by her elder brother who attended the same university one year ago. She has strong interest in Archeology, and declined the offer of History in CUHK. Both Medicine students (Students G02 and G05) got average scores of 16, whilst Student G12 majoring in Accounting in Jinan University admitted that her English is relatively poor, and this is one reason that she cannot enter a Hong Kong Bachelor program in Accounting. Most of the Loyalists are from the lower working class, and nine out of the ten students came from secondary schools which used Chinese as the media of instructions.

To sum up, first, the Loyalists are strongly pulled by favorable factors in the Mainland, in particular, program like Chinese Medicine, and, second, they have exerted every effort to pursue this path. Finally, most of them come from the less privileged class.

Scenario 5: the passive recipients

The last scenario involves ten students who attained lower academic performance and did not have clear academic or career objective. Eight of them are males, and two are females. Five of them are locally born, and two are new migrants. None of them are studying in Beijing or Shanghai, whilst five in Fujian (Huaqiao University) and two in Guangdong (Jinan University). Huaqiao and Jinan Universities have long heritage of enrolling Hong Kong students through different channels. Thus, students with lower examination scores will treat this as the last resort. As mentioned by Students G09, F03 and F04, their standard of English was a major hindrance limiting their choice of universities. Both Students F03 and F04 took TU JEE and gained admission to Huaqiao University, both studying Engineering programs. They said that in Hong Kong, only talented students with high academic achievement can study Engineering, whilst in Huaqiao University, they met the admission requirements. They selected this discipline because it is most famous in this

University. After years of study, they realized that the academic pressure was extremely high, and they had failed in some subjects. They expressed that upon graduation, they may not pursue the profession of engineers.

Other than Engineering, other students in this group chose business-related subjects. For example, Student M03 majoring in International Finance in Sichuan University considered that what to be studied in this major should be similar across all universities, and it will be more favorable for finding jobs after graduation.

Regarding the admission channels, it varies a lot. Two students entered through DSE Admission Scheme (one with two-year combined results), two through JEE PRC, two took TU JEE, one through Direct Admission Scheme to Huaqiao University. Another pathway for the lower tier examination scorers is the Preparatory Course of Huaqiao and Jinan Universities. For example, Student S06 entered Huaqiao University's one-year preparatory course before articulating to its Bachelor program on Project Management of Engineering. Besides facing heavy academic pressure in class, she found it difficult to find an internship opportunity from engineering firm which is a prerequisite to graduate. Student G08, who got 10 marks in DSE examination, also joined the preparatory course of Jinan University, then articulating to the program of International Finance. He found it satisfactory as this is the only feasible path for him to obtain the credential of a degree. As he recalled, "Facing the dead-end, there is a door." All passive recipients did not have alternate offers for both Bachelor or Associate Degree with their academic scores.

The findings reveal that similar to the Loyalists, most of the passive recipients come from the working class, parents' education at secondary level, studied in the secondary schools using Chinese as the medium of instruction.

Discussion

The study reveals that students with higher academic scores and clear academic/career aspirations have utilized the fast track path of the Secondary Principal Nomination Scheme to enter the top three elite universities: Peking, Tsinghua and Fudan Universities. However, these students are from the twenty plus traditional elite and pro-Beijing patriotic schools. For the other students in the mainstream secondary schools, some can gain admission to their preferred programs through DSE Admission Scheme, when the other offers are not their most preferred choice. The majority (over 80 percent) of the interviewed students treat the study path to the Chinese Mainland as a backup or second-rated option rather than a first choice. This study confirms earlier research that the push factor of inability to gain access to a preferred local program or university is a primary reason of leaving one's home town (Altbach, 1998). Under a highly stratified education system in Hong Kong, academic capability is a salient factor which determines the available options of students. With a lower grade in the English subject, irrespective of their family origins of whether born in Hong Kong, some students envisage this educational pathway as a fallback.

That students hold an optimistic view of China's economic development and career prospects is a key pull factor (Hu *et al.*, 2016; Jiani, 2017), regardless of the students' social class. Students coming from different family backgrounds share similar views on this. All students considered that the broader exposure and social network gained through studying in the Chinese Mainland will help their future development. The reason of the reluctance of some teenagers to go northwards is the perception that the academic qualification earned there may not be recognized in Hong Kong. They also recognize the differences in language and professional practices. In short, some of them question the relevance of the knowledge obtained in academic programs (Central Policy Unit, 2016). As pragmatic opportunists (Dimmock and Leong, 2010), some students value the "China factor" as a desirable educational pathway.

Policies recommendations

Since the implementation of the Admission Scheme in 2012, the number of applicants is rather stable, irrespective of the political situation under the Occupy Central in 2014 when the youth's sentiment was aroused. The students' perceptions have not been particularly affected. In recent years, especially during the post-2014 period, new economic, socio-cultural and political factors emerge. First, from the economic perspective, the interconnectedness and interrelations with Mainland China are propelling. Hong Kong assumes a role on the Belt and Road Initiative, and is integrated as part of the Greater Bay Area Initiative. Second, on the socio-cultural aspects, the demographics of Hong Kong have undergone changes. According to the 2016 Population By-census Report (HKCSD, 2018), because of continuous inflow of young one-way permit holders from Mainland China over the past ten years, the percentage of youths who were born in Mainland rose slightly from 20.4 percent in 2006 to 21.2 percent in 2016. Recent statistics reveal that in 2016, there were over 10,000 Mainland teenagers aged 10–19 came and settled in Hong Kong, while there were only around 5,000 per year in the preceding four years (Hong Kong Legco, 2017). To what extent will this affect the popularity of the scheme is worth investigating. Third, coupled with the high property costs, downgrading of bachelor credentials, the seemingly lack of social mobility in Hong Kong has raised socio-political awareness.

The study path to Mainland universities can be considered as an alternative for upward social mobility, especially for the lower or under-privileged classes, with the preferential treatment with low tuition fees, government subsidies and scholarships. In 2017, Mainland China offers RMB15m more each year into a scholarship fund for Hong Kong and Macao students enrolled in Mainland universities, and adds a new criterion that they must “love the motherland and uphold the “One Country, Two Systems’ policy.” Moreover, if Hong Kong employees work in the Mainland, they can join China’s housing fund, which can be used to apply for low-interest housing loans to buy property or for rent.

To boost the level of acceptance of the scheme, the following suggestions are made. First, at the macro-level, three Thematic Household Surveys on Hong Kong students studying outside Hong Kong were conducted in 2002, 2005 and 2012. With the launch of the new DSE Admission Scheme since 2012, it is about time to conduct the fourth survey on the same topic. A territory-wide survey is of utmost importance in providing useful, timely and comprehensive data for planning and policy making purposes.

Second, there are six cohorts of student intakes since 2012, with the first cohort graduated in 2016. It is the appropriate time for Hong Kong Government to conduct a comprehensive review of the DSE Admission Scheme to evaluate its effectiveness. It is found that detailed statistics are not available. For example, the official data only provided the number of students admitted, but neither on the students who actually enrolled for the programs, nor statistics accessible on the drop-out rate of students. Only data of enrollments on 2014/2015 and 2015/2016 were released in the Legco paper. Indeed, other admission channels like JEE PRC and individual examinations remain the major admission paths. Moreover, the educational outcomes, students’ learning experiences, level of satisfaction and post-graduation development need in-depth investigation.

Third, there should be better coordination between different departments in supporting Hong Kong students studying in Mainland and job placement after graduation. For example, Constitutional and Mainland Affairs Bureau has set up liaison offices in different cities in the Mainland. It should make concerted effort with Education Bureau in facilitating the students who are interested to pursue education in those cities. For job placement, a new website has been set up to help the graduates find jobs. Labor Department could help encourage job postings from more organizations, and more recruitment talks have to be arranged.

Fourth, in secondary schools, there should be more active promotion activities of the scheme to the students and parents. For some elite and patriotic schools, they have long heritage and connections with Mainland universities. But for government schools, for example, as informed by the interviewed students, there is a minimal level of promotion, only by putting the booklets on the information desk.

