



Learning To Learn

The Way Forward in Curriculum Development

Consultation Document Summary

**Hong Kong Special Administrative Region of
The People's Republic of China**

Curriculum Development Council

November 2000

The set of ***Learning to Learn*** consultation documents consists of 10 booklets: one on 'The Way Forward in Curriculum Development', eight on the respective Key Learning Areas (Chinese Language Education, English Language Education, Mathematics Education, Personal, Social and Humanities Education, Science Education, Technology Education, Arts Education and Physical Education) and one on General Studies for Primary Schools. The full set of these documents can be downloaded from the website of the Curriculum Development Council (<http://www.cdc.org.hk>). Copies of the 'Consultation Document Summary' are available at the Regional Education Offices and district offices.

A Message from the Chairman of the Curriculum Development Council (CDC)

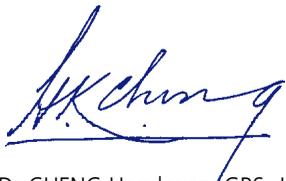
We are in an era when knowledge is expanding at an unprecedented rate and moral values are being challenged. To prepare our younger generation to meet the challenges of an ever advancing knowledge-based society and the dynamically changing environment, it is not enough to impart them with mere 'knowledge'. Instead, we have to help them develop a global outlook, equip them with a repertoire of skills and the positive attitudes to respect knowledge and to learn how to learn.

In preparing the curriculum framework for Learning to Learn, which is a student-focused curriculum developed in the best interest of students, we firmly believe that all students could learn, and that they have different intelligences. We provide them with opportunities to learn. We identify key learning experiences and key learning areas, integrating the generic skills, values and attitudes that are essential to their whole person development. We help them to become more aware that there are different ways of learning. What is important is to enhance their quest for knowledge, their awareness and responsibilities in advancing the frontiers of knowledge.

As learning is such a complex process, it requires the collective will and coordinated efforts of all parties concerned to make it effective. We need the partnership with all stakeholders and sectors to maximize expertise and resources. Past experience has also told us that being prescriptive is undesirable. In order to allow for holistic and coherent planning and to provide more flexibility and choices for schools and teachers, we have developed a curriculum framework with key learning areas (knowledge/concepts), generic skills, values and attitudes as the major components. Schools are encouraged to make reference to these frameworks and develop their own school-based teaching and learning programmes according to the needs and characteristics of their students.

It should be noted that the curriculum review is to improve the school curricula to help our young generation face the challenges of the 21st Century. There is no perfect way to achieve all curriculum intentions and goals; nor is there any point in time when all pre-existing conditions can be 'absolutely' ready before any curriculum improvement is to be made. We must bear in mind that curriculum development is an ongoing endeavour and the ultimate goal of curriculum reform is to benefit students and to raise the quality of learning.

I am now inviting your suggestions and views on this document. Your valuable support and contribution to this curriculum reform will be much treasured by the Council.



Dr CHENG Hon-kwan, GBS, JP
Chairman, Curriculum Development Council

Vision of the Curriculum Reform

Learning to Learn, Learning for Life; An Adaptable Teaching Culture, An Evolving Curriculum

Students are the focal point of the entire curriculum reform.
We hope they can all:

-  learn how to learn
-  sustain life-long learning

To develop students' life-long learning abilities, we hope that through the concerted effort of all educators and the general public, schools can:

-  develop an adaptable teaching culture to enhance the practice of flexible teaching
-  broaden the curriculum to cater for the different needs of students

Contents

Page

Chapter 1 Looking Back and Looking Ahead

- | | | |
|-----|--|-----|
| 1.1 | Introduction | 1 |
| | - A Holistic Review of the Hong Kong School Curriculum | |
| 1.2 | Looking Back | 2 |
| | - Foundation, Achievement and Strengths, and Issues of Concern | |
| 1.3 | Looking Ahead | 3-7 |
| | - Challenges and Opportunities, Balanced Considerations and Guiding Principles | |

Chapter 2 The Aim, Goals and Development Strategies

- | | | |
|-----|---|-------|
| 2.1 | The Aim of the School Curriculum and Learning Goals | 8 |
| 2.2 | An Incremental and Interactive Approach | 8 |
| 2.3 | Phases of Development | 9 |
| 2.4 | Development Strategies to Support Schools and Teachers (2000 - 2005) | 10 |
| 2.5 | Key Components of the Curriculum Reform | 11-14 |
| | - Changes Inside and Outside the Classroom, Key Support to Teachers and Schools | |

Chapter 3 What is Worth Learning?

