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<th>Title</th>
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The Singapore Global Schoolhouse: an analysis of the development of the tertiary education landscape in Singapore

Introduction

Singapore is a small country with hardly any natural resources except human resources. Therefore, since independence in 1965, Singapore has emphasised education as the vehicle to provide its manpower needs, as the country met the challenges of industrialisation of yesteryears and the challenges of the knowledge economy today.

Education has always been an expenditure – a well-worth investment for the future perhaps, but still an expenditure item on the national budget. But now, this position has changed. Education is increasing developed as a major revenue generating sector in the economy. According to the Ministry of Trade and Industry (MTI), education constitutes 3.6 per cent of Singapore’s economy currently. The government hopes that by capturing a larger share of the global educational market estimated at US$2.2 trillion, the total education sector can grow to about 5 per cent of the economy in the next decade (MTI, 2002a; 2002b). To achieve this, the government has embarked on an ambitious plan to make Singapore a ‘Global Schoolhouse’, where a myriad of educational programmes from pre-schools to post-graduate institutions is provided to attract fee-paying students from all over the world (Yeo, 2003).

This paper analyses the Singapore government’s attempts to make the country a ‘Global Schoolhouse’, in particular in its tertiary education sector. It focuses on the delicate balancing act by the government as it tries to engineer a ‘market economy’ in the tertiary education sector on one hand and yet contain university operations within state-defined parameters on the other. The case study of the sudden pull-out of the University of New South Wales from Singapore serves to highlight the increasing challenge faced by the government in its desire to hold on to centralised control while encouraging more foreign or private players to join the Singapore tertiary education market.

Meeting Global Competition

Brief History of Singapore Tertiary Education

When Singapore became independent in 1965, there were only two universities: the University of Singapore, which was formally established in 1962, and the Nanyang University, which was established as a private university in 1956 by the Chinese community. In 1980, these two entities merged to form the National University of Singapore (NUS). Today, the NUS is an established comprehensive university with good international reputation. The other comprehensive university in Singapore today is Nanyang Technological University (NTU). It also enjoys a good international reputation. Formerly established as the Nanyang Technological Institute (NTI) in 1981 as an engineering institution, the Nanyang Technological University (NTU) was formally granted university status in 1991. It was in 1997 that the idea of a third local university was mooted by the government. This corporate, not-for-profit autonomous university
was to be different from the two established ones to add a little diversity to the tertiary education landscape. In 2000, the Singapore Management University (SMU) started its operations in a single, two-storey building in an old school campus. In 2005, it moved to its state-of-the-art city campus to pursue its mission of providing a world-class business education and become a global leader in its field. Another local university was established in 2005 with an aim to provide university education and satisfy skills upgrading needs of the working professional and adult learners. Formerly the Singapore Institute of Management (SIM) Open University Centre, the SIM University (UniSIM) is the first private university in Singapore.

The four universities described so far represent the local universities. However, in the last decade, the tertiary education landscape in Singapore has been seen major developments, with the addition of many foreign players. The government’s focus on the development of the tertiary education sector is triggered by the analysts’ forecast that the global demand for international higher education will exceed 7 million students by 2025 (Yeo, 2003). Expecting Asia to account for 70 per cent of this future demand, which is a six-fold increase in demand from the year 2000, the Singapore government aims to enjoy a share of the fast expanding and lucrative education market. The Minister for Trade and Industry George Yeo said:

This will be a growth market for us. If we can double or triple the number of international students in Singapore to 100,000 or 150,000, there will be all kinds of spin-offs for our economy. Our shops, restaurants and housing rental market will all benefit. More than that, these students when they return home will expand our international network (Yeo, 2003).

To tap this growth market, the government made a number of notable changes in the tertiary education sector. In particular, there is now a conscious effort to promote diversity and autonomy in the university landscape. But this is coupled with an accountability and funding structure within which universities are expected to operate.