Fifth, the option of studying in Mainland universities shall be integrated as part of the career guidance in all secondary schools, at best started at Form 1, which has been practiced in a few schools. Parents will then be aware of this alternative in advance. It is of particular importance to the working-class families who are unlikely to send students abroad if they cannot enter local universities.

Sixth, due to the different academic systems in the secondary and tertiary education in the Mainland and Hong Kong, there should be closer alliances between Mainland universities and Hong Kong secondary schools. Through more exchanges or study trips to different universities, secondary school students, teachers and principals can have more in-depth understandings on the programs, teaching and learning environment. Some universities in Guangzhou and Fujian have actively invited Hong Kong secondary schools for such exchanges regularly. This shall be extended to universities in other cities.

To conclude, whether studying locally or in the Mainland is a complex decision involving not only the students and their parents, but also significantly influenced by teachers and principals of secondary schools, and the community. In spite of the efforts from Mainland and Hong Kong Governments in providing various incentives for Hong Kong students, the acceptance of the Admission Scheme is confined to certain groups of students like the Loyalists. Thorough policy review as well as longitudinal studies on the students and graduates' development will be instrumental in order to better utilize this channel of university access.

References

- Altbach, P. (1998), *Comparative Higher Education: Knowledge, the University, and Development*, Comparative Education Research Centre, The University of Hong Kong, Hong Kong.
- Bray, M. and Koo, R. (2005), *Education and Society in Hong Kong and Macao: Comparative Perspectives on Continuity and Change*, Springer Press, Hong Kong.
- Cao, C., Zhu, C. and Meng, Q. (2016), "A survey of the influencing factors for international academic mobility of Chinese university students", *Higher Education Quarterly*, Vol. 70 No. 2, pp. 200-220.
- Central Policy Unit (2016), "A report on the study on Hong Kong youth's perceptions of the Mainland, by Hong Kong institute of Asia-Pacific studies", The Chinese University of Hong Kong, Hong Kong, February.
- China Education Exchange (HK) Centre (2017), "Press release on students application statistics", (in Chinese), China Education Exchange (HK) Centre, Hong Kong.
- Dimmock, C. and Leong, J.O.S. (2010), "Studying overseas: Mainland Chinese students in Singapore", *Compare: A Journal of Comparative and International Education*, Vol. 40 No. 1, pp. 25-42.
- Hong Kong Census and Statistics Department (HKCSD) (2002), "2001 Thematic Household Survey Report No. 9", Hong Kong Students Studying Outside Hong Kong, Hong Kong Census and Statistics Department, Hong Kong.
- Hong Kong Census and Statistics Department (HKCSD) (2018), "2016 Population By-census Thematic report: youths", Hong Kong Census and Statistics Department, Hong Kong.
- Hong Kong Education Commission (2003), "Report on review of the academic structure of senior secondary education", Hong Kong Education Commission, Hong Kong.
- Hong Kong Legco (2010), "Panel on education", Minutes of Meeting on 12 July 2010. LC Paper No. CB(2) 2235/09-10, Hong Kong Legco, Hong Kong.

- Hong Kong Legco (2012), "Panel on education. meeting on 10 December 2012", Background Brief on Issues Related to the Admission of Hong Kong Students to Mainland Higher Education Institutions, LC Paper No. CB(4)207/12-13(03), Hong Kong Legco, Hong Kong.
- Hong Kong Legco (2016), "Panel on Education, meeting on 11 April 2016", Background brief on issues related to the Mainland University Study Subsidy Scheme, LC Paper No. CB(4)812/15-16(03), Hong Kong Legco, Hong Kong.
- Hong Kong Legco (2017), "Press release: LCQ12: teenagers who have come from the Mainland to settle in Hong Kong", Hong Kong Legco, Hong Kong.
- Hu, C., Wotipka, C.M. and Wen, W. (2016), "International students in Chinese higher education: choices, expectations, and experiences by region of origin", in Bista, K. and Foster, C. (Eds), *Global Perspectives and Local Challenges Surrounding International Student Mobility*, IGI Global, Hershey, PA, pp. 153-177.
- Jiani, M.A. (2017), "Why and how international students choose Mainland China as a higher education study abroad destination", *Higher Education*, Vol. 74 No. 4, pp. 563-579.
- Jung, J. and Postiglione, G.A. (2015), "From massification towards the post massification of higher education in Hong Kong", in Shin, C., Postiglione, G. and Huang, F.T. (Eds), *Mass Higher Education Development in East Asia*, Springer, Dordrecht, pp. 119-136.
- Kember, D. (2010), "Opening up the road to nowhere: problems with the path to mass higher education in Hong Kong", *Higher Education*, Vol. 59 No. 2, pp. 167-179.
- McMahon, M.E. (1992), "Higher education in a world market: a historical look at the global context of international study", *Higher Education*, Vol. 24 No. 4, pp. 465-482.
- Oleksiyenko, A., Cheng, K.M. and Yip, H.K. (2013), "International student mobility in Hong Kong: private good, public good, or trade in services?", *Studies in Higher Education*, Vol. 38 No. 7, pp. 1079-1101.
- Postiglione, G.A. (2007), "Hong Kong: expansion, reunion with China, and the transformation of academic culture", in Locke, W. and Teichler, U. (Eds), *The Changing Conditions for Academic Work and Careers in Selected Countries*, International Centre for Higher Education Research, Kassel, pp. 57-76.
- Postiglione, G.A. (2013), "Anchoring globalization in Hong Kong's research universities: network agents, institutional arrangements, and brain circulation", *Studies in Higher Education*, Vol. 38 No. 3, pp. 345-366.
- Trow, M. (1973), *Problems in the Transition from Elite to Mass Higher Education*, Carnegie Commission on Higher Education, Berkeley, CA.
- Waters, J.L. (2006), "Geographies of cultural capital: education, international migration and family strategies between Hong Kong and Canada", *Transactions of the Institute of British Geographers*, Vol. 31 No. 2, pp. 179-192.
- World Bank UNESCO (2017), "Institute for statistics, gross tertiary education enrollment ratio", available at: <http://data.worldbank.org/indicator/SE.TER.ENRR?locations=HK> (accessed February 18, 2018).

Further reading

- Hong Kong Census and Statistics Department (2005), "2005 Thematic Household Survey Report No. 21", Pattern of study in higher education, Hong Kong Census and Statistics Department, Hong Kong.
- Hong Kong Census and Statistics Department (2011), "2011 Thematic Household Survey Report No. 46", Hong Kong Students Studying Outside Hong Kong, Hong Kong Census and Statistics Department, Hong Kong.
- Hong Kong Education Bureau (2012/2017), *Handbook on the Scheme for Admission of Hong Kong Students to Mainland Higher Education Institutions*, Hong Kong Education Bureau, Hong Kong.
- ICEF Monitor (2016), "Hong Kong's outbound numbers continue to rise", available at: <http://monitor.icef.com/2016/02/hong-kongs-outbound-numbers-continue-to-rise/> (accessed April 10, 2018).

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Assessment for learning: Hong Kong needs territory-wide system assessment (TSA) or not

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Abstract

Purpose – Territory-wide system assessment (TSA) was launched and administered by Hong Kong (HK) Education Bureau (EDB) since 2004. Since then, parents and teachers have been questioning its need, value, uselessness, effectiveness, harm for schools, teachers and students. In 2015, the issue blew up with Kau Yan School's principal boycotting the tests. A series of discussions in the public and media and different surveys were then carried out widely in HK. After review, EDB announced in 2017 that the revised version of TSA be extended to Primary 3 students in HK. The purpose of this paper is to propose that TSAs for Primary 3, Primary 6 and Secondary 3 need a further review to judge their need and uselessness.

