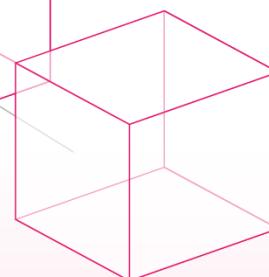
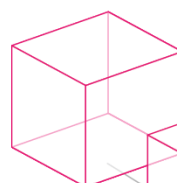
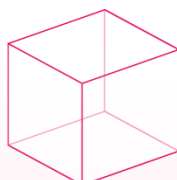
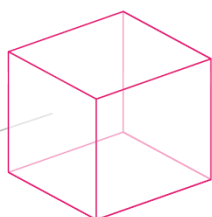
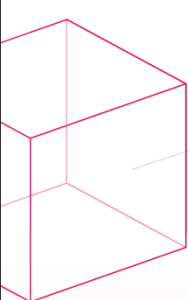
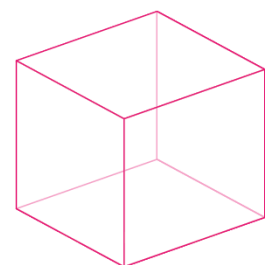
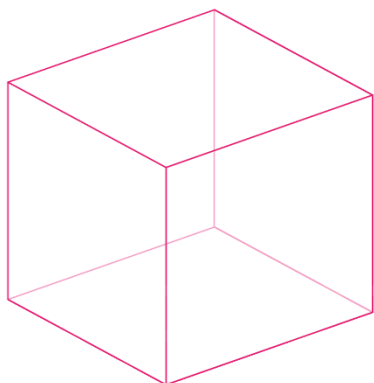
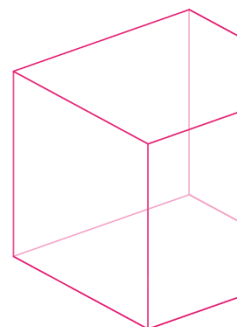
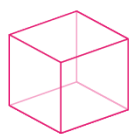


# Learning Goals, School Curriculum Framework and Planning



## Booklet 2 Learning Goals, School Curriculum Framework and Planning

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

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## 2.1 Background

- Schools have responded positively to the Curriculum Development Council’s (CDC) recommendation of the **Learning to Learn** curriculum reform since the last decade and **student-centredness** has become the focus in their whole-school curriculum planning.
- With the implementation of the new senior secondary curriculum since 2009 under the New Academic Structure (NAS), secondary education for all students has been extended to six years. Schools have since accumulated practical experiences in developing their whole-school curriculum for the continuous study of six years for all students, taking into account their school contexts and the varied learning needs of students.
- In light of moving towards a coherent curriculum, there have been efforts to enhance the **vertical continuity** of the school curriculum between the junior secondary (JS) and senior secondary (SS) levels and the **lateral coherence** among different Key Learning Areas (KLAs)/subjects through strategies such as encouraging cross-curricular project learning and collaboration among subject panels in promoting Language across the Curriculum (LaC). Further recommendations on enhancing a **smooth interface between the JS and SS curricula** based on authentic good practices are necessary to bring insights into the ongoing curriculum renewal.
- There has been more **flexible use of curriculum time** for broadening students' learning experiences beyond the classroom through life-wide learning activities. In recent years, many schools have paid attention to the organisation of career-related experiences and learning activities to enhance students’ awareness of and exposure to life planning, and vocational and professional education and training (VPET).
- According to the annual survey data on multiple pathways and career interests of students since 2012, schools have gained better understanding of the abilities, aptitudes, interests and needs of students, as well as the activities, career talks and vocational programmes to be organised for students.

- **The Planning-Implementation-Evaluation (P-I-E) cycle** has been generally used as the whole-school curriculum planning model with reference to the annual review of the school’s curriculum plan, implementation and student performance as shown in its internal assessment, public assessment and other sources of feedback.
- In response to the development of **Information Technology in Education (ITE)** and the launch of the “Fourth Strategy on Information Technology in Education” (ITE4), a number of schools have started incorporating e-learning into the school curricula, or developing and trying out e-resources such as education apps, online learning and teaching resources.

### Reflective Questions

- ✧ What have been the **experiences of your school** since (a) the **Learning to Learn** curriculum reform that started in 2001; and (b) the implementation of the SS curriculum in 2009?
- ✧ What are the **achievements of your school** in terms of the following?
  - providing a student-centred 6-year secondary curriculum based on the central curriculum<sup>1</sup>;
  - enhancing the vertical continuity and lateral coherence of the school curriculum;
  - promoting a smooth interface between the junior and senior secondary curricula;
  - incorporating e-learning into and across the curricula;
  - designing flexible use of curriculum time;
  - promoting multiple pathways among students; and
  - implementing P-I-E.

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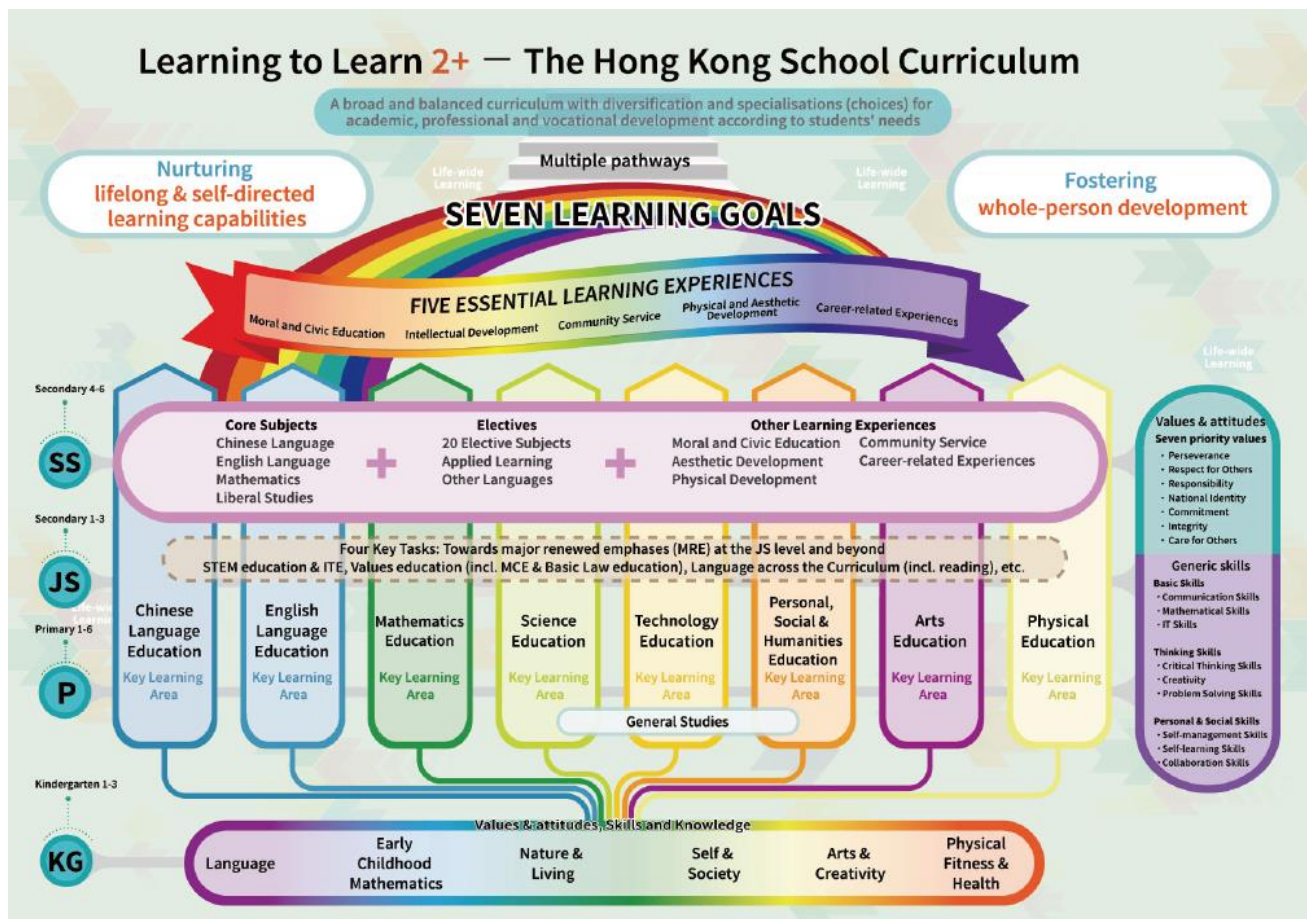
<sup>1</sup> Central curriculum refers to the school curriculum recommended by the Curriculum Development Council. Please refer to the Glossary of this Guide for further details.

## 2.2 Purposes of the Booklet

- To present the CDC recommendation for a **school curriculum framework** and the suggested **allocation of time** to be implemented by all local schools
- To introduce to school principals, middle managers and teachers the **guiding principles on whole-school curriculum planning** according to school contexts
- To provide **practical guidance** for schools to renew, reflect, plan and implement the secondary curriculum

## 2.3 The School Curriculum Framework - What is Worth Learning?

Figure 2.1 The Hong Kong School Curriculum



- Figure 2.1 shows Hong Kong’s school curriculum recommended by the CDC to all local schools including kindergartens, primary and secondary schools. It covers the key components of the school curriculum from kindergarten to senior secondary education and envisages how students progress along different key stages of learning towards multiple pathways for further studies and work to achieve the updated seven learning goals (see 2.3.1 below). Refer to Figure 2.1:  
*How do you make reference to the school curriculum presented by the framework when designing or reviewing your whole-school curriculum?*
- The CDC school curriculum is broad and balanced with diversification and specialisation for academic, professional and vocational developments according to students’ diverse abilities, interests and needs. It is also open and flexible to suit a wide range of school contexts at various levels to foster students’ whole-person development and to nurture their lifelong and self-directed learning capabilities.
- Since the implementation of the NAS in 2009, holistic planning of the whole-school curriculum comprising six years of secondary education is important to enhance the transition between different key stages, i.e. between primary and secondary education, between JS and SS education, and between SS and multiple pathways for study and work.

### ***2.3.1 Updated Seven Learning Goals and the School Curriculum Framework***

#### **Updated Seven Learning Goals**

- The updated seven learning goals set out the qualities desired for students of the 21st century by the end of their six-year secondary education.

**Our Learning Journey - the Past**

“The CDC has set out the overall aims of the school curriculum and specified the goals that our students should be able to achieve...”

*Learning to Learn – The Way Forward in Curriculum Development*

#### **Our Learning Journey – the Present and the Future**

- Updates are made to the seven learning goals set by the CDC in 2001 for the ongoing renewal of the school curriculum, taking into account the local, regional and global changes and the experience gained in the curriculum reform (see Figures 2.2 and 2.3).

**Figure 2.2 Overview of the Updated Seven Learning Goals of Secondary Education**



**Figure 2.3 Updated Seven Learning Goals of Secondary Education**

### **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.

- All local secondary schools should aim at helping students achieve the updated seven learning goals through adopting the school curriculum for secondary education, planning and implementing their school curriculum, taking into account their students' abilities, interests and needs.

## School Curriculum Framework

- The CDC school curriculum is designed to help students achieve the updated seven learning goals, and foster lifelong and self-directed learning capabilities among them. It offers an open and flexible framework enabling local schools to plan for a whole-school curriculum that offers diversification and specialisation to cater for students' abilities, interests and learning needs throughout their schooling.
- Building on the foundation developed in primary education, the school curriculum for secondary education covers eight **Key Learning Areas (KLAs)** at the JS level to help students build a solid knowledge foundation and prepare them for studying the SS curriculum that is made up of core subjects and elective subjects for diversification and specialisation.
- Students' learning experiences are organised within the school curriculum framework to include **knowledge, generic skills, values and attitudes** spanning the five essential learning experiences to achieve the updated seven learning goals of secondary education including whole-person development and nurturing students' lifelong learning, as well as developing their learning to learn capabilities.

## Five Essential Learning Experiences

- The term “curriculum” is defined as the set of total learning experiences through which students learn. All students are entitled to the following five essential learning experiences for whole-person development:
  - ✧ Moral and Civic Education
  - ✧ Intellectual Development
  - ✧ Community Service
  - ✧ Physical and Aesthetic Development
  - ✧ Career-related Experiences

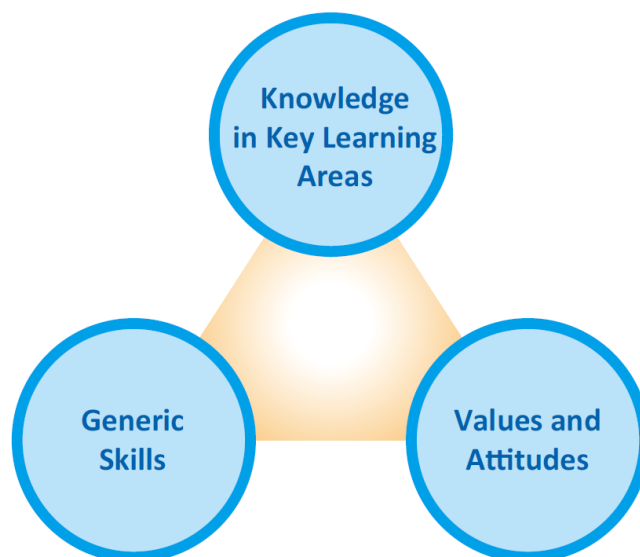
## Knowledge, Generic Skills, Values and Attitudes

- The secondary school curriculum framework is made up of **three interconnected components: knowledge in KLAs, generic skills, values and attitudes**. This open and flexible curriculum framework, which is represented in Figure 2.4, allows schools to organise learning experiences, adjust the breadth and depth of the learning content, adopt various learning strategies and



modes, and flexibly respond to local and global changes to enhance the learning outcomes of students.

**Figure 2.4 Three Interconnected Components of the Curriculum Framework**



### **Knowledge**

- Knowledge is organised in the following eight KLAs:
  - Chinese Language Education
  - English Language Education
  - Mathematics Education
  - Personal, Social and Humanities Education
  - Science Education
  - Technology Education
  - Arts Education
  - Physical Education

### **Generic Skills**

- Generic skills are the fundamental skills that help students acquire, construct and apply knowledge in various contexts. They are developed in the learning and teaching of different KLAs/subjects and are transferrable from one learning situation to another.

- After consolidating experiences of implementation over the years and reflecting on recent developments in the academic field and society, an integrative approach is recommended as each generic skill should not be seen in isolation. Meaningful contexts can be provided for the development of the nine generic skills grouped in three clusters of related skills for better integrative understanding and application in a holistic manner.
- Grouping of the nine generic skills:

<b>Basic Skills</b>	<b>Thinking Skills</b>	<b>Personal and Social Skills</b>
Communication Skills	Critical Thinking Skills	Self-management Skills
Mathematical Skills*	Creativity	Self-learning Skills*
Information Technology Skills	Problem Solving Skills	Collaboration Skills

\*“Mathematical Skills” and “Self-learning Skills” have been referred to as “Numeracy Skills” and “Study Skills” respectively in earlier curriculum documents such as *Learning to Learn: The Way Forward in Curriculum Development* (2001).

- Please refer to Appendix 1 for details of the nine generic skills and two examples illustrating the development/application of generic skills in an integrative approach.

### **Values and Attitudes**

- Values are explicit or implicit belief systems that students develop, which guide their conduct and decision making, while attitudes are personal dispositions towards particular issues. Please refer to Appendix 2 for the proposed set of “Values and Attitudes for Incorporation into the School Curriculum”.

#### ***2.3.2 The Junior Secondary Curriculum and Suggested Time Allocation***

- The JS curriculum extends learning from primary education in terms of breadth and depth. It is a broad and balanced curriculum building on the knowledge, generic skills, values and attitudes as well as learning experiences students have acquired, and are organised around eight KLAs. The objectives of the JS curriculum are as follows:
  - To capitalise on students’ prior learning of knowledge, generic skills, values and attitudes in primary education and to develop them into self-

directed learners;

- To help students go through the stage of adolescence with a solid knowledge foundation from eight KLAs offering diversification and the necessary generic skills, positive values and attitudes to prepare them for more specialised studies at the SS level;
- To promote a smooth transition for students from studying General Studies at the primary level to three KLAs, i.e. Personal, Social and Humanities Education, Science Education and Technology Education at the secondary level; and
- To facilitate students' whole-person development through enriching their life-wide learning experiences.

