A Review of Educational Reform – New Senior Secondary (NSS) Education in Hong Kong

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Abstract

The Hong Kong government had implemented a new senior secondary education system from the school year of 2009-2010. This paper is to review the educational reform and discuss the issues arising from the Managerialism Approach used in the reform and provides some suggestions for the impact of change.

Keywords: Educational reform, Senior secondary education, Managerialism, 334

1. Introduction

The growing impact of globalization had affected educational development in many parts of the world. In order to maintain the country's competitiveness in the global marketplace, governments across the world had started to review their education systems and policies, and different reform initiatives were introduced in education to enhance the global capacity of their countries' man power and thus to improve their competitiveness.

Under such educational reform, Hong Kong's education had been affected by the global trend of economic rationalism and managerialism. The economic rationalism was focused on the promotion of productivity and economic growth, pursue greater efficiency and develop a competitive and productive culture (Friedman, 1982) and by adopting a managerial approach – in order to achieve objectives with maximum efficiency in educational reform, it will creates impacts of change and require bearing the costs of managerialism by the education sector. This had interested me to look into it in this paper.

In the past, the primary concern for public services was bound to be with quantity – in securing enough school places or hospital beds to cater for the growing social needs. As in other countries, Hong Kong is growing with the concern for quality in public services which includes education. There has been a quest for quality school education in Hong Kong since the 1990s (Education and Manpower Branch and Education Department, 1991). With increasing constraints on public expenditure, the public management today is much more concerned with how to reduce cost, or at lease to prevent it from continuing to raise (Mok and Chan 2002, p.29) an in good order. Such concerns have inevitably changed the nature of government from service providers to regulators, thereby increasing the focus on how to regulate the quality of public services.

Questions of the 'Three E's': economy, efficiency and effectiveness were often being asked in the provision of these public services. Economy is about the cost of the inputs used, and making economic use of them. Efficiency is concerned with the cost of producing outputs. Effectiveness is defined as producing results (Flynn 2007, p.129). A concern for effectiveness led easily and logically to a concern for quality, thus raising the issue of how performance is to be measured (Mok and Chan 2002, p.3). On top of it, the rise of "consumerism" – the belief that consumers had a right to express their views about services and that their knowledge and opinions had value and validity (Currie and Newson, 1998) and ideas from "postmodernism" – the belief that truth does not exist in any objective sense but is created rather than discovered, together these issues had made the educational reform complicated as well as shaping the ways public organizations were managed (Ball, 1998).

The educational reform of Hong Kong starts out from the comprehensive review of the existing education system being carried out between the year 1997-2000, initiated by the then Chief Executive of Hong Kong SAR – Mr. C.H. Tung. An educational reform document titled "Learning for Life, Learning Through Life: Reform Proposals for the Education System in Hong Kong" were issued by the Education Commission in May 2000 and had proposed the review of the academic structure, the curricula and the assessment mechanisms that we see happening today.

The reform document focuses on whether Hong Kong's educational standards were keeping up with the improvements in the standards of its competing countries; whether Hong Kong's educational achievements would ensure its economic competitiveness in the future. These reports and along with a number of consultation papers clearly signifies a move away from meeting quantitative targets to qualitative improvement. In an attempt to promote quality, the government had introduced to the educational sector management strategies and

"quasi-market" mechanisms (Mok and Chan 2002, p.7). Within these educational reform reports, we can observed that managerial strategies were mainly focused on quality assurance, incentives, accountability, competitiveness, measurable performance, efficiency, cost-effectiveness, standards, appraisal, value-added, monitoring and inspection. There were also the key terms like professional, school-based, autonomy, participation and self-evaluation were more often being mentioned by the Government. The call for diversity and choice, as well as the proposal to allow schools to develop their own individual characteristics, can be understood as a further step towards a "market-oriented" approach in educational governance (Ball, 1998). Education Policy was now emphasizing on the quest for quality, efficiency and effectiveness (Mok, 1999).