Design/methodology/approach – This paper reviews the educational policy governing the administration of the TSA. Primary and secondary data from focus group meetings, press interviews (Bogdan and Biklen, 1982; Miles and Huberman, 1994; Ouiment *et al.*, 2001) and public reports would be analyzed. Besides, participant observation (Nosich, 1982; Sou, 2000; Sou and Zhou, 2007) and theoretical reasoning (Nosich, 1982; Sou, 2000; Sou and Zhou, 2007) have been applied for the critical review of this controversial test. The contrast study on the conflicting views of stakeholders in the education industry would bring up some insights of this controversial educational policy in Assessment for Learning.

Findings – Conflicting and contrasting perceptions from TSA to basic competency assessment (BCA) among stakeholders of education and government include governmental stakeholder – EDB's awareness; EDB stressed that TSA is a low-stakes assessment which does not need extra practice for students; non-governmental stakeholders including legislative councilors' perception, school principals' perception, teachers' perception, parents' perception and students' perception. Facing the opposition and grievances of different stakeholders, EDB announced in January 2017 that the revised version of TSA: BCA, be extended to HK in May 2017. Parents and legislative councilors were angry and they ask for a review or even cancellation for Primary 3 TSA.

Originality/value – This original study will initiate more thorough revisions and discussions for the TSAs for Primary 3, Primary 6 and Secondary 3 in HK, as a quality educational management step. While TSA for Primary 3 has been reviewed and substantially "revised," the community at large still asks for further revision for its needs, uselessness and harm for parents, teachers and students. Since the underlying causes of students' suicides are not fully identified, the problem of over-drilling practices for TSAs for Primary 3, Primary 6 and Secondary 3 needs to be satisfactorily resolved. Thus, TSAs for Primary 6 and Secondary 3, like that for Primary 3, should be reviewed for probable revision.

Keywords Assessment for learning, Basic competency assessment (BCA), Education Bureau (EDB), Student assessment (SA), Territory-wide system assessment (TSA)

Paper type Research paper



Introduction

Territory-wide system assessment (TSA) is an assessment introduced by the Education Commission (2000) in the report of "Reform proposal for the education system in Hong Kong" in September 2000. Assessments of similar nature are conducted in many

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countries, for instance, Australia, Canada and the USA. These countries make use of the assessment data to gain a good understanding of their students' overall standards and learning performance so as to inform education policies and to narrow gaps in learning.

Administration of TSA

TSA is held in June every year since 2004 for students of Primary 3, Primary 6 (implemented in alternate year starting from 2012) and Secondary 3. TSA is designed for facilitating learning and teaching after evaluating the average learning standard of the students in the subject of Chinese language, English language and mathematics at the end of key learning stages, i.e. Primary 3, Primary 6 and Secondary 3.

TSA is launched and administered by the Education Bureau (EDB). It aims to objectively assess the basic competencies (BCs) and learning progress of the students at different stages of learning. EDB claims that the capabilities of students are analyzed through the TSA in order to improve the effectiveness of learning and teaching. Educational policies can be reviewed with the help of the data collected through the TSA.

The TSA (Table I) is conducted in the form of pencil and paper (except Chinese and English oral assessments). TSA is compulsory for all Primary 3, Primary 6 and Secondary 3 students in Hong Kong except for those on sick leave or those from international schools. The assessment results of the students with intellectual disabilities, e.g., suffering from dyslexia can be excluded after getting medical approval.

Research methodology

This paper reviews the educational policy governing the administration of the TSA. Primary and secondary data from focus group meetings, press Interviews (Bogdan and Biklen, 1982; Miles and Huberman, 1994; Ouiment *et al.*, 2001) and public reports would be analyzed. Besides, participant observation (Nosich, 1982; Sou, 2000; Sou and Zhou, 2007)

Aspect	Descriptions
Subjects	Reading, writing and listening assessments for Chinese and English Chinese audio-visual (CAV) assessment at the secondary level Mathematics (pen-and-paper mode) Oral assessments for the two languages CAV assessments at primary levels (conducted on a sampling basis)
Coverage	The basic competencies of Chinese, English and Mathematics are the basic requirements; they are only part of the curriculum
Participants	Primary 3, Primary 6 and 3 Secondary students
Assessment dates	Sampling assessment: April/May Written assessment: mid and late June
Marking	Oral assessments are rated by two oral examiners Teachers are recruited to mark written assessments through a central system in assessment centers
Reporting	Quantitative analysis (assessment data) - School-level reports (each dimension) - Item analysis reports (sorted by sub-papers) - Item analysis reports (sorted by Basic Competency Descriptors) Qualitative analysis (written reports) - Summary of territory-wide level students' performance (with student exemplars)
Functions	For the government: to gauge students' overall attainment of basic competencies For schools: to identify students' strengths and weaknesses to inform learning and teaching, thereby enhancing learning

Source: Education Bureau (2016b)

Table I.
Implementation
of TSA

and theoretical reasoning (Nosich, 1982; Sou, 2000; Sou and Zhou, 2007) have been applied for the critical review of this controversial test. Contrast study on the conflicting views of stakeholders in the education industry would bring up some insights of this controversial educational policy in Assessment for Learning.

Assessment of learning is about proving that you have learned something that can be measured, while Assessment for Learning affects school and students' learning by using information produced by rich forms of assessment to enhance instruction and improve learning in schools (Education Bureau, 2016b). This testing approach of TSA is to assess students' performance and has important contributions to educational quality evaluation in Hong Kong as part of a comprehensive evaluation program for schools and students in Hong Kong (Sou, 2009). In classrooms where Assessment for Learning is practiced, students are encouraged to be more active in their learning and associated assessment. The ultimate purpose of TSA as Assessment for Learning is to create self-regulated learners. After leaving schools, self-regulated learners will be able and confident of continue learning throughout their lives.

Teachers need to know from the outset of a unit of study where their students are in terms of their learning and then continually check on how they are progressing through strengthening the feedback they get from their learners. Students are guided on what they are expected to learn and what quality work looks like. The teacher will work for the students to understand and identify any gaps or misconceptions (initial/diagnostic assessment). As the unit progresses, the teacher and individual student work together to assess the student's knowledge, what she or he needs to learn to improve and extend this knowledge, and how the student can best get to that point (formative assessment).

Assessment for Learning occurs at all stages of the learning process. For the TSA, it is used to collect evidence of student learning. It is an integral part of the learning and teaching cycle. Assessment results can provide information for students to enhance their learning and enable teachers to review and improve their teaching. Introduced in 2000, the TSA was intended to provide the government and school management on students' standards in key learning areas for the purpose of school improvement in learning and teaching. After all, the government may provide more targeted support to schools that are in need of assistance.

Review on TSA

In October 2015, more than 40,000 parents and teachers placed a full-page advertisement in the *Apple Daily* asking for the test for Primary 3 students to be scrapped. The Parents and Teachers Group said: "Junior primary pupils are tormented [...] We urge the EDB to show an educator's courage to free pupils from an 'unnecessary' exam system [...] to give them back a happy childhood" (Lo, 2016).

Parents, school organizations and political groups had all spoken out against TSA-related exam pressure and excessive practices. They quoted a survey (Lo, 2016) revealing that majority of primary students were burdened with more than seven daily homework assignments to prepare for the TSA. Some parents even complained of children showing signs of depression, such as crying, whilst toiling over their homework. Some schools face pressure to improve their TSA results, which lead to teachers drilling pupils for the TSA (Pang, 2015). Students are facing overloaded exercises. In some schools, teachers give students a lot of TSA-oriented drillings with practice papers, and some schools even confine their design of learning tasks, homework, test or examination papers to match the TSA only (Education Bureau, 2014a).

The Coordinating Committee on BCA and Assessment Literacy

Thus, the government tasked a committee to review the Primary 3 TSA which submitted its recommendations to the EDB in January 2016. As one of the recommendations, the tests

were suspended for the rest of 2016. Instead, some 40 primary schools, or about 10 percent of the total number of local primary schools, would be invited to take a revised and more simple assessment under a trial scheme.

The mix of participants was representatives of schools from different districts, ranging from large- to small-scale enrollments. Based on the result of the Trial Scheme in 2016, a revamped version of the controversial TSA shall resume in 2017. The revamped version of TSA is known as Basic Competency Assessment (BCA).