**Diversity and Autonomy**

Diversity is emphasised in the government’s vision to offer “a diverse and distinctive mix of quality educational services to the world” (Ministry of Trade and Industry, 2002b). By offering “a cluster of mutually reinforcing, complementary education institutions which vary in terms of student enrolment numbers, country of origin, cultural environment, nature of activity, academic level, academic discipline/subjects, research interests and price”, it is hoped that the overall education standards in Singapore will be raised, more choices for students will be available, and more foreign students will be attracted to study and later work in Singapore, thereby contributing towards the Singapore’s economy (MTI, 2002b).

The government aims to provide a diversity of tertiary education through a ‘tiered system of universities’ which will provide a variety of undergraduate and postgraduate courses.
for local and international students. This system comprises three levels: ‘World Class Universities’ (WCU), local universities, and private universities (MTI, 2002b).

‘World Class Universities’ (WCU) refer to top universities in the world that set up centres of excellence in Singapore to spearhead world-class research and development (R&D), transfer knowledge to the industry, and position Singapore as a premier educational hub. The government aims to attract about 10 WCU centres and a pool of 1,000 to 3,000 global top talents in Singapore. For the local universities, their main task is to meet Singapore’s core human resource needs and provide education as a public good. The third category comprises other private universities which can be foreign or local in origin. They can have their own campuses and operate independently or collaborate with local partners, and will operate according to market forces. This means they are at liberty to establish their own international to local student ratio and school fees. The government estimates that this segment has the potential to attract up to half of the projected 100,000-strong additional international students (MTI, 2002a).

Since 2002, various WCU centres have set up in Singapore, including INSEAD (Institut Européen d’Administration des Affaires), University of Chicago Graduate School of Business, University of Pennsylvania’s Wharton School, Massachusetts Institute of Technology, Technische Universität Eindhoven, Technische University München, Georgia Institute of Technology and Johns Hopkins University. The government has continued to woo foreign brand names to set up shop in Singapore. Recent targets include New York University’s Tisch School of the Arts, and Stanford University. The Singapore Tourism Board (STB) has also mounted roadshows in more than 30 regional cities in the last two years to spread the name of Singapore education (Ho, 2007). University and institute tie-up to put Singapore on the world map is highly encouraged and publicised. One of the latest is the tie-up among the Lee Kuan Yew School of Public Policy (NUS), Columbia University’s School of International and Public Affairs (SIPA), London School of Economics and Political Science (LSE) and the Institut d’Études Politiques de Paris to offer a double master degree (Chia, 2007). The Singapore National Institute of Education also launched a joint dual-degree educational doctorate with the Institute of Education, University of London in 2007.

Besides diversity, the government also aims to promote greater autonomy for the local universities in Singapore. In 2005, a review conducted by the University Autonomy, Governance and Funding (UAGF) Steering Committee recommended that both the National University of Singapore (NUS) and the Nanyang Technological University (NTU) change their status to corporate autonomous entities. Based on the recommendations, the universities can now exercise greater control over their internal governance, fees structure, admission requirements, staff remuneration and fund utilisation out of a block budget for recurrent expenditure within a broad strategic framework set by the government. The university Councils are also empowered to ensure that strategic plans are aligned to the university’s goals, and oversee the internal quality assurance systems. Both the NUS and the NTU were corporatised in 2006 and together with the SMU are now known as ‘Autonomous Universities’ (AUs). It is believed that this higher degree of autonomy will make the universities responsive and flexible, not
only to achieve excellence but also to compete with universities world-wide (UAGF Steering Committee, 2005).

**Accountability and Funding**

However, the promotion of diversity and autonomy, together with choice and competition, does not mean that the government has adopted a neo-liberal stand and encourages a genuine education market that is unregulated and totally subject to market forces. On the contrary, the government still maintains centralised control, especially over the local universities, though systems of accountability and funding. Educational quality assurance in Singapore is a matter of great concern for the government (Ng, 2008a). The government has stated that despite their change of status and greater autonomy, local Autonomous Universities, “as national universities, must also continue to fulfil their critical role of training graduate manpower for Singapore’s economy” (Ministry of Education, 2007). The UAGF Steering Committee report stated the government’s stand very clearly:

> [W]e remain mindful that our universities are vital national institutions and they have a public obligation to fulfill. They contribute to Singapore’s progress and development through providing quality education, and knowledge creation. Hence, we need to ensure that our universities’ missions remain firmly aligned with our national strategic objectives. At the same time, our universities have to remain accountable for the use of public funds (UAGF Steering Committee, 2005).