- | | | |
|-----|--|-------|
| 3.1 | Learning Experiences | 15 |
| 3.2 | The Whole Curriculum Framework and Its Components | 15-17 |
| | Key Learning Areas, Generic Skills, Values and Attitudes | |
| 3.3 | The Key Learning Area Curriculum Framework and Its Features | 17-19 |
| 3.4 | Connection of Key Learning Areas | 19 |
| 3.5 | Life-wide Learning (connecting the formal and informal curriculum) | 19 |
| 3.6 | Catering for Student Diversity | 19-20 |
| | - the gifted and the academically low achievers | |
| 3.7 | School-based Curriculum Development | 20 |

Chapter 4 Facilitating Learning and Teaching

- | | | |
|-----|---|-------|
| 4.1 | The Principles of Facilitating Learning and Teaching | 21 |
| 4.2 | The Roles of Change Agents in Schools
- School Heads, Middle Managers, School Teachers
and Teacher Librarians | 21-25 |

Conclusion - Society-wide Mobilisation, Support of Other Stakeholders

Appendices

- | | | |
|------------|---|-------|
| Appendix 1 | Publication Schedule of Curriculum Guides | 27-28 |
| Appendix 2 | Suggested Lesson Time Allocation for Primary /
Secondary Schools | 29-31 |
| Appendix 3 | Subjects under the 8 Key Learning Areas | 32 |

Chapter 1 Looking Back and Looking Ahead

1.1 Introduction - A Holistic Review of the Hong Kong School Curriculum

Overall Aims of Education for the 21st Century

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

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

- 1.1.1 In response to the 'Learning for Life, Learning through Life - Reform Proposals for the Education System in Hong Kong' put forward by the Education Commission (EC) in September this year, the major concerns of the public are: how the school curriculum can be modified, how the teachers can improve their teaching, how the school heads can plan and lead and how the Government can support schools to implement one of the key components of the Education Reform - Curriculum Reform.
- 1.1.2 To cater for the future learning needs of students and to address related curriculum issues, the Curriculum Development Council has been conducting a Holistic Review of the Hong Kong School Curriculum since January 1999. This was done in parallel with the Education Commission's review of the education system conducted during 1998-2000.
- 1.1.3 The Holistic Review of the School Curriculum has been conducted in three stages. In the first and second stages (i.e. from January 1999 to July 2000), we reviewed the existing kindergarten, primary and secondary school curricula as well as the implementation and the issues of individual subjects. We made initial recommendations on the future direction of curriculum development and public views were sought through open consultation. (For details, please refer to the consultative document 'A Holistic Review of the Hong Kong School Curriculum – Proposed Reforms' (CDC, 1999) available on the CDC website: <http://www.cdc.org.hk>).
- 1.1.4 Based on the findings and views collected through public consultation in the first and second stages, the following three questions are further studied at the third stage:

- (1) What are the experiences of curriculum development in Hong Kong?
- (2) What is worth learning in the school curriculum to achieve the aims of education for the 21st century?
- (3) How can effective teaching and learning be facilitated?

After detailed analysis and thorough consideration, we have chosen 'Learning to Learn' as the theme to represent the thrust of this consultation document, to reflect the outcome of the holistic review of the school curriculum at this final stage, and to align with the Education Commission's rationale, aims, principles, focuses and strategies in their proposals for reforming the education system in Hong Kong.

1.1.5 Learning to Learn

Learning is the key to one's future, and Education is the gateway to our society's tomorrow.

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

'Learning to Learn' means:

To enable students to learn how to learn, that is, to grasp the basic learning skills, to gain a thorough understanding of the concepts to be learnt. Students do not just learn by rote but are able to transcend and apply what they have learnt. In this way, even if they come across new problems in the future, they will be able to tackle the problems by themselves proactively and independently or else they may enhance their problem solving skills through continuing education. That is why students should:

- ◆ build up their capabilities to learn independently (e.g. creative and critical thinking, communication skills, etc.)
- ◆ be able to use different ways of learning
- ◆ develop diverse ways of learning in accordance with their interests, needs and abilities
- ◆ have broad and diversified learning space to learn

1.2 Looking Back - Foundation, Achievements and Strengths, and Issues of Concern

In proposing changes to the curriculum for the future, we are not diminishing the contributions of our predecessors. In fact, it is due to the strong foundation laid in the past that we are now able to move forward to our ideals. While building on these strengths, we are also concerned with the gap between the 'Intended Curriculum' and the 'Implemented Curriculum' and the problems that

ensue. With the findings from the holistic review, we hope to improve the shortcomings and help students achieve the goal of ‘learning how to learn’.