In this paper, I will try to explain the New Educational Reform for Senior Secondary Education in Hong Kong and the impact of adopting the managerialism approach.

2. The Reform for Senior Secondary Education

Since the implementation of nine years of compulsory education from 1978, the school quality and school effectiveness had emerged to be prominent themes in the education policy discourse in Hong Kong (Tsang, 1997). Besides enhancing basic knowledge, the educational reform report published in 2000 had also proposed a whole-person approach in Senior Secondary (SS) education, holding the belief that students must have some experience in the academic, vocational, organizational and social services as well as in aesthetics and sports. The report also recommended doing away with the streaming between natural science and the humanities arts classes which the students have to make a choice when promoting to the Senior Secondary education. To reduce the pressure generated from public examinations, the report also proposed that there should be only one public examination after the 12 years universal basic education (P1–P6 +& S1–S6) and before the commencement of higher education.

The final outcome of the overall review on the education system had made the following major recommendations (Education Commission, 2000):

Visions of the Education Reform

- 1. To build a lifelong learning (use of both formal and informal learning opportunities throughout people's lives in order to foster the continuous development and improvement of the knowledge and skills needed for employment and personal fulfillment) society.
- 2. To raise the overall quality of students.
- 3. To construct a diverse school system.
- 4. To create an inspiring learning environment.
- 5. To acknowledge the importance of moral education.
- 6. To develop an education system that is rich in tradition but cosmopolitan and culturally diverse.

Senior Secondary Education (SSE)

- 1. Three-year senior secondary schooling is being proposed and a working group will submit its final recommendations to the government by 2002.
- 2. It should provide a broad-based curriculum, avoid premature streaming.
- 3. The fine grades in the Hong Kong examination of education (HKCEE) and Hong Kong Advanced Level Examination (HKALE) will be abolished by 2002, to be replaced by a new public examination in Chinese and English.

"334" New Academic Structure represents 3 years of Junior Secondary education (S1-S3), 3 years of Senior Secondary education (S4-S6) and 4 years of University education. The 3-year Senior Secondary education under the New Academic Structure was implemented in S4 in September 2009 and the 4-year university courses will be implemented in September 2012.

The New Senior Secondary (NSS) curriculum was built upon the curriculum reform in basic education introduced since 2001 which is broad and balanced focusing on students' needs. It is supported by a flexible, coherent and diversified curriculum aimed at catering for students' varied interests, needs, aptitudes and abilities. The curriculum recommends that every student should have the opportunities to study four core subjects (Chinese Language, English Language, Mathematics and Liberal Studies), and two to three electives, and acquire Other Learning Experiences (OLE). The curriculum breaks the barrier of traditional arts and science streaming (see Diagram 1).

2.1 The New Academic Structure for Senior Secondary Education (SSE)

The explosive growth of knowledge, the advent of information technology and the development of a knowledge-based economy are leading to unprecedented worldwide changes. Hong Kong's cultural, social and economic developments depend on whether the population can rise to these challenges and make the best of the opportunities ahead. To sustain the development of Hong Kong as an international city amidst the economic restructuring and rapid development in Mainland China, Hong Kong citizens need to develop their adaptability, creativity, independent thinking and lifelong learning capabilities. Hong Kong had become part of China after 1997. It is necessary to enable every student, as a citizen of Hong Kong, to have more in-depth knowledge of modern China and the world (EMB, 2005).

The Senior Secondary (SS) curriculum reform in 2009 was aim to:

- establish a vibrant and flexible education system that will widen the knowledge base of every student, provide an enabling environment for every student to attain all-round development and to achieve lifelong learning in a diverse and complex environment; and
- provide multiple progression pathways for further studies and career development, which articulate well with international higher education and the manpower requirements of the 21st Century.