*(Please refer to Appendix 3 for the organisation of the curricula of the eight KLAs and suggested allocation of time at the JS level.)*

#### *2.3.2.1 Key Learning Areas*

- The JS curriculum is organised around the eight KLAs of knowledge domains as the basis while generic skills, values and attitudes are infused into the knowledge framework for learning and teaching inside and outside the classroom. Together with a range of learning experiences across KLAs, it provides a student programme for whole-person development aiming to help students lay a solid foundation for lifelong learning. Schools should adopt the suggested allocation of lesson time (i.e. % of total lesson time/number of hours of lesson time over 3 years) for each KLA, and use the flexible time to suit the specific needs of their students and their school context. Figure 2.5 shows the average number of school days and lesson hours over three years of JS education, and Figure 2.6 shows the suggested time allocation of the eight KLAs and flexible time for learning across KLAs.

**Figure 2.5 School Days and Lesson Hours over 3 Years**

Junior Secondary	
Length of a School Year	190 days or 1 013 hours <sup>Note 1</sup> Lesson time <sup>Note 2</sup> (school days or lesson hours per year): 172 days or 918 hours <sup>Note 3</sup>
Lesson Hours over 3 Years	2 754 hours (918 hours x 3 years) <sup>Note 3</sup>

<sup>Note 1</sup> 190 is the minimum number of school days for a school year. The number of lesson hours is calculated based on an average of eight 40-minute lessons a day in schools.

<sup>Note 2</sup> Examination time not included.

<sup>Note 3</sup> There may be variation in lesson hours among schools as individual schools may devote time to non-teaching activities such as school picnics, student orientations, post-examination activities. Lesson hours of a school day and the duration of lessons may also vary among schools or even between weekdays within the same school.

**Figure 2.6 Components of the JS Curriculum and Allocation of Time** <sup>Note 1</sup>

Component of the JS Curriculum		% of Time Allocation	No. of Hours
Key Learning Area	Chinese Language Education	17-21%	468-578
	English Language Education	17-21%	468-578
	Mathematics Education	12-15%	331-413
	Science Education	10-15%	276-413
	Personal, Social and Humanities Education <sup>Note 2</sup>	15-20%	413-551
	Technology Education <sup>Note 3</sup>	8-15%	220-413
	Arts Education	8-10%	220-276
	Physical Education	5-8%	138-220
Sub-total of the lower range of lesson hours over 3 years		92%	2 534
Across Key Learning Areas	Flexibility is provided for: <ul style="list-style-type: none"> <li>• Values education (including moral and civic education, Basic Law education) and guidance to complement values education across KLAs</li> </ul>	8%	About 220 hours over 3 years

	<ul style="list-style-type: none"> <li>• Additional common reading time</li> <li>• School Assembly/Class teacher period to complement values education across KLAs</li> <li>• Remedial or enhancement studies in KLA(s) or across KLAs</li> <li>• Other cross-curricular activities and broadening learning experiences such as community service, co-curricular activities, and aesthetic and physical activities to complement life-wide learning</li> </ul> <p><i>Remarks:</i>  <i>The deployment of flexible time may vary from term to term (e.g. life skills education in the 1st term, remedial study of Chinese Language in the 2nd term of the year and enhancement study of English Language throughout the school year).</i></p>		
	Total lesson hours over 3 years	100%	2 754

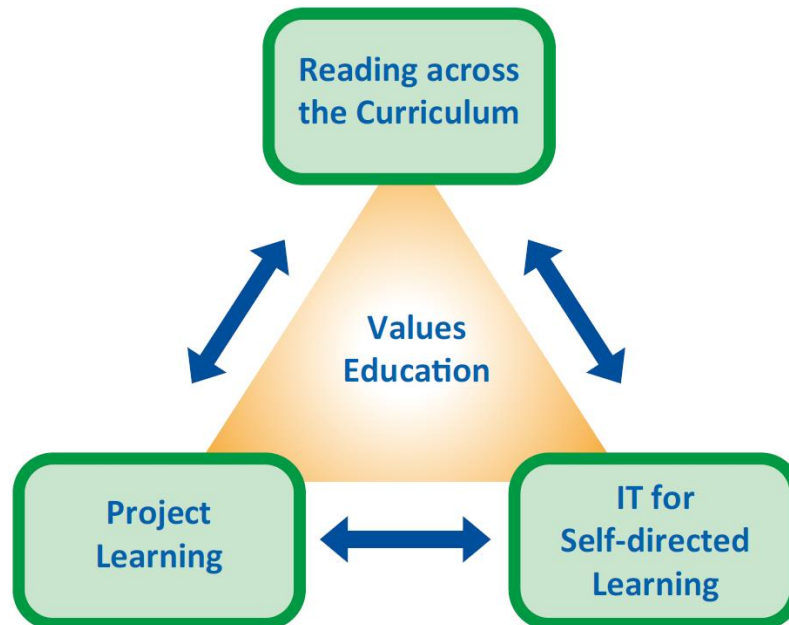
Note 1 As there is an increasing need for schools to organise cross-curricular learning and teaching (e.g. STEM education, Language across the Curriculum, values education) while closely integrating these with life-wide learning activities for students' consolidated learning, application and whole-person development, the allocation of time for respective KLA/subjects can be more flexibly and integratively handled with due regard for individual school contexts and needs.

Note 2 All secondary schools should allocate about 5% of the total lesson time for the JS level, or about two lessons per week, to the study of Chinese History under the PSHE KLA at the JS level.

Note 3 All secondary schools should allocate about 25 lesson hours to the teaching of programming concepts including coding within the Information & Communication Technology knowledge context under the TE KLA at the JS level.

### 2.3.2.2 Four Key Tasks: Towards Major Renewed Emphases

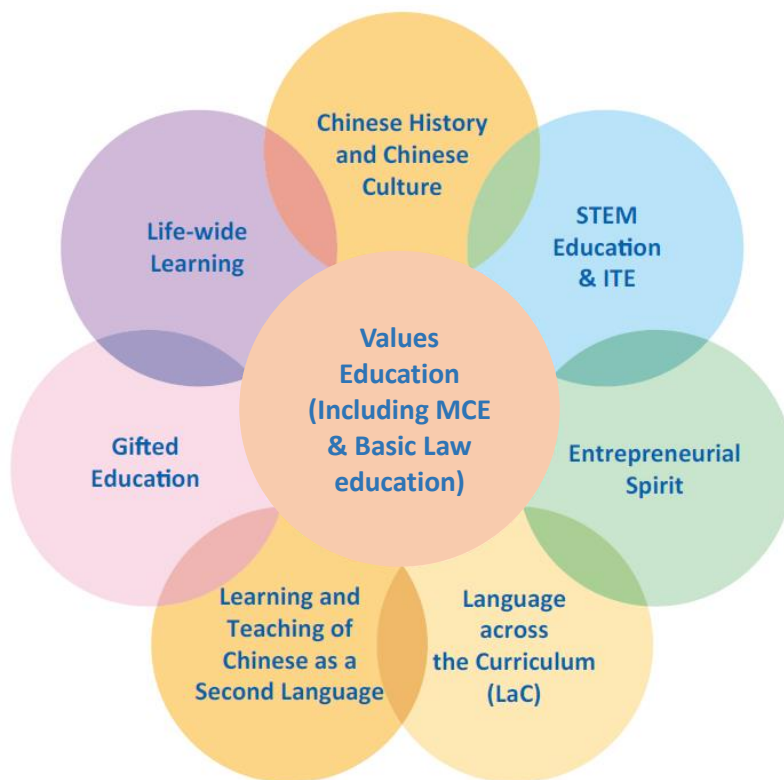
**Figure 2.7 Four Key Tasks: Towards Major Renewed Emphases**




- The Four Key Tasks have been introduced since 2002 to support the Learning to Learn curriculum reform. These key tasks would be carried on to sustain the momentum and positive impact on student learning. In order to encourage schools to build on their strengths, respond to changing needs of students and flexibly adopt the Four Key Tasks with deepened understanding, the Four Key Tasks are updated as follows (see Figure 2.7):
  - Moral and Civic Education: Towards Values Education;
  - Reading to Learn: Towards Reading across the Curriculum;
  - Project Learning: Towards Integrating and Applying Knowledge and Skills across Disciplines; and
  - Information Technology for Interactive Learning: Towards Self-directed Learning.
- In particular, all schools should strengthen the implementation of values education. For Key Stage 3, schools should make use of the 8% of the flexible lesson time to arrange values education in the JS curriculum in addition to other KLA/subject-based learning opportunities. For Key Stage 4, 10-15% of lesson time is allocated to “Other Learning Experiences” (OLE). Schools should arrange values education within the lesson time for

OLE and beyond.

**Figure 2.8 Major Renewed Emphases at the JS Level and beyond**



- **Major renewed emphases (MRE)** are brought on board to better respond to the changing needs of society as reflected in the updated seven learning goals (see Figure 2.3). With reference to their own contexts and stages of development on various curriculum areas, schools should plan the whole-school curriculum with due consideration of the SECG to strategically integrate the MRE for coherent and systematic implementation in their school development plans alongside the school priorities for the next three to six years by observing the guiding principles for the Learning to Learn curriculum (*please refer to Section 1.6.1 of Booklet 1 for details*). To facilitate whole-school curriculum planning based on existing components, proposed allocation of time within the school curriculum recommended by the CDC has been included where appropriate. These MRE include:
  - strengthening values education (including moral and civic education, and Basic Law education)
  - reinforcing the learning of Chinese history and Chinese culture

- extending “Reading to Learn” to “Language across the Curriculum”
  - promoting STEM education and ITE
  - fostering an entrepreneurial spirit
  - diversifying life-wide learning experiences (including those for Vocational and Professional Education and Training)
  - stepping up gifted education
  - enhancing the learning and teaching of Chinese as a second language (see Figure 2.8).
- The purposes, requirements and suggestions for sustaining each of these MRE are highlighted and articulated below to show how they resonate with the updated seven learning goals, how they are realised through the knowledge, generic skills, values and attitudes of the school/KLA curriculum framework, cross-curricular studies, and how they can be developed as the competencies of relevant sets of skills and applied in different curriculum contexts.
- **Strengthening Values Education (including moral and civic education and Basic Law education)**
    - One of the updated learning goals is for every student “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”. To fully achieve this goal, values education, variously delivered in the form of moral and civic education, Basic Law education, life education, religious education, values across different KLAs/subjects, etc., need to be given utmost prominence.
    - Since 2008, the EDB has clearly stipulated the learning elements of values education through, for instance, specifying the learning expectations for respective key stages in order to articulate a systematic curriculum framework. The framework could be accessed at: <http://www.edb.gov.hk/tc/revised-MCE-framework2008>. 
    - Specifically, **perseverance, respect for others, responsibility, national identity, commitment, integrity** and **care for others** have been identified as the priority values and attitudes. These values and attitudes are infused into the learning and teaching of all KLAs as well.



## ***Basic Law Education***

- ✧ The Basic Law, the constitutional document for the Hong Kong Special Administrative Region (HKSAR), is closely related to students' daily life in Hong Kong. Basic Law education has already been included in the primary and secondary curricula. Elements related to the Basic Law should be strengthened to enable students **to understand its importance, the principle of “one country, two systems”** and what is pertaining to the sustainability of the social system and way of life of Hong Kong people in the coming decades. It helps to enhance students' thinking skills as well as nurture positive values and attitudes. Enabling students to understand the Basic Law and its application in everyday life reinforces the cultivation of values including **the rule of law, justice, national identity, democracy, freedom, human rights, equality and rationality.**
- ✧ Due attention should be given to ensuring sufficient time be dedicated to Basic Law education. In fact, Basic Law education has been introduced through different curricula such as primary **General Studies** (P1-6); junior secondary Personal, Social and Humanities Education (PSHE) subjects/curricula, in particular **Life and Society** (S1-3) and **Chinese History** (S1-3) (independent compulsory subject); and the senior secondary interdisciplinary subject of **Liberal Studies** (S4-6) (core subject) and relevant elective subjects. The background of the principle of “one country, two systems”, the importance as well as ideas and concepts of the Basic Law are part of the core elements/essential content for learning in the PSHE KLA curriculum where relevant topics/themes are covered. Such curriculum manifestations related to Basic Law education will continue to apply. In the learning/teaching process, teachers are advised to make explicit connections between the subject content and the Basic Law at appropriate junctures.
- ✧ In whole-school curriculum planning, and where appropriate, Basic Law education should be incorporated in the school development plan to strengthen values education and to facilitate coherent and strategic planning, implementation and self-evaluation of its effectiveness.
- ✧ At the junior secondary level (S1-3)
  - Basic Law education is an integral part of values education in the moral and civic education curriculum framework.

- Essential learning elements relevant to Basic Law education can be found in different subject curricula at the junior secondary level. For example, in the PSHE KLA, Chinese History (S1-3) (independent compulsory subject) will enable JS students to acquire fundamental knowledge necessary for further study about the Basic Law at the SS level, in particular the fact of Hong Kong as part of China and the background of the principle of “one country, two systems”; and Life and Society (S1-3) will enable students to understand the importance, ideas and concepts of the Basic Law.
  - For schools that do not offer Life and Society (S1-3) in JS, or in cases where modules relevant to Basic Law education are not taught in Life and Society (S1-3), a 15-hour independent module on “Constitution and the Basic Law” is available for schools’ adoption. These schools are required to teach this module as part of moral and civic education, or as a standalone module in the timetable, and/or part of the school-based curriculum in the PSHE KLA (e.g. Integrated Humanities), according to their school contexts. *(Please refer to Appendix 4 for the curriculum contents and suggested lesson hours related to Basic Law education at the junior secondary level in relevant curricula/subjects.)*
- ✧ At the senior secondary level (S4-6)
- Students will continue to learn about the Basic Law, particularly in the core subject of Liberal Studies as well as in relevant elective subjects, such as Chinese History, History, Economics and Geography.
- ✧ Planning and evaluation
- A systematic and strategic plan for implementing Basic Law education involves:
    - (1) implementing the most recent curriculum guides prepared by the CDC with regard to the contents and time allocated to the KLA/subjects/topics related to Basic Law education;
    - (2) promoting Basic Law-related learning in cross-curricular studies/activities, theme-based forums, exhibitions, competitions, summer camps and non-local visits/exchange programmes conducted on the Mainland with articulation to the whole-school curriculum, and to complement classroom learning and teaching;
    - (3) making use of up-to-date and appropriate learning and teaching

resources prepared for Basic Law education suited to the curricula;

(4) participating in professional development programmes related to core contents, knowledge updating and enrichment, pedagogies and assessment that are dedicated respectively for school heads, middle managers and teachers to keep abreast of the development of society and the needs of students; and

(5) self-evaluating the implementation of Basic Law education in schools with a view to making sustainable improvements.


- ✧ A planning and self-evaluation tool has been developed in Appendix 5 for the reference of schools to develop a more holistic view about the situation of Basic Law education in schools and reflect on areas requiring further improvement. Schools may use this tool flexibly and incorporate self-evaluation findings so derived in their school development plans/annual school plans/reports.
- ✧ To achieve curriculum coherence, schools could use or adapt the tool on whole-school curriculum planning (see Figure 2.20) or the Basic Law education planning and self-evaluation tool in Appendix 5 that involves similar information in Figure 2.20.

## ➤ **Reinforcing the Learning of Chinese History and Chinese Culture**

The study of Chinese history and Chinese culture provides the foundation knowledge and root values on which students understand our country and progress towards developing a sense of national identity. The teaching of Chinese history and Chinese culture should be reinforced and strengthened in JS education through the following arrangements for Chinese history education and Chinese culture across the curriculum.

### ***Chinese History Education***

- ✧ Schools should build on the foundation knowledge of Chinese history studied in General Studies through the six years of primary education (including “National Identity and Chinese Culture” as one of the six strands recommended by the CDC) to further promote the study of Chinese history in secondary education;

- ◇ All students at the JS level should be taught Chinese history, which is part of the core elements/essential content for learning in the PSHE KLA curriculum, by following the most up-to-date *Chinese History Curriculum Guide (S1-3)* recommended by the CDC available at: [www.edb.gov.hk/cd/pshe/curriculum/eng](http://www.edb.gov.hk/cd/pshe/curriculum/eng); 
- ◇ Schools should offer Chinese History as an independent compulsory subject for students to gain a systematic understanding of Chinese history and Chinese culture;
- ◇ Schools should devote a quarter **(25%) of the total lesson time allocated to the PSHE KLA** to the learning and teaching of Chinese History, i.e. **about 5% of total lesson time or about 2 lessons per week**;
- ◇ Chinese should be used as the medium of instruction for the learning and teaching of Chinese History in secondary schools.

