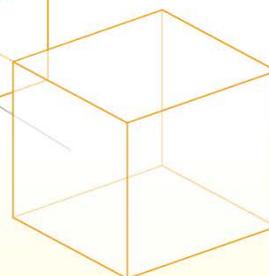
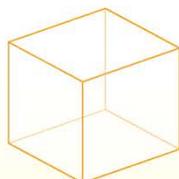
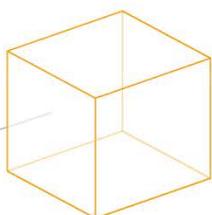
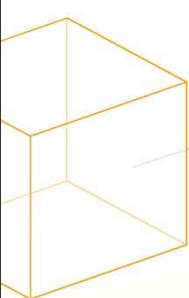
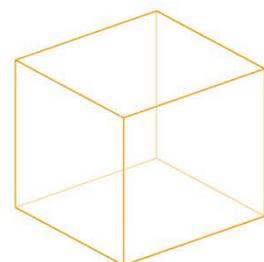
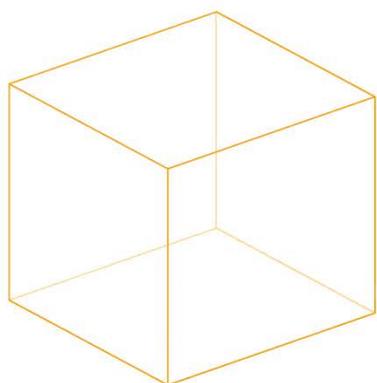
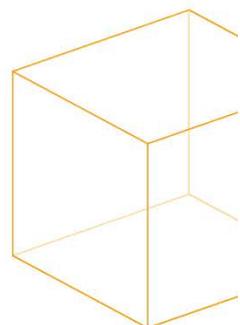
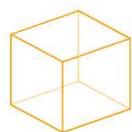


Ongoing Renewal of the School Curriculum



Booklet 1 *Ongoing Renewal of the School Curriculum*

This is one of the 11 Booklets in the *Secondary Education Curriculum Guide*. Its contents are as follows:

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1.1 Background

- The Learning to Learn curriculum reform that started in 2001 has had a massive impact on school education in Hong Kong at both primary and secondary levels. The premise underpinning the reform is that all students could learn and succeed. The school curriculum aims to help students cultivate positive values, attitudes and commitment to lifelong learning. This requires a paradigm shift to placing more emphasis on preparing students across a spectrum of abilities for a variety of pathways.
- Under the curriculum reform, schools have drawn reference to the central curriculum¹ framework and, in consideration of their own contexts, embarked on their own journey of school curriculum development. Principals and teachers have been committed and made substantial contributions to improving the curriculum and strategies for learning and teaching.
- The Education Bureau (EDB) has been conducting regular curriculum implementation studies since the 2002/03 school year to track the implementation of the curriculum reform in basic education at the primary and junior secondary (JS) levels, as well as the curriculum and assessment reform at the senior secondary (SS) level under the New Academic Structure (NAS) to ensure that the curriculum and assessment reform issues are addressed, and to gather insights for the ongoing curriculum renewal.
- To account for the changing environment since 2001, the curriculum reform is now moving towards continual curriculum renewal. The development of the Hong Kong school curriculum has advanced into a new phase of ongoing renewal and updating to ensure that our schools can keep abreast of local, regional as well as global changes for the ultimate benefits of student learning. Focal points of curriculum development in response to future needs and areas or accomplishments to deepen and sustain have to be identified and adopted by individual schools according to the school contexts in the planning and implementation of their school curriculum. Such curriculum renewal is not an add-on but a continual journey to work smarter and in a more focused manner in promoting Learning to Learn in the ensuing years leading towards 2030 and beyond.

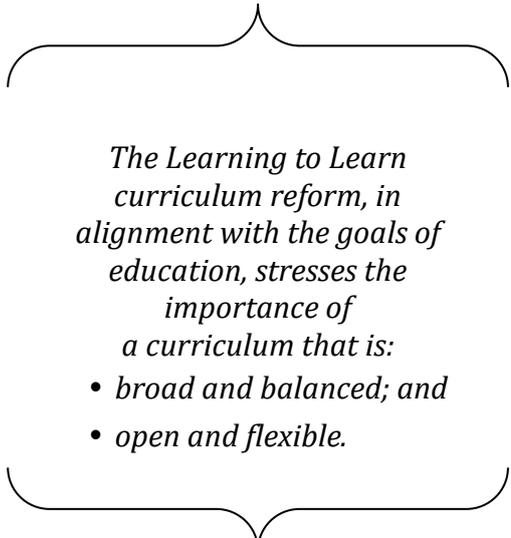
¹ Central curriculum refers to the school curriculum recommended by the Curriculum Development Council. Please refer to the Glossary of this Guide for further details.

1.2 Purposes of the Booklet

- To review the progress and achievements since the Learning to Learn curriculum reform
- To scrutinise the challenges and opportunities facing Hong Kong
- To restate the rationale for the ongoing renewal of the school curriculum
- To propose focal points of the ongoing curriculum renewal

1.3 The Road We have Travelled

1.3.1 *Learning to Learn since 2001*

- The Learning to Learn curriculum reform that started in 2001 has been promoting a curriculum and pedagogical change that fosters students' whole-person development, positive values and attitudes, as well as learning to learn capabilities to achieve lifelong learning. Since then, a series of measures which focus on student learning and well-being have been introduced to improve the quality of education. These measures have involved curriculum and assessment reforms, professional development of principals and teachers, promotion of school-based management, provision of additional funding for schools, fine-tuning of medium of instruction arrangements, strengthening of quality assurance processes at all levels of education, and investment in the physical infrastructure.