1.3 Looking Ahead - Challenges and Opportunities, Balanced Considerations and Guiding Principles

1.3.1 Challenges and Opportunities

As globalization brings about changes in society, environment, culture, politics, technology and moral values, Hong Kong, as an Asian world class city, has been transformed from an industrial society to a knowledge-based society. Therefore, our students need to continuously update their knowledge to face a future of opportunities and challenges. In this regard, our responsibility is to equip students with different learning abilities to develop their potential, and encourage them to sustain life-long learning to meet future challenges.

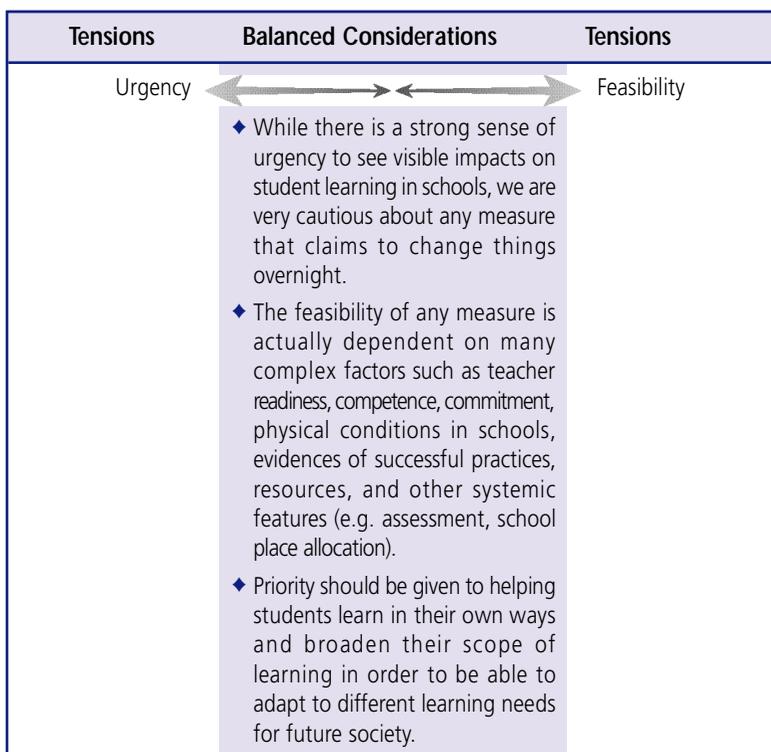
1.3.2 Balanced Considerations

During the curriculum review process, we are aware that the public, in particular the commercial sector, education practitioners, parents and students, have different expectations and viewpoints with regard to the curriculum reform, resulting in seemingly irresolvable tensions. In view of the complexity of the issues involved in curriculum development, a simple and one-size-fits-all solution would not be able to resolve all the curriculum related issues. Instead, we need to consider the following tensions in a balanced way.

Tensions	Balanced Considerations	Tensions
Localization	 <p>◆ While keeping abreast of global trends, we will adapt to local requirements and adopt the most appropriate reform strategies.</p>	Globalization
Academic, Personal, Social and Economic Goals of the Curriculum	 <p>◆ These goals are not mutually exclusive. Students must acquire the skills and attitudes to learn a number of different things for a balanced development.</p>	Tensions among the Academic, Personal, Social and Economic Goals of the Curriculum

Tensions	Balanced Considerations	Tensions
Central Curriculum	 <ul style="list-style-type: none"> ◆ The CDC curriculum provides general directions, frameworks and guides. However, schools also need to exercise professional autonomy to adapt and provide variations in learning opportunities for each student. ◆ The government maintains the responsibility to lead schools towards the vision of curriculum development and to support schools with professional service. The valuable initiatives developed by individual schools will be used to inform policy and will be disseminated to other schools. The relationship between central policy making and school-based development will be more on a partnership basis than a top-down and bottom-up dichotomy. 	School-based Curriculum
Specialist Development	 <ul style="list-style-type: none"> ◆ A 9-year basic education is necessary for students to acquire a sound foundation for whole-person development and prepare for studies at higher levels. It is undesirable to allocate students to study specialised courses / subjects at this stage. ◆ At senior secondary level, however, students should be entitled to learning opportunities of a more specialised nature in order to develop their potential and interests for further study. 	Whole-person Development
Uniformity	 <ul style="list-style-type: none"> ◆ Students should be entitled to a wide range of learning opportunities, and be allowed flexibility to learn in diverse ways suitable for them and to develop pluralistic values. 	Diversity and Flexibility