### ***Chinese Culture across the Curriculum***

- ◇ In parallel, the learning elements of Chinese culture are inherent in the Chinese History curriculum on the one hand, and are covered in all KLAs on the other, e.g. the Chinese Language Education KLA (“Chinese Culture” being one of the strands), Chinese music and arts in the Arts Education KLA.
- **Extending “Reading to Learn” to “Language across the Curriculum”**
- Another updated learning goal is for students “to be proficient in biliterate and trilingual communication”. With the successful experience in promoting biliterate reading in schools and the advancement of technology, reading to learn should be reinforced at the JS level in all KLAs through the following:
    - ◇ Extending “Reading to Learn” to “Reading across the Curriculum” by making effective use of a variety of texts, including non-fiction texts, on various themes and topics, and engaging students in deep reading to help connect their learning experiences, broaden their knowledge base and enhance their language skills;
    - ◇ Leveraging on electronic reading resources with multimodal features to enhance students’ understanding of texts and enjoyment of reading; and
    - ◇ Devising a holistic plan to enhance collaboration between different stakeholders, including teacher-librarians and parents, in promoting

reading and allocating time, both within and outside lessons, for cross-curricular reading.

- In addition to reading to learn, schools are also advised to implement “Language across the Curriculum” (LaC) through English and/or Chinese. Schools may promote LaC through the following:
  - ✧ Setting up an LaC committee/working group which comprises representatives from different KLAs to set the direction and decide on how LaC can be promoted, and oversee its implementation;
  - ✧ Enhancing collaboration between different KLAs with language teachers focusing on the development of language skills essential to different KLAs and non-language teachers providing opportunities for students to apply their language skills in the KLA contexts; and
  - ✧ Making the best use of the 8% of the flexible lesson time at the JS level, in addition to regular lesson time, to engage students in LaC activities.

➤ **Promoting STEM Education and Information Technology in Education (ITE)**

- To fulfill the learning goals for students “to acquire and construct a broad and solid knowledge base”, “to develop and apply generic skills in an integrative manner” and “to use information and information technology ethically, flexibly and effectively”, the promotion of STEM education and IT in education should start at the JS level and be extended to the SS level, building on the past experiences and achievements of the schools.
- The Report on Promotion of STEM Education - Unleashing Potential in Innovation and the Report on the Fourth Strategy on IT in Education set the directions for the development of STEM education and IT in Education respectively in schools. The two reports are available at:

<http://www.edb.gov.hk/renewal> and

<http://www.edb.gov.hk/ited/ite4> respectively.



***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 turn contributing to national developments.
- ✧ Major objectives of promoting STEM education in relation to student learning are:
  - to develop among students a solid knowledge base and to enhance their interest in science, technology and mathematics for further studies and careers in meeting the changes and challenges in the contemporary world; and
  - to strengthen students' ability to integrate and apply knowledge and skills, and to nurture their creativity, collaboration and problem solving skills, as well as to foster their innovation and entrepreneurial spirit as required in the 21st century.
- ✧ Two different approaches are recommended for schools to organise STEM-related learning activities for students:
  - Approach One – Learning activities based on topics of a KLA for students to integrate relevant learning elements from other KLAs
  - Approach Two – Projects for students to integrate relevant learning elements from different KLAs

The two approaches should be complementary rather than exclusive to each other.

- ✧ Depending on individual context and development focus, schools are advised to effectively use the suggested time allocation for each KLA. In addition, flexible time across KLAs as well as outside classroom learning should be deployed for engaging students in meaningful learning experiences (e.g. cross-curricular and cross-KLA project learning or competitions).
- ✧ To cultivate students' interest and curiosity in science and technology, hands-on and minds-on activities that may be theme-based or problem-based are recommended for students to solve problems and produce designs through, where appropriate, scientific investigation, computer programming (coding), mathematics modelling, design and make, etc.
- ✧ To broaden students' learning, opportunities should be arranged for

students to participate in local, national, and/or international competitions related to STEM to cater for their interests and abilities and to unleash their potential.

- ✧ Teachers of different KLAs are expected to collaborate in planning the whole-school curriculum and organising learning and teaching activities that help promote STEM education.
- ✧ Assessment for STEM-related learning activities should align with the objectives and pedagogies adopted to reflect the learning progress and the capability of students as independent/collaborative learners.

### ***Information Technology in Education***

- ✧ Information technology (IT) is a powerful tool to unleash the learning capability of students. With the advancement of technology and its application through innovative pedagogies in all KLAs (including STEM), students' capability in information literacy (IL), self-directed learning and other 21st century skills such as creativity, problem solving skills, collaboration skills and computational thinking skills are enhanced. Strategies on IT in Education are formulated at various stages to enable students to learn and excel through realising the potential of IT in enhancing interactive learning and teaching experiences.
- ✧ As an important competency, IT helps students identify the need for information; locate, evaluate, extract, organise and present information; create new ideas; cope with the dynamics in our information world; use information ethically as well as refrain from immoral practices such as cyber bullying and infringing intellectual property rights. IL could be developed through the application of the generic skills (see Section 2.3.1 and Appendix 1 of this booklet) in the context of handling information in different media in our information world. This also involves various knowledge contexts and has close linkage with the KLAs.
- ✧ Schools can make reference to the “Information Literacy Framework for Hong Kong Students” for suggestions on how to develop students' knowledge, skills and attitudes to use information and information technology ethically and effectively as responsible citizens and lifelong learners. Incorporation of IL in the whole-school curriculum will provide authentic contexts for students to apply the skills and benefit their learning in relevant KLAs. More information is accessible at:

- ✧ [http://www.edb.gov.hk/attachment/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/il\\_eng\\_7323.pdf](http://www.edb.gov.hk/attachment/en/edu-system/primary-secondary/applicable-to-primary-secondary/it-in-edu/il_eng_7323.pdf)



### ➤ **Fostering an Entrepreneurial Spirit**

- 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. Development of an entrepreneurial spirit is not confined to teaching students to start and run new businesses. It focuses on developing knowledge, generic skills, positive values and attitudes 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 JS education, different KLAs provide meaningful contexts for students to acquire foundation knowledge in entrepreneurship. Through cross-KLA collaboration, schools can organise life-wide learning activities such as running a sales bazaar or a small shop in the student union to widen students' exposure and provide opportunities to apply what they have learnt in various subjects in authentic contexts with a view to adding value to the community.
- Building on this foundation knowledge, the SS curriculum provides learning experiences that develop innovation, creativity and an entrepreneurial spirit which enables students to conceive new and better ideas, turn ideas into actions, stay positive in uncertainties and make the best of the opportunities ahead, e.g.
  - ✧ Many core elements of developing an entrepreneurial spirit are highly relevant to and have naturally been embedded in the Economics curriculum. Through case studies or classroom learning activities, students will have a better understanding of entrepreneurship through the lens of basic economic principles, such as opportunity recognition, types of organisations and growth of firms, market structure, competition and product differentiation.
  - ✧ Applied Learning provides opportunities linked to professional and vocational contexts that continue to build on the foundation knowledge in entrepreneurship students acquired in JS education. In



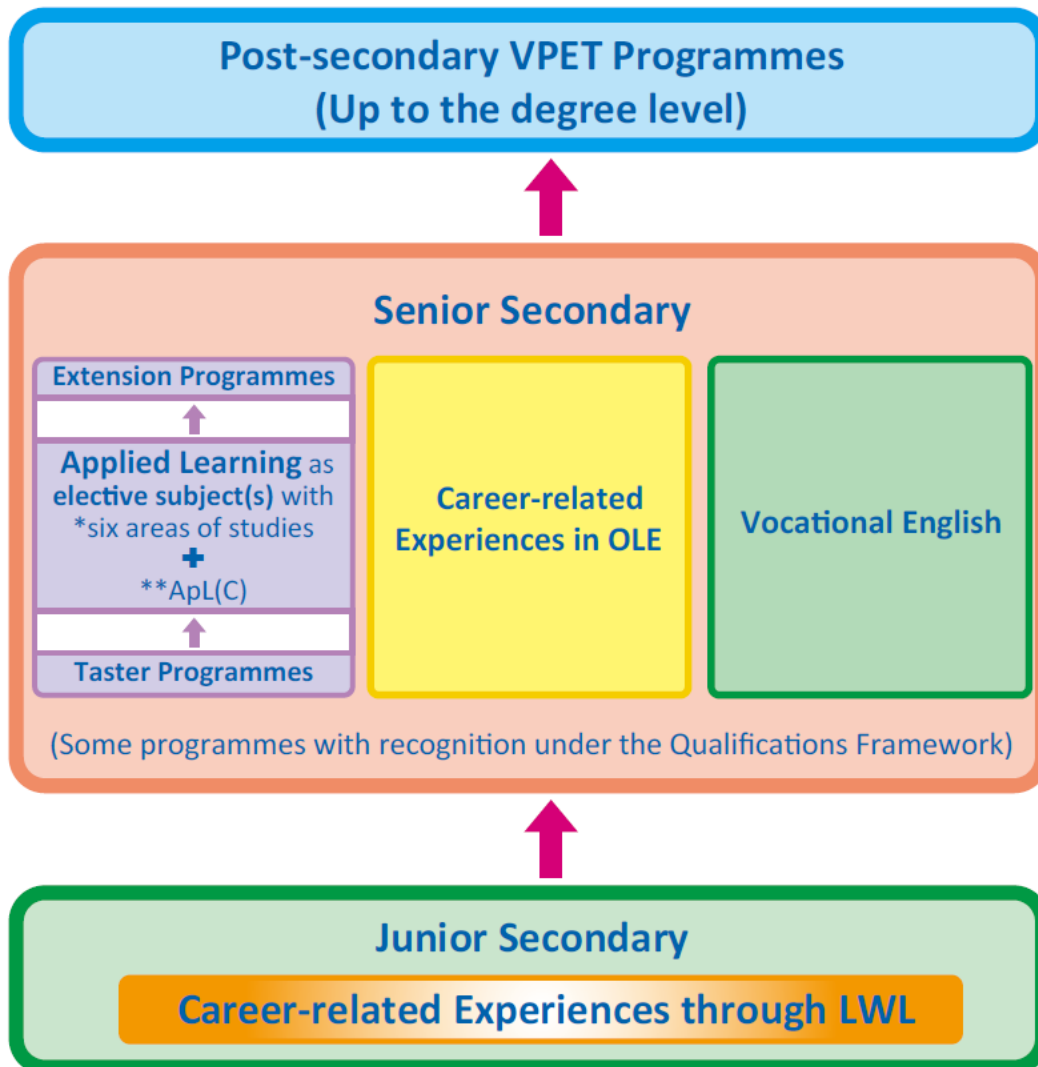
the process of learning-by-doing, students develop and apply conceptual, practical and reflective skills to demonstrate entrepreneurship and innovation.

➤ **Diversifying Life-wide Learning Experiences (including those for VPET)**

- Life-wide learning (LWL) has been one of the most widely adopted strategies to enable students to gain a variety of experiences, including the five essential learning experiences of Moral and Civic Education, Intellectual Development, Physical and Aesthetic Development, Community Service and Career-related Experiences, which are more difficult to acquire in ordinary classroom settings for enhancing students' whole-person development. It promotes students' quality reflection on their learning experiences to enhance deep learning.
- To achieve the learning goal for students to “lead a healthy lifestyle with active participation in physical and aesthetic activities, and to appreciate sports and the arts”, schools should support students' exploration of learning opportunities for quality physical and aesthetic education beyond the classroom to nurture their confidence, perseverance and aesthetic appreciation in becoming lifelong learners and in facing personal and social challenges.
- As for the learning goal for students to “understand one's own interests, aptitudes and abilities, and to develop and reflect upon personal goals with aspirations for further studies and future career”, school should provide or enrich the Career-related Experiences to broaden students' exposure to the world of work and help them set realistic goals for themselves and pursue aspirations for their future.
- Students' understanding of society and the workplace should gradually increase during their secondary education. Through Community Services and Career-related Experiences, students have good opportunities to explore their strengths, interests and aspirations. They may be introduced to VPET as an articulation choice through relevant Career-related Experiences.
- Figure 2.9 shows how the Career-related Experiences through LWL at the JS level support students with diverse options of Applied Learning as elective subject(s), Career-related Experiences in OLE and Vocational English at the senior secondary level, as well as post-secondary VPET

programmes up to the degree level.

**Figure 2.9 Progression of VPET with Diversification**



- In addition, every secondary school student is entitled to participation in **Mainland exchange programmes (MEP)** under the current provision with an aim to deepen their understanding of the history, culture, technology and economic development of the Mainland. Schools should make use of the MEP and/or other funding schemes to provide life-wide learning activities to strengthen students’ understanding of the Mainland in different areas from different perspectives so as to facilitate their reflection on the opportunities, achievements and challenges in terms of our country’s development through first-hand and personal experience. Schools can visit the website on “Passing on the Torch” National

Education Activity Series at <http://www.passontorch.org.hk/en> for more information.



➤ **Stepping up Gifted Education**

- To nurture gifted students and to embrace learner diversity, an inclusive approach has been adopted in mainstream schools since 2000 to provide gifted students with appropriate challenges and learning opportunities. Schools should implement the approach in their whole-school curriculum through adopting three levels of engagement, including school-based whole-class learning (Level 1), supplemented by school-based pull-out enrichment and extension programmes (Level 2), and off-site intensive support services (Level 3). More information could be retrieved from the website: <http://www.edb.gov.hk/en/curriculum-development/major-level-of-edu/gifted/index.html>.



➤ **Enhancing the Learning and Teaching of Chinese as a Second Language**

- The “Chinese Language Curriculum Second Language Learning Framework” (Learning Framework) has been introduced since the 2014/15 school year for non-Chinese speaking (NCS) students. It aims to help NCS students overcome the difficulties of learning Chinese as a second language, with a view to facilitating their effective learning of Chinese and enabling them to bridge over to mainstream Chinese language classes. A dedicated website on the Learning Framework is set up to provide guidelines and suggestions on curriculum planning, learning, teaching and assessment of Chinese as a second language.
- Please visit: <http://www.edb.gov.hk/tc/curriculum-development/kla/chi-edu/second-lang.html> for the Learning Framework.



### **Reflective Questions**

- ✧ How does your school incorporate the Four Key Tasks in designing and implementing the whole-school curriculum? How would you evaluate their effectiveness?
- ✧ What is the role of values education in your whole-school curriculum design? How does it contribute to achieving your intended objective(s)?
- ✧ Review your whole-school curriculum to see how the MRE at the JS level and beyond could be adjusted and/or achieved in a coherent manner over the next few years. What are your considerations in allocating lesson time to each MRE? To what extent are they effective in achieving the Updated Seven Learning Goals among your students?

### ***2.3.3 Interface between the Junior and Senior Secondary Levels***

To promote a smooth interface from JS to SS education, schools should implement curriculum plans or programmes to provide JS students, especially S3 students with:

- a solid and adequate knowledge base at the JS level spanning across different KLAs for better transition to the SS level;
- academic learning experiences conducive to their optimal selection of elective subjects for SS education;
- learning and teaching strategies supportive to their study at the SS level;
- learning experiences for the development of generic skills as well as values and attitudes to conduct more advanced academic learning;
- life-wide learning experiences to enrich their whole-person development and to widen their exposure to various choices of articulation, including VPET; and
- counselling and guidance on career and life planning, and issues related to adaptation to academic studies and school life.

Where necessary and appropriate, schools' efforts in implementing the MRE should be sustained taking into account the natural development of curriculum options at the SS level.

### ***2.3.4 The Senior Secondary Curriculum and Suggested Time Allocation***

- The SS curriculum, an extension of the curriculum in primary and JS education, is broad and balanced with diversification and specialisation. It promotes

students' learning to learn capabilities and is developed from the prior knowledge of the eight KLAs and learning experiences students have acquired with an emphasis on positive values and attitudes.

- The SS curriculum is made up of three components, namely core subjects, elective subjects and Other Learning Experiences (OLE).