The Learning to Learn curriculum reform, in alignment with the goals of education, stresses the importance of a curriculum that is:

 - *broad and balanced; and*
 - *open and flexible.*
- With the implementation of the NAS for SS and higher education since 2009, the three-year SS curriculum has phased in and curriculum changes have been accompanied by an assessment reform. The NAS can be seen as the highlight of the curriculum reform since 2001. It has changed the previous 3-2-2-3 (i.e. 3 years for JS, 2 years for SS, 2 years for matriculation and 3 years for university) to a 3-3-4 (i.e. 3 years for JS, 3 years for SS and 4 years

for university) academic structure. Under the NAS, all students are provided with quality, flexible and diversified pathways alongside multiple entry and exit points. Multiple routes leading smoothly to further studies and the workplace are available so that every student has the opportunity to succeed in life.

1.3.2 Progress and Achievements

The Learning to Learn curriculum reform has set high expectations for improving the quality of education in Hong Kong. To support this, the Government has invested considerable resources in education. With the dedication and immense efforts of all stakeholders including principals, teachers, parents, students, the post-secondary sector and the wider community, the following progress and achievements have been observed.

- **Progress in schools**

Over the past decade, schools have made good progress through the implementation of the curriculum reform. Under the leadership of principals, vice principals and KLA heads, many schools have developed innovative school curricula, learning and teaching strategies and resources to support student learning. With the adoption of a student-centred approach, a range of learning experiences is provided to achieve whole-person development and students' learning to learn abilities are enhanced. Students have greater learning agility, stronger soft and transferable skills, and are more proactive. In addition to summative assessment, formative assessment, assessment for learning and feedback are often used. Teachers have successfully undergone a paradigm shift from teacher-centred to student-centred classroom practices and students are provided with opportunities to participate more actively in learning. There is also a collaborative culture among teachers through collaborative lesson planning, peer observation and professional exchange activities within and across schools.

- **Multiple pathways under the NAS**

Under the NAS, the implementation of the three-year SS curriculum has involved new levels of whole-school curriculum leadership and planning. Schools have developed strategies to cater for learner diversity and meet the needs and interests of students in their timetabling, subjects offered, as well as learning and teaching approaches. Greater resources have been allocated to

provide more opportunities for higher education and to strengthen vocational and professional education and training (VPET). Multiple pathways for further studies or future careers are available to secondary students according to their abilities and aspirations. In 2017, about 70% of the Secondary 6 graduates have access to post-secondary education, with 45% at degree level. The rest can choose from other pathways, e.g. Diploma Yi Jin and Vocational Training Council (VTC) courses that can reconnect them with post-secondary programmes at multiple entry points.

- **Internationally recognised standards**

With the implementation of the SS curriculum and public assessment under the NAS, Liberal Studies has been introduced as a core subject for all students, apart from Chinese Language, English Language and Mathematics. By the end of Secondary 6, students sit for the Hong Kong Diploma of Secondary Education (HKDSE) examinations for the four core subjects as well as two to three elective subjects (up to a maximum of four). Several complete cycles of the SS curriculum have now been implemented and Hong Kong students' performance in the HKDSE has been highly recognised. International benchmarking exercises performed by the Hong Kong Examinations and Assessment Authority (HKEAA) in 2009, 2012 and 2016 showed that the performance of candidates in the HKDSE was comparable to other major systems such as the General Certificate of Education (GCE) Advanced Level, International Baccalaureate (IB) Higher Level and Advanced Placement (AP).

- **Outstanding achievements in international assessments**

Hong Kong students have been performing well in major international assessments, including the Programme for International Student Assessment (PISA) carried out by the Organisation for Economic Co-operation and Development (OECD), and the Trends in International Mathematics and Science Study (TIMSS), the Progress in International Reading Literacy Study (PIRLS) and the International Civic and Citizenship Education Study (ICCS) carried out by the International Association for the Evaluation of Educational Achievement (IEA). The good performance of Hong Kong students, especially in mathematics and reading, provides supporting evidence that the concerted efforts of the government, schools and parents have had positive impact on student learning at the primary and JS levels, which helps lay a good foundation for the SS education.

- **High levels of performance and equity in education outcomes**

Further analysis by international agencies reveals that Hong Kong has achieved both high levels of performance and equity in education outcomes. In 2013, Hong Kong was ranked second among more than 60 countries/regions in its performance in mathematics and equity in education outcomes. We have greater socio-economic diversity than the average of the participating countries/regions, but the equity in education outcomes is also above average. Further, there is equity between the performance of the newly-arrived children and local children, and equity between schools. We have more resilient students who manage to overcome difficult socio-economic circumstances and succeed in schools. They beat the odds when compared to similar students in other countries/regions. Many of these Hong Kong students with lower socio-economic status (SES) perform at the highest levels on the PISA scales.

- **Best performing education system and innovation in education**

For nearly a decade, Hong Kong has been recognised not only as one of the best performing education systems but also a sustained improver. Schools in Hong Kong are now centres of innovations amongst other education systems. Some of our top innovations in organisational policy and practice are as follows:

- i. More peer evaluation of teachers in primary and secondary education
- ii. More external evaluation of primary and secondary schools classrooms
- iii. More remedial Mathematics education in secondary schools
- iv. More teacher observations of secondary school Science classroom
- v. More use of incentives for recruitment and retention of secondary teachers



Five of the 20 systems were on the journey from great to excellent during which innovation was a theme: Hong Kong, Ontario, Saxony, Singapore and South Korea.

1.4 Building on Strengths and Engaging Challenges and Opportunities

1.4.1 Hong Kong at the Geographical and Cultural Crossroads of the World

- Hong Kong is a place where East meets West and old meets new. It has a lengthy experience with the blending of the Chinese and Anglo-American traditions due to its geographical location and history. In education, we have a Confucian civilisation heritage that goes back 2 500 years, and also the educational values of the British school system with a history of more than a hundred years.