Therefore, the school curriculum should:

- enable all students to achieve enhanced language and mathematical abilities, a broadened knowledge base, increased competence in critical thinking, independent learning and interpersonal skills, and provide increased exposure to Other Learning Experiences (OLE) in moral, civic, physical and aesthetic areas;
- provide students with greater diversity and more choices to suit their needs, interests and abilities; and
- equip students better for further studies and in meeting the needs of an ever-changing society.

2.2 Seven Learning Goals of the Curriculum Framework

The SS curriculum framework was designed to enable students to attain the following learning goals for whole-person development and stretch the potential of each student:

- 1. to be biliterate and trilingual with adequate proficiency
- 2. to acquire a broad knowledge base, and be able to understand contemporary issues that may impact on their daily life at personal, community, national and global levels
- 3. to be an informed and responsible citizen with a sense of global and national identity
- 4. to respect pluralism of cultures and views, and be a critical, reflective and independent thinker
- 5. to acquire information technology and other skills as necessary for being a lifelong learner
- 6. to understand their own career/ academic aspirations and develop positive attitudes towards work and learning
- 7. to lead a healthy life-style with active participation in aesthetic and physical activities.

SSE Curriculum and Assessment Framework

The Senior Secondary (SS) curriculum was an extension of the curriculum in basic education. It promotes students' **Learning to Learn** capabilities. It is broad and balanced, and is developed from prior knowledge of the eight Key Learning Areas (KLAs) and the learning experiences of students gained in their basic education with an emphasis on positive values and attitudes (see Diagram 2).

2.3 Three Components in the Senior Secondary Curriculum

The SS curriculum was made up of 3 components, namely Core subjects, Elective subjects and Other Learning Experiences (OLE). It provides a student programme for whole-person development which aims to develop the potential of each student (see Table 1).

Besides the 4 Core Subjects, there were 20 Elective Subjects for the SS academic system that have been developed based on a balance of interrelated factors, such as content rigour, relevance to users and lateral coherence across the subjects. Students should **not** be narrowly streamed into arts, science, commercial or technical studies as before. On the contrary, they should be helped to choose a range of subjects that will develop their interests and abilities, and open up a number of pathways to further studies and careers. Schools were therefore encouraged to provide such opportunities for students by offering more subjects and allowing free choice to students as far as possible by adopting flexible time-tabling arrangements.

A range of Applied Learning (ApL) was developed in accordance with the curriculum design principle that there should be a balance of theoretical and applied learning in the school curriculum to enable every student to develop their potential. These ApL courses will complement the 24 SS subjects, and have a status comparable to the SS elective subjects. ApL courses will be designed to challenge students and provide progression in both academic and career directions.

ApL courses cover six areas, namely, (1) Applied Science; (2) Business, Management and Law; (3) Creative Studies; (4) Engineering and Production; (5) Media and Communication; and (6) Services. They aimed to develop students' basic skills, thinking abilities, interpersonal relationships, values, attitudes and career-related abilities necessary to prepare them for further studies, work and future lifelong learning. Students can also take other languages (e.g. French, German, Japanese, Spanish, Hindu and Urdu) as their elective subjects.

2.3.1 Other Learning Experiences (OLE)

In order to meet the important non-academic goals of the curriculum for whole-person development, students were entitled to moral and civic education, community service, aesthetic development, physical development and career-related experiences. It aimed to promote a balanced and whole-person development of students, foster lifelong learning capacities and develop students' abilities in different areas. These learning experiences complement the examination subjects and ApL and ensure that learning leads to informed and responsible citizenship, respect for plural values and healthy living style and the development of career aspirations.

2.3.2 New Public Assessment

A typical student will take the assessment and examinations for Hong Kong Diploma of Secondary Education (HKDSE) at the end of their third year of Senior Secondary (SS) education. The new system will be 'standards-referenced', i.e. students' performance will be compared to a pre-defined standard. There will be five levels and each level will be accompanied by descriptors that make it clear what a typical student at a given level is able to do. The assessments emphasize thinking skills and application of knowledge (e.g. analysis and problem-solving) and a School-based Assessment (SBA) was also included which will be assessed by the teachers within the school.