<p><b>SS Curriculum</b></p> <p>4 Core Subjects + 2 or 3 Elective Subjects + Other Learning Experiences (OLE)</p>
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- All students studying the SS curriculum in local schools should study the four core subjects, and two or three elective subjects (up to a maximum of four). (Remarks: The fourth elective subject has to be taken from Ethics and Religious Studies, Music, Visual Arts, Physical Education, Applied Learning or Other Languages, which are broadly related to the elements of OLE.) In addition, all students are entitled to OLE that includes the five areas of Moral and Civic Education, Aesthetic Development, Physical Development, Community Service and Career-related Experiences for enhancing students' whole-person development and widening their horizons.
- Figure 2.10 shows the total number of lesson hours over three years of senior secondary education. Figure 2.11 shows the components of the SS student programme and allocation of time to respective components.

**Figure 2.10 Lesson Hours over Three Years**

Senior Secondary	
Total no. of lesson hours over 3 years	2 400 ( $\pm 200$ ) hours <sup>Note 1</sup>
	Length of a school year: 190 days

<sup>Note 1</sup> Examination time and study leave not included. Based on the 2015 annual school survey, more than 80% of our local schools are able to offer the recommended 2 400 ( $\pm 200$ ) hours (or above) for the 3-year total lesson time.

**Figure 2.11 Components of the SS Student Programme and Allocation of Time**

Component of the SS Student Programme		% of Time Allocation	No. of Hours
Four Core Subjects	<ul style="list-style-type: none"> <li>• Chinese Language</li> <li>• English Language</li> <li>• Mathematics</li> <li>• Liberal Studies</li> </ul>	45-55%	1 125 – 1 375
Two or Three Elective Subjects	<ul style="list-style-type: none"> <li>• Subjects from KLAs</li> <li>• Applied Learning</li> <li>• Other Languages</li> </ul>	20-30%	500 – 750
Other Learning Experiences	<ul style="list-style-type: none"> <li>• Moral and Civic Education</li> <li>• Community Service</li> <li>• Career-related Experiences</li> <li>• Aesthetic Development</li> <li>• Physical Development</li> </ul>	10-15%	250 – 375

*(Please refer to Appendix 7 for the components of the four core subjects and the suggested allocation of time.)*

- Public assessment of SS subjects is conducted by the Hong Kong Examinations and Assessment Authority (HKEAA). Performance of students would be certified in the Hong Kong Diploma of Secondary Education (HKDSE). Please refer to the respective KLA Curriculum Guides/Supplements, and Curriculum and Assessment Guides of SS subjects for more details.

#### 2.3.4.1 Core Subjects (Category A subjects in HKDSE)

##### **Chinese and English Languages**

- The Chinese and English Language curricula include the Compulsory and Elective Parts.
- Schools are encouraged to offer the elective modules in S5, taking into consideration students' needs, interests and abilities, teachers' preferences and readiness, as well as the school context.

## **Mathematics**

- The Mathematics curriculum comprises a Compulsory Part and an Extended Part.
- Students may take the Compulsory Part only, or take the Compulsory Part with either Module 1 (Calculus and Statistics) or Module 2 (Algebra and Calculus) from the Extended Part.

## **Liberal Studies**

- All students are required to take Liberal Studies (LS) for broadening their knowledge base and nurturing multiple perspectives. The LS curriculum comprises three Areas of Study (six modules) and an Independent Enquiry Study.
- The design of LS is to provide learning experiences for students to make connections across knowledge areas and see things from different perspectives. This will lead to a better understanding of the Hong Kong society, development of China and its place in the modern world, globalisation, and citizenship at the community, national and global levels, and help students develop the learning to learn skills and become independent thinkers.

*(Please refer to Appendix 7 for the components of the Chinese Language, English Language, Mathematics and Liberal Studies curricula and the suggested allocation of time to respective components.)*

### **2.3.4.2 Elective Subjects**

#### **Elective subjects by KLA (Category A subjects in HKDSE)**

- Twenty elective subjects have been developed for the SS curriculum based on a balance of interrelated factors, such as content rigour, relevance to students 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 are therefore encouraged to provide such opportunities for students by offering more subjects and giving students a free choice as far as possible by adopting flexible timetabling arrangements. A summary of all the SS elective subjects by KLA is shown in Figure 2.12.

**Figure 2.12 SS Elective Subjects by KLA**

Key Learning Area	Subject
Chinese Language Education	<ul style="list-style-type: none"> <li>• Chinese Literature</li> </ul>
English Language Education	<ul style="list-style-type: none"> <li>• Literature in English</li> </ul>
Personal, Social and Humanities Education	<ul style="list-style-type: none"> <li>• Chinese History</li> <li>• Economics</li> <li>• Ethics and Religious Studies</li> <li>• Geography</li> <li>• History</li> <li>• Tourism and Hospitality Studies</li> </ul>
Science Education	<ul style="list-style-type: none"> <li>• Biology</li> <li>• Chemistry</li> <li>• Physics</li> <li>• Science (Integrated Science; Combined Science)</li> </ul>
Technology Education	<ul style="list-style-type: none"> <li>• Business, Accounting and Financial Studies</li> <li>• Design and Applied Technology</li> <li>• Health Management and Social Care</li> <li>• Information and Communication Technology</li> <li>• Technology and Living</li> </ul>
Arts Education	<ul style="list-style-type: none"> <li>• Music</li> <li>• Visual Arts</li> </ul>
Physical Education	<ul style="list-style-type: none"> <li>• Physical Education</li> </ul>

### Reflective Questions

- ✧ What are the diverse interests, aptitudes and abilities of your students at the end of S3?
- ✧ How would you cater for students' diversity in terms of language proficiency, mathematics competencies, solid foundation knowledge for Liberal Studies, aspiration for elective subjects, study and career pathways?
- ✧ How can you make the best use of school days so that students can get the learning opportunities they are entitled to?
- ✧ Is the suggested percentage of time allocation similar to the existing practice in your school? If not, how would you change your existing practice to meet the requirements?



## **Applied Learning as Elective Subject(s) (Category B subject in HKDSE)**

- Applied Learning (ApL)<sup>2</sup> is an integral part of the SS curriculum. Students at all ability levels could take ApL courses as elective subjects. The design principles of ApL courses are the same as those of other school subjects, focusing on the development of knowledge, generic skills, values and attitudes. A flexible combination of ApL courses with core subjects, elective subjects and OLE broadens students' learning experiences and enhances diversification within the SS curriculum for holistic learning. Through application and practice, ApL aims to provide learning experiences for students to understand fundamental theories and concepts and to develop beginners' skill sets, career-related competencies and generic skills, which are required for further studies and by the future labour market.
- Students are given opportunities to understand the context of the course within the wider area of studies; understand and interpret workplace requirements through practising the basic skills in an authentic or near authentic environment; as well as develop and apply conceptual, practical and reflective skills to demonstrate innovation and entrepreneurship. Through the learning experiences in professional and vocational contexts, students explore their career aspirations and orientation for lifelong learning.
- There are six areas of studies under ApL, namely (1) Creative Studies; (2) Media and Communication; (3) Business, Management and Law; (4) Services; (5) Applied Science; and (6) Engineering and Production. ApL provides the learning environment and experiences linked to broad professional and vocational fields that reflect social, economic and technological developments.

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<sup>2</sup> ApL was formerly named "Career-oriented Studies". Please refer to the report "Action for the Future – Career-oriented Studies and the New Senior Secondary Academic Structure for Special Schools" (EMB, 2006) for details.

Subject	Duration
ApL	180 hours over two school years <sup>3</sup>

*(Please refer to the ApL website for more information:*

<http://www.edb.gov.hk/en/curriculum-development/cross-kla-studies/applied-learning/index-1.html>)



### **Other Languages as Elective Subjects (Category C subjects in HKDSE)**

- Students can take Other Languages (including French, German, Japanese, Spanish, Hindi and Urdu) as their elective subjects and sit for the examinations pitched at Advanced Subsidiary Level offered by the Cambridge International Examinations and administered by the HKEAA. Results obtained by students in Other Languages will be reported in their HKDSE certificates.

*(Please refer to the NAS web bulletin <http://334.edb.hkedcity.net/EN/curriculum.php> for more information.)*



### **Reflective Questions**

- ✧ How much do you know about ApL courses? Are they helpful to your students?
- ✧ Would you consider offering one of the “Other Languages” to your SS students? How would you arrange the lessons?

<sup>3</sup> Generally, Applied Learning courses extend over two school years in Secondary 5 and 6. Flexible arrangements of Applied Learning implementation, for example, early course commencement in Secondary 4, may also be adopted in order to cater for students’ diverse learning needs.

### 2.3.4.3 *Other Learning Experiences*

- In order to meet the important goals of the curriculum for whole-person development, all SS students are entitled to Other Learning Experiences (OLE) in the areas of Moral and Civic Education, Aesthetic Development, Physical Development, Community Service and Career-related Experiences. These learning experiences complement the core and elective subjects (including ApL courses) and ensure that learning leads to informed and responsible citizenship, respect for plural values and healthy lifestyle, and development of career aspirations. Schools should make an optimal use of OLE for moral and civic education in addition to other KLA/subject-based learning opportunities.

## 2.4 **Guiding Principles for Designing the Whole-school Curriculum**

Schools should refer to the following guiding principles and the other ten SECG booklets in planning the whole-school curriculum that suits their contexts:

- Ensure that common understanding and values of the **school’s mission and prioritised goals** are shared among school members; (*Refer to Section 1.3 “The Road We have Travelled” of Booklet 1 and make reference to the mission and vision, major concerns and self-evaluation of schools.*)  
Refer to Booklet 1:  
Section 1.3  
*Getting school members’ buy-in is conducive to the effective and sustainable school curriculum implementation.*
- **Build on strengths** in the light of school context; (*Make reference to various sources for information, e.g. student performance, self-evaluation results and external review reports.*)
- **Design a learner-centred curriculum** with the aim of promoting whole-person development and lifelong learning capabilities of students, especially on providing more space to students to learn at their own pace and in their own ways, helping them strike a balance between learning, play and rest and promoting their self-directed learning capabilities; (*Refer to Section 1.6 “Rationale for Ongoing Renewal of the School Curriculum” of Booklet 1 for more information.*)  
Refer to Booklet 1:  
Section 1.6  
*How do we know if our curriculum is promoting lifelong learning and whole-person development among students?*
- Foster strategically a positive school culture, which centres on care, collaboration and good interpersonal relationship, to motivate school members to work towards the updated **seven learning goals** in a pleasant, supportive and safe  
Refer to Booklet 2:  
Section 2.3.1  
*Which learning goal(s) is/are more pertinent to my school’s current situation?*

learning environment; and (*Refer to the Updated Seven Learning Goals of Secondary Education in Figure 2.3 and the current school culture in promoting these learning goals.*)

- Provide a **broad and balanced secondary curriculum** aiming at building a solid foundation at the JS level and providing diversification and specialisation at the SS level. (*Refer to the components of the JS and SS curricula framework and suggested time allocation in Sections 2.3.2 and 2.3.4 of this booklet.*)  
Refer to Booklet 2: Sections 2.3.2 & 2.3.4  
*Adequate time should be allocated to different subjects at the junior and senior secondary levels to achieve a broad and balanced design of the whole-school curriculum.*
- Design a whole-school curriculum with **lateral coherence and vertical continuity** across the eight KLAs, the five essential learning experiences, and learning experiences organised with the three interconnected components of the school curriculum framework, i.e. knowledge in KLAs, generic skills, and values and attitudes. (*Refer to Section 2.3.1 of this booklet*)  
Refer to Booklet 2: Section 2.3.1
- Enhance the professional development of teachers and the deployment of resources to achieve the school curriculum goals. (*Refer to Section 2.5 of this booklet.*)  
Refer to Booklet 2: Section 2.5

### Reflective Question

✧ *What are your past experiences in implementing the JS and SS curricula in your school context?*

- (1) **Referring to and adapting the school curriculum recommended by the CDC;** and providing a sufficient knowledge base for further studies and promotion of lifelong learning skills, positive values and attitudes to meet contemporary needs, and making appropriate school-based adaptations; (*Refer to the School Curriculum Framework in Section 2.3 of this booklet for more information.*)  
Refer to Booklet 2: Fig 2.1  
*Does the curriculum framework of my school at the junior secondary level provide a sufficient and solid knowledge base for students covering eight KLAs?*
- (2) **Sustaining students' motivation and interest** in learning  
Refer to Booklet 3

and encouraging self-directed learning through a wide repertoire of learning and teaching strategies, helping them connect learning to real-life contexts and real-world applications as well as understand how learning contributes to solving daily problems or bettering our lives, society and the world; (Refer to Booklet 3 “Effective Learning and Teaching: Developing Lifelong and Self-directed Learners” for more information.)

What learning and teaching strategies is my school employing to motivate students to learn and promote self-directed learning among them?

(3) **Promoting assessment literacy** to inform and improve the effectiveness of learning and teaching; (Refer to Booklet 4 “Assessment Literacy and School Assessment Policy” for more information.)

Refer to Booklet 4

What key elements do I need to know as regards “assessment literacy” so that my students will benefit?

(4) **Embracing and catering for learner diversity**, and to cater for students’ different learning styles and pace, especially in the areas of special educational needs and education for non-Chinese speaking students; (Refer to Booklet 5 “Embracing Learner Diversity” for more information.)

Refer to Booklet 5

What kind of learner diversity is my school facing? Are we embracing such diversity and adopting the appropriate approach to enhance students’ learning effectiveness?

(5) **Strengthening lateral coherence** by realising the existence of multiple perspectives across KLAs/subjects, connecting the knowledge and skills of different KLAs/subjects and providing opportunities for students’ application in daily lives, also helps co-ordinate and better connect learning within and across KLAs to avoid repetitions; (Refer to the recommendations on Major Renewed Emphases in Section 2.3 of this booklet and Booklet 6 “Four Key Tasks: Towards Major Renewed Emphases” for more information.)

Refer to Booklet 6

How often do teachers from different KLAs sit together to share and deliberate on teaching common skills to promote more effective learning with coherence and authentic contexts for skills and knowledge application?

(6) **Providing the five essential learning experiences** for promoting whole-person development of students throughout the secondary education, and to help them explore their potential, develop strengths and inspire creativity; (Refer to Section 7.3 of Booklet 7 “Life-wide Learning and Experiential Learning” for details of the five essential learning experiences.)

Refer to Booklet 7: Section 7.3

Do I have a role to play in promoting the five essential learning experiences among students, whose intellectual development is different?

(7) **Planning life-wide learning activities** such as experiential

Refer to Booklet 7

learning and career-related activities to broaden students' learning experiences, widen their horizons, and foster whole-person development in authentic contexts beyond the classroom, and emphasising the importance of leisure, rest, recreation and sports in student development; (*Refer to Booklet 7 "Life-wide Learning and Experiential Learning" for more information.*)

*"As research has taught us over many decades and many different cultures young people thrive when they are able to carry their learning across the contexts of classroom, school, home and community."*  
(Prof. John MacBeath, OBE)  
How do my students benefit from my school curriculum in terms of life-wide learning experiences?

(8) ***Enhancing vertical continuity and smooth progression*** in the interface between the curriculum, learning, teaching and assessment practices at each secondary level and between key stages; (*Refer to Section 2.3 of this Booklet and Booklet 8 "Interfaces between KS2/KS3 and KS3/KS4" for more information.*)

Refer to Booklet 8  
What strategies is my school using to enhance the interface between P6 and S1 as well as between KS3 and KS4?

(9) ***Paying special attention to, when planning the SS curriculum, the prior knowledge, skills, values, attitudes and learning experiences*** expected of students at the JS level, the balance between the breadth and depth of learning, theoretical and practical learning, as well as essential and optional components of learning in order to provide a flexible and diversified curriculum; (*Refer to Section 2.3 of this Booklet and Booklet 8 "Interfaces between KS2/KS3 and KS3/KS4" for more information.*)

Refer to Booklet 8  
Does my school keep track of students' learning progression for their better articulation to senior secondary education?

(10) ***Providing choices and a reasonable number of SS elective subjects*** (i.e. at least ten elective subjects including Other Languages, ApL courses) and OLE by exercising professional judgement and flexibility to cater for students' diverse interests, needs and abilities; (*Refer to Booklet 8 "Interfaces between KS2/KS3 and KS3/KS4" for more information.*)

Refer to Booklet 8  
Does my school provide adequate choices of senior secondary elective subjects to students?

