

SINGAPORE – EDUCATION SYSTEM AND SCHOOL ACCOUNTABILITY

(September 2006)

Education System

Singapore places a great deal of emphasis on education. In the 1960's and 1970's the Singapore education system had to cope with educating large numbers of children as result of high birth rates from the previous decade.

The practices from the British colonial period produced a small number of highly trained university graduates and a much larger number of young people who left the education system following secondary schooling and entered the workforce with no particular skills.

In 1979 major reforms introduced a tracking system with the aim of reducing the drop out rate and ensuring students with a low academic performance exited school with some skills.

During the 1980's more resources were put into vocational education and efforts were made to match the students educational performance with the manpower needs of industry and commerce.

In 1987 4% of the gross domestic product was devoted to education. This increased to 6% in the 1990's.

http://www.photius.com/countries/Singapore/society/Singapore_society_education.html)

The school system has an emphasis on testing and student tracking. Education is perceived as the key to social mobility and this can lead to high levels of competition and pressure from parents for student achievement.

Compulsory education was implemented in Singapore from 2003, however prior to this date attendance was almost universal.

Both primary and high schools operated on double sessions involving different groups of students, however in the 1990's secondary schools converted to single session schools. This move required the construction of fifty new high schools. Partial and all day programs have been extended to include primary schools from 2004. This transition will continue to occur over the next ten years.

In 2005 the Singapore education statistics were:

Type of School		Number of Schools
Kindergarten		200+
Primary	Government	132
	Government aided	41
Secondary	Government	110
	Government aided	20
	Autonomous	21
	Independent	5
	Autonomous	3
Full School	Independent	2
	Government	9
Junior College	Government aided	4

	Independent	1
Polytechnic		5
Institute of Technical Education		10
Universities		4
Specialised Tertiary School		10
International School		22
Special Education School		5

http://en.wikipedia.org/wiki/Education_in_Singapore

Education in Singapore is managed by the Ministry of Education (MOE), which directs education policy. The mission of the MOE is to mould the future of the nation, with a vision of Thinking Schools, Learning Nation. The goal of MOE is holistic education for students which prepares them for the challenges of the future. For both public and private schools there are variations in the extent of the autonomy in their curriculum and the scope of government aid and funding. Students in primary school do not pay school fees, while students at secondary and pre university levels pay subsidised school fees.

The school year consists of four terms of ten weeks each. In 2005 the annual education budget was \$6 b (SGD). The MOE employs 24 900 teachers to teach 530 000 students.

English is the first language used by half the children by the time they reach preschool age and becomes the primary language of instruction by the time children reach primary school.

Kindergarten

Kindergartens in Singapore provide a structured three years of preschool for children aged three to six. The three years are called Nursery, Kindergarten (1) and Kindergarten (2). Kindergartens function five days a week, with school hours ranging from three to four hours per day. Most kindergartens operate at least two sessions a day. Kindergartens are run by the private sector, including community foundations, religious bodies; and social and business organisations.

Under the Education Act (1985) kindergartens are defined as private schools that have to be registered with the MOE. Kindergartens are also run by child care centres as well as international schools.

<http://www.moe.gov.sg/preschooleducation/>

http://en.wikipedia.org/wiki/Education_in_Singapore

Primary

Primary education consists of a four year foundation stage from Primary 1–4 and a two year orientation stage from Primary 5 and 6. The overall aim of primary education is to teach the English language, Mother Tongue, Mathematics and Science. From the end of 2004, the EM1, EM2 and EM3 streaming for upper primary students were removed allowing schools the autonomy to decide how best to band their students by ability and value added information. Previously students were tested in Primary 4 to determine their stream: EM1 - brighter students, EM2 – average students and EM3 – a lower level of study for students who did not perform well in the testing. (<http://library.thinkquest.org/05aug/01348/primaryfour.html>)

At the end of Primary 6, the national Primary School Leaving Examination (PSLE) is held. The primary purpose of the exam is to allocate placement for students into

secondary school based on the score achieved. Subjects examined in the PSLE include, English, Mother Tongue, Mathematics and Science.