*West and East, which will excel?
We must be alert that introducing
a reform is not choosing between
two extremes, and success often
rests on finding a balance
between the two. One-sidedness or
going to the extremes will only
lead to chaos and failure.*

- Brought up in a melting pot of Eastern and Western characteristics, embodying both the old and the new, our students have performed very well in international assessments such as PISA and TIMSS and attained high scores when measured for in-depth learning and understanding of subject matter.
- Despite the outstanding performance in international assessments, the results also revealed that our students displayed lower self-concept in reading and mathematics, and their reading motivation and engagement in reading lessons were comparatively low. There is a need to investigate why our students have a high level of achievement but low self-concept, low motivation and engagements in lessons. Effective measures have to be taken to improve the situation.
- While honouring its traditions, Hong Kong always looks to the future and keeps abreast of the latest development in education. The recent education reforms in school organisation, curriculum, assessment as well as the changes in learning and instructional paradigms are efforts to blend our tradition with modernity, and to have the future visions building on our strengths.

1.4.2 Challenging Missions and Difficult Tasks Ahead

- **Pursuit of academic excellence through extra efforts**

Ascribed to the Confucian heritage culture, the tradition of valuing education and the belief that studying is climbing the ladder of success still has a massive impact on Hong Kong today. Having faith in hard work and extra efforts, the idea that diligence is the key that unlocks an individual's potential is shared. However, the utilitarian tendency in education leads to the strong desire to excel in examinations and has profound influence in our society. It is undesirable that there is too much emphasis on academic achievement and too much pressure from examination and homework, to the extent that students are left with little room for personal choice and individuality development.

- **Parent input on student learning**

Parents' attention to school education is considered essential for their children's future career success and well-being. However, parents' drives to push their children to study earlier (say, studying S2 curriculum when in S1), deeper (more in-depth), broader (more extensive coverage) and faster (shorter duration) in order to achieve academic excellence must be dealt with cautiously as such drives could be counter-productive. Parent input could become positive and supportive on student learning through home-school co-operation and parent education. Parents have to gain more knowledge of their children's learning and development, the teachers' roles and school curriculum so that a true partnership could exist between schools and families.

Joyful Learning

Every parent wants their children to enjoy life which is free from pressure and anxieties. Every parent also wants their adolescent children to learn well in school and be well prepared for adulthood. However, the anxiety of some parents is that their children might lag behind. These parents tend to over-prepare their children, leaving them no time for joyful learning.

- **Reducing workload of students and teachers**

While the link with our Confucian heritage culture may be a reason for achieving good results, our students and teachers are also facing greater workload than their western counterparts. There are competitions among students to outperform others so as to gain a place in better schools or better programmes. There are competitions among teachers on subject status and popularity, among schools on student in-take, and among parents on various fronts. Parents' efforts to ensure academic excellence and outstanding performance in all kinds of non-academic activities may exert immense pressure and lead to heavy workload on their children. Coupled with increasing competition among economies as a result of globalisation, and our deep rooted belief in hard work and that practice makes perfect, the situation is not likely to change within a short time. Effective strategies have to be worked out to reduce the pressure on our students as well as on our teachers.

**Why are our secondary students and teachers so busy?
Is it due to the high expectations from the various stakeholders?**

From the **government**: "The world has undergone tremendous changes since 2001. We need to continue with ongoing renewal of the school curriculum in preparing students to succeed in a knowledge-based, technologically advanced, and increasingly globalised world."

From the **principals**: "We are proud of our students' good results in competitions and public examinations. This can also ensure intake of stronger students in the future."

From the **parents**: "We have to ensure that our children achieve excellence on all fronts, academic in particular. We need to push our children to learn more or they will lag behind and become less competitive in society."

From the **subject teachers**: "We ought to add extra lessons for our subjects. Otherwise, the students will spend their time on other subjects. This can also ensure good results in our subjects so that they will still be offered with support from the school management."

From the **students**: "Good results in public examinations and outstanding performance in sports or music competitions can guarantee me not just a place in the university I like, but also a place in the more prestigious programmes."

- **Creating space for learning**

- Secondary students are usually engaged in a variety of learning experiences during school hours, and the remaining time is packed with additional classes, sports training, service hours and competitions. While some teenagers may excel under the pressing schedule, more are pushed to near-desperation, have low self-concept and become unmotivated in learning. For the well-being of teenagers, considerations have to be given to creating space for learning to help students develop confidence and passion for lifelong learning.
- To students, creating space for learning means giving them specific free time at school or at home so that they could think, reflect on and learn from past experiences. It also means giving them free choice of activities to bring out their passions or allow students to plan their own schedule. This must be planned, intentional and conducted on a regular basis so that students gradually become independent and self-directed. This must also be initiated by the school and may work out better with parents' support. The fears that have restricted flexible use of time and space for learning must be overcome so as to fuel a genuine love of learning, higher levels of learning achievement, and ultimately student happiness and well-being. The parents' anxiety that their children would learn less if they are not constantly occupied must be banished so that students are given space to explore and learn on their own, and decide how to make the best use of the time after school.
- To teachers, creating space for learning means adopting more engaging and enjoyable learning and teaching strategies, such as organising drama workshops, promoting project learning or conducting games and learning activities inside or outside the classroom. Such ideas may have been hampered due to mistaken fears of low academic achievements in students or due to fears of losing authority or a lack of school discipline.
- To curriculum planners and school management, space for learning can be created through careful planning of the curriculum and flexible allocation of the learning time during school hours, including strategies such as implementing cross-disciplinary learning, planning the timetable flexibly, and reducing excessive tests, examinations and dictations.