(11) ***Providing ApL courses to cater for further studies, vocational and professional needs***, and strengthening administrative support to cater for the diverse needs of students, especially those with aspirations to pursue VPET (e.g. pilot early commencement of some ApL courses at

Refer to Booklet 9  
Does my school offer ApL course(s)? If not, what are our major considerations?

What is the relationship

S4, along with opportunities for taster programmes); (*Refer to Booklet 9 “Career and Life Planning - Multiple Pathways for All Students to Excel” for more information.*) *between ApL and “Vocational and Professional Education and Training” (VPET)?*

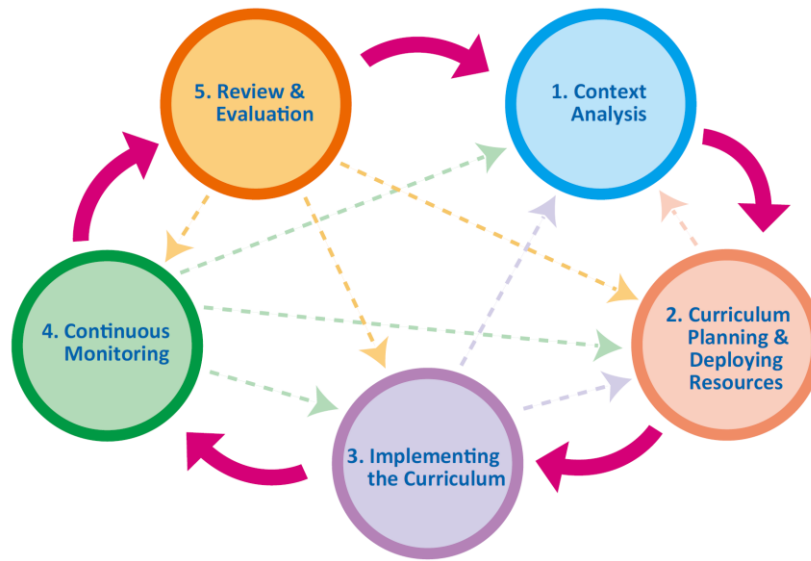
(12) ***Deploying resources flexibly*** to achieve the school curriculum goals; and (*Refer to Booklet 10 “Quality Learning and Teaching Resources” for more information.*) Refer to Booklet 10  
*What resources does my school have for achieving the curriculum goals? What external resources could I get hold of?*

(13) ***Providing timely and diversified professional learning opportunities to teachers*** to help enhance their awareness, knowledge, skills, values and attitudes when dealing with curriculum change and sustain progress, facilitate change and strengthen the ongoing cycle of professional development through setting up communities of practice within school and with other schools and encouraging teachers to share and construct knowledge together. (*Refer to Booklet 11 “Professional Development and Schools as Learning Organisations” for more information.*) Refer to Booklet 11  
*Is my school a community of practice where professional learning is ongoing and targeted towards enhancing students’ learning?*

## 2.5 Five Stages of Whole-school Curriculum Planning

- Since the curriculum reform, most schools have integrated the process of P-I-E (Planning, Implementation and Evaluation) into their school development planning. A five-stage cycle which refines the process to achieve the school curriculum goals is suggested to enhance schools’ practice in whole-school curriculum planning. The five stages are:
  1. Context Analysis
  2. Curriculum Planning and Deploying Resources
  3. Implementing the Curriculum
  4. Continuous Monitoring
  5. Review and Evaluation
- The five-stage cycle for whole-school curriculum planning helps schools identify the basis, key issues and impetus for school development planning and is tied closely to the school development plan for the next cycle. Figure 2.13 shows the five-stage cycle for whole-school curriculum planning.

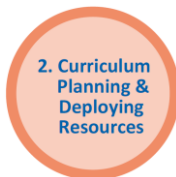
**Figure 2.13 Five-stage Cycle for Whole-school Curriculum Planning**



- The process of the five-stage cycle for whole-school curriculum planning is not necessarily conducted in a linear direction. Depending on the circumstances and needs of each stage of the planning process, schools may revert to other stages and make adjustment to planning and resource deployment.
- This booklet focuses on discussing **Stage 1 “Context Analysis”** and **Stage 2 “Curriculum Planning and Deploying Resources”**. Below is a brief description of the five stages, followed by more suggestions on Stages 1 and 2.

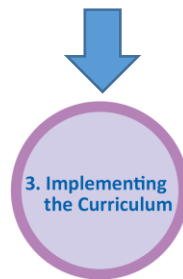


- Before planning, it is important to conduct a **school context analysis** to set the direction, priorities and major concerns for curriculum planning. Schools may adopt the planning tools suggested below independently or simultaneously to meet school needs.

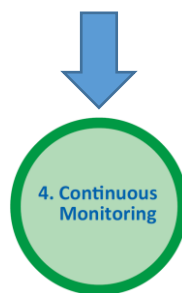




- A whole-school curriculum planning should be carried out in the manner that common understanding and values of the school’s prioritised goals and curriculum initiatives are shared among all school members. In this way, every member in the school works towards the school curriculum goals and initiatives set through cautious, deliberate and collaborative planning.
- To conduct a whole-school curriculum planning, schools should utilise resources flexibly with reference to their curriculum goals, focal points and MRE for the ongoing renewal of the school curriculum.



- Adopting a whole-school approach, schools implement the plans on curriculum development through a wide range of strategies within and beyond the classroom.
- Attention is drawn to whether the expected outcomes are achieved and have brought about positive impact on students’ personal development and learning, and whether there are discrepancies between the curriculum plans and implementation. Teachers may make adjustment to the plans or formulate new strategies to achieve the curriculum goals.



- Schools continuously monitor the implementation of the curriculum to ensure the effectiveness of learning. Schools can take into consideration the following:
  - Facilitating understanding of the curriculum implementation through lesson observations, observing students’ daily performance, reviewing students’ work, learning journals and assessment data, and collecting feedback regularly from teachers, students and parents
  - Collecting data which can illustrate how students’ learning is enhanced, and identifying areas for improvement

- Proposing timely measures for enhancement and improvement of student learning as appropriate, for example, noting down the changes made to the curriculum plans and learning activities for review/follow-up
- Attending to the emerging needs of teachers and students regularly and providing appropriate support



- Schools make good use of the information collected for evaluation to inform curriculum planning of the new cycle and make adjustments to strategies between cycles. Valuable information for review and evaluation includes assessment data from both internal and external sources such as school tests and examinations, APASO (Assessment Programme for Affective and Social Outcomes), TSA (Territory-wide System Assessment), and feedback from different stakeholders to assess students' strengths, weaknesses and needs.
- Schools should have a reliable and precise evaluation system which provides feedback to inform curriculum planning of the new cycle and helps make adjustments/improvements to strategies between cycles so as to facilitate the ongoing curriculum development and improve learning and teaching effectiveness.

### **Reflection and Action**

- ✧ Does the five-stage cycle for whole-school curriculum planning reflect a similar process your school goes through during curriculum planning and development? Why or why not?
- ✧ How effective is the previous school development plan of your school?
- ✧ In collecting information for review and evaluation, does your school include students' voice and parents' views?
- ✧ To what extent are the prioritised goals and curriculum initiatives shared among all school members?
- ✧ What are the discrepancies between your school's curriculum planning and implementation?

## **Planning Tools for Stage 1 - Context Analysis**

- Schools can set the direction, priorities and major concerns for curriculum planning through analysing the following:
  - Current situation of the school curriculum, such as curricula for all KLAs, learning and teaching, assessment, curriculum leadership and teacher professional development;
  - Experiences in curriculum development;
  - Emerging demands on school curriculum development; and
  - Implications of the changing society on school curriculum development
- Schools may use the four planning tools suggested below independently or simultaneously to conduct context analysis.

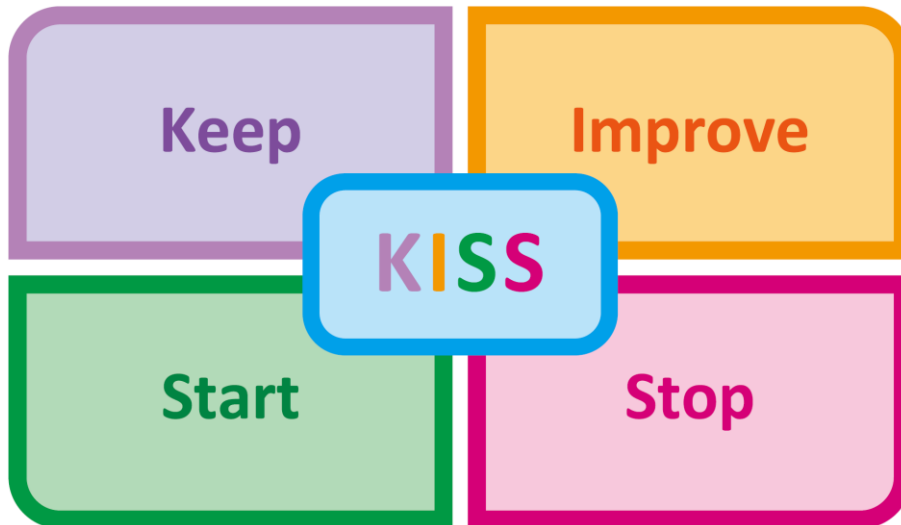
**Figure 2.14 A checklist for review**

Item	Strength	Area for Improvement
Curriculum		
Learning		
Teaching		
Assessment		
Learning and teaching resources		
School curriculum leadership at various levels		
Teacher collaboration		
Staff profiles and professional development needs		
Professional development of various levels of school curriculum leaders		
School as a community of practice		
School ethos		
Communication, connection and collaboration with parents		
Communication, connection and collaboration with different organisations in society		
Others		

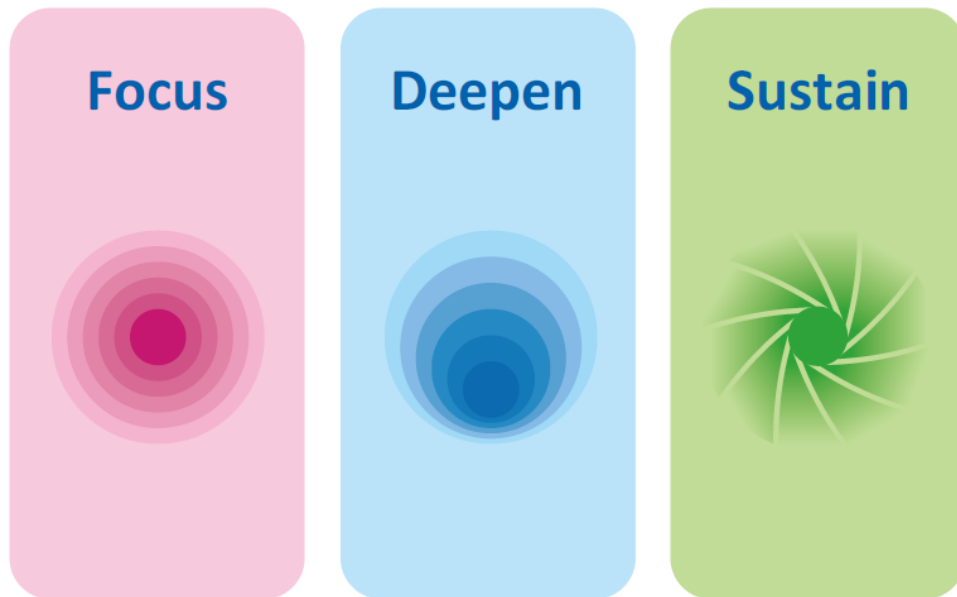
**Figure 2.15 SWOT Analysis**



**Figure 2.16 Keep-Improve-Start-Stop**



**Figure 2.17 Focus- Deepen- Sustain**



**Reflection and Action**

- ✧ In what way(s) can your school build on the strengths identified? What are the goals/focuses of your student programme in accordance with the abilities, interests and aptitudes of your students?
- ✧ What can be done to address the weaknesses identified in your school?
- ✧ How can your school make use of the opportunities ahead?
- ✧ How can your school defend against threats?

## Planning Tools for Stage 2 – Curriculum Planning & Deploying Resources

### *A Checklist for Curriculum Planning*

Schools may refer to the following checklist and determine strategies that best fit their contexts.

Figures 2.18

<b>Checklist on the Implementation Strategies</b>	<b>Consideration of the School</b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Understanding students’ learning needs and culture</li> <li><input type="checkbox"/> Understanding the latest development trends in education</li> <li><input type="checkbox"/> Strengthening leadership in whole-school curriculum development</li> <li><input type="checkbox"/> Fostering connection between the Four Key Tasks and the Major Renewed Emphases at the JS Level and beyond</li> <li><input type="checkbox"/> Strengthening cross-curricular and interdisciplinary linkage</li> <li><input type="checkbox"/> Enhancing teachers’ repertoire of pedagogy</li> <li><input type="checkbox"/> Deploying resources effectively</li> <li><input type="checkbox"/> Other strategies (e.g. Interface at P6 to S1, S3 to S4, S6 and multiple pathways)</li> </ul>	

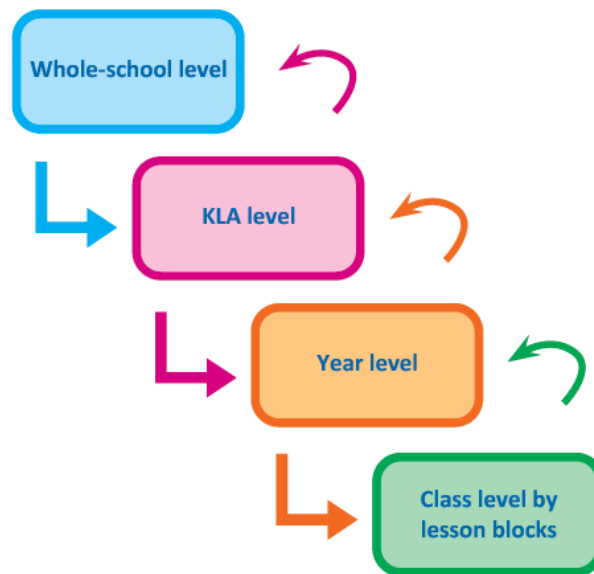
### *Coherence of the Four Levels of Curriculum Planning*

- The four levels of curriculum planning, namely whole-school level, KLA level, year level and class level by lesson blocks, are interrelated. Coherence among these four levels of curriculum planning is of utmost importance as it:
  - helps ensure school priorities, in terms of vision, curriculum goals, major concerns, focal points and MRE, to be realised in student learning;
  - allows effective learning to occur by making meaningful connections within and across the curriculum and progression from year to year; and
  - helps identify gaps and remove unnecessary duplications in the school curriculum.

## ***Interface***

- Curriculum planning of the lower levels informs that of the upper levels and vice versa. For example, when KLAs are planning the curriculum, gaps and feedback to the whole-school curriculum which lead to adjustment in the whole-school curriculum planning may be identified (see Figure 2.19).

**Figure 2.19 Four Levels of Curriculum Planning**



## ***A Planning Tool for Whole-school Curriculum Planning and Self-evaluation***

- The planning tool in Figure 2.20 is designed to support schools in whole-school curriculum planning, e.g. the planning of MRE (*please refer to Section 2.3.2.2 “Four Key Tasks: Towards Major Renewed Emphases” for more information*), the five essential learning experiences under LWL at the JS level and the five essential areas of learning under OLE at the SS level.
- Schools may use this planning tool flexibly with appropriate adaptation to suit the school contexts. (*Please refer to Appendices 5 and 6 for illustrations.*)
- Schools may also consider incorporating plans derived from this tool in their school development plan/school reports.