(Ministry of Education, *Education in Singapore*)

http://en.wikipedia.org/wiki/Education_in_Singapore

<http://www.moe.gov.sg/corporate/eduoverview/Primary.htm>

Secondary

Secondary education is for four to five years and students are placed into either of the following education tracks or streams – Special, Express, Normal – academic or Normal – technical, according to their performance on the PLSE.

Special and Express are four year courses leading to the Singapore – Cambridge General Certificate of Education Ordinary – level (O Level) national exam. The difference between Special and Express is that the formers native language – English and Mother Tongue are taught at a higher level as Higher Mother Tongue. A foreign language can be taken in addition to the Mother Tongue or can replace it.

Normal is split into Normal – academic and Normal – technical and is a four year course leading up to a Normal – level (N level) exam, with the possibility of a fifth year followed by an O level exam. Students in the Normal – technical stream take subjects more technical in nature, while in Normal – academic students are prepared to take the O level exam. In 2004 the MOE announced that selected students in the normal course would have an opportunity to sit for the O level exam directly without first taking the N level exam. The total number of subjects students take at O level range between six to ten with English, Mother Tongue or Higher Mother Tongue, Mathematics, one Science and one Humanities subject being compulsory.

(Ministry of Education, *Education in Singapore*)

http://en.wikipedia.org/wiki/Education_in_Singapore

<http://www.moe.gov.sg/corporate/eduoverview/Primary.htm>

Alternative routes through the Integrated program, Specialised Independent schools and alternate curriculum qualifications are available for students to pursue to enter junior college and upper secondary education ie: Polytechnics and Institutes of Technical Education.

Junior College (Pre University Education)

Admission to a two year pre university course at Junior College is determined by O level subject grades. Junior College prepares students for the GSE A level.

Alternatively this takes three years in a centralised institute course. Students who complete pre university education receive the Singapore – Cambridge General Certificate of Education Advanced (GCEA). In 2007 the revised GCEA will be available.

<http://www.moe.gov.sg/corporate/eduoverview/PreV.htm>

After completing the requirements of pre university education, students can choose to attend one of Singapore's four universities.

<http://www.moe.gov.sg/corporate/postsecondary.htm>

Apart from the formal school curriculum students participate in co curricular activities (CCA's) such as sport, uniformed groups eg: scouts, girl guides, chess and computer clubs; and competitions associated with creative arts, English, humanities, maths, Mother Tongue and science. (<http://www.crescent.edu.sg/achievenets/cca.htm>). CCA's are introduced at Primary 4 and participation is voluntary. In secondary school students must participate in at least one core CCA.

Special Schools

The education of children with disabilities is provided in SPED schools. SPED schools are run by voluntary welfare organisations receiving funding from MOE and the National Council of Social Service.

(<http://www.moe.gov.sg/specialeducation/Introduction/202003.htm>)

Private Schools

The state is the principal provider of education at primary, secondary and tertiary levels. Regulations require private schools conducting educational courses to be registered with MOE; however registration by MOE does not represent an endorsement of the school.

(<http://www.moe.gov.sg/privatesch/>)

International Schools

Due to its large expatriate community, Singapore is host to a number of International schools.

The Singapore education system has been criticised for being too competitive, specialised, rigid and elitist with little emphasis on creative thinking. It is reported that students from as young as primary school age are under intense pressure to perform.

In September 2005, the government made changes to the education system that included:

- Cuts in the curriculum
- Greater flexibility in streaming
- Greater focus on creative and critical thinking

In addition the *Teach Less, Learn More* project which focuses on learning for life long skills rather than simply learning to do well in exams, was emphasised.

(http://en.wikipedia.org/wiki/Education_in_Singapore)

School Accountability

The mission of Schools Division of MOE is to ensure there is quality leadership in schools.

An area overseen by Schools Division is the School Appraisal Branch. The branch is responsible for matters involving the implementation of the School Excellence Model (SEM) and the Masterplan of Awards (MoA).