Although the internal operation of the university is controlled by the university leadership, at the governance level, the university council members are appointed by the Minister of Education and all the constitutions of the local universities are prescribed by parliamentary acts (J. Tan, 2006). In addition, while allowing autonomy, an enhanced accountability framework for universities was introduced, comprising the existing Quality Assurance Framework for Universities (QAFU) and the proposed Policy and Performance Agreements between the Ministry of Education (MOE) and each university (UAGF Steering Committee, 2005). That means that strategic control over local universities is achieved through the following measures: alignment with national strategic objectives; accountability framework for the use of public funds; policy agreement signed between the university and the MOE; performance agreement signed between the university and the MOE; and the MOE’s Quality Assurance Framework for Universities.

Besides measures to ensure accountability, the government also retains centralised control as the major source of funding for the local Autonomous Universities (AUs). Historically, the NUS and the NTU were allocated funds and resources through the University Grants Commission which was set up in 1992 by the Ministry of Education (J. Tan, 2006). Even with corporatisation, the Government remains the principal source for the AUs (UAGF Steering Committee, 2005). The AUs, though ‘corporate’ or ‘autonomous’, are more accurately described as state-funded, privately managed and publicly accountable institutions. The government provides a block budget to give the
universities greater financial autonomy to deploy resources and matches the endowment donations that the universities raise from their stakeholders.

One consequence is that the AUs are now highly ‘encouraged’ to seek other sources of funding and run revenue-generating programmes. The more that the university can raise, the more the government will give to it. Corporatisation strategies are adopted as “policy tools to partially reduce government’s burden in financing higher education and to introduce further forces for making public universities more productive and proactive” (Mok, 2005, p. 15). Apparently, not all university chiefs are unhappy with the ‘control’ that comes with the funding. Government funding in Singapore puts universities in a strong financial position for growth. Elsewhere in the world, the situation is strikingly different as governments cut back on funding for universities in a bid to balance the books as tax revenues fall while total public spending goes up (Lee, 2007). NTU president Professor Su Guaning observed that “the government is now much more concerned with the results produced by the university and less with the process of getting there…this allows us to be more entrepreneurial and innovative in the use of our scarce resources” (quoted in Lee, 2007).

The government also continues to provide heavy financial subsidies for recurrent expenditure, the total development expenditure, and most of research funding, with the university students’ tuition fees accounting for less than 30 per cent of the overall recurrent expenditure (J. Tan, 2006). The government also provides generously for postgraduate programmes and academic research funding. A capital grant is provided for postgraduate research programmes. Local universities have full operational autonomy to internally allocate funds to students granted through the Research Scholarship Block (RSB) from the MOE. For academic research funding, there is a two-tier research grant: Tier 1 is a block grant to the university and Tier 2 is competitive, peer-reviewed grant for research projects. The Research Quality Review (RQR) is conducted once every 5 year. The MOE sponsors the establishment of Centres of Excellence to the order of S$2-3 million a year (UAGF Steering Committee, 2005).