*A Checklist for Whole-school Curriculum Planning and Self-evaluation*

Figure 2.20 A Checklist for Whole-school Curriculum Planning and Self-evaluation

<b>Programme/Activity:</b>	
_____	
<b>Whole-school Curriculum Planning and Self-evaluation</b>	<b>Remarks</b>
<b>(A) Lesson Hours and Learning Hours</b>	
<p>✧ <b>Curriculum/Subject Learning (Classroom)</b></p> <p>Related KLA(s)/Subject(s)/ Functional Area(s): _____</p> <p>Key Content: _____</p> <p>Year Level: <input type="checkbox"/>S1   <input type="checkbox"/>S2   <input type="checkbox"/>S3   <input type="checkbox"/>S4   <input type="checkbox"/>S5   <input type="checkbox"/>S6</p> <p><b>Lesson hours:</b> _____</p>	
<p>✧ <b>Student Learning Experiences/Activities (e.g. LWL, OLE)</b></p> <p>Related KLA(s)/Subject(s)/Functional Area(s): _____</p> <p>Key Content: _____</p> <p>Year Level: <input type="checkbox"/>S1   <input type="checkbox"/>S2   <input type="checkbox"/>S3   <input type="checkbox"/>S4   <input type="checkbox"/>S5   <input type="checkbox"/>S6</p> <p><b>Learning hours:</b> _____</p>	
<p>✧ <b>Non-local Learning Experiences/Activities (e.g. MEP, overseas visits)</b></p>	

<p>Related KLA(s)/Subject(s)/ Functional Area(s):</p> <hr/> <p>Key Content:</p> <hr/> <p>Year Level: <input type="checkbox"/>S1    <input type="checkbox"/>S2    <input type="checkbox"/>S3    <input type="checkbox"/>S4    <input type="checkbox"/>S5    <input type="checkbox"/>S6</p> <p><b>Learning hours:</b> _____</p>	
<p><b>(B) Use of Learning and Teaching Resources &amp; Assessment</b></p> <p><input type="checkbox"/> Resources from the EDB:</p> <hr/> <hr/> <p><input type="checkbox"/> Other resources (including resources developed by the school):</p> <hr/> <hr/> <p><input type="checkbox"/> Observations/comments on the resources used:</p> <hr/> <hr/> <hr/> <p><input type="checkbox"/> Mode of assessment:</p> <hr/> <hr/> <hr/>	
<p><b>(C) Staff's Participation in Training/Professional Development Activities</b></p> <p><input type="checkbox"/> Training/professional Development Activities:</p> <hr/> <hr/> <p><input type="checkbox"/> Organiser:</p> <hr/>	

<input type="checkbox"/> No. of hours: _____ <input type="checkbox"/> No. of staff participated in the training/professional development activities: _____	
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### **Reflection and Action**

- ✧ When planning the curriculum, what will you do to avoid the curriculum content being dictated by textbooks?
- ✧ How would you prepare and adapt technology as an evolving entity to the changing educational contexts and pedagogies in the whole-school curriculum planning?

### **Overall Reflection and Action**

#### **In relation to the school mission:**

- ✧ How are the school mission, curriculum goals, major concerns and focal points for the ongoing renewal of the school curriculum reflected in the curriculum planning, school calendar and timetable

#### **In relation to students and teachers:**

- ✧ How are issues related to students' diverse needs (e.g. their interests, social needs, leisure and rest, academic abilities) and concerns for interface between different key stages addressed?
- ✧ Under what circumstances can the lesson or learning time in schools be maximised?
- ✧ How can space and time be provided for teachers to enhance their professional development?

#### **In relation to resources:**

- ✧ How can the physical environment and facilities of the school be fully utilised to enable better timetabling arrangement?

- ✧ How can the teaching and non-teaching staff be better deployed to facilitate an effective time-tabling arrangement?
- ✧ What contributions can the teacher-librarian make?
- ✧ How can we make good use of parental support to help with school activities?
- ✧ How can we explore opportunities for co-operation with different organisations?
- ✧ How can different community resources be utilised to facilitate student learning?

**In relation to curriculum planning**

- ✧ How can we offer a broad and balanced curriculum to flexibly cater for student needs?
- ✧ How many periods should we offer per day/week/cycle?
- ✧ How can the lesson time be provided to meet the minimum requirement of each KLA?
- ✧ How can we encourage connections and collaboration across KLAs?
- ✧ How can the school curriculum, school calendar and timetable be better co-ordinated with co-curricular activities/OLE?
- ✧ How much time is allocated to the five essential learning experiences?
- ✧ Are students provided with opportunities to explore their interests and aspirations towards further studies in VPET?
- ✧ Is there sufficient time for Physical Education lessons and sports?
- ✧ To what extent can improvements be made through curriculum planning, school calendar and timetabling arrangement?

**Generic Skills**

**Communication Skills**

Communication skills refer to the abilities to achieve the desired outcomes or goals in a process where two or more people interact (be it in a face-to-face or virtual context) through expressing or receiving messages using verbal and non-verbal means. To communicate effectively, students should learn to listen, speak, read and write competently. Not only should they express themselves in an accurate, organised and proper manner, but they should also understand and respect others' views and expectations, and use appropriate information and means to convey a message in accordance with the purpose, context and audience. They should also evaluate the effectiveness of their communication and identify areas for improvement to achieve the best results.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• comprehend and act appropriately on spoken instructions</li> <li>• comprehend the explicit messages conveyed in information from different media</li> <li>• use clear and appropriate means of communication, both verbal and non-verbal, to express meaning and feelings</li> <li>• work and discuss with others to accomplish simple tasks</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• comprehend and respond to different types of texts</li> <li>• comprehend and infer the messages conveyed in information from different media</li> <li>• use spoken, written, graphic and other non-verbal means of expression to convey information and opinions, and to explain ideas</li> <li>• work and negotiate with others to develop ideas and accomplish tasks</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• understand, analyse, evaluate and respond to a range of different types of texts</li> <li>• synthesise the messages conveyed in information from different media</li> <li>• use appropriate language and/or other forms of communication to present information and different points of view, and to express feelings</li> <li>• work and negotiate with others to solve problems and accomplish tasks</li> <li>• reflect and improve on the effectiveness of their own communication</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• listen and read critically, evaluate the messages conveyed in information from different media and express ideas fluently in accordance with the audience and reader</li> <li>• use appropriate means of communication to inform, entertain, persuade and argue to achieve expected outcomes</li> <li>• resolve conflicts and solve problems with others to accomplish tasks</li> <li>• evaluate the effectiveness of their communication with others from different perspectives for further improvement</li> </ul>

## Mathematical Skills<sup>4</sup>

Mathematical skills include the ability to perform computations and estimations of numbers in various forms, to describe spatial relationships between objects, to perform measurements, to manage data, to employ logical reasoning for drawing valid conclusions, and to apply mathematical concepts in different contexts.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• perform comparison and basic computations of whole numbers</li> <li>• describe shapes, sizes and positions</li> <li>• apply the knowledge of measurement and use appropriate units and tools for measurement</li> <li>• present data by means of and retrieve information from simple charts and graphs</li> <li>• perform simple deductions with the use of basic logical concepts, such as “and”, “or”, “all”, “some”, “because”, “if ... then” and “contradiction”</li> <li>• apply simple mathematical knowledge in daily life</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• perform computations and simple estimations involving whole numbers, fractions, decimals and percentages, such as estimating expenses</li> <li>• use simple geometric properties, such as symmetry, parallel and perpendicular, to describe shapes, sizes and positions more accurately</li> <li>• apply strategies and formulae in measurement</li> <li>• collect and process data, present data by means of suitable charts and graphs and retrieve information from charts and graphs</li> <li>• perform deductions, such as syllogism and provide counter examples</li> <li>• apply mathematical concepts in daily life</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• handle very large or very small numbers and negative numbers with a sense of scale</li> <li>• perform numerical manipulations, such as percentage changes, and perform estimations with appropriate strategies</li> <li>• describe the rules of arrangement of objects or occurrence of events, such as the pattern formed by a set of shapes and the trend of population growth</li> <li>• describe spatial relationships between objects using distance, angle, scale, bearings and gradient</li> <li>• choose appropriate tools and strategies to find measurements according to the degree of accuracy required by the specific purpose</li> <li>• use different methods for handling (i.e. collecting, organising, analysing and presenting) quantitative information and make reasonable interpretation of the results</li> <li>• estimate risks and chances through the use of elementary probability</li> <li>• perform deductions and verifications, and check their validity</li> <li>• apply various mathematical concepts in authentic situations</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• evaluate the appropriateness of tools and strategies for handling quantitative information</li> <li>• use quantitative information for making informed decisions in different contexts</li> <li>• evaluate processes of deductions to avoid committing logical fallacies</li> <li>• apply various mathematical concepts in different contexts with appropriate strategies and be aware of the need to make adaptations in new situations</li> </ul>

<sup>4</sup> In the context of generic skills, Mathematical Skills refer to the ability to apply mathematics in different key learning areas and subjects. The concepts and skills of the Mathematics subject to be applied are only those generally applicable to various disciplines.

## Information Technology Skills

Information technology skills are the ability to use IT critically to search, select, analyse, manage and share information. Mastery of IT skills facilitates collaborative learning, problem solving and self-directed learning.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• operate computers or mobile devices</li> <li>• input Chinese characters</li> <li>• use e-resources to support learning with the help of teachers</li> <li>• recognise some methods to locate and access information with given search criteria</li> <li>• generate, present, and safely share ideas with IT tools in learning activities</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• use a variety of software packages for word-processing, calculation, image-processing and other learning activities</li> <li>• produce multimedia presentations with simple design</li> <li>• search, select and prudently share information via computer networks and other media</li> <li>• process information and produce user-generated content<sup>5</sup> using IT tools</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• use appropriate IT tools to facilitate learning</li> <li>• use IT tools and strategies for processing and presenting information</li> <li>• produce multimedia presentations with appropriate design for different purposes</li> <li>• communicate and collaborate with others via computer networks and other media</li> <li>• verify and evaluate the accuracy and reliability of information</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• strengthen capability in IT usage for lifelong learning</li> <li>• analyse and ethically use information from different sources for specific purposes</li> <li>• compare the effectiveness of various ways, including the use of IT tools, to solve a given problem</li> <li>• select and apply appropriate IT tools in different aspects of study, including processing information, generating and communicating original ideas artfully to audience with different backgrounds</li> </ul>

<sup>5</sup> User-generated content refers to content that is produced and shared by end-users of digital media.

## Critical Thinking Skills

Critical thinking is drawing out meaning from available data or statements, and examining and questioning their accuracy and credibility in order to establish one's views and evaluate the arguments put forward by oneself and others.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• extract, classify and organise information</li> <li>• identify and express main ideas, problems or core issues</li> <li>• understand straightforward cause-and-effect relationships</li> <li>• distinguish between obvious fact and opinion</li> <li>• notice obvious contradictions, seek clarifications and make simple predictions</li> <li>• draw simple but logical conclusions not contradictory to given data and evidence</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• make inductions/inferences from sources</li> <li>• cross-reference other sources to determine the reliability of a source</li> <li>• understand the concepts of relevance and irrelevance</li> <li>• distinguish between fact and opinion as well as source and evidence</li> <li>• recognise obvious inconsistencies, omissions, assumptions, stereotypes and biases</li> <li>• formulate appropriate questions, and make reasonable predictions and hypotheses</li> <li>• draw logical conclusions based on adequate data and evidence, and make predictions about consequences</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• identify the issue at stake</li> <li>• clarify and define key words to guide thinking</li> <li>• compare information from different sources, note contrasts and similarities, and determine its reliability</li> <li>• differentiate between fact, opinion and reasoned judgement</li> <li>• recognise that information providers' value orientations and ideologies would affect the perspectives or judgement of sources</li> <li>• recognise and challenge stereotypes, emotional factors, propaganda and fallacies</li> <li>• draw and test conclusions as well as hypotheses, identify reasonable alternatives and predict probable consequences</li> <li>• admit their own limitations, shortcomings or errors of the thinking process</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• differentiate between real and stated issues, false and accurate representations, and relevant and irrelevant evidence</li> <li>• differentiate between sophisticated fact, opinion and reasoned judgement</li> <li>• recognise and challenge subtle or fundamental assumptions, permeating value orientations and ideologies</li> <li>• recognise that the selection and deployment of information/facts are affected by personal perspectives</li> <li>• draw warranted conclusions, predict and assess probable consequences and make reasoned judgement in reading, writing and speech</li> <li>• apply appropriate thinking skills to evaluate and reflect on their thinking process and suggest ways for improvement</li> </ul>



## Creativity

Creativity brings in changes or transformations and is manifested in new ideas, acts or products. It emerges spontaneously or through deliberate processes of divergent and convergent thinking. It involves the integration of general or domain-specific knowledge for a meaningful purpose.

Although the expected achievements of the students in this generic skill cannot be suitably classified according to Key Stages, development of creativity involves the following *abilities, dispositions* and *favourable factors for nurturing creativity*.

### 1. Abilities

Abilities	Descriptions
Sensitivity	To discern details from observation and quickly respond to stimulus
Fluency	To generate numerous ideas promptly
Flexibility	To adapt varied ideas and to initiate new thoughts for action
Originality	To produce unusual, novel and unique ideas
Elaboration	To expand, refine and embellish ideas

### 2. Dispositions

Dispositions	Descriptions
Curiosity	To show interest and desire to find out more
Risk-taking	To show courage and determination to deal with uncertainties or ambiguities
Imagination	To enjoy fantasising and generating new ideas
Complexity	To be attracted to intricacies and novelty; to embrace challenges

### 3. Favourable Factors for Nurturing Creativity<sup>6</sup>

Favourable Factors	Corresponding actions
Place	<ul style="list-style-type: none"> <li>• To foster a supportive environment (open, inviting and accepting atmosphere; resourceful, safe yet stimulating environment)</li> </ul>
Person	<ul style="list-style-type: none"> <li>• To recognise and accommodate the wide range of attributes and dispositions of students (strengths, weaknesses, learning styles, learning needs, motivation and readiness)</li> <li>• To identify and develop students' potential for creative acts</li> </ul>
Process	<ul style="list-style-type: none"> <li>• To open up alternatives for students to explore personal interest</li> <li>• To provide interesting and stimulating themes conducive to arousing creative acts and satisfying a craving</li> <li>• To expose students to various stages of creating new ideas, acts or products (preparation, incubation, illumination and verification)</li> <li>• To value attempts to present new ideas and encourage further refinements</li> </ul>
Product	<ul style="list-style-type: none"> <li>• To encourage creative actions and output (ideas, plans, methods, solutions, products, theories)</li> <li>• To value the creative experience and celebrate students' creative output</li> <li>• To encourage students to persuade others (especially experts in the field) to accept the creative output</li> </ul>

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<sup>6</sup> Mooney, R. L. (1975). A conceptual model for integrating four approaches to the identification of creative talent. In C. W. Taylor & F. Barron (Eds.), *Scientific Creativity: Its Recognition and Development* (pp. 331-340). New York, NY: Robert E. Krieger.

## Problem Solving Skills

Problem solving involves using various skills to resolve a difficulty. The process includes investigating the problem, synthesising information and generating ideas to determine the best course of action. Students need to adjust and evaluate strategies, as well as consolidate experience for knowledge construction.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• develop ideas about the problem and identify related sources of information</li> <li>• identify, under guidance, one or more ways of tackling the problem</li> <li>• choose and implement a solution plan, using support and advice given</li> <li>• follow the given step-by-step methods to check and describe the outcomes</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• identify the problem and describe its main features</li> <li>• propose alternative courses of action for solving it</li> <li>• plan and try out the selected option, obtain support and make changes when needed</li> <li>• develop an appropriate method to measure the effectiveness of the solution plan adopted</li> <li>• gain insights from the problem solving process</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• explore the problem and identify its main focus</li> <li>• suggest and compare the possible outcomes of each alternative course of action and justify the option selected</li> <li>• execute the planned strategy, monitor the progress and make adjustment when necessary</li> <li>• evaluate against established criteria the quality of outcomes, and review the effectiveness of the problem solving process</li> <li>• formulate personal views, and paraphrase or construct analogies to explain how the problem is solved</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• recognise the complexity of the problem and search for appropriate information required to solve it</li> <li>• formulate feasible strategies to achieve optimal results, considering both long and short term objectives</li> <li>• modify objectives or strategies and suggest remedial or enhancing measures to cope with circumstantial changes or difficulties</li> <li>• evaluate the overall strategy and outcomes, and anticipate future problems that may be incurred</li> <li>• consolidate experience on problem solving for knowledge construction</li> </ul>

## Self-management Skills

Self-management skills comprise essential life skills and desirable personal qualities such as maintaining emotional stability, making decisions and exercising self-discipline. Self-management skills enable students to embrace challenges encountered on a personal or team basis.

The expected achievements of the students in this generic skill are classified according to different levels of mastery.