- **Teaching according to diverse abilities and developing multiple pathways**

Most parents wish their sons and daughters to become “dragons and phoenixes”, i.e. achieving excellence in academic studies and getting a good job after university graduation. Such expectations, statistically unrealistic, not only produce student failures and failing schools, but also negate the multiple intelligences of students, narrow their career pathways and reduce social mobility. Schools have to help students and parents understand that a university degree is not necessarily a sole ticket for upward social mobility and success in life. More effort in promoting Applied Learning (ApL) and VPET to different stakeholders should be made. Corresponding changes in our deep rooted culture are required in order to make progress in developing multiple pathways for students of multiple intelligences.

*Every profession has its master
Secondary students have to be guided to understand that the two most important factors to consider in choosing a career are self-fulfillment and potential career opportunities. As they understand that these are related to their potential, interests and abilities as well as what is available for them, their path to pursuing related post-secondary education would also be clear.*

1.4.3 Considerations for the Way Forward

- **Learning to Learn is still the way forward.**

While past achievements are causes for celebration, recent challenges are signals for us to move ahead without delay. To maintain Hong Kong’s competitive edge and to prepare our students well for the local, regional and global changes taking place in various fields, it is necessary to enhance the Learning to Learn curriculum reform, to sustain and deepen the accomplishments achieved and to identify new focuses in the curriculum as we move to a new phase of ongoing curriculum renewal and updating in response to the changing contexts.

- **Whole-person development is the key goal**

- The all-round development of the whole person is an important theme in the Curriculum Development Council (CDC)'s final report on its holistic review of the school curriculum entitled *Learning to Learn – The Way Forward in Curriculum Development* (2001). It stresses, apart from the development of learning to learn capabilities, whole-person development to achieve lifelong learning.
- Changing family formation and household structure often complicates the whole-person development of students. The harmful effects that accompany achievement pressure and separation from parents due to various reasons often manifest themselves in children who are disconnected from reality, disheartened, confused or misguided regarding their priorities in studies and in life. Schools have to help parents understand that character education is an important part of their children's family experiences. They have to help their children develop the personality and ability to act with ever greater autonomy. Home-school co-operation plays a critical role in the whole-person development of every student in this aspect. It must remain so in the ongoing renewal of the school curriculum.

- **Schools must be a place where students enjoy learning**

We believe that all human beings can learn to be happy, but they can also be happy to learn through the fostering of a genuine love of learning which leads to a sense of achievement and accomplishment. According priority to happiness and well-being can result in higher academic achievement. In an age filled with demographic changes, increasing mobility, growing intolerance and violent extremism, more competition and rapid technological advancement, schools could be made a happier place by prioritising happiness and well-being in the planning of learning experiences for students.

1.5 Responding to Regional and Global Developments

After more than ten years of the implementation of the Learning to Learn curriculum reform, while the concepts for school curriculum planning such as student-centred learning and teaching, whole-person development, lifelong learning, life-wide learning, balanced development of knowledge in Key Learning Areas, generic skills, and positive values and attitudes are still central to school education, they have to take on a new stage in view of the massive changes taking place in the local, regional and global landscapes as well as the recent trends in education.

1.5.1 *Changing Contexts since 2001*

- The world has undergone tremendous changes since 2001. Economic, social, cultural, political and technological matrixes are rapidly evolving, and the transformations bring new requirements and significant implications on education and particularly the Hong Kong school curriculum. To closely respond to these contextual changes, there is a need to continue in the major directions set in 2001 but with ongoing renewal of the school curriculum, building on strengths that schools have achieved in the past decade in preparing students to succeed in a knowledge-based, technologically advanced and increasingly globalised world.
- ***Techno-economic Aspect***
 - Nowadays, developments in previously disjointed fields such as artificial intelligence and machine learning, robotics, nanotechnology, 3D printing, genetics and biotechnology are all building on and amplifying one another. The velocity and scope of these changes impact on and herald the transformation of the entire system of production, management and governance. We need to consider strategically about the forces of disruption and innovation shaping our future, and prepare our next generation for it.
 - The World Bank pointed out in 2011 that the growth of economy will depend more and more on “what individuals learn, both in and out of school, from preschool through the labour market”. The UNESCO studies in 2012 pointed out that the future workplace requires individuals to be competent in creativity, critical thinking, problem solving, collaboration, communication and information literacy. They also need to possess

positive values and attitudes such as perseverance and being innovative and adaptable to change for unforeseen demand in the labour market. In the World Economic Forum in 2016, it was estimated that 65% of the students in primary one today will engage in new job types that do not even exist now. The future demand on talents for white collar jobs such as performing professional and administrative work will drop sharply, while the demand on computer, mathematics, architecture and engineering related fields will rise tremendously.

- Knowledge and skill sets required by the future labour market will be very different from what are required today. Knowledge which is static and supposed to be learnt only within the classroom walls is no longer good enough for the dynamic workplace in the changing world. The globalised world is changing so fast that knowledge will become obsolete soon after it has been taught. With an acceleration in the production and circulation of knowledge, individuals not only need a solid knowledge base, but also the ability to learn from diverse modes and sources, and continue to learn throughout life.
- *Socio-economic Aspect*
 - At the national level, the economic opportunities heralded by different initiatives offer exciting prospects but also imminent challenges to Hong Kong.
 - For example, the **Belt and Road Initiative** is our country's visionary and long-term plan to strengthen economic co-operation and partnership between China and more than 60 countries located along the ancient Silk Road. In the 2017 Policy Address, it is stated that Hong Kong plays the role as a super-connector and acts in concert with the strategy of our country and Mainland enterprises to go global, thereby creating opportunities for our young people and boosting our social and economic development in the coming decades. Furthermore, co-operation and exchanges in education will be promoted to help Hong Kong students gain better understanding of the countries along the Belt and Road, thereby strengthening people-to-people bonds. Obviously, the Belt and Road Initiative offers unparalleled opportunities for Hong Kong to tap new markets and explore the tremendous potential of the Mainland,

member countries of the Association of Southeast Asian Nations (ASEAN) and other economies along the Belt and Road. It also provides Hong Kong students with a variety of opportunities to gain more exposure and equip themselves well for the challenges ahead.