Comparing with TSA, BCA for Primary 3 students is less demanding. For instance, the language reading section is set to be reduced from three articles to two. The word limit would be capped at 1,200, and the use of more complex words would be reduced. After all, topics would be more direct and relevant to daily life. Also, the number of questions for the mathematics paper would be reduced by about 20 percent.

However, the parents said that the suggestions did not address the problem of excessive drillings. A mother of two said, “We are still very worried. It’s just small changes to the format, such as the type of questions [...] As long as there is an assessment, there will be a pull to make schools train better” (Lo, 2016). A father of two echoed, “I think the changes are pointless. During my time, there were no such tests conducted to gauge students’ standards [...] I believe that having assessors come in to monitor classes is sufficient and at the same time stress-free” (Lo, 2016).

When the Coordinating Committee on BCA and Assessment Literacy submitted the review report on TSA to EDB in 2016, TSA Concern Group Spokeswoman, Rachel Chung-yeetong rejected it as unnecessary, useless and unacceptable. Education Sector Lawmaker Kin-yuen Ip criticized, “It also shows the government has no sincerity in listening to the parents.” Simultaneously, the Hong Kong Professional Teachers’ Union (HKPTU) urged its members not to help with examination papers.

Eddie Hak-kim Ng, former Secretary for Education in Hong Kong, defended the TSA and said, “TSA itself was a really good tool. When we ask [for] opinions from schools and so on, they did tell us that this was a very important, meaningful and effective tool for them to work together with students, improving the teaching and learning” (Lo, 2016). In such belief, from TSA to BCA, the government promoted “The Coordinating Committee on Basic Competency Assessment (BCA) and Assessment Literacy” as one of the seven participating sectors (Figure 1) in the education industry.

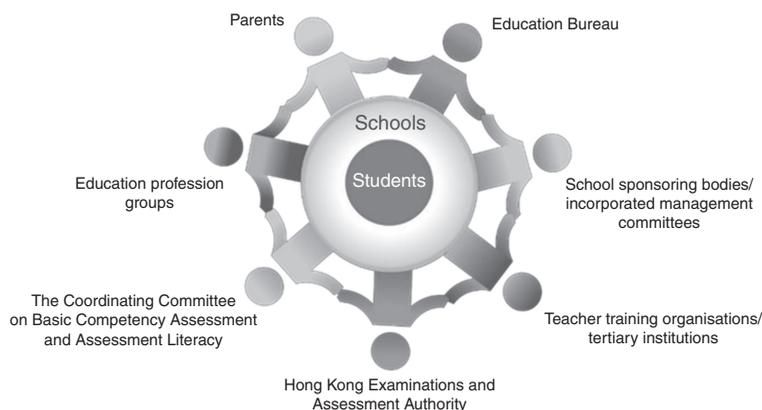


Figure 1.
Seven participating
sectors in promoting
“assessment for
learning”

Source: Education Bureau (2016a)

EDB also suggested different roles of participating sectors in promoting “Assessment for Learning” (Table II). To synergize the participants’ efforts, EDB elaborated the roles of nine stakeholders of the seven participating sectors.

Status quo of TSA

In 2016, the TSA was suspended amid fierce public opposition. In 2017, it is being replaced by the BCA test, which critics say is not much different (Pang, 2017). The incumbent Chief Executive Carrie Lam commented, “Having the test this year is meaningless” (Pang, 2017). In response, the former Chief Executive Chun-ying Leung said this year’s BCA would not be canceled. “Whether or not to cancel the assessment will be left to the next administration after July 1,” he confirmed (Pang, 2017). Meanwhile, the current administration and the last administration have different views on the revamped version of TSA, which is also known as BCA.

Student assessment (SA)

The SA is a web-based assessment resource bank. It provides schools with an assessment tool featuring a greater variety of educational needs. Teachers can conduct this assessment according to their students’ needs and learning progress. The assessment can be flexibly used with other assessment tools at schools so that the effectiveness of student learning would be further enhanced. The features of the SA include:

- web-based central assessment item bank;
- online assessments; and
- computer marking and instant reports on students’ performance.

Based on the online assessment results and their knowledge about the students, teachers can provide appropriate follow-ups to enhance student learning.

Territory-wide system assessment

The TSA is an assessment administered at the territory level. It facilitates Assessment for Learning by providing schools with objective data on students in Chinese language, English language and mathematics. TSA reports and school reports provide information about students’ strengths and weaknesses against specific BCs. They enable schools and teachers to enhance their plans on learning and teaching.

To enhance learning and teaching effectiveness, the EDB provides web-based learning and teaching support (WLTS) for schools according to assessment results and analysis of SA and TSA. The territory-wide data also help the government provide focused support to schools.

Student assessment repository (STAR)

In “Assessment for Learning”, assessment is an integral part of the curriculum and an integral part of the learning–teaching–assessment cycle. Its main function is to help schools understand students’ learning progress and needs, as well as their strengths and weaknesses for planning the curriculum, designing teaching and developing school-based assessment to enhance the effectiveness of learning and teaching so as to help students learn more effectively.

The Education Commission issued “Learning for life, learning through life: reform proposals for the education system in Hong Kong” which sets out detailed proposals for BCAs in Chinese language, English language and mathematics. BCA Program (Figure 2) has been refined to three components: STAR (formerly called SA), TSA and WLTS with a view to carrying out “Assessment for Learning” in everyday teaching.

Sector	Suggested role
Education Bureau	<p>Maintaining close communication with various stakeholders on an ongoing basis to gather views and recommendations to serve as reference for the development of TSA</p> <p>Making good use of assessment data to grasp the overall basic competency levels of students in Hong Kong in order to review education policies, determine the directions of professional training, provide learning and teaching resources, and conduct a further data analysis to understand the learning needs of students at different stages</p> <p>Providing schools with various support measures, including professional development activities for promoting assessment literacy, the provision of school-based support services, the enhancement of the WLTS and assessment bank, etc.</p> <p>Enhancing school professional leadership and capacity (including aspiring principals, newly appointed principals, prospective teachers, appointed teachers, serving teachers, newly appointed school managers, etc.) to promote whole-person development and a balanced curriculum</p> <p>Strengthening internal guidelines to enhance public understanding of how EDB will use the TSA information to refine the curriculum development, and enhance the effectiveness of learning and teaching</p> <p>Removing TSA from the “Performance Indicators” to put emphasis on “assessment for learning”</p>
School sponsoring bodies/ incorporated management committees	<p>Encouraging schools to develop the school-based curriculum and assessment policies based on professional decisions in the light of school culture and students’ learning needs to support the varied pace of development among different schools</p> <p>Assisting schools in consolidating and making optimal use of different assessment data, and analyzing and adjusting teaching strategies by incorporating information on students and school backgrounds to facilitate effective student learning</p>
Schools (principals/panel chairpersons/teachers)	<p>Formulating and implementing school-based homework and assessment policies having regard to school context, students’ learning needs and schools’ professional decisions; and promoting home-school communication</p> <p>Making use of various assessment data to provide feedback to learning and teaching, enhancing the curriculum and facilitating student learning</p>
Teacher training organizations/ tertiary institutions	<p>Collaborating with EDB to deepen the concept of “assessment for learning” in various training programs and courses for principals (aspiring principals and newly appointed principals), teachers (prospective teachers, appointed teachers and serving teachers) and newly appointed school managers</p> <p>Conducting partnership research programs/projects to support the Government in making good use of assessment data for tracking studies to serve as reference for education policies and school practices</p>
Parents	<p>Grasping and understanding the concepts, strategies and arrangements of the school-based homework and assessment policies</p> <p>Communicating and collaborating with schools to facilitate students’ learning and healthy development</p>
Parent-teacher associations and regional federation of parent- teacher associations	<p>Assisting schools in gathering parents’ views and understanding their concerns, and helping parents grasp schools’ homework and assessment policies, as well as the objectives, implementation and functions of assessment</p> <p>Organizing various activities with different groups to deepen parents’ understanding of the concept of “assessment for learning”</p>
Hong Kong Examinations and Assessment Authority	<p>Ensuring and maintaining the reliability and validity of basic competency assessments, including maintaining the stringent process of item setting</p>