Tensions	Balanced Considerations	Tensions
Competition 	<ul style="list-style-type: none"> ◆ While co-operation among schools, teachers and students will contribute to raising teaching /learning effectiveness, competition through examinations, which is embedded in Chinese culture, will provide an incentive for learning to work hard and to strive for excellence. 	Co-operation
Knowledge Transmission 	<ul style="list-style-type: none"> ◆ Both knowledge transmission and knowledge creation are complementary to learning. ◆ While the skilful knowledge transmission in Chinese classrooms has been successful in knowledge scaffolding for students, knowledge creation can be effectively built on the experience of scaffolding. 	Knowledge Creation
Assessment for Selection 	<ul style="list-style-type: none"> ◆ As long as selection remains a function in the education system, there should be an equal balance between the use of assessment for selection and assessment for helping students learn at the school level. Different modes of assessment serve different purposes, and no one form of assessment should take over the other. However, the key purpose is to help students learn. 	Assessment for Enhancing the Quality of Teaching and Effectiveness of Student Learning



1.3.3 Guiding Principles

Apart from the education reform principles set out by the Education Commission, we have also adopted the following guiding principles in planning for the new curriculum framework for the next decade.

- ◆ Curriculum aims in line with the Aims of Education and with life-long learning as the key vision - 'Enjoy learning, enhance effective communication, develop creativity and a sense of commitment' – should be given high priority.
- ◆ A learner-focused approach should be used to make decisions in the best interest of students. We should remove barriers and never give up on any student.
- ◆ We are committed to uphold the belief that all students have the ability to learn. Though they might have their own different styles of learning, we should never give up on them. They should be entitled to opportunities for essential learning experiences for whole person development, as well as opportunities for developing diverse potential.

- ◆ In order to keep abreast with the development of a knowledge-based society, the prescriptive 'teaching / examination syllabus' should be opened up so that it is made up of learning experiences (contents, processes, social interaction, etc.) to help students learn more and better. Any supportive guidance in the form of curriculum guides to schools should be open to adaptation and flexible changes.
- ◆ Both the basic education and senior secondary curricula should be broad and balanced, comprising different learning experiences and all Key Learning Areas in order to lay a good foundation for students' future life, employment, further studies and life-long learning. In addition, the senior secondary curriculum should be diversified, providing students with a variety of options for some degree of specialization to cater for their different aptitudes and learning needs.
- ◆ The strategies for development should be built on the strengths of students, teachers and schools in Hong Kong and the wider educational community. Longstanding practices or principles (e.g. effective whole-class teaching) have to be valued and not to be abandoned. Suitable reference should be made to international experiences and research findings, and continuous improvement is to be made in response to these when appropriate.
- ◆ Curriculum development should be an ongoing improvement process to help students learn better. Education / curriculum aims should be adjusted with time and with reference to the contexts of specific schools.
- ◆ The development of the curriculum and support mechanisms for schools should involve the participation and collaboration of government, parents and all community sectors to maximize the use of resources.
- ◆ There should be corresponding changes in assessment to complement the developments in the whole curriculum.

Chapter 2 The Aim, Goals and Development Strategies

Curriculum is the road map of education for our children. The teaching professionals provide the compass which helps our children to navigate and explore on their own in a way that is inspiring, meaningful and enjoyable.

(Learning for Life, A Promise to Our Children 2000)

2.1 The Aim of the School Curriculum and Learning Goals

The vision of the Curriculum Reform is formulated in line with that of the Education Reform. The CDC has translated the Overall Aims of Education for the 21st Century into the aim of the school curriculum, learning goals as well as learning aims at various stages of schooling. To sum up, we hope students will be able to:

1. recognize their roles and responsibilities as members of the family, the society, and the nation, and show concern for their well-being;
2. understand their national identity and be committed to contributing to the nation and society;
3. develop creative thinking and master independent learning skills (e.g. critical thinking, information technology, self-management);
4. engage in discussion actively and confidently in English and Chinese (including Putonghua);
5. develop a habit of reading independently;
6. possess a breadth and foundation of knowledge in the eight Key Learning Areas; and
7. lead a healthy lifestyle and develop an interest in and appreciation of aesthetic and physical activities.