- As a highly open economy with strong external connections, Hong Kong could play an active role in providing professional services such as advising on infrastructure projects, as well as finance, legal and tourism issues. As a regional education hub and a highly international city with the widespread use of English, Hong Kong could provide a platform for educational, cultural and youth exchanges.
- At the regional level, the continued boom of Shenzhen and Guangzhou in innovation and technology, etc. is bringing massive changes to business models, employment trends and education policies. Together with the Mainland moving further to urbanisation and consumer-driven and service-driven economies, new business and employment opportunities are created in Hong Kong in various economic sectors including, but not limited to, financial services, commercial and trading, high-end professional services, tourist industry, as well as creative and cultural industries.
- Young people today experience a completely different economy and labour market than previous generations. There was a time when our education system was predicated on preparation for lifelong careers with large companies and employers. Recently, there has been a staggering rise in self-employment and a rapid expansion of e-tail (retail via electronic means), and the growth of small and medium enterprises (SMEs) or even micro enterprises (firms with 0–9 employees) has also been rapid. The skills required by these new emerging jobs are not the same as those in large companies and public services. Our education system and career advice need to adapt to this changing pattern of work, including a better balance between education and skills for employment, and motivation and support to work for oneself.
- Developing multiple pathways for students of multiple intelligences becomes crucial to enable students to plan for their road map for success. These changes call for the need to enhance entrepreneurial spirit,

information literacy as well as new skill sets to cope with various work situations.

- ***Socio-cultural Aspect***

- According to the report on “*Hong Kong Population Projections 2015-2064*” conducted by the Census and Statistics Department, the total fertility rates of Hong Kong from 1994 to 2014 were lower than that of 11 selected economies including Singapore, Australia, U.S.A. and U.K. Nevertheless, because of the continual inflow of persons from outside Hong Kong to the population, the total fertility rates of Hong Kong from 2014 to 2064 are projected to maintain a positive growth during the initial projection period. The diversity in the demographic make-up of Hong Kong will remain the same and this makes an impact on school education. Greater diversity in the demographic make-up of Hong Kong is now observed in schools with an increasing number of students from the Mainland and other areas bringing in different cultures and living styles. Schools have to help students develop positive values and attitudes such as respect for pluralism, multiculturalism, mutual respect, acceptance and openness.
- The same report also reveals that the proportion of the population aged 65 and over is projected to rise markedly from 15% in 2014 to 33% in 2064. Correspondingly, the median age would rise from 42.8 in 2014 to 51.0 in 2064. On the other hand, the proportion of the population aged under 15 is projected to decrease from 11% in 2014 to 9% in 2064. The population in Hong Kong is expected to remain on an ageing trend. Schools have to help students understand how the ageing population affects them in various aspects such as family and intergenerational relationship, as well as respecting and caring for the elderly. They may also be guided to explore the impact of ageing population on the career dimension such as more demand for long term care and nursing services, social care management, and leisure, activities and tourism for older customers.

- The popularisation of social media and network media makes communication easier. However, as they cater for small groups with particular interest and orientations, their users are further narrowed to become in-groups of an exclusive nature. Students have to develop habits of gathering information from different sources to examine beliefs and eliminate biases, and checking the balance of views, including opposite views, when they are engaged in such activities. Teachers ought to develop students' multiple perspectives, nurture their critical thinking skills and creativity to exhaust alternatives, as well as problem solving skills to seek for solutions. Intellectual openness as well as humility should also become an objective in classroom teaching.

The Post 05 Generation
Students now in the primary schools are mostly born in or after 2005. They are referred to as members of generation z, at times called Internet aboriginals, as they are typically thought of as being comfortable with technology, and interacting on social media websites for a significant portion of their socialising.

- Education should prepare young people not just for work and citizenship, but also for life. There is increasing recognition of the need for learning assessments to look beyond strictly academic outcomes and place importance on measuring the social and emotional domains of learning that are conducive to enhancing student well-being and addressing issues such as students' stress, depression and feelings of disengagement with society and the broader world due to pressures to perform academically and obtain high grades.

- ***Socio-political Aspect***

- The last decade has seen an enhanced level of socio-political awareness amongst many people in society, and a lot of controversial issues that caught the attention of the general public, including adolescents. Some have even concluded that Hong Kong is becoming polarised and further divided. In the building and strengthening of a civil society, it is also

important to build a humanitarian society so that everyone's voice can be heard.

- These changes, coupled with the diversity in the demographic make-up of Hong Kong and the trend of an ageing population, call for the need to strengthen values education in the school curriculum embracing the cultivation of self-esteem, mutual respect, tolerance and respect for diversity, responsibility and caring for others etc., to enhance their understanding of what it takes to live and work with one another in harmony. Students should also be equipped with better understanding of the Basic Law, which not only spells out how we should live together under the “one country, two systems” in Hong Kong, but is also the ultimate reference to settle our disputes and differences.

Reflective Questions

- ✧ As a school head, which aspect(s) in the contextual changes is/are most challenging? How could you deploy your staff to cope with the challenges?
- ✧ As a prefect of studies/academic master/mistress, how could you design a school curriculum to prepare all your students for their whole-person development and the dynamic workplace?
- ✧ As a KLA co-ordinator, how far could the requirements of the future workplace be met through aligned/synergised efforts of different school subjects?
- ✧ As a subject teacher, how could you attach due weight to knowledge, skills, values and attitudes in your classroom teaching?