(continued)

Table II.
EDB’s suggested
roles of
participating sectors

Sector	Suggested role
	and moderation, improving the papers and question design, enhancing TSA school reports, etc. Assisting the Government in promoting the culture of “assessment for learning” in the education sector
Education profession groups	Taking forward public education activities to encourage and guide the public and the education sector to make use of assessment data with a right and positive attitude to serve the function of “assessment for learning” Drawing on different educational resources to form learning communities to share successful experiences in making good use of assessment to benefit learning and teaching
The Coordinating Committee on Basic Competency Assessment and Assessment Literacy	Advising the government on the overall direction for enhancing assessment literacy (including the use of quantitative and qualitative assessment data and the optimal use of information technology to facilitate learning and teaching) Reviewing and monitoring the development, implementation and effectiveness of TSA on an ongoing basis, and offering professional advice and recommendations on the development, implementation and effectiveness of TSA

Table II. Source: Education Bureau (2016a)

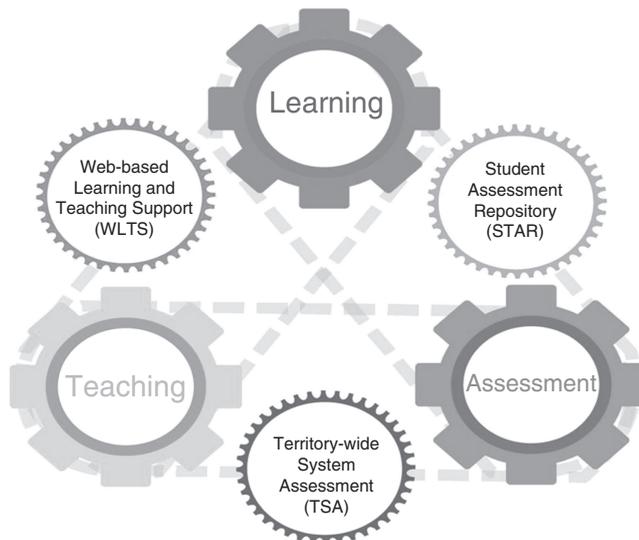


Figure 2.
BCA program –
STAR+TSA+WLTS

Source: Education Bureau (2016a)

Schools can use the assessment information (including TSA and STAR information) to:

- understand whether students have attained BCs in the three principal subjects (Chinese language, English language and mathematics);
- promote the use of assessment data and schools’ development needs; and
- make reference to various resources (such as WLTS) to formulate learning and teaching strategies to enhance learning and teaching.

Basic Competency Assessment

BC refers to a minimally acceptable level from which a student should be able to continue to the next key stage of learning without extra learning support. For the first year of TSA implementation at each level (Primary 3 in 2004, Primary 6 in 2005 and Secondary 3 in 2006), independent panels of judges providing professional judgment alongside with psychometric methods, setting the BC standards which were then benchmarked against international standards.

The BC standards set in the first year remain unchanged across the years. Like the qualifying height for the high jump, a student jumping over the bar of qualifying height means that the student has achieved BC. Over the years, TSA is implemented on the basis of BC (Figure 3).

BCA has two components, namely, the “SA” and the “TSA” under the platform of “WLTS”. They cover Chinese language, English language and mathematics.

Findings

Tai-fai Lam, the Supervisor of Lam Tai Fai College and delegate to the Chinese People’s Political Consultative Conference, was extremely disappointed at the former Chief Executive. He said, “[The old government] pushed ahead a policy that will be scrapped several months later by the next government,” adding it would only confuse students, parents and schools. The incumbent Chief Executive Carrie Lam remarked, “If the old government thought it was too difficult to suspend, I would respect its decision. I shall do what I can do for the next school year after I assume office” (Lo, 2016).

Obviously, there are conflicting views from TSA to BCA among the stakeholders of the education industry, politicians, and even government leaders. The most controversial issue is the Primary 3 TSA. To this end, we shall consolidate the contrasting perceptions of governmental stakeholder – EDB’s Awareness and Non-governmental stakeholders including legislative councilors’ perception, school principals’ perception, teachers’ perception, parents’ perception and students’ perception.

Governmental stakeholder – EDB’s awareness

Having consulted various stakeholders and examined their views, the EDB decided, from 2014, to change TSA into a low-stakes assessment with the removal of the

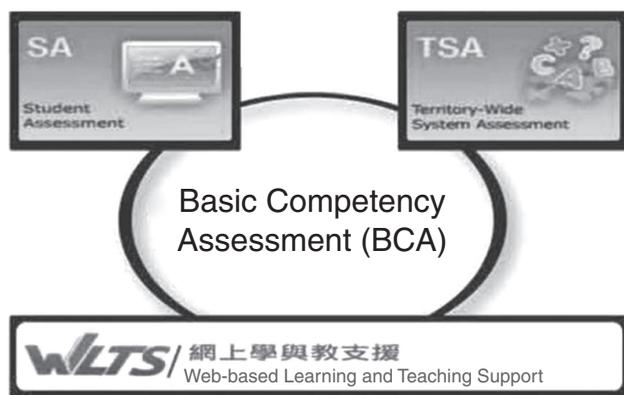


Figure 3.
Components of Basic
competency
Assessment (BCA)

Source: Education Bureau (2016a)

performance indicator, not to disclose to individual primary schools the percentage of their students achieving BCs in Chinese language, English language and mathematics and to remove the TSA from the key performance measures for primary schools (Education Bureau, 2014b).

Apparently, many parents, teachers and students disagree with having the TSA, too. It is difficult to manage school internal examinations and TSAs, and the TSA questions are a bit too hard for the kids. Politicians urged that the EDB should ask the public if they want to keep them. On April 9, 2017, teachers both in support and against the BCA attended a forum held by the HKPTU. Professor Wing-kwong Tsang from the Faculty of Education, The Chinese University of Hong Kong and education sector Lawmaker Kin-yuen Ip suggested the government should scrap the new version of TSA being launched in May 2017, saying it would not improve teaching and learning quality.

Ip added that the TSA had transformed from a low-stakes assessment into a high-stakes one, imposing huge pressure on Primary 3 students who have to go through extra drilling practice. On the other hand, Professor Kit-tai Hau, also from the Faculty of Education, The Chinese University of Hong Kong believed that schools could make improvements based on the TSA reports, adding that the test is a low-stakes assessment, as schools are under no pressure from the government to prepare for it.

The EDB stressed that the TSA is a low-stakes assessment used mainly to gauge Primary 3, Primary 6 and Secondary 3 students' performances in three principal subjects, namely, Chinese language, English language and mathematics. The EDB assured that the main purpose of the TSA is to provide the government and schools with information on students' standards, including strengths and weaknesses, in key learning areas for the purposes of school improvement in learning and teaching, and government's provision of targeted support to schools, which need assistance.

The EDB argued that it was not necessary to arrange extra practice for students in preparing for the TSA. BCs represent just part of the curriculum requirements. Schools should not change their teaching and assessment methods because of the TSA. The EDB claimed that over-drilling not only wears out students' interest and motivation in learning but also affects the rest time of teachers and students, resulting in unnecessary pressure on teachers and students. In the long run, over-drilling may demotivate students to learn and affect their next stage of learning.

Non-governmental stakeholders

Legislative councilors' perception. Michael Tien, a Legislative Councilor, recognized the need of an assessment tool like TSA to gauge students' attainment of BCs which provided data for the government to allocate education resources (Legislative Council Secretariat, 2017). Another Legislative Councilor, Hoi-dick Chu, queried about the possible adverse impact, if any, on schools if TSA was abolished (Legislative Council Secretariat, 2017).