2.2 An Incremental and Interactive Approach

As the Government continuously increases the provision of resources for education, students, parents, employers and the general public expect that reforms in education will enhance the quality of school education in Hong Kong. We understand the resulting pressure on frontline educators and their worries. An incremental and interactive approach (based on cumulative knowledge and experiences) is thus advocated rather than a radical approach to initiating curriculum changes.

2.3 Phases of Development

In this final stage of consultation, we define the background, rationale and principles of the curriculum reform. To facilitate in-depth discussion, we also present a more comprehensive and holistic picture of our recommendations, for example, short-term, medium-term and long-term development strategies, support and resource strategies.

Schedule for implementing the reform



Short-term (2000 to 2005)

- ◆ Based on the principles of the curriculum reform, the Education Department will develop new curriculum guides, subject guides and exemplars, and teaching / learning materials; engage in research and development projects and disseminate good practices.
- ◆ Teachers and schools can promote learning to learn through infusing generic skills into existing school subjects.
- ◆ The following key tasks have been shown to be useful strategies for promoting learning to learn:
 - Moral and Civic Education
 - Promoting a Reading Culture
 - Project Learning
 - Use of Information Technology
- ◆ Schools can prepare for the transition to the new curriculum framework and gradually develop a school-based curriculum, using the new framework to suit the needs of students and schools.

Medium-term (2005 to 2010)

- ◆ Schools should have followed the central directions and used the curriculum guides of the open framework provided to develop a school-based curriculum most suited to the abilities and needs of students and the mission of the schools. They should continue to raise their quality of teaching and learning.

Long-term (2010 and beyond)

- ◆ Vision for life-long learning to be achieved.

2.4 Development Strategies to Support Schools and Teachers (2000-2005)

In accordance with the direction of the curriculum reform, we recommend the following development strategies to support schools and teachers:

1. Curriculum Support Materials

For example:

- (I) Curriculum Guides (for Key Learning Areas and Subject Curriculum Guides) (Please see Appendix 1 for Publication Schedule of Curriculum Guides)
- (II) A bank of exemplary teaching / learning / assessment materials
- (III) A central data-base of life-wide learning provisions in Hong Kong
- (IV) Curriculum planning exemplars

2. Development Programmes for Principals and Teachers

For example:

- (I) Courses on curriculum and curriculum leadership
- (II) Key Learning Area / subject specific courses to enhance the overall professional knowledge of teachers
- (III) Specific courses (e.g. curriculum and assessment; how to teach critical thinking skills, creativity, or other learning skills; catering for individual differences; moral and civic education; media education; Chinese culture; etc.)

3. A range of collaborative research and development projects on key curriculum changes will be conducted, e.g. 'Seed' Projects, in partnership with schools, consultants, and universities. The projects will generate useful experiences and evidence-based learning / teaching / assessment materials for the reference of other schools.

4. Provide on-site advice to help schools to develop a school-based curriculum
For example: to strengthen learning to learn in the existing curricula, to promote curriculum leadership, etc.

5. Local and international experts will be invited to advise on the development strategies and review the progress of development whenever appropriate.

6. Set up a committee to coordinate the provision of life-wide learning opportunities

For example: strengthen the promotion of civic mindedness, national identity and service learning, etc.

7. Greater autonomy and flexibility will be given to schools in funding, management and staffing, in order to create more time and space for curriculum changes and improve learning and teaching.
8. There will be close contact and collaboration with other educational organizations (e.g. teacher training institutions, Hong Kong Examinations Authority, Education Commission, etc.)

2.5 Key Components of the Curriculum Reform – Changes Inside and Outside the Classroom, Key Support to Teachers and Schools

The aim of the curriculum reform is to enhance student learning and the quality of teaching. It focuses on questions like: ‘How can we facilitate students to learn how to learn through the school curriculum?’ and ‘How can schools broaden their curriculum?’ Only with the support of government policies, enhancement of teachers’ professionalism, active participation by parents, and the support from society, **a new culture of learning and teaching** can then **be evolved to bring about real changes in classrooms** and to create wider learning space for students to develop their potential. The following table (Table 2.5.1) highlights the corresponding relationship among issues identified from the Holistic Review of the School Curriculum, the major changes anticipated both inside and outside the classroom and the related government supportive measures for schools and teachers.