Consultancy on school self assessment and external validation of schools is conducted by the School Appraisal Branch. 'The branch also validates applicants for Autonomous Status and assists schools with their application for the Singapore Quality Class Award. The School Appraisal Branch provides information for continuous school improvement and enables schools to be well organised and managed to provide quality education.'

(http://www.moe.gov.sg/schdiv/school_rew.htm)

'Autonomous schools were established in 1994 to provide students with quality education within the framework of a non independent status, but with greater autonomy devolved to schools. Autonomous schools present parents with more options in the choice of quality schools for their children.

These schools receive additional funding (\$300 per student per year) and flexibility to develop a holistic education that stretches each student to their fullest potential.

Students in Autonomous schools benefit from better facilities, a more innovative curriculum as well as a more varied range of enrichment programs.'

(<http://www.moe.gov.sg/press/2005/pr20050717.htm>)

School Excellence Model

The SEM, adapted from a business model, was introduced in 2000 to guide schools in their capacity for reflection, self assessment and self improvement; and to prepare the school for change. (Tee, 2003, p.1) suggests 'school leaders should focus on the substance and not the form of the SEM.' From January 2001, schools could apply to MOE for external validation using the same model.

SEM has provided schools with a more systematic framework and holistic approach to self assessment by measuring both outcomes and processes and requiring schools to examine their practices not independently but as parts contributing to a whole. The SEM requires every school to continuously question its current practices collaboratively and establish and think of more creative and effective ways of delivering the desired outcomes of education. SEM also allows benchmarking against similar schools to compare performance as a part of continual improvement.

(<http://www.moe.gov.sg/speeches/2002/sp30122002.htm>)

Every five years the school is externally validated. The external validation team comprises of at least four people. Assessors are key personnel officers from the private sector, the Polytechnics and Institutes of Technical Education as well as schools and MOE.

'The assessors visit the school for three days to gather information on its processes and results. The assessors work from the school's own self appraisal report in which is captured strengths and areas for improvement.

Before the school visit, the assessors carry out a desk top evaluation using the school report. They then meet to discuss key issues which they want to further explore. On site, the assessors interview the staff, groups of students, stakeholders and the school's partners. They also carry out extensive document checks. At the end of the three days the assessors meet again to discuss their findings and to assign scores to the different criteria.

The outcome of the process is a report which gives the school information on the assessors' views of its strengths, areas of improvement and scores. The feedback report is a crucial component of the self appraisal process as it acts as a catalyst for action. It provides helpful information to trigger relevant improvement initiatives.' (Lan and Leng, 2003, p.4 and 5)

SEM is not a one size fits all model. SEM recognises that there are many different approaches to achieving sustainable excellence. Excellent schools do not produce one off good results.

The SEM is driven by a set of seven core values:

- Purposeful school leadership
- Putting students first
- Teachers as the key to making quality education happen
- Systems support
- Working with partners
- Management by knowledge
- Continuous improvement

The SEM framework has two broad categories - 'Enablers' and 'Results'. The 'Enablers' category, which comprises cultural, process and resource components, is concerned with how results are achieved and the 'Results' category is concerned with what the school has achieved or is achieving.

The SEM comprises nine criteria against which schools are assessed:

- Leadership
- Strategic Planning
- Staff Management
- Resources
- Student – Focused Processes
- Administrative and Operational Results
- Staff Results
- Partnership and Society Results
- Key Performance Results

The SEM describes an excellent school as one in which the leaders lead staff, devise strategies and deploy resources, all of which lead to identified student focused processes for which targets are set and performance monitored and managed.

The SEM assigns ten per cent of its weighting to school leadership. Schools demonstrate that they are applying the principles of the SEM to the following four criteria in terms of how leaders:

- Develop the school vision and set focus and direction
- Ensure that the school's management system is developed, implemented and continuously improved
- Communicate school values to staff, students and other stakeholders
- Role model commitment to excellence in their day to day activities.' (Tee, 2003, p.35).