In a way, research funding in Singapore is hardly a problem, so long as it coincides with national agenda and priority. For example, the Research, Innovation and Enterprise Council, chaired by the Prime Minister, has allocated S$1.4 billion over the next five years for biomedical sciences, environmental and water technologies, and interactive and digital media. The three strategic areas are expected to yield big payoffs in the next decade, creating 86,000 jobs and S$30 billion in value-added by 2015. Another S$1 billion will be spent on attracting the best and brightest researchers to Singapore, through joint programmes that marry local institutes with the cream of overseas research universities. The Prime Minister said that Singapore was committed to invest in R&D as a driver for economic growth and as the foundation for the country’s long-term competitiveness (Chang & Loo, 2006). Perhaps an interesting phenomenon in the research scene in Singapore is a lack of a national league table for local universities or a public ranking through national research auditing. Nor is there a plan for it. There may be too few local universities to make this exercise worthwhile and research funding is always available so long as it coincides with national agenda and priority. Therefore, as a
marketing tool, the local universities have always relied on global ranking tables, such as the Times Higher Education Supplement World University Rankings, to show the public where they stand locally and internationally.

**Discussion: Case Study of the University of New South Wales**

Other than corporatising the local universities and attracting top foreign universities to set up centres of excellence in Singapore, the government recently attempted to attract foreign universities to set up comprehensive campuses here in Singapore. An International Academic Advisory Panel (IAAP), which consisted international university leaders and industry experts, strongly recommended that Singapore distinguished itself further as a premier education hub by increasing choice and competition (MOE, 2007). One foreign university identified as a strategic partner to set up a comprehensive university campus in Singapore was the University of New South Wales (UNSW). Commenting on how the setting up of a comprehensive university by the UNSW in Singapore was in alignment with the government’s Global Schoolhouse strategy, Education Minister Tharman Shanmugaratnam said:

> UNSW Asia will also be an attractive choice for international students who wish to gain their experience of university here in Asia, immersed in its transformation. … And we hope some of the students who come here, will decide to stay for a while and contribute to Singapore and the wider region. (Tharman, 2007)

The case study of the setting up and subsequent sudden pull-out of the UNSW Asia highlights the increasing challenge faced by the government in its desire to engineer an tertiary education ‘market economy’ with private foreign players while maintaining centralised control over the achievement of its strategic agenda within its stipulated time frame.

In 2004, after much “wooing” by the Economic Development Board (EDB), the UNSW was selected by Singapore to spearhead what was expected to be the centre-piece of the Global Schoolhouse ambition: the establishment of a first full-scale foreign university campus with 15,000 students once the project was completed (Li, 2007a). In April 2004, UNSW’s then deputy vice-chancellor, Professor John Ingleson, signed the memorandum of understanding with the EDB, in the presence of two cabinet ministers and the EDB chief. The Australian university was expected to contribute at least S$500 million a year to Singapore’s economy in direct spending. UNSW Asia’s campus was due to be built up in three phases up to about 2020. If all had gone well, Phase One would of course be a big capital outlay. But by Phase Two, the university would be able to generate an income to service its loan. By Phase Three, after 2015, it would be in the black. In terms of enrolment, UNSW Asia aimed to take in 10,000 students by 2015 and 15,000 by 2020.

UNSW Asia started its first intake of students in March 2007. In May 2007, barely two months into its operation, it announced its closure and complete pull-out from Singapore. The withdrawal of UNSW Asia came as a shock to both staff and students. According to
the UNSW, the decision was due to lower than anticipated enrolments with only 148
students in the first semester, half of its projected target. What was unforeseen was the
surprisingly low enrolment in the first two terms. Under Phase One, for up to four or five
years, the university had expected to fall short of its enrolment targets by 10 or 20 per
cent. Instead, based on the applications received, the shortfall was about 50 per cent. For
its pioneer intake in March 2007, it had hoped to take in 300 students. While 700 people
applied, only 148 qualified and enrolled. For its August intake, it had hoped to get 500
students. But the applications received showed it could admit only about 250 (Davie,
2007a). An intensive internal review indicated that to continue would involve an
unacceptable level of risk to the institution (Li, 2007b).

In an interview with the local newspaper, Professor Hilmer, the new UNSW Vice-
chancellor gave the reasons for the sudden withdrawal:

We had an unsustainable financial position. It had the potential to pull the
university down in the sense of soaking up all our uncommitted free reserves of
A$200 million (S$255 million). (quoted in Davie, 2007a)

In 2006, UNSW Asia (Singapore campus) spent slightly more than the S$17.3 million
that the Economic Development Board (EDB) of Singapore had given it in grants. On top
of this, the university had taken on a debt of S$156.8 million, from which it had already
drawn down S$21 million. UNSW main campus had only A$200 million in reserves.