School principals' perception. Although the former Legislative Councilor and School Principal Yok-sing Tsang said the EDB pressurized those schools which failed to meet the average score in the TSA to do more drillings and to review their teaching (SCMP, 2015), the Principal of Ma On Shan Methodist Primary School, Kam-fai Chan said the test did not put pressure on the school and students. "We don't focus on drillings as the test shows as what levels the students are at," he said (Pang, 2015). Mr Chan said TSAs are important to schools to show where they might be going wrong. He said that the TSA is an important guide to show a school's strengths and key areas that need changes. So, he thinks it is more appropriate to make the TSA more suitable to pupils' levels and needs rather

than scrapping it (Pang, 2015). Another secondary school Principal, Dr Ambrose Chong, Convener of the Working Group on Papers and Question Design of the Committee, stated in a Legislative Council Meeting in December 2016 that while there was a concern over school pressure induced from TSA, he, being a Principal, considered that TSA school reports enabled schools and teachers to understand students' strengths and weaknesses and make adjustments to enhance teaching and learning (Legislative Council Secretariat, 2017).

Teachers' perception. On October 30, 2015, Kau Yan School (www.kauyan.edu.hk/), a private primary school in Sai Ying Pun, announced that it would boycott the tests that academic year, saying the scheme was not in line with the school's mission and was no good for students. Then, on the next day, October 31, 2015, the EDB admitted that there were problems with the controversial TSA and pledged to review the assessments.

A survey carried out by the HKPTU found that 65 percent of its members thought that the TSAs should be abolished because they put too much pressure on students and teachers (Cheung, 2015a). This largest teachers' union in Hong Kong revealed that most of its members thought that a government test, like TSA, used to track pupils' progress in primary schools should be scrapped.

The HKPTU President Wai-wah Fung said most of its members felt students and teachers had to prepare specifically for the TSA. The union surveyed more than 1,900 primary school teachers in March and April 2015. The survey also revealed (Cheung, 2015a):

- 97 percent of primary school teachers required students to purchase TSA practice exercises for the examinations;
- Primary 3 and 6 students on average purchased three TSA practice exercises to prepare for the examinations;
- 73 percent of teachers felt the TSAs put "serious" pressure on students; and
- 80 percent of teachers felt the TSAs put "serious" pressure on teaching staff.

The HKPTU suggested that previous attempts to improve the TSA were ineffective in reducing the pressure on students and teachers. In a statement, this teachers' union argued that "normal classroom teaching and examination methods were gravely distorted" because of the TSA. The union also appealed to teachers and parents to put pressure on the EDB to cancel the examination (Cheung, 2015a).

It was reported that a student with autism suffered from depression due to the TSA examination. His mother said that, on one occasion, he asked her in tears if "his survival is only for finishing homework." But the EDB issued a response by emphasizing that the TSA did not require special preparation. The government said that many schools believed that the TSA figures were effective in evaluating teaching and learning, adding that the TSA should be retained (Cheung, 2015a).

In a questionnaire survey conducted in May 2008 by the Hong Kong Examinations and Assessment Authority (HKEAA), 96 percent of the responded school principals confirmed that their teachers had made reference to the TSA data in enhancing their teaching plans. Most teachers found the school reports useful for analyzing students' performance. They agreed that the TSA could provide an objective assessment, system context for schools to identify areas where their students were faring relatively well and areas where they might need to improve upon including the possibilities of seeking professional support and additional special educational needs (SEN) resources or adjustment in curriculum planning (Education Bureau, 2014a).

Parents' perception. Parents concerning the effects brought by the TSA started an online petition, requesting a cancellation of the Primary 3 TSA exam. Over 30,000 Facebook users, including parents, teachers and students, etc., signed up. Parents said the schools were very concerned about the results of TSA since it affected the banding of the school because before 2014, TSA was one of the key performance measures for primary schools in Hong Kong for the EDB to assess the school's performance (Education Bureau, 2016a). This resulted in extra TSA drilling practice and after-school classes appearing in the learning curriculum.

As most of the schools required students to finish a lot of complementary exercises and attend extra lessons conducted for the TSA, parents were worried about the health and mental states of children and so forth requested for the cancellation of the TSA. A parent interviewee once said:

Let's not make our children exam machines. Let them have a good childhood, let them regain their interest in learning. Give the children space to understand themselves and develop their potential.

Another parent in an interview said:

It's an inhumane way to live [...] the children go to school, do their homework after school, continue doing their homework after dinner, prepare for tests, go to bed, and the next day it repeats all over again. The system forces the school to put pressure on teachers, the teachers put pressure on us, and then we put pressure on the children, and it's an endless loop [...] TSA should be cancelled! No more students should kill themselves because of school pressure! Please let them have a happy childhood and have time to play!

A survey of more than 500 parents conducted by the Hong Kong Institute of Family Education in 2015 has found that about 35 percent of parents whose children are in Primary 3 or Primary 6 spend more than an hour everyday preparing for the TSA. It found that more than 60 percent of them believe TSA puts too much pressure on their children. The institute's Director, Chi-yuen Tik, said he thinks the TSA evaluation committee should consider the concerns of parents as well as teachers when reviewing the current policy (Leung, 2015).

Students' perception. Some students wrote to the newspapers and thought that the TSA exams should be marked on a simple pass/fail basis (Gusway, 2015). This way, schools and teachers, as well as students and their parents, would not be so stressed about them. Dr Fernando Chiu-hung Cheung, a former Legislative Councilor, commented in a Legislative Council Meeting that TSA had already deviated from its original purpose and imposed undue pressure on students. He said that a recent survey indicated that child abuse cases reached its climax during the TSA period (Legislative Council Secretariat, 2017). Primary 3 students in Hong Kong are not mature enough to tackle such complicated TSA tests. They might feel a lot of stress from being pushed by their parents and teachers to do a lot of preparation. About 97 percent of teachers would ask their Primary 3 and 6 pupils to buy extra printed exercises, an average of 3.1 exercises each (EJ Insight, 2015).

Furthermore, they may be worried that they have to do well on them. Overloading students like this could make both students and their parents depressed. If students just needed to get a pass, they would not need to worry about aiming for higher marks. The pass/fail scheme is supported because it puts less pressure on schools and students. It would reduce the negative consequences caused by TSA exams.

Some students said that it would be better if the TSAs were canceled altogether (Gusway, 2015). It is because they feel stressed because the exam results were not very good. And in addition to the usual exams, they still had to revise for the TSAs. It was tough and tiring.

They said that kids needed to play for at least one hour each day, but if they have the TSAs, they cannot play because they are too busy revising.

However, Kitty Chan, a Primary 4 Student at Yaumati Catholic Primary School (Hoi Wang Road), said that she was “happy” and “relaxed” taking the TSA because the tests would not be handed back to her for corrections, which meant that she had more time to play. She also said that the TSA was “no pressure at all” and that there was no need to abolish them. “Should we ask the government to block the road just because there has been a small accident?” she said (Cheung, 2015b).

The way forward

Facing the opposition and grievances of some parents, teachers and students, EDB announced on January 23, 2017 that the revised version of TSA is extended to Hong Kong in May this year, namely, the Primary 3 “BCA”. The EDB also issued a circular to all primary schools on the same day to adjust the school calendar and notify parents of the government’s arrangements.

The government stressed that the new scheme BCA is not a re-examination of TSA and will not be used to assess school performance. Hong Kong Government primary schools will not need to buy TSA-related exercises. Parents and members of the Legislative Council who opposed TSA were angry at the decision and they asked for a further review or even cancellation for the Primary 3 TSA. To this end, BCA will be most likely taking place in May 2017. We strongly proposed that Primary 3 BCA needs to be reviewed on its needs and uselessness for Hong Kong. What then is the way forward for Primary 6 TSA and Secondary 3 TSA?

Primary 6 TSA

To alleviate the pressure on Primary 6 students, Primary 6 TSA has been implemented only in odd-numbered years since 2012. Schools can participate on a voluntary basis in even-numbered years according to the needs of individual schools. Schools may request question papers from the HKEAA for reference or use to facilitate teaching. Although not every year of Primary 6 students need to take the TSA, some stakeholders think that it is important to review and to evaluate its importance and adverse effects on Primary 6 students.