1.5.2 Recent Global Education Trends

- The Learning to Learn curriculum reform started in 2001 is in alignment with the general directions of the major economies in the world. There is, however, a need to take further steps towards a new phase of ongoing curriculum renewal and updating in response to the changing contexts to enable our students to meet the dynamic challenges in the 21st century world. In

formulating the blueprint for the ongoing renewal of the school curriculum, it is necessary to make reference to the trends in education in international organisations and other countries or regions.

- The report on “*Education for the Future: The Global Experience of Developing 21st Century Skills and Competencies*” released in 2016 reveals that among the frameworks of five international organisations and 24 countries or regions,
 - seven competencies are found to be most important by the economies and international organisations: (i) communication and collaboration; (ii) creativity and problem solving; (iii) information literacy; (iv) self-perception and self-regulation; (v) critical thinking; (vi) learning to learn and lifelong learning; and (vii) civic responsibilities and social participation; and
 - regardless of the income level, competencies like language, mathematics, humanities, sports and health, critical thinking, communication and collaboration, civic responsibilities and social participation are regarded as significant by most economies.
- The education initiatives launched by other economies also show that the above-mentioned 21st century competencies are considered essential for their students.

1.6 Rationale for Ongoing Renewal of the School Curriculum

1.6.1 Guiding Principles

The ongoing renewal of the school curriculum continues to adopt and support a student-centred curriculum to meet the needs of students based on the following guiding principles adapted from the Learning to Learn curriculum reform, and aims at promoting **whole-person development** and **lifelong learning**.

- The overarching principle is to support students to learn how to learn.
- All students have the ability to learn and in order to do so, they should be provided with essential learning experiences both inside and outside the classroom.
- A student-focused approach is adopted to make decisions in the best interests of the students and in response to the macro changing contexts. Diversified

learning, teaching and assessment strategies should be used to suit the different needs and interests of students and to help them aim towards achieving the curriculum goals.

- Development strategies should be built on the strengths of students, teachers, schools and the wider community of Hong Kong. Reference should be made to evidence of past reform experiences, as well as contemporary trends in Hong Kong, the Mainland and overseas systems.
- Adequate balance should be maintained across different purposes, conflicting interests and views, e.g. across the academic, social and economic aspects of the curriculum goals, the diverse learning and teaching strategies. The purpose and modes of learning, teaching and assessment should be consistent with one another.
- While fulfilling the requirements set out in the central curriculum, schools can take into account their school contexts and exercise flexibility in designing a school curriculum that caters for their students' diverse needs.
- Curriculum development should be a continuous and dynamic improvement process to enhance student learning.
- Positive thinking, patience, celebration of small successes and tolerance of ambiguity are essential to ensuring the sustainability of change and improvement.

1.6.2 Aims of Education for the 21st Century

“To enable every person to attain all-round development in the domains of ethics, intellect, physique, social skills and aesthetics according to his/her own attributes so that he/she is capable of life-long learning, critical and exploratory thinking, innovating and adapting to change; filled with self-confidence and a team spirit; willing to put forward continuing effort for the prosperity, progress, freedom and democracy of their society, and contribute to the future well-being of the nation and the world at large.”

Reform Proposals for the Education System in Hong Kong (EC, 2000)

1.6.3 Overall Aims of the School Curriculum

“The school curriculum should provide all students with essential life-long learning experiences for whole-person development in the domains of ethics, intellect, physical development, social skills and aesthetics, according to individual potential, so that all students can become active, responsible and contributing members of society, the nation and the world.

The school curriculum should help students to learn how to learn through cultivating positive values, attitudes, and a commitment to life-long learning, and through developing generic skills to acquire and construct knowledge. These qualities are essential for whole-person development to cope with challenges of the 21st Century.

A quality curriculum for the 21st Century should therefore set the directions for teaching and learning through a coherent and flexible framework which can be adapted to changes and the different needs of students and schools.”

Learning to Learn – The Way Forward in Curriculum Development
(CDC, 2001)

1.6.4 Updated Seven Learning Goals of Secondary Education

- In line with the aims of education and the overall aims of the school curriculum, the CDC has set out seven learning goals that our students should be able to achieve for whole-person development and lifelong learning. As informed by feedback from various channels, there has been a positive consensus on the seven learning goals in the school community regarding their appropriateness in continuing to serve the needs of student learning for the 21st century.
- Under the guiding principles for the ongoing renewal of the school curriculum, it is proposed that the seven learning goals should continue to converge on promoting the **whole-person development** and **lifelong learning** capabilities of students, and updates are made with better clarity to take into account the changes in society and the experience gained in the curriculum reform at the school and KLA levels.

The Updated Seven Learning Goals of Secondary Education

To enable students to:

- become an informed and responsible citizen with a sense of national and global identity, appreciation of positive values and attitudes as well as Chinese culture and respect for pluralism in society;
- acquire and construct a broad and solid knowledge base, and to understand contemporary issues that may impact on students' daily lives at personal, community, national and global levels;
- become proficient in biliterate and trilingual communication for better study and life;
- develop and apply generic skills in an integrative manner, and to become an independent and self-directed learner for future study and work;
- use information and information technology ethically, flexibly and effectively;
- understand one's own interests, aptitudes and abilities, and to develop and reflect upon personal goals with aspirations for further studies and future career; and
- lead a healthy lifestyle with active participation in physical and aesthetic activities, and to appreciate sports and the arts.

1.7 Direction of Ongoing Curriculum Development – Focusing, Deepening and Sustaining

- In face of the continual local and global changes, and capitalising on the positive impacts and experience gained in the Learning to Learn curriculum reform of 2001, the following six focal points of the ongoing renewal of the school curriculum are proposed to foster students' learning to learn capabilities for lifelong learning. Schools have to **sustain** and **deepen** the accomplishments achieved and to **focus** on new areas as a move towards a new phase of ongoing renewal and updating.