Elements of Self-management Skills	Beginning -----	Developing -----	Mastering
	<b>Students will learn to</b>		
Self-worth	<ul style="list-style-type: none"> <li>express positive statements about themselves</li> </ul>	<ul style="list-style-type: none"> <li>identify and apply personal skills, attitudes and values to overcome challenges</li> </ul>	<ul style="list-style-type: none"> <li>uphold, synthesise and renew their own beliefs and values</li> </ul>
Goal setting and tracking	<ul style="list-style-type: none"> <li>set goals to assist their learning and personal development</li> </ul>	<ul style="list-style-type: none"> <li>set and keep track of realistic goals</li> </ul>	<ul style="list-style-type: none"> <li>set, keep track of, and be reflective on and accountable for goals which work towards excellence in life</li> </ul>
Decision making	<ul style="list-style-type: none"> <li>make decisions in daily life situations with supporting reasons</li> </ul>	<ul style="list-style-type: none"> <li>list out and evaluate the pros and cons of a suggestion, and make prediction about the consequences of a decision</li> </ul>	<ul style="list-style-type: none"> <li>consider all factors, such as technical, ethical, resource and community considerations before making a decision</li> </ul>

Confidence, resilience and adaptability	<ul style="list-style-type: none"> <li>develop confidence and resilience in performing simple tasks and appreciate the progress made</li> </ul>	<ul style="list-style-type: none"> <li>demonstrate motivation, confidence, commitment and adaptability when faced with new or difficult situations, and derive satisfaction from accomplishments and efforts</li> </ul>	<ul style="list-style-type: none"> <li>demonstrate confidence and adaptability in adversities, tolerate ambiguities and appreciate lessons learnt from mistakes</li> </ul>
Appropriate expression of emotions	<ul style="list-style-type: none"> <li>understand, accept and appropriately express emotions</li> </ul>	<ul style="list-style-type: none"> <li>describe their feelings, such as joy and disappointment and identify factors contributing to these feelings</li> </ul>	<ul style="list-style-type: none"> <li>use appropriate means to contain or release their emotions</li> </ul>
Managing resources	<ul style="list-style-type: none"> <li>demonstrate care for personal properties and shared resources</li> </ul>	<ul style="list-style-type: none"> <li>treasure and make good use of time, money and other resources</li> </ul>	<ul style="list-style-type: none"> <li>suggest ways for effective, equitable and ethical use of resources</li> </ul>
Keeping promises to others	<ul style="list-style-type: none"> <li>keep promises and fulfill obligations</li> </ul>	<ul style="list-style-type: none"> <li>assess feasibility before making promises</li> </ul>	<ul style="list-style-type: none"> <li>make determined efforts to keep promises</li> <li>take responsibility and make up for broken promises obliged by circumstances</li> </ul>
Self-discipline	<ul style="list-style-type: none"> <li>exercise self-control against distractions, and focus on and complete given tasks at hand within a given time</li> </ul>	<ul style="list-style-type: none"> <li>extend self-control in scope and duration over personal impulses through developing positive thinking and self-affirmation</li> </ul>	<ul style="list-style-type: none"> <li>exercise self-control naturally as a habit of mind</li> </ul>
Reflective practice	<ul style="list-style-type: none"> <li>review their learning readily to know more about themselves and how they work</li> </ul>	<ul style="list-style-type: none"> <li>form habits of reviewing their learning and identify factors that contribute to or hinder their learning effectiveness</li> </ul>	<ul style="list-style-type: none"> <li>sustain self-improvement by paying attention to and making judicious use of feedback</li> </ul>

## Self-learning Skills

Self-learning skills refer to the ability to initiate, plan, carry out, evaluate and adjust learning activities autonomously. Students with advanced self-learning skills can select or design effective strategies for in-depth learning. These skills help students enhance their academic performance and self-efficacy. Self-learning skills form the core part of lifelong learning and help students acquire new knowledge to adapt to the fast changing world.

Key Stage 1	Key Stage 2	Key Stage 3	Key Stage 4
<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• consciously listen and read to learn, and actively present their learning</li> <li>• concentrate and pay attention to instructions</li> <li>• identify and retain main ideas</li> <li>• collect information from given sources and organise it into pre-determined categories</li> <li>• try out different means to present ideas and demonstrate learning</li> <li>• develop simple learning plans to meet short term targets</li> <li>• show interest in enquiring further</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• take initiative in the enquiry learning area selected by themselves</li> <li>• actively locate required information from different media</li> <li>• take initiative in identifying and organising main points from different sources, e.g. note-taking, mind-mapping</li> <li>• decide on the most suitable means to present ideas and demonstrate learning</li> <li>• seek help appropriately when necessary</li> <li>• manage time to complete tasks according to a plan</li> <li>• make use of feedback to reflect on the effectiveness of different learning tactics</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• initiate learning activities and apply relevant personal strengths to overcome challenges</li> <li>• set learning plans with stage-wise goals</li> <li>• identify lines of reasoning and possible hidden ideas in sources</li> <li>• function effectively in a group to achieve the learning goals</li> <li>• decide on the most suitable means to manage and present knowledge</li> <li>• adjust the learning strategies to improve learning effectiveness</li> </ul>	<p>Students will learn to</p> <ul style="list-style-type: none"> <li>• initiate challenging learning activities and develop relevant personal strengths to overcome challenges</li> <li>• plan and set goals for self-initiated enquiries</li> <li>• autonomously select or design more effective learning strategies for in-depth learning</li> <li>• evaluate key ideas, opinions and arguments identified from different sources independently, and synthesise them to construct and develop their own interpretation</li> <li>• evaluate and suggest ways to improve the effectiveness of learning strategies</li> <li>• learn beyond the prescribed curriculum and apply knowledge in a variety of contexts</li> </ul>

## Collaboration Skills

Problem solving, planning and making decisions in a small group require collaboration skills, namely the skills of communication, appreciation, negotiation, making compromises and asserting leadership. Students with these skills will be able to effectively engage in and contribute to tasks involving teamwork.

The expected achievements of the students in this generic skill cannot be suitably classified according to Key Stages.

### **1. Understanding the nature of group work**

#### **Students will learn to**

- recognise the need for teamwork and that the team has a shared responsibility
- recognise that individuals as well as the team have to take the consequences for their own actions

### **2. Desirable dispositions for group work**

#### **Students will learn to**

- be open and responsive to others' ideas; appreciate, encourage and support the ideas and efforts of others
- be active in discussing and posing questions to others, as well as in exchanging, asserting, defending and rethinking ideas
- recognise and avoid stereotyping; withhold premature judgement until the facts are known
- be willing to adjust their own behaviour to fit the dynamics of various groups and situations

<b>3. Skills for group work</b>	
<b>Students will learn to</b>	
<b>Goal setting</b>	<ul style="list-style-type: none"> <li>• select a strategy and plan cooperatively to complete a task in a team</li> </ul>
<b>Role taking</b>	<ul style="list-style-type: none"> <li>• understand the strengths and weaknesses of members and maximise the potential of the team</li> <li>• clarify and accept various roles and responsibilities of individual members in a team and be willing to follow team rules</li> </ul>
<b>Synergising</b>	<ul style="list-style-type: none"> <li>• liaise with members for views and resources</li> <li>• negotiate and compromise with others</li> </ul>
<b>Reflection</b>	<ul style="list-style-type: none"> <li>• reflect on and evaluate the strategy used by the group and make necessary adjustments</li> </ul>



### ***Collaborative Problem Solving Skills***

Collaborative problem solving skills, an example of integrative use of generic skills, refers to students’ ability to solve problems with synergised efforts through effective division of labour, as well as incorporation of information from multiple sources of knowledge, perspectives and experiences. Compared to individual problem solving, collaborative problem solving has distinct advantages because it enhances the creativity and quality of solutions through stimulation brought by the ideas of other group members<sup>7</sup>. In the 21<sup>st</sup> Century, it is particularly important for people with different perspectives and talents to solve problem as a team with the effective use of communication technology.

The expected achievements of the students in collaborative problem solving skills are classified according to different levels of mastery.

Students will learn to

<b>Beginning</b>	<b>Developing</b>	<b>Mastering</b>
<b>Collaboration</b>		
<ul style="list-style-type: none"> <li>• be ready to act responsively and reach the goals with team members</li> <li>• follow the rules and instructions set for the team work</li> <li>• participate actively in the team and contribute to achievement of the team goals</li> </ul>	<ul style="list-style-type: none"> <li>• share other team members’ perspectives on the problem and establish a common understanding</li> <li>• identify and capitalise on the talents and potential of members</li> <li>• be able to work with different people and accept the adjustments to plans or roles in changing situations</li> </ul>	<ul style="list-style-type: none"> <li>• treasure working as a team and take initiative to foster synergy for attaining the team goals</li> <li>• show mutual respect and support when dealing with difficult people and situations</li> <li>• take initiative to propose plans or make adjustments to the plans and roles in changing situations</li> </ul>

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<sup>7</sup> Adapted from OECD 2015 PISA Framework

Beginning	Developing	Mastering
<b>Communication</b>		
<ul style="list-style-type: none"> <li>• comprehend messages with an open mind and ask questions to identify the problem and team goals</li> <li>• express oneself clearly to team members by verbal and/or non-verbal means</li> <li>• show courage in sharing new or unconventional ideas</li> </ul>	<ul style="list-style-type: none"> <li>• ask meaningful questions that clarify the vision, goals and viewpoints for better solutions</li> <li>• respond specifically to queries raised during the problem solving process</li> <li>• enhance mutual understanding through effective means and with a respectful attitude</li> </ul>	<ul style="list-style-type: none"> <li>• negotiate for consensus and foster a cooperative atmosphere to resolve conflicts</li> <li>• take the initiative in introducing new resources and exploring further ideas to facilitate the team to progress further</li> </ul>
<b>Problem Solving</b>		
<ul style="list-style-type: none"> <li>• propose solutions or strategies to solve a problem</li> <li>• complete the task assigned to one's role in the team</li> </ul>	<ul style="list-style-type: none"> <li>• select a problem solving strategy and develop an action plan</li> <li>• execute actions that comply with the planned distribution of roles and make adjustments when necessary</li> </ul>	<ul style="list-style-type: none"> <li>• select a problem solving strategy and prepare alternative plans</li> <li>• monitor and evaluate individual and team effectiveness</li> </ul>

## ***Generic Skills – Holistic Thinking Skills***

Critical thinking skills, creativity and problem solving skills are conventionally categorised as higher order thinking skills. These three skills can be combined and employed integratively as holistic thinking skills to deal with complex issues. Holistic thinking skills enable students to deploy critical thinking skills to assess the validity of given information, creativity to explore other possibilities, and problem solving skills to examine the feasibility of each alternative.

The expected achievements of the students in holistic thinking skills are classified according to different levels of mastery.

Students will learn to

<b>Beginning</b>	<b>Developing</b>	<b>Mastering</b>
<b>Critical Thinking: enquiring and assessing</b>		
<ul style="list-style-type: none"> <li>• ask questions to explore matters that attract interest</li> <li>• identify main ideas and clarify meaning in information</li> </ul>	<ul style="list-style-type: none"> <li>• pose questions to explore issues related to their immediate contexts</li> <li>• comprehend complementary and contradictory information</li> </ul>	<ul style="list-style-type: none"> <li>• pose questions that probe complex and abstract ideas about issues beyond local context and contemporary period</li> <li>• synthesise points from complementary and contradictory information</li> </ul>
<b>Creativity: generating</b>		
<ul style="list-style-type: none"> <li>• come up with new ideas by linking imagination and reality</li> <li>• create analogies by matching two ideas</li> <li>• brainstorm suggestions</li> </ul>	<ul style="list-style-type: none"> <li>• draw parallels between known and new scenarios and use ideas, patterns and trends to consider new possibilities</li> <li>• produce alternative or unconventional solutions</li> <li>• suspend judgement to consider alternative ideas and actions</li> </ul>	<ul style="list-style-type: none"> <li>• generate a large number of raw ideas</li> <li>• combine good ideas to make even better ideas</li> <li>• use existing knowledge in a novel way</li> <li>• temporarily suspend pragmatic and rational thinking to allow new possibilities to emerge</li> </ul>

Beginning	Developing	Mastering
<b>Critical Thinking and Problem Solving: analysing and comparing</b>		
<ul style="list-style-type: none"> <li>• realise real world constraints in drafting solutions</li> <li>• compare advantages and limitations of various solutions</li> </ul>	<ul style="list-style-type: none"> <li>• estimate the cost and benefit of possible solutions from multiple perspectives</li> <li>• rate and select solutions according to criteria, such as feasibility, desirability and ethical considerations</li> </ul>	<ul style="list-style-type: none"> <li>• compare the possible outcomes of each solution against both their own and prevailing values</li> <li>• mediate opposing viewpoints and acknowledge the limitations of one's view</li> <li>• synthesise different considerations into a solution</li> </ul>
<b>Creativity and Problem Solving: predicting and fine-tuning</b>		
<ul style="list-style-type: none"> <li>• ask "what if" questions</li> <li>• consider ways of tackling possible consequences</li> </ul>	<ul style="list-style-type: none"> <li>• make adjustments to avoid possible pitfalls (e.g. ambiguity, stereotyping and misunderstandings) in planning and presentation of solutions</li> <li>• consider alternative courses of action in changing situations</li> </ul>	<ul style="list-style-type: none"> <li>• fine tune plans with reference to new developments</li> <li>• be sensitive to stakeholders' reactions</li> <li>• anticipate adverse impacts and suggest precautionary or compensatory measures accordingly</li> </ul>

Beginning	Developing	Mastering
<b>Problem Solving: executing and monitoring</b>		
<ul style="list-style-type: none"> <li>• choose a solution and devise an implementation plan, using support and advice given</li> <li>• turn the plan into workable parts with measures for implementation</li> </ul>	<ul style="list-style-type: none"> <li>• execute the plan, monitor progress and revise the strategies when necessary</li> <li>• realise the adverse effect of over-reacting and using emotional words</li> </ul>	<ul style="list-style-type: none"> <li>• monitor the progress with established check points or criteria</li> <li>• suggest ways to catch up with delays or optimise the results</li> <li>• manage over-reactions and strong emotions</li> </ul>
<b>Problem Solving and Critical Thinking: evaluating and reflecting</b>		
<ul style="list-style-type: none"> <li>• reflect on whether the task is accomplished</li> <li>• be open to comments and feedback</li> </ul>	<ul style="list-style-type: none"> <li>• evaluate the quality of outcomes and the solution process</li> <li>• invite and evaluate feedback</li> </ul>	<ul style="list-style-type: none"> <li>• evaluate the effectiveness of solutions with due regard for positive values</li> <li>• anticipate possible problems arising from the solution</li> <li>• make judicious use of comments and feedback</li> </ul>

*Values and Attitudes for  
Incorporation into the School Curriculum*

A Proposed Set of Values and Attitudes for Incorporation into the School Curriculum –

**Seven Priority Values and Attitudes:**

- ✧ Perseverance
- ✧ Respect for Others
- ✧ Responsibility
- ✧ National Identity
- ✧ Commitment
- ✧ Integrity
- ✧ Care for Others

## Other Core Values:

Core Values: Personal	Sustaining Values: Personal	Core Values: Social	Sustaining Values: Social	Attitudes
<ul style="list-style-type: none"> <li>❖ sanctity of life</li> <li>❖ truth</li> <li>❖ aesthetics</li> <li>❖ honesty</li> <li>❖ human dignity</li> <li>❖ rationality</li> <li>❖ creativity</li> <li>❖ courage</li> <li>❖ liberty</li> <li>❖ affectivity</li> <li>❖ individuality</li> </ul>	<ul style="list-style-type: none"> <li>❖ self-esteem</li> <li>❖ self-reflection</li> <li>❖ self-discipline</li> <li>❖ self-cultivation</li> <li>❖ principled morality</li> <li>❖ self-determination</li> <li>❖ openness</li> <li>❖ independence</li> <li>❖ enterprise</li> <li>❖ integrity</li> <li>❖ simplicity</li> <li>❖ sensitivity</li> <li>❖ modesty</li> <li>❖ perseverance</li> </ul>	<ul style="list-style-type: none"> <li>❖ equality</li> <li>❖ kindness</li> <li>❖ benevolence</li> <li>❖ love</li> <li>❖ freedom</li> <li>❖ common good</li> <li>❖ mutuality</li> <li>❖ justice</li> <li>❖ trust</li> <li>❖ inter-dependence</li> <li>❖ sustainability</li> <li>❖ betterment of human kind</li> <li>❖ national identity</li> </ul>	<ul style="list-style-type: none"> <li>❖ plurality</li> <li>❖ due process of law</li> <li>❖ democracy</li> <li>❖ freedom and liberty</li> <li>❖ common will</li> <li>❖ patriotism</li> <li>❖ tolerance</li> <li>❖ equal opportunities</li> <li>❖ culture and civilisation heritage</li> <li>❖ human rights and responsibilities</li> <li>❖ rationality</li> <li>❖ sense of belonging</li> <li>❖ solidarity</li> </ul>	<ul style="list-style-type: none"> <li>❖ optimistic</li> <li>❖ participatory</li> <li>❖ critical</li> <li>❖ creative</li> <li>❖ appreciative</li> <li>❖ empathetic</li> <li>❖ caring and concerned</li> <li>❖ positive</li> <li>❖ confident</li> <li>❖ cooperative</li> <li>❖ responsible</li> <li>❖ adaptable to changes</li> <li>❖ open-minded</li> <li>❖ with a respect for               <ul style="list-style-type: none"> <li>▶ self</li> <li>▶ others</li> <li>▶ life</li> <li>▶ quality and excellence</li> <li>▶ evidence</li> <li>▶ fair play</li> <li>▶ rule of law</li> <li>▶ different ways of life, beliefs and opinions</li> <li>▶ the environment</li> </ul> </li> <li>❖ with a desire to learn</li> <li>❖ diligent</li> <li>❖ committed to core and sustaining values</li> </ul>