The UNSW Asia episode illustrates the dominant interventionist role of the government
in the Singapore tertiary education market. The UNSW could plan to set up a
comprehensive university campus in Singapore because it was banking on the strong
financial support from the Singapore government through the EDB. Unlike other private
universities which offered only specialised courses and did not need a huge initial capital
to set up a branch campus in Singapore, the UNSW aimed to set up a comprehensive
university with a sprawling campus that was specially built for it. A total of S$32.3
million was given by the EDB to the UNSW, of which S$17.3 million was in grants and
S$15 million in loan. But the support package was not offered without strings attached.
The EDB stated that the support package which comprised tax incentives, grants and
loans were “recallable if pre-agreed milestones and outcomes are not met” (quoted in
Davie, 2007a). The Singapore government’s plan for the tertiary Global Schoolhouse
was not to be compromised.

When Professor Hilmer realised that the enrolment number was way below the target and
that the university may be stuck in Phase One, he approached the EDB in March 2007 to
work out a compromise. It was reported that the university wanted to have a scale-down
target of just 2,000 students by 2012. The proposal was rejected by the EDB. Again, it
was clear that the deal was not a free lunch. It was a hard-nose business transaction.

With the pull-out, the Trade and Industry Minister stated that the UNSW would have to
pay back the money because it did not meet the “agreed milestones, such as student
enrolment and setting up of science research labs” (quoted in Davie, 2007b). He added
that the EDB did not issue a “blank cheque” to foreign institutions coming in to set up campuses or offer programmes. The quantum of grants and loans was tied to the benefits the project would bring to Singapore, such as the number of jobs created or number of new foreign students recruited. For the UNSW, he clarified that the loans and grants were tied to its undertaking of attracting 10,000 to 15,000 students.

When a Member of Parliament asked how realistic it was for the EDB to expect UNSW Asia to achieve an enrolment of 10,000 to 15,000 students within such a short period of time, the Trade and Industry Minister replied that it was not the government’s job to evaluate an investor’s business plan. “Investors know their business better than the Government. In this case, the UNSW was in the best position to assess the viability of its business plan” (quoted in Davie, 2007b).

The UNSW episode will definitely give other foreign universities thinking of setting up campuses in Singapore something to consider. Some may attribute the failure of the venture to poor marketing strategy which fails to attract enough students to enrol in its programmes (Liaw, 2007). Others may attribute it to over-optimism and poor calculation right at the inception. But, the episode definitely illustrates the business philosophy and style of the Singapore Inc. The government wants the targets and outcomes of private universities to coincide with its strategic plans and timeframe. It is prepared to invest funds, but it also expects the universities to bear the responsibility of achieving long-term business sustainability and to deliver their part of the bargain. This poses a challenge for both parties. The government must now do more to attract top foreign universities to come to Singapore. These universities are likely to proceed with much more caution.

The UNSW Asia episode, together with other developments in the tertiary education sector, illustrates how the phenomenon of “decentralised centralism” (Karlsen, 2000) is manifested in the Singapore education system. In their analysis of the development of the Singapore education system, Tan and Ng (2007) explain how decentralised centralism is evident in the educational reforms for schools in Singapore since 1997. As an example, in the primary and secondary school sector of the education system, although the government has adopted a school-based management paradigm and a self-appraisal quality system through the School Excellence Model, external inspections and validation are still carried out once in five years (Ng, 2003). In “decentralised centralism”, decentralisation reforms are initiated from the top by the central authorities but implementation and accountability are local duties (Karlsen, 2000). Paradoxically, decentralisation of administrative responsibility is accompanied by a good deal of regulatory re-centralisation. In fact, the decentralisation legitimises the need for national standards, performance indicators and accountability for public funding.