2.3.3 Student Learning Profile (SLP)

A wider range of student outcomes particularly in activities and achievements other than academic performance in public examinations will be recognised through an SS Student Learning Profile (SLP). Every student was encouraged to build a SLP to record and reflect on their learning experiences and achievements that give a fuller picture of the student throughout the years of SS schooling. The SLP will be issued by schools and it could serve as a school-based 'transcript' of the student's achievement (in addition to HKDSE) for tertiary education institutions and future employers if necessary.

3. The Managerialism Approach

The emphasis of measurement and control in the educational reform of New Senior Secondary (NSS) was deeply influenced by the ideas of Managerialism and McDonaldization (Ritzer, 1998). Managerialism is the means through which public sector agencies would become more effective service providers (Mooney 2001, p.196). According to the curriculum requirements, the students of the NSS had to attain the Other Learning Experiences (OLE) besides the 4 Core and 20 Elective Subjects. The teachers have to organize these OLE learning activities and responsible to built up the Student Learning Profile (SLP) for their students in addition to their original teaching duties of core and elective subjects. These involved a large amount of administrative duties which included the capture, measurement and controlling of their students' learning experiences. These learning experiences include intellectual development, moral and civic education, community service, physical development, aesthetic development and career-related experiences of which have to be organized by the school and teachers. The suggested time allocation for different components of the learning experiences over three years of NSS are shown in Table 2.

There are a total of 405 hours of OLE to be completed by each student in each class within their 3 years of NSS studies. The teachers have to plan, organize, lead and control the whole OLE activities. Some of the OLE activities can be scheduled within the normal school hours or, as recommended by the EC, to be provided after school, during the post-examination school days, weekends or school holidays. The after teaching hours or days off of the teachers were also being occupied. In addition, individual student's participation in OLE is required to record such experiences in the Student Learning Profile (SLP) after the OLE activities. The workload is heavy but necessary under the NSS educational reform approach which focused in effectiveness and efficiency.

The OLE activities were not just 'other' learning besides the normal subjects teaching in class. As referred to the NSS document - students should be provided with sufficient OLE opportunities (e.g. Community Service, Career-related Experiences) to cultivate positive values and attitudes. Such experiential learning (sometimes known as 'learning-by-doing') was essential in helping students to nurture sustainable personal development. Therefore, the teachers had to put in effort to plan, design and leading the OLE activities in order to achieve these learning objectives. There is also concern that since the OLE activities may last from one day to multiple days, the teachers' workload and manpower distribution may not be able to cope with the demand to take care of the students (Wen Wei Po - 8th September, 2009, p.A21). The increasing of teachers' workload in leading the OLE activities may also lead to the school being lack of teachers to take care of individual student's learning needs (Headline Daily - 14th September, 2009, p.26).

Reflecting on experiences can enhance learning. In order to learn effectively from experiences, students need to go through the self-reflection thinking process by doing the following actions: journal or 'blog' writing, worksheets, tape recording own thoughts, talking with peers, power-point presentations, group discussions in de-briefing, drawing, designing a short play with a targeted audience or producing a promotional video collectively after the OLE activities. Again, these were organized by the responsible teachers in order to appraise the student performance and provide feedback to the students in OLE.

For this, every student was encouraged to build a Student Learning Profile (SLP) through which tracking and reflecting on whole-person development could be possible during the period in the SS education. Teachers should assist students in creating this SLP which is useful as documents to demonstrate personal qualities and competence to the student's future employers and application for the tertiary institutions. The teachers also have to manage the record of the SLP as well. The SLP is not a list of extra-curriculum but a booklet of self-reflection of the students after the OLE activities to enable them to capture their learning experience and personal growth outside the classroom (Headline Daily - 9th November, 2009, p.40). However, there is comment that the OLE data is difficult to be quantify for the University admission consideration (Wen Wei Po - 29th September, 2009, p.A33).