Secondary 3 TSA

For Secondary 3 students, TSA is a way for the EDB to monitor their study progress and education results of schools. The examinations are held for Secondary 3 students to test their BCs in Chinese language, English language and mathematics. Nevertheless, the recent Program for International Student Assessment (PISA) finds that Hong Kong secondary students fall to ninth in world rankings – down from second three years ago. Should this raise an alarm for the new senior secondary school curriculum or the TSA as a monitoring tool? The problem may lie behind how the assessments are subject to appropriate quality control. The NSS school curriculum launched in 2009 may not be the cause of the drop in PISA science score. PISA 2015, presented in 2016, showed the results for around 540,000 participating students of 15-year-old in 72 countries to test scholastic performance on mathematics, science, and reading.

Hong Kong participated for the sixth time in this three-yearly PISA in 2000. Hong Kong students have always been in the world’s top ten in all three assessed aspects. Our secondary students ranked second in science in 2012 but dropped to ninth in 2015. Hong Kong ranked second in mathematics, up from third in 2012 and remained second in reading.

A possible contributing factor behind the drop might be the launch of the NSS curriculum, which does not require students to choose subjects in either the arts or science stream. Nevertheless, Hong Kong students performed best in the PISA 2012 assessment when the NSS curriculum was already in place. If the change to the curriculum is a contributing factor, then it might be TSA being ineffective in assessing specific BCs as enabling tools for learning other subjects, including science subjects.

Setting standards is not an exact science, involving making judgments and choices about where to make. What is in essence, an artificial dichotomy on a continuum of performance? The preparation process of TSA blended technical as well as professional and policy-oriented considerations. The more subjective considerations should be reviewed frequently.

In addition, while TSA for secondary school students facilitates assessment for learning by providing objective data on students' performances in the three principal subjects, it may not predict the performances in the science subjects. The territory-wide data are supposed to help the government review policies. There now exists a need to review whether TSA should include the science subjects in the assessment scope.

Implication for assessment practice and policy

Opponents of TSA believe that the EDB should review TSA more thoroughly. They associate TSA with overloading teachers, depressing students, children's happiness and accommodation for SEN students.

First, some stakeholders might have perceived the high stakes involved in the TSA. The HKPTU Survey in 2015 showed that most teachers believed the government should scrap TSA because the examination forced over-drilling practice. About 70 percent of the 2,055 teachers, including those in focus group interviews, who responded said TSA preparation had affected their daily teaching. Teachers set up after-school tutoring sessions for Primary 3 and Primary 6 students lasting for an average two hours per week (Cheung, 2015a). There were evidently fewer drillings for Primary 1 and 2 students as compared with those in Primary 3 and 6 (Education Bureau, 2014a).

Second, some parents who have children with SEN studying at mainstream schools reveal that their children have to rely on antidepressants to ease the pressures arising from extra studies due to TSA drillings (Cheung, 2015a). Another case from *Apple Daily*, a Hong Kong newspaper, reported that a student with autism suffered from depression due to the TSA examination. His mother said that, on one occasion, her son asked her in tears if "his survival is only for finishing the TSA examination and worksheets" (Cheung, 2015a).

Third, the Hong Kong Children's Happiness Index, commissioned by the Hong Kong Early Childhood Development Research Foundation, revealed that the Index in 2015 dropped in two consecutive years, with the overall index in 2015 dropped noticeably to 6.49 (on a scale of 0 to 10) from 6.74 in 2014. It was found that study pressures and homework hours pose the significant impact on children's happiness (Early Childhood Development Research Foundation, 2016).

Lastly, support measures, with ongoing improvements every year, are needed for students with SEN to participate in the TSA. Given that the TSA is a low-stakes assessment which serves as an assessment tools for Hong Kong schools to enhance learning and teaching, students with SEN are strongly encouraged by the HKEAA to take part in it. Therefore, support measures with ongoing improvements yearly, according to the usual practice in schools are necessary for providing accommodation for the needs of students with SEN in attempting the TSA (Hong Kong Examinations and Assessment Authority, 2017).

Upon requests from schools and students, the measures for SEN students include the following, with ongoing improvements every year (Hong Kong Examinations and Assessment Authority, 2017):

- (1) extension of assessment time;
- (2) use of colored paper (i.e. green);
- (3) single-paged printing of question papers;
- (4) double spacing answer areas; and
- (5) students with visual disabilities can choose Braille scripts or use screen readers to answer: for use in screen readers, encrypted “WORD” files with assessment content are delivered to schools by the HKEAA on the days of assessment.

The EDB reaffirms the intent and value of the establishment of TSA after a review in 2016. However, quality education should encourage learners to read more, see more, think more, ask more and reflect on the answers but should never demotivate learning in endless drilling practices. In fact, the Committee on Prevention of Student Suicides admitted that it was important to review the relevant domains of the education system to protect the students from the risk of suicide (Committee on Prevention of Student Suicides, 2017). If the underlying causes of the over-drilling practices are not fully identified and the problem satisfactorily resolved, TSAs for Primary 6 and Secondary 3, like that for Primary 3, should be reviewed for probable revision.

A more thorough revision is always called for the TSA for Primary 3, Primary 6 and Secondary 3, as a quality educational management step. While TSA for Primary 3 has been reviewed and substantially “revised,” the community at large still asks for further revision for its needs, uselessness and harm for teachers and students.

On the other hand, TSA for Primary 6 and Secondary 3 should also be refined. Every child has worth and demands the best possible chances of life and there is always a room for improvement in helping students toward the goals of whole-person development and life-long learning.

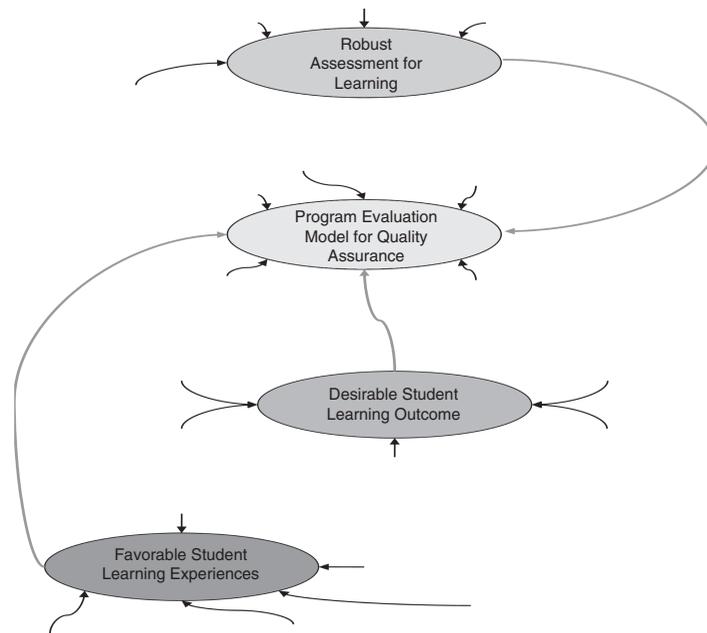
Former Permanent Secretary for Education and Manpower Fanny Law said it would be beneficial to test Primary 3 students with the BCA. She commented that the aim of the BCA was not to rank students or schools, but added that participating schools would know from the tests the level of their students to improve their teaching methods. She stated, “I support the Government to let schools try the new method (BCA) and see whether there are any benefits or inefficiencies, then we can review it” (Hui, 2017).

Further research works on assessment of program, SLO and SLE

Having reviewed the TSA and BCA and studied the conflicting views of stakeholders, we call upon the education sector to avoid political interference whilst discussing the TSA and hope that the EDB could support the schools without giving them pressure.

When we wish to assess the quality of a training program or kindred programs offered by various schools, we shall adopt appropriate program evaluation models (Kellaghan and Stufflebeam, 2002; Sou, 2008; Stufflebeam *et al.*, 2000) to assess program effectiveness or institutional effectiveness.