- The six focal points are not meant to be implemented necessarily at the same time. Schools are encouraged to take into account their current state and rationale for ongoing renewal of the school curriculum (refer to *Section 1.6 of this booklet for details*), consider their own contexts, and incorporate these focal points into their whole-school curriculum planning to set the direction for their implementation at the KLA/subject levels through appropriate learning, teaching and assessment activities and in the life-wide learning contexts.

Focal Points and Four Key Tasks

The six focal points are NOT additional key tasks. They are proposed curriculum initiatives for the ongoing renewal of the school curriculum.

These focal points could be implemented through the Four Key Tasks, e.g.

- (a) promoting STEM education through Project Learning and/or IT for Self-directed Learning; and
(b) enhancing entrepreneurial spirit or LaC through Project Learning and Reading to Learn.*

1.7.1 STEM Education

- STEM is an acronym that refers collectively to the academic disciplines of Science, Technology, Engineering and Mathematics. In the local curriculum context, STEM education is promoted through the Science, Technology and Mathematics Education KLAs. STEM education aims at further developing students to become lifelong learners of science, technology and mathematics, enabling them to meet the challenges of the 21st century, and from a wider perspective, nurturing versatile talents with different levels of knowledge and skills for enhancing the international competitiveness of Hong Kong, and in so doing contributes to national developments, e.g. the Belt and Road Initiative. In secondary schools, STEM education could be promoted at both the JS and SS levels. The major objectives of STEM education include developing a solid knowledge base among students and enhancing their interests in science, technology and mathematics, strengthening their ability to integrate and apply knowledge and skills, nurturing their creativity, collaboration and problem solving skills, and developing talents/experts in STEM-related areas to foster the development of Hong Kong.

1.7.2 Information Technology in Education (ITE)

- Advances in technology have brought about the changing modes of learning and teaching. Knowledge is no longer a form of entity that has to be passed from teachers to students within the classroom walls. Instead, with the wide application of digital technologies in daily life and education, students can get access to information beyond the confines of schools, learn with no limits of time and space, and progress at their own pace. Information Technology in Education (ITE) helps to unleash the power of all our students to learn and excel through engaging in interactive and self-directed learning. It also helps strengthen students' problem solving, collaboration and computational thinking competences, and enhance their creativity and innovation, as well as entrepreneurial spirit. It is envisaged that a key pedagogy in future classrooms will be e-learning, which refers to an open and flexible learning mode involving the use of electronic media such as digital resources and communication tools to achieve the learning objectives.
- With the launching of EDB's Fourth Strategy on IT in Education (ITE4) since 2015, schools have acquired mobile computing devices and access to Wi-Fi to promote ITE. Teachers are encouraged to attend related professional development programmes, build their repertoire in e-learning strategies and implement ITE in different curriculum areas. While the learning and teaching effectiveness is enhanced through an IT-rich environment supported by high-quality and easy-to-use e-learning resources, due attention has to be given to the promotion of students' information literacy (IL). This helps students develop the ability and attitude that lead to the effective and ethical use of information and information technology as responsible citizens and lifelong learners, as well as the necessary qualities in meeting the challenges of the rapidly changing digital world.

1.7.3 Vocational and Professional Education and Training (VPET)

- Secondary schools have to adopt a whole-school approach to providing guidance and support to facilitate students' understanding and exploration of multiple pathways. Parents and students could be advised to consider VPET as a valued choice for articulation.

- VPET is a rebranding of Vocational Education and Training (VET) in Hong Kong. It covers learning programmes from the JS up to the degree level with a high percentage of curriculum consisting of specialised contents in vocational skills or professional knowledge. It plays a key role in providing students of different intelligences with multiple pathways.
- At the JS level, students could be progressively provided with career-related experiences and relevant exposure through life-wide learning activities such as participating in talks, workshops, camps and workplace visits. At the SS level, students' understanding in VPET is further enhanced through a variety of learning opportunities, including ApL courses, the career-related experiences embedded in the Other Learning Experiences (OLE) activities, and other subjects. As an elective subject of the senior secondary curriculum, ApL provides the opportunity to deepen the understanding of vocational and professional education. ApL offers learning contexts linked to broad professional and vocational fields. Through application and practice, students develop beginners' skill sets, career-related competencies and generic skills, and have the opportunities to explore their career aspirations. Arrangements for attending related talks and exhibitions could be made for students and parents to understand more about VPET and the related fields, and that VPET provides opportunities for students of multiple intelligences to explore their interests and career aspirations.

1.7.4 Language across the Curriculum (LaC)

- Language plays a central role in learning. The importance of language education as the basis of further studies and lifelong learning has been widely recognised. At the school level, language education and learning should take place in the subjects of Chinese Language and English Language as well as across the curriculum. Through the incorporation of Language across the Curriculum (LaC) in whole-school curriculum planning, all language and non-language teachers take part in developing students' language skills and competence within their field of responsibility and contribute to students' language development. The basic functions of the Chinese and English languages acquired through specific learning experiences in the language subjects are extended and widened through continued and conscious language use in the contexts of other non-language subjects such as Science, History

and Physical Education.

- Helping students master good literacy skills, i.e. reading and writing skills, is particularly crucial at the JS level when students are required to process and understand a variety of text types, more complex texts, conduct deep reading and be able to explain and express their views and interpretations of new learning. Different KLAs can lend themselves to meaningful purposes and contexts for the promotion of LaC in order to provide authentic contexts for students to apply their literacy skills to construct or co-construct knowledge as well as to facilitate their development into lifelong learners.