To improve education quality, the Government also implemented the Quality Assurance process which included School Self-evaluation and Quality Assurance (QA) Inspection by the Education Committee. Annual reports will be generated to show the individual schools' performance and provide recommendations for any improvement if required. School development plan and annual plan will then be prepared by the school to implement the corrective actions. The results of the inspection will be published for the reference of the public (i.e. parents) and benchmarking with other schools. These inspection activities required the teachers in preparing heavy loads of documentation and involved in the follow-up actions, thus creating stress called 'pre-inspection panic and post-inspection blues' to the teachers (Flynn 2007, p.98). This practice of having the teachers bearing the increasing responsibilities for the administrative work, being member of committees and leading the OLE activities will affected their teaching work and depleted their chance of meeting with students. It just seems like 'putting the cart before the horse' (Hong Kong Economic Journal - 29th August, 2009, p.5).

The QA process is shown in Diagram 4.

In response to an uncertain global restructuring economy, governments had brought in market principles and ideas of new managerialism to improve the economic returns, efficiency, standard and accountability of their educational systems (Chan 2004, p.75). The trend of replacement of welfare nations by the competitive nations had also transformed the governments from maximizing general welfare to maximizing returns on investment in bringing about greater managerialism among the public service.

Nowadays, the public sector is not about the delivery of public values but about the management of scare public resources (Mok and Chan 2002, p.29-30). The rise of the tidal wave in managerialism had transformed the Hong Kong Government in the way they managed the educational reform. To improve the efficiency and effectiveness of public service delivery, new ways to maximize productivity and effectiveness comparable to that of the private sector are sought. Commercial and business sectors practices (e.g. performance measurement, benchmarking and control system, etc.), are being considered and introduced into the educational reform, like the School-Based Management (SBM) model proposed in the School Management Initiative (SMI) (Education and Manpower Branch and Education Department, 1991). The SMI expected that with increased transparency of school operations, broadened participation from parents and the community in school management, increased accountability of schools to the general public, and the sharing of experience among schools would then improve the schools performance. Education Policy is emphasizing the quest for quality, efficiency and effectiveness and has employed the principle of manageralism in order to enhance its competitiveness in providing quality

education to meet the increasing market demands (Mok, 1999). The School-Based Management (SBM) is the legacy of the New Right's ideology of school reforms in Western countries (Cooper, 1988) of which the government is committed to breaking the monopoly of public schools and to introduce more choice, competition and measurable results in schools (Mok and Chan 2002, p.172). It is believed that teachers needed to be subjected to more control and inspection if they were to teach well (Flynn 2007, p.90).

With the primarily concern with outputs and results, the government inevitably shifts its attention to the 'three E's': efficiency, effectiveness and economy (Flynn 2007, p.129) instead of evaluating whether people (students, teachers and parents, etc.) have really benefited during the educational reform process. On the other hand, excessive workload and pressure of stress were created along the way towards the teachers in schools. The emerged managerial approach had changed the ways the schools manage themselves. We can see the introduction of mission statements, strategic plans, appraisal system, cost monitoring systems, promotion and public relations in many secondary schools. Teachers were required to complete more paperwork and administrative tasks instead of devoting more time with their students and doing their job – teaching. The decision making about the curriculum, about pedagogy and about assessment which may previously had been the concern of teachers are now to be pre-empted by decisions lodged elsewhere (Ball 1990, p.51).

Some people had argued that quality school education is related to the adoption of managerial practices – having clear development plans and targets, proper appraisal systems, and strong management direction (Mok and Chan 2002, p.90). The new managerial practices require time to settle in and accepted by the schools. In addition, the NSS had implemented a scheme of 'quality indicators' to measure school context and profile, process and output. These performance measurements were aimed to allow the comparison between schools for the purpose of best practice sharing and continuous improvements. However, to what extent does these performance indicators really measure up to the expectations of both the school administrators and the parents are in doubt. While not yet seeing the positive benefits, we had observed the trigger of more competition among the schools themselves. The school administrators and teachers were busy fighting the battles and thus spending less time on the students itself.