Decentralisation is indeed taking place in the tertiary education sector in Singapore. The measures to promote greater diversity by attracting foreign universities to Singapore and the greater autonomy given to the local universities are clear indications of that. The government wants the universities to devise and implement sound business plans to meet global market competition. However, this does not mean that the government has relinquished its power and control to allow a free market to evolve. Instead the market is
carefully engineered and strategically controlled. For the local universities, there are accountability measures through the enhanced accountability framework for universities comprising the existing Quality Assurance Framework for Universities (QAFU) and the proposed Policy and Performance Agreements between the MOE and each university (UAGF Steering Committee, 2005). For foreign universities, such as UNSW Asia, that receive a generous support package from the government, specific outcomes are expected in return and the government is prepared to pull the plug if the other party fails to meet the agreed outcomes and milestones.

J. Tan (2006) notes the “dominant interventionist government role in directing a frenetically orchestrated flurry of higher education policy initiatives toward prescribed social and economic goals” (p. 180). Rather than genuine deregulation, recent reforms for the tertiary sector show that “the Singapore government has strengthened its governance over the university sector instead of weakening its controls” (Mok, 2005, p. 17). There is a gap between policy rhetoric and reality (Ng, 2008b). The episode of UNSW Asia has demonstrated the heavy state presence in the tertiary education sector.

Concluding Remarks

The challenges notwithstanding, the UNSW’s saga has dented neither the zeal nor the optimism of the Singapore government in expanding, diversifying and enhancing the tertiary education landscape. Even with the setback, Singapore has already passed the halfway mark in its quest to become a Global Schoolhouse with 150,000 international students by 2015. In 2006, it hosted nearly 80,000 foreign students. The number of foreign students increased 11.6 per cent over the previous year and 46 per cent over 2003. The industry’s contribution to gross domestic product doubled from 1.9 per cent, or S$3 billion, in 2002 to 3.8 per cent, or about S$8 billion, in 2007, another sign that the Singapore education sales pitch is on course. The aim is to increase this to about 5 per cent by 2015 (Ho, 2007).

Looking ahead, one of the challenges in developing a Global Schoolhouse is the effect upon the populace on seeing so many foreigners taking up places in the local universities. Members of Parliament have raised concerns in the house that local students who did not get into local universities might feel as if their places were being taken by foreigners (Low, 2007). In fact, the government has responded swiftly by promising to study ways to increase the number of university places and the feasibility of opening another local university in the near future (Lim, 2007).

Another question is whether Singapore can provide the necessary conditions for a creative university culture where academic pursuits flourish freely, factors which go beyond state legislation and funding. Concerns have been expressed about the extent of media and academic freedom in Singapore. Singapore was recently ranked quite lowly by ‘Reporters Without Borders’ on media freedom, and Warwick University’s governing council has aborted its plan to set up a campus in Singapore partly due to a perceived lack of academic freedom in Singapore (C. Tan, 2006). The tension is “between the
Government’s desire to be in overall charge of higher education development and planning, on the one hand, and trends that militate against the effectiveness of government controls, on the other” (J. Tan, 2006, p. 183). One possible middle ground is for Singapore to move towards a “regulated self-regulation” framework. Mok (2005) explains this model:

Special arrangements are to be made in allowing private/non-state actors to participate in policy-making and implementation. One of the ways is delegating power to these non-state actors particularly when these non-state actors are playing increasingly important roles in education. A self-regulatory framework should be established in governing these newly emerging private/non-state education coordination institutions, providing that these participative institutions still follow the overarching framework or directions set out by the state (Mok, 2005, p. 20).

With the internationalisation of higher education, many countries will be trying to develop themselves into similar ‘global schoolhouses’ to take a share of this economic pie. The experience of Singapore will serve as a mirror for those that wish to pursue this path. Time will tell how the Singapore Global Schoolhouse will continue to develop and be governed. For the time being, the Global Schoolhouse has a no-nonsense school master and the school master is in.

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