1.7.5 Values Education

- Values education is an essential and integral part of the school curriculum, and is implemented through different components in KLAs, moral and civic education, cross-curricular learning opportunities and life-wide learning experiences. Values education should also be included as elements of other focal points listed above such as STEM education, ITE and LaC.
- According to the revised Moral and Civic Education Curriculum Framework (2008), seven priority values and attitudes are identified to reflect the uniqueness of Hong Kong as an international city frequently described as a place where East meets West, in which both Chinese and Western cultures and values co-exist and interact. These seven priority values and attitudes are **perseverance, respect for others, responsibility, national identity, commitment, integrity** and **care for others**. They are of vital importance for students' whole-person development to meet their own needs as well as those of society. Schools would be guided to adopt in accordance with the mission and contexts of their schools or school sponsoring bodies a whole-school approach in implementing values education and cultivating students' positive values and attitudes, which cover the personal, family, community, national and global domains. With the increasing number of non-Chinese speaking (NCS) students in Hong Kong, it is necessary for schools to devise strategies to nurture students' values and attitudes such as openness, respect for pluralism and multicultural competence, mutual respect and acceptance. Schools are encouraged to broaden students' knowledge and exposure to the background leading to the Belt and Road Initiative, the history and culture of the 60-plus Belt and Road countries, and their current relations with our nation

with a view to further developing their specific values and concepts. To help students embrace the challenges and opportunities brought by the trend of ageing population in Hong Kong, more efforts have to be put on nurturing students' positive values and attitudes such as responsibility, respecting and caring for the elderly.

- Values education can be effectively reinforced through Basic Law education and life education.

- Basic Law education

As the constitutional document for the Hong Kong Special Administrative Region (HKSAR), the Basic Law prescribes the various systems to be practised in the HKSAR. The Basic Law has a close connection with the daily lives of all people in Hong Kong, and thus understanding the Basic Law will help students learn to live together with others. Students need not be taught every single article of the Basic Law, but they should understand important concepts such as “one country, two systems”, Hong Kong is an inseparable part of the People's Republic of China, and Hong Kong has a high degree of autonomy as an SAR. Ensuring students' understanding of the Basic Law reinforces the cultivation of values including **the rule of law, justice, national identity, democracy, freedom, human rights, equality and rationality**. It also enriches their knowledge of the local, national and global community, and helps students develop into positive and responsible citizens who contribute to the betterment of society, our nation and the world.

- Life education

Hong Kong students' performance in international assessments is outstanding but they are also facing great workload and pressure coupled with parents' high expectation and increasing competition at various levels to outperform the others. There is always a need to develop students' positive values and resilience as well as to enhance their understanding of important values and concepts such as self-esteem, sanctity of life and adaptability to change, uncertainty, transition and novelty through different subject curricula to help students understand life, cherish life, respect life, explore life and embrace changes. Life education in schools should be strengthened to nurture students' ability to cope with adversity and change, and enhance their respect for life. Schools can provide

learning experiences to help students develop a positive understanding of themselves and an appreciation of the uniqueness of others, and learn how to make decisions about any negative influences that might impede the development of their fullest potential. Students should also learn how to view change positively and regard it as an opportunity to learn and grow.

1.7.6 Entrepreneurial Spirit

- The world in the 21st century is moving in waves of changing demands and uncertainties. Globalisation and technical advances, the digital revolution in particular, have drastically transformed the economic landscape. As economic growth is increasingly driven by the ability to create and innovate, fostering an entrepreneurial spirit across our society becomes all the more important for enhancing our global competitiveness. To help our young people navigate their way through these changes, the development of an entrepreneurial spirit needs to be strengthened in the school curriculum. It includes the qualities of possessing creativity and innovativeness, taking initiatives and responsibilities, taking calculated risks, upholding perseverance in times of uncertainty and seizing the best of the opportunities ahead. Learning opportunities should be provided to enable our students to think critically and creatively and come up with fresh, problem solving ideas that can be applied in simulated situations and/or authentic business practices to generate value to society.
- Promoting an entrepreneurial spirit is more than teaching students to start and run new businesses. It focuses on developing positive values and attitudes, skills and knowledge which will benefit students in their personal development, as well as future endeavours as business owners, managers of social enterprises, project team members, employees, freelancers or innovators. In the coming decades, our society needs school graduates who possess innovation, creativity and entrepreneurship, which enable them to conceive new and better ideas, turn ideas into actions, stay positive in uncertainties and make the best of the opportunities ahead.
- Hong Kong is well placed to help those with an entrepreneurial spirit to seize new opportunities offered by the Mainland and other countries through managing related investment projects and business activities or providing financial or legal advisory services. For example, in the context of the Belt and Road Initiative, schools could nurture the entrepreneurial spirit by involving

students in updating the profiles of the 60-plus countries along the Belt and Road, and their current relations with our nation. This helps enhance their understanding of the Belt and Road in history and the reasons for the initiative to bring about its revival now. Students could also be provided with opportunities to learn the Arabic language and know more about the Islamic culture to equip themselves better to take part in and benefit from the initiative should opportunities arise.

1.8 Latest Development: Updating KLA Curriculum Guides and Related Documents

- In response to the ongoing curriculum renewal, the *Basic Education Curriculum Guide (Primary 1 - 6)* was updated in 2014. The corresponding *Secondary Education Curriculum Guide* (i.e. this Guide) and the updated curriculum guides for the eight KLAs have been available in 2017. The *Basic Education Curriculum Guide (Primary 1 - 6)* will also be further updated. As curriculum renewal is an ongoing process, schools are encouraged to **refer to the latest curriculum guides prepared by the CDC for holistic planning and implementation of the school curriculum**. For details and updates, please refer to the EDB website (www.edb.gov.hk/renewal). 
- Schools are encouraged to sustain, deepen and focus on areas deemed essential for further improving students' independent learning capabilities. Schools may formulate their plans to incorporate these curriculum updates, taking into consideration the school contexts, teachers' readiness and students' needs.

Reflective Questions

- ✧ As a school head, how should you lead your teaching staff to embrace the ongoing curriculum renewal?
- ✧ As a prefect of studies/academic master/mistress, how would you integrate and prioritise the focal points in the course of whole-school curriculum planning?

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