***Organisation of the Curricula of the Eight KLAs and  
Suggested Allocation of Time at the Junior Secondary Level***

<b>Key Learning Area</b>	<b>Suggested Time Allocation (%)</b>	<b>Organisation of the Curriculum</b>	<b>Core/Extended Part</b>
Chinese Language Education	17 - 21%	Nine strands <ul style="list-style-type: none"> <li>• Listening</li> <li>• Speaking</li> <li>• Reading</li> <li>• Writing</li> <li>• Independent Language Learning</li> <li>• Thinking</li> <li>• Moral &amp; Affection</li> <li>• Chinese Culture</li> <li>• Literature</li> </ul>	Nil
English Language Education	17 - 21%	Three strands: <ul style="list-style-type: none"> <li>• Interpersonal</li> <li>• Knowledge</li> <li>• Experience</li> </ul>	Nil
Mathematics Education	12 - 15%	Three strands: <ul style="list-style-type: none"> <li>• Number &amp; Algebra</li> <li>• Measures, Shape &amp; Space</li> <li>• Data Handling</li> </ul>	Foundation, non-foundation and enrichment topics
Science Education	10 - 15%	Six strands: <ul style="list-style-type: none"> <li>• Life and Living</li> <li>• The Material World</li> <li>• Energy and Change</li> <li>• The Earth and Beyond</li> <li>• Science, Technology, Society and Environment (STSE)</li> <li>• Scientific Investigation</li> </ul>	Core and extension parts



<p>Personal, Social and Humanities Education</p>	<p>15 - 20%</p>	<p>Six strands:</p> <ul style="list-style-type: none"> <li>• Personal and Social Development</li> <li>• Time, Continuity and Change</li> <li>• Culture and Heritage</li> <li>• Place and Environment</li> <li>• Resources and Economic Activities</li> <li>• Social Systems and Citizenship</li> </ul> <p>Five subjects:</p> <ul style="list-style-type: none"> <li>• Chinese History</li> <li>• Geography</li> <li>• History</li> <li>• Life and Society</li> <li>• Religious Education</li> </ul>	<p>Core elements/ essential content for learning</p>
<p>Technology Education</p>	<p>8 - 15%</p>	<p>Six knowledge contexts:</p> <ul style="list-style-type: none"> <li>• Information and Communication Technology (ICT)</li> <li>• Materials and Structures (M&amp;S)</li> <li>• Operations and Manufacturing (O&amp;M)</li> <li>• Strategies and Management (S&amp;M)</li> <li>• Systems and Control (S&amp;C)</li> <li>• Technology and Living (T&amp;L)</li> </ul> <p>Three subjects:</p> <ul style="list-style-type: none"> <li>• Computer Literacy</li> <li>• Home Economics / Technology and Living</li> <li>• Design and Technology</li> </ul>	<p>Modules of learning elements (core and extensions )</p>

Arts Education	8 - 10%	<p>Four learning targets:</p> <ul style="list-style-type: none"> <li>• Developing Creativity and Imagination</li> <li>• Developing Skills and Processes</li> <li>• Cultivating Critical Responses</li> <li>• Understanding Arts in Context</li> </ul> <p>Two subjects:</p> <ul style="list-style-type: none"> <li>• Music</li> <li>• Visual Arts</li> </ul>	Nil
Physical Education	5 - 8%	<p>Six strands:</p> <ul style="list-style-type: none"> <li>• Motor and Sports Skills</li> <li>• Health and Fitness</li> <li>• Sports-related Values and Attitudes</li> <li>• Knowledge and Practice of Safety</li> <li>• Knowledge of Movement</li> <li>• Aesthetic Sensitivity</li> </ul>	Nil

***Curriculum Contents and Lesson Hours Related to  
Basic Law Education at the Junior Secondary Level  
[For reference only]***

<b>Relevant Curriculum/Subject</b>	<b>Topics/Themes Related to the Basic Law</b>	<b>Estimated No. of Hours</b>
Chinese History	<ul style="list-style-type: none"> <li>• Preamble, General Principles and External Affairs</li> </ul>	24 <sup>Note 1</sup>
Life and Society / Integrated Curriculum Mode	<ul style="list-style-type: none"> <li>• Preamble, General Principles and Relationship between the Central Authorities and the Hong Kong Special Administrative Region</li> <li>• Rights and Duties, and Political Structure</li> <li>• Economy, External Affairs and Society and Livelihood</li> <li>• Interpretation and Amendment of the Basic Law</li> <li>• Functions and Powers of the National People’s Congress and its Standing Committee, the President and the State Council</li> </ul>	15 <sup>Note 2</sup>
History	<ul style="list-style-type: none"> <li>• Preamble and General Principles</li> </ul>	10 <sup>Note 1</sup>
Geography	<ul style="list-style-type: none"> <li>• Rights and Duties, and External Affairs</li> </ul>	2

Note 1 The number of hours is based on the revised curriculum frameworks of junior secondary Chinese History and History curricula announced in May 2018.

Note 2 For schools offering Life and Society (S1-3), modules relevant to Basic Law education take up about 15 hours. For schools not offering Life and Society (S1-3), or in cases where modules relevant to Basic Law education are not taught in Life and Society (S1-3), a 15-hour independent module on “Constitution and the Basic Law” is available for adoption.

*Topics of the 15-hour Independent Module on  
“Constitution and the Basic Law”*

1. Historical background of “one country, two systems”, and the constitutional basis, enactment and promulgation of the Basic Law
2. Relationship between the Central Authorities and the Hong Kong Special Administrative Region
3. Interpretation and amendment of the Basic Law
4. Fundamental rights and duties of Hong Kong residents
5. Basic characteristics of the political structure of the HKSAR
6. The Basic Law and public finance
7. How the Basic Law protects the development of monetary affairs and trade in Hong Kong
8. The Basic Law and daily life
9. External affairs

*Planning and Self-evaluation Tool for Basic Law Education*

- This **tool** aims to support schools in planning and evaluating the implementation of Basic Law education so as to understand its effectiveness in learning and teaching.
- Schools may **use this tool flexibly, make necessary adaptations** according to the school-based needs and **articulate details** of related information as appropriate.
- The EDB encourages schools to **incorporate plans and evaluations** derived from this tool in their school development plans/school annual plans/school reports. Details of related information could be listed as appendices.

School Year: \_\_\_\_\_

**1. Lesson Hours and Learning Hours Allocated to Basic Law Education<sup>(1)</sup>**

Level & Objectives	(A) Curriculum/Subject Learning (Classroom) <sup>(2)</sup>				(B) Student Learning Experiences/Activities <sup>(3)</sup>				(C) Mainland/Non-local Learning Experiences / Activities <sup>(4)</sup>				Total Learning Hours	Achievement of objectives
	Name	Theme/Key Content	Related Article(s)/ Chapter in the Basic Law	Lesson Hours	Name	Theme/Key Content	Related Article(s)/ Chapter in the Basic Law	Learning Hours	Name	Theme/ Key Content	Related Article(s)/ Chapter in the Basic Law	Learning Hours		
S1														
S2														
S3														
S4														
S5														
S6														

**2. Use of the Basic Law Learning and Teaching Resources and Assessment**

Level	Learning and Teaching Resources <sup>(5)</sup>		Mode of Assessment <sup>(6)</sup>
	EDB Resources	Non-EDB Resources	
S1			
S2			
S3			
S4			
S5			
S6			

**3. Principals’/Teachers’ Participation in Training/Professional Development Activities on Basic Law Education**

Date	Training/Professional Development Activities <sup>(7)</sup>	Organiser	Hours	No. of Principals/Teachers Participated in the Training/Professional Activities

\*Please add cells to the tables if necessary.

## **Remarks**

- <sup>1</sup> The total lesson and learning hours of Basic Law education at each year level is the sum of the hours of: (A) Curriculum/Subject Learning (Classroom), (B) Student Learning Experiences/Activities; and (C) Mainland/Non-local Learning Experiences/Activities.
- <sup>2</sup> Curriculum/subject learning (classroom) related to Basic Law education includes learning of all subject and school-based curricula, e.g. Liberal Studies, Chinese History, History, Geography, Life and Society, Physical Education, Visual Art and Putonghua, as well as learning related to values education (e.g. class teacher, personal growth and moral education lessons).
- <sup>3</sup> Student learning experiences/activities related to Basic Law education include learning experiences/activities for life-wide learning, and moral and civic education such as visits to museums, quiz competitions and project learning.
- <sup>4</sup> Non-local learning experiences/activities related to Basic Law education include visits/exchanges/learning activities conducted in the Mainland with learning components related to the Basic Law.
- <sup>5</sup> Learning and teaching resources related to Basic Law education include resources provided by the EDB (e.g. Understanding the Law, Access to Justice – Basic Law Learning Package (Junior Secondary)), and resources outside the EDB (e.g. resources from school sponsoring bodies, schools, and publishers’ textbooks). Schools may provide information on the use of learning and teaching resources such as names of the learning and teaching resources adopted and related themes.
- <sup>6</sup> Modes of assessment related to Basic Law education include pen-and paper assessment, project learning, online self-assessment, etc. Schools may provide information on students’ use of assessment modes such as modes of assessment adopted and related themes.
- <sup>7</sup> Training/professional development activities related to Basic Law education for principal/teachers’ participation include talks, seminars, teachers’ professional development days, lesson observations, visits, etc. held by different organisations (e.g. the EDB, school sponsoring bodies, schools, teacher education institutions and education bodies.)

## **Reference**

School may make reference to the content of the Basic Law and conduct planning and self-evaluation. Full text of the Basic Law is available at: <http://www.basiclaw.gov.hk/tc/basiclawtext/>.





*Planning and Self-evaluation Tool for STEM Education*

- ✧ This **planning tool** aims to support schools in planning and evaluating the implementation of STEM education so as to understand its effectiveness in learning and teaching.
- ✧ Schools may **use this planning tool flexibly, make necessary adaptations** according to the schools' needs and **list details** of related information as appropriate.
- ✧ Schools are also encouraged to **incorporate plans and evaluations** derived from this tool in their school development plans/school annual plan/school reports. Details of the related information could be listed as appropriate.

School Year: \_\_\_\_\_

**1. Learning Hours, the Use of Teaching Resources and Assessment at the Year level**

Level & Objectives	Activity/ Programme	Date	Theme/Key Content	Relevant Approach/ Approaches <sup>1</sup> for Organising STEM related learning activities	Learning Hours	KLA(s)/Subject(s) involved LWL/OLE	Resources <sup>2</sup>	Assessment Strategies	Total Learning Hours of STEM Education	Achievement of objectives
S1										
S2										
S3										
S4										
S5										
S6										

**Remarks**

<sup>1</sup> The approaches include: 1) learning activities based on topics of a KLA for students to integrate relevant learning elements from other KLAs; 2) projects for students to integrate relevant learning elements from different KLAs; and 3) others (adopted by schools as appropriate).

<sup>2</sup> Resources includes community resources.

## 2. Principals'/Teachers' Participation in Training/Professional Development Activities

Date	Training/Professional Development Activities	Organiser	Hours	No. of Principals/Teachers Participated in the Training/Professional Activities

\*Please add cells to the tables if necessary.

### Reference

School may make reference to latest version of the Science Education, Mathematics Education and Technology Education Key Learning Area Curriculum Guides available at: <http://www.edb.gov.hk/en/curriculum-development/cs-sec-edu/curri-guides/index.html>.



**Components of the SS Core Subjects and  
Suggested Allocation of Time**

**Core Subjects**

**Chinese Language and English Language**

- The Chinese Language and English Language curricula include the Compulsory and Elective Parts. The following figure shows the components of the Chinese Language and English Language curricula and the suggested allocation of time to respective components.

Subject	Suggested Time Allocation (%)	Compulsory Part	Extended Part
Chinese Language	<ul style="list-style-type: none"> <li>12.5 - 15% (313-375 hours)</li> </ul>	<ul style="list-style-type: none"> <li>67 -83% of the total lesson time</li> <li>Nine strands:               <ul style="list-style-type: none"> <li>- Listening</li> <li>- Speaking</li> <li>- Reading</li> <li>- Writing</li> <li>- Independent Language Learning</li> <li>- Thinking</li> <li>- Moral &amp; Affection</li> <li>- Chinese Culture</li> <li>- Literature</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>17 -33% of the total lesson time</li> <li>2 to 4 elective modules chosen from the ten proposed modules (one of them may be a school's self-designed module)</li> </ul>
English Language	<ul style="list-style-type: none"> <li>12.5 -15% (313-375 hours)</li> </ul>	<ul style="list-style-type: none"> <li>Up to 75% of the total lesson time</li> <li>Three strands:               <ul style="list-style-type: none"> <li>- Interpersonal</li> <li>- Knowledge</li> <li>- Experience</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Taking up about 25% of the total lesson time</li> <li>2-3 elective modules chosen from two groups, namely Language Arts and Non-Language Arts, with at least one module from each group</li> </ul>

## Mathematics

- The Mathematics curriculum comprises a Compulsory Part and an Extended Part. The following figure shows the components of the Mathematics curriculum and the suggested allocation of time to respective components.

Subject	Suggested Time Allocation (%)	Compulsory Part	Extended Part
Mathematics	<ul style="list-style-type: none"> <li>10 -12.5% (250 – 313 hours) for the Compulsory Part</li> <li>15% (375 hours) for the Compulsory Part and the Extended Part</li> </ul>	<ul style="list-style-type: none"> <li>Three strands:               <ul style="list-style-type: none"> <li>Number and Algebra</li> <li>Measures, Shape and Space</li> <li>Data Handling</li> </ul> </li> <li>Categorised into Foundation Topics and Non-foundation Topics</li> </ul>	<ul style="list-style-type: none"> <li>One of the two modules, namely Module 1 (Calculus &amp; Statistics) or Module 2 (Algebra &amp; Calculus)</li> </ul>

## Liberal Studies

- The Liberal Studies curriculum comprises three Areas of Study (six modules) and an Independent Enquiry Study. The following figure shows the components of the Liberal Studies curriculum and the suggested allocation of time to respective components.

Subject	Suggested Time Allocation (%)	Three Areas of Study & Six Modules	Independent Enquiry Study
Liberal Studies	<ul style="list-style-type: none"> <li>Minimum 10% (250 hours)</li> </ul>	<ul style="list-style-type: none"> <li>168 hours for all 6 modules</li> <li>Self and Personal Development               <ul style="list-style-type: none"> <li>Personal Development and Interpersonal Relationships</li> </ul> </li> <li>Society and Culture               <ul style="list-style-type: none"> <li>Hong Kong Today</li> <li>Modern China</li> <li>Globalisation</li> </ul> </li> <li>Science, Technology and the Environment               <ul style="list-style-type: none"> <li>Public Health</li> <li>Energy Technology and the Environment</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>82 hours</li> <li>Suggested themes:               <ul style="list-style-type: none"> <li>Media</li> <li>Education</li> <li>Religion</li> <li>Sports</li> <li>Art</li> <li>Information and Communication Technology</li> </ul> </li> </ul>

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