Tee (2006) considered the following issues relating to SEM:

- School leadership – School leaders have had to very quickly change from a model of receiving orders from headquarters to one of self appraisal and improvement.
- The school leadership team must be the first believing and practising members of the excellent school.
- Measurement of the desired outcomes of education – a number of the criteria assessed require measures to be established eg: student morale
- It is possible to score reasonably high on the SEM by distributing the 'work' so that each unit of a school takes a portion of the SEM and tries to undertake projects to score high on the individual category.
- SEM does not come with a remedy system – the SEM could be coupled with an improvement action framework. In Tee's (2003) opinion it is critically important to integrate self assessment with action planning and implementation followed by effective review.
- SEM is seen as an add-on initiative.
- School leaders should identify not only areas of weakness through the self assessment but also areas of strength to innovate, bringing the school to a new level of excellence.
- The appropriateness of a business and management excellence model applied to education.

School Ranking and Appraisal System

MOE has been providing information on the performance of secondary schools and junior colleges in the areas of academic (absolute performance and value added performance based on testing) as well as physical fitness since 1992.

In 2004 School Achievement Tables replaced the ranking lists. The School Achievement Tables are intended to provide a more holistic view of the performance of schools with the focus on both academic and non academic subjects.

From 2004 secondary schools offering the integrated program and all junior colleges were excluded from the School Achievement Tables. MOE does not rank primary schools.

(<http://www.moe.gov.sg/esd/Ranking.htm>)

In 1998 MOE introduced the Masterplan of Awards (MoA) to recognise school success in the delivery of holistic education. The MoA is linked to the SEM. The objectives of the award plan include:

- used as a school accountability tool for MOE to identify good practices that can be used to improve the education system.
- used as a benchmarking tool for schools to measure their performance against that of other schools as part of continual improvement.
- used as a source of information to allow parents and students to make informed choices when selecting schools.

(http://www.logos-net/ilo/195_base/en/init/sin_13.htm)

'There are three levels of awards. The first level comprises the Achievement Awards given to schools each year for current year's achievements. The second level comprises the Best Practiced Award which recognises schools with good scores in the 'Enablers' category and the Sustained Achievement Award which recognises schools with sustained good scores in the 'Results' category. At the apex of the awards is the School Excellence Award (SEA), which gives recognition to schools for excellence in education processes and outcomes. Schools may also apply for the Singapore Quality Award just like any other industrial or commercial sector organisation. Schools may request for additional external validations to qualify for these awards.' (Tee, 2003, p.30 and 31).

Principal/ Teacher Development

'In Singapore, teachers are seen to be of vital importance to the nation as a whole as well as to the individual student. Teaching is recognised as a career with unique opportunities and satisfying experiences.' (Gregory, 2003, p.5).

In 2003, cluster superintendents, education officers in senior positions and school leaders – principals and their leadership teams – commenced being appraised using the Enhanced Performance Management System. Appraisal of teachers using the EPMS commenced in 2005.

The EPMS introduced three career tracks – teaching, specialist and leadership. Competencies have been developed for each of the tracks. Appraisal of school leaders focuses on visionary leadership while for teachers the focus is on their ability to nurture the whole child and the further development of their teaching skills.

EPMS requires staff to self reflect on their capabilities and achievements; and chart their own professional development. Assessment tools have been designed to encourage and reinforce behaviours and outcomes the MOE value.

(<http://www.moe.gov.sg/speeches/2002/sp.30122002.htm>)

In 2006 new key initiatives were announced to boost teacher development and recognition. The initiatives included:

- Four Centres of Excellence for Professional Development were established in each zone. The centres promote the sharing of best practice and learning from fellow teachers to sustain teachers' continued professional development.
- GROW package (Grow, Recognition, Opportunities and Wellbeing) released to ensure the teaching profession continues to attract, motivate and retain good teachers and school leaders.
- Professional development and growth of staff through sabbatical opportunities for teachers.
- Learning and Development Scheme – teachers can claim for learning expenses incurred.
- Every school is to have a School Staff Developer to ensure that training and professional development programs encompass teacher needs while focusing on school goals.

(<http://www.moe.gov.sg/press/2006/pr20060904.htm>)

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