On top of that, the stress of Quality Assurance (QA) through both internal and external mechanisms like School-Based Management (SBM), self-evaluation by school and inspections by the Quality Assurance Inspection Unit (QAI) to review the school performance had also added pressure to the educational reform.

4. Conclusions and Discussion

Due to the increase in global competitiveness, more and more government were using market principles to organize their educational systems and utilizing managerialist ideology to administer these new systems (Mok and Chan 2002, p.243). Putting the ideas of postmodernism and the experiences of globalization into perspective, it seems to suggest that the governments had to do less but let the market takes care of the rest (Mok and Chan 2002, p.26). Will it be more beneficial to the students if the schools were allowed for certain degree of flexibility and autonomy in implementing the OLE? Shall we following "small government, big individual" (Flynn, 2007) so that the government only taking care of law and order, protecting the students at-risk and facilitating the free operation of the education market? The classic ideal type of government bureaucracy is in the process of being deconstructed and in return is emerging forms of governance that bring both the government and people into the policy making process, and transfer control to the education bodies – the adoption of reduced roles for government as a provider of public services (Jones, 1998) or dominance by the beliefs of 'New Right'. This practice of increased school management autonomy and market-oriented principles will lessen the degree of government intervention during the educational reform and the schools will become more managerialist and bureaucratic in nature (Currie, 1998).

Under the NSS educational reform, teachers were required to plan, organize and implement the Other Learning Experiences (OLE) activities and responsible to capture the students' learning experience in the Student Learning Profile (SLP). This is to be done within the control of the Quality Assurance (QA) process focusing on the efficiency and quality standard. The control over the teaching profession gives rise to the behaviour of 'Managerialism' — a stress on procedures at the expense of educational purpose and values (Bush 1999, p.240) and the Government put their emphasis on managerial efficiency rather than the goals and objectives of education. Control is indeed the central concept of all management systems (Bowe *et al* 1992, p.145). There is comment that teachers were difficult to complete the quantified students' evaluation when they even have no time to see them (Sing Tao Daily - 30th November, 2009, p.A18). The increased Managerialism (Day 1999, p.7) contradicts the requirement for educational leaders and managers who should focus on the specifically educational aspects of their work — to promote effective teaching and learning. Schools were increasingly

becoming more conscious about 'output' and 'performativity' (Ball, 2000). Thus, there was a dislocation between the culture of the pedagogic discourse and the management culture (Bernstein 1996, p.75).

The impact of Managerialism is that students are no longer students but rather are our clients or customers (Mooney, 2001); students' admission is based on providing access to students instead of selection by schools; schools were now more sensitive to market needs and courses and curricula are "market-driven", stressing their practical and applied value; the NSS curriculum design encompasses cores and options from which students, as customers, can choose, rather than a fixed set of subjects; measurement is more focus on performance indicators and efficiency instead of educated graduates – the "extrinsic" value of education; on staff management, instead of collegiality, we encounter more on mission statements, system outputs, appraisal, audit, decision making, control, strategic plans, cost centers, partnership and public relations – adopting market principles and introducing competition and choice in education.

However, we could observe that the 'Myth' of educational reform will not bring us multi-purpose solution that could solve various society problems like anti-poverty and unemployment. In fact, as the slogan of the NSS educational reform stated that: Learning for Life, Learning through Life is crucial to cater to learners' differences and their diversity (actual needs of students). It should be learners' centered and adding value to them. Under the NSS structure, all students will complete 6 years of free but compulsory secondary school studies instead of previously 3 years. Even though the students do not want to or were not capable to complete their studies, they have no choice. Is this doing good to the students? Will the less able students learn and develop themselves during the compulsory time (3-3-4) spend in school? The forthcoming Hong Kong Diploma of Secondary Education (HKDSE) will just be more difficult than the previously Hong Kong Certificate of Education (HKCE) and the passing rate will be much lower for these students (Ming Pao - 1st September, 2009, p.4).