When we wish to measure student learning outcomes (SLO), we need tools for direct measurement of SLO (Brown *et al.*, 1997; Sou, 2008). Likewise, for student learning experiences (SLE), we need tools for the understanding of SLE (Baird, 1976; Berdie, 1971; Chun, 2002; Ouiment *et al.*, 2001; Pace, 1985; Pike, 1995; Pohlman and Beggs, 1974; Turner and Martin, 1984). These three concepts may be regarded as food for thoughts for further research works (Figure 4).



Source: Sou (2011)

Figure 4.
A holistic view on
“assessment for
learning”

References

- Baird, L.L. (1976), *Using Self-Reports to Predict Student Performance*, The College Board, New York, NY.
- Berdie, R.F. (1971), “Self-claimed and tested knowledge”, *Educational and Psychological Measurements*, Vol. 31 No. 3, pp. 629-636.
- Bogdan, R. and Biklen, S.K. (1982), *Qualitative Research for Education: An Introduction to Theory and Methods*, Allyn & Bacon, Boston, MA.
- Brown, G., Bull, J. and Pendlebury, M. (1997), *Assessing Student Learning in Higher Education*, Routledge, London and New York, NY.
- Cheung, E. (2015a), “70% of teachers oppose compulsory TSA exams in primary schools”, *Hong Kong Free Press*, June 23, available at: www.hongkongfp.com (accessed April 1, 2017).
- Cheung, K. (2015b), “Primary school students speak at 9-hour long LegCo hearing on TSA controversy”, *Hong Kong Free Press*, November 30, available at: www.hongkongfp.com/2015/11/30/primary-school-students-speak-at-9-hour-long-legco-hearing-on-tsa-controversy/ (accessed September 28, 2017).
- Chun, M. (2002), “Looking where the light is better: a review of the literature on assessing higher education quality”, *Peer Review*, Vol. 4 Nos 2/3, pp. 16-25.
- Committee on Prevention of Student Suicides (2017), “Committee on prevention of student suicides submits final report to SED (press release)”, February 10, available at: www.info.gov.hk/gia/general/201611/07/P2016110700281.htm (accessed October 2, 2017).
- Early Childhood Development Research Foundation (2016), “Lingnan University survey reveals that children’s happiness index in 2015 drops in two consecutive years (press release)”, Hong Kong, March 30, available at: www.ln.edu.hk/news/20160330/Children_Happiness_Index_2015 (accessed September 29, 2017).

- Education Bureau (2014a), "Review on the implementation of territory-wide system assessment", LC Paper No. CB(4)284/13-14(03), Legislative Council, Legislative Council Panel on Education, Hong Kong, January 13, available at: www.legco.gov.hk/yr13-14/english/panels/ed/papers/ed0113cb4-284-3-e.pdf (accessed September 29, 2017).
- Education Bureau (2014b), "Education bureau announces enhancement measures of territory-wide system assessment (press release)", April 11, available at: www.info.gov.hk/gia/general/201404/11/P201404110467.htm (accessed September 28, 2017).
- Education Bureau (2016a), "The coordinating committee on basic competency assessment and assessment literacy report on 2016 tryout study (Primary 3)", available at: www.edb.gov.hk (accessed September 29, 2017).
- Education Bureau (2016b), "Assessment for learning", available at: www.edb.gov.hk (accessed July 7, 2017).
- Education Commission (2000), *Learning for Life, Learning Through Life*, Hong Kong Government Printer, Hong Kong.
- EJ Insight (2015), "Teachers call for TSA to be canned, citing pressure on students", June 23, available at: www.ejinsight.com/20150623-teachers-call-tsa-be-canned-citing-pressure-students/ (accessed September 29, 2017).
- Gusway, S. (2015), "Talking points: should Hong Kong's TSA exams be marked on a simple pass/fail basis?", *Young Post*, December 9, available at: <http://yp.scmp.com> (accessed April 4, 2017).
- Hong Kong Examinations and Assessment Authority (2017), "TSA – frequently asked questions (FAQ)", available at: www.bca.hkeaa.edu.hk/web/TSA/en/Faq.html (accessed September 29, 2017).
- Hui, S. (2017), "Revamped TSA worth trying says law", *The Standard*, April 10, p. 11.
- Kellaghan, T. and Stufflebeam, D.L. (2002), *International Handbook of Educational Evaluation*, Springer Publishing Company, New York, NY.
- Legislative Council Secretariat (2017), "Minutes of meeting held on Monday, 12 December 2016, at 4:30 p.m. in Conference Room 1 of the Legislative Council complex", LC Paper No. CB(4)751/16-17, Legislative Council, Legislative Council Panel on Education, Hong Kong.
- Leung, C. (Writer) (2015), "Tik Chi-yuen said TSA evaluation committee should consider the concerns of parents", transcript, radio broadcast, Newswrap, Hong Kong, November 3, available at: http://news.rthk.hk/rthk/en/news-programmes/this-episode.htm?cmsid=78&episode_id=321164&livetime=20151103180000 (accessed July 17, 2017).
- Lo, K.L. (2016), "Hong Kong slips to new low in international ranking for student performance in science", *South China Morning Post*, December 6, available at: www.scmp.com (accessed April 3, 2017).
- Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis*, SAGE Publications, Thousand Oaks, CA.
- Nosich, G.M. (1982), *Reasons and Arguments*, Wadsworth, CA.
- Ouiment, J.A., Carini, R.M., Kuh, G.D. and Bunnage, J.C. (2001), "Using focus group to establish the validity and reliability of a college student survey", paper presented at the AIR Forum, Long Beach, CA.
- Pace, C.R. (1985), *The Credibility of Students' Self-Reports*, Center for the Study of Evaluation, University of California, Los Angeles, CA.
- Pang, B. (2015), "Too much pressure for Primary Three? Too bad, the TSAs are here to stay", *Young Post of South China Morning Post*, October 28, available at: <http://yp.scmp.com/news/hong-kong/article/99963/too-much-pressure-primary-three-too-bad-tsas-are-here-stay> (accessed September 28, 2017).
- Pang, B. (2017), "Carrie Lam and CY Leung tussle over Hong Kong's BCA plans", *South China Morning Post (Young Post)*, March 30, pp. 1-2.
- Pike, G.R. (1995), "The relationship between self-reports of college experiences and achievements and achievement test scores", *Research in Higher Education*, Vol. 36 No. 1, pp. 1-22.

- Pohlman, J.T. and Beggs, D.L. (1974), "A study of the validity of self-reported measures of academic growth", *Journal of Educational Measurement*, Vol. 11 No. 2, pp. 115-119.
- SCMP (2015), "How to face Education Bureau pressure to up TSA scores? Jasper Tsang draws parallels from his math teaching past", November 3, available at: www.scmp.com/news/hong-kong/education-community/article/1874935/how-face-education-bureau-pressure-tsa-scores (accessed September 29, 2017).
- Sou, G. (2000), "Action learning for modern managers", *International Journal of Action Learning*, Vol. 1 No. 5, pp. 141-145.
- Sou, G. (2008), "Historical review of program evaluation for educational quality assurance", available at: www.paper.edu.cn/index.php/default/releasepaper/downPaper/200808-173 (accessed August 13, 2008).
- Sou, G. (2009), "An investigation of assessment practices in the MBA degree program in a Chinese university", published doctoral dissertation, University of Technology Sydney.
- Sou, G. (2011), "A management education model for the Chinese career managers", *International Conference of Learning Society and Open Education Research, Macau, City University of Macau and Universidale Alberta International da Asia, Macau*.
- Sou, G. and Zhou, P.Q. (2007), "Management education program evaluation: an empirical study in Mainland China", *New Horizons in Education*, Vol. 55 No. 2, pp. 12-27.
- Stufflebeam, D.L., Madaus, G.F. and Kellaghan, T. (Eds) (2000), *Evaluation Models – Viewpoints on Educational and Human Services Evaluation*, Vol. 49, 2nd ed., Kluwer Academic Publishing, MA.
- Turner, C.F. and Martin, E. (Eds) (1984), *Surveying Subjective Phenomena*, Vol. 1, Russell Sage Foundation, New York, NY.

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