By promoting 'quality education' with the introduction of NSS, the expected returns were not without cost. We must understand that education, unlike other commodities, is a human service and a public good (Bridges and McLaughlin, 1994). The pursuit of efficiency and effective education services, through the quantification and control measurement over human autonomy, may result in the dehumanization and alienation of education practitioners (Mok and Chan 2002, p.115). The quality and practicality of the change project may exist in contradiction (Fullan 1991, p.72). The hasty implementation of a huge educational reform had thus imposed a massive and complex task on school and teachers and resulted in tremendous human and social costs. Education itself is not merely a technical or management issue, and so the complexity of school education reform should not be overlooked, nor can one neglect the costs of 'Managerialism' for human beings. The impacts and consequences of the adoption of the managerial practices in the education sector were worthy of our serious consideration before the actual implementation. Too much emphasis on market principles, Education can then fail to fulfill the noble task of human development. The most important characteristic of Managerialism within the educational reform is that it adopts the ideology of "business' in which the curriculum is the *input*, students are the throughput and success is designated by measurable outputs (Bush and Middlewood 1997, p.16). Everything is justified by the efficiency and effectiveness of the results. This is exactly the business spirit of Hong Kong.

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Table 1. Components of the Senior Secondary Student Programme

Components of t	% of Time Allocation	
	Chinese Language, English Language, Mathematics and Liberal Studies as core subjects for ALL students	45-55%
Elective Subjects	2 or 3 subjects chosen from 20 elective subjects, a range of Applied Learning (ApL) courses and other languages	20-30%
Other Learning Experiences	Moral & civic education, community service, aesthetic development, physical development, career-related experiences	15-35%

Source: Education and Manpower Bureau (2005)

Table 2. Suggested Time Allocation

Component		Suggested time allocation	
Core Subjects	Chinese Language	338 – 405 hours (12.5 – 15%)	
	English Language	338 – 405 hours (12.5 – 15%)	
	Mathematics	270 – 405 hours (10 – 15%)	
	Liberal Studies	270 hours (Min 10%)	
2 to 3 Elective Subjects		540 – 810 hours (20 – 30%) 270 hours (Min 10% per subject)	
Other Learning Experiences	Aesthetic Development	135 hours (5%)	
	Physical Development	135 hours (5%)	
	Moral and civic education, community service and career-related experiences	135 hours (5%)	

Source: Education and Manpower Bureau (2005)

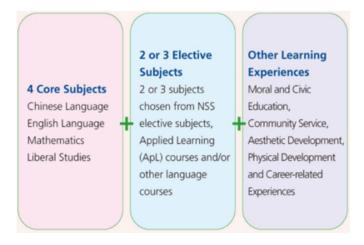


Diagram 1. Framework of the NSS Curriculum

Source: Education and Manpower Bureau (2005)

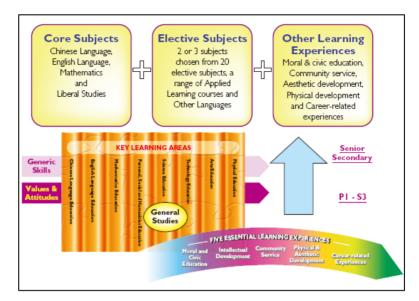


Diagram 2. The New Senior Secondary (NSS) curriculum

Source: Education and Manpower Bureau (2005)

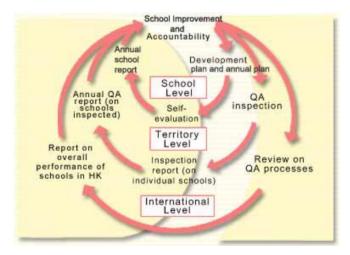


Diagram 3. Quality Assurance Process

Source: Education and Manpower Bureau (2005)