Key Reform Proposals

1. Shifting from transmission of knowledge to **learning how to learn**
2. Shifting from over-emphasizing academic studies to **focusing on whole-person development**
3. Shifting from compartmentalized subjects to **integrated learning**
4. Shifting from reliance on textbooks to **use of diversified learning and teaching materials**
5. Shifting from classroom teaching to **learning beyond the classroom, with support from the community**
6. Shifting from traditional time-tabling to **an integrated and flexible arrangement of learning time**
7. Abolishing premature streaming and **providing more opportunities for students to explore their aptitudes and potentials**

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

Table 2.5.1

Issues of Concern	Changes Inside and Outside the Classroom	Key Support to Teachers and Schools
CURRICULUM, TEACHING AND LEARNING		
<ul style="list-style-type: none"> ◆ Overlapping and outdated school subjects and syllabuses, and overcrowded school curricula at all levels. Teachers compete for more teaching time ◆ Lack of continuity of curricula across primary, junior and senior secondary levels 	<ul style="list-style-type: none"> ◆ Organize the current subjects into the relevant Key Learning Areas and avoid early specialization in basic education for a balanced curriculum ◆ Design school-based curriculum according to the recommendations in the Key Learning Areas' documents. (e.g. trim some teaching topics and allocate 10 to 15% time as curriculum space for designing different curriculum modes. Please refer to Appendix 2 for details of the Suggested Lesson Time Allocation for Primary/Secondary Schools 	<ul style="list-style-type: none"> ◆ Provide curriculum guides and reference materials ◆ Adjust the teaching/learning time for each Key Learning Area / subject ◆ Provide exemplars showing good use of flexible time-tabling ◆ Implement 'Seed' Projects ◆ Promote cross-curricular collaboration
<ul style="list-style-type: none"> ◆ The prescribed teaching contents in teaching syllabuses do not leave much learning space for developing students' creativity and critical thinking 	<ul style="list-style-type: none"> ◆ Provide opportunities for life-wide learning ◆ Reduce the reliance on textbooks ◆ Use diversified teaching materials ◆ Promote a reading culture ◆ Reduce mechanical and drill-type exercises / homework 	<ul style="list-style-type: none"> ◆ Provide diversified training courses ◆ Set up a central web-based resource bank ◆ Promote other teaching materials and informed practices ◆ Introduce evidence-based findings from related researches and development projects ◆ Provide parent education courses in collaboration with other organizations

Issues of Concern	Changes Inside and Outside the Classroom	Key Support to Teachers and Schools
CURRICULUM, TEACHING AND LEARNING		
<ul style="list-style-type: none"> ◆ Curriculum innovations are implemented in a linear manner with a prescribed schedule for all schools. On the contrary, insufficient assistance is provided to schools which developed the curriculum at their own pace in terms of the teaching and learning processes 	<ul style="list-style-type: none"> ◆ Allow schools to implement the new curriculum initiatives gradually and at different paces 	<ul style="list-style-type: none"> ◆ Design new curriculum framework ◆ Set up a central web-based resource bank ◆ Promote other teaching materials ◆ Provide on-site support to schools ◆ Implement 'Seed' Projects with input from schools
<ul style="list-style-type: none"> ◆ Fixed time-tabling in terms of number of periods / weeks or cycles was inflexible 	<ul style="list-style-type: none"> ◆ Arrange lesson time-table flexibly 	<ul style="list-style-type: none"> ◆ Provide exemplars of flexible time-tabling
ASSESSMENT		
<ul style="list-style-type: none"> ◆ Teaching and learning in schools tend to be very much examination-oriented because teachers have to satisfy student needs in preparing for 'high stake' public examinations ◆ Most public examinations rely on pen and paper tests to assess students' academic abilities. This indirectly limits the curriculum content as well as the scope of teaching and learning. As this mode of assessment does not fully reflect students' learning abilities in various aspects holistically, it cannot meet the expectation of the public for a clear picture of students' actual learning abilities 	<ul style="list-style-type: none"> ◆ Reduce the number of tests and examinations ◆ Use different modes of assessments, e.g. project work ◆ Provide a broad and diversified curriculum at senior secondary level, e.g. introduce Integrated Humanities, Integrated Science & Technology and Liberal Studies and other subjects in 2003 	<ul style="list-style-type: none"> ◆ Implement 'Seed' Projects ◆ Set up a resource bank for exemplars ◆ Provide training courses ◆ Liaise with Hong Kong Examinations Authority, modify modes of examinations, more questions to be set to assess students' high order thinking skills, creativity, and problem solving skills ◆ Complement the Basic Competency Assessments in Chinese, English and Mathematics ◆ Close communication and collaboration with tertiary institutions

Issues of Concern	Changes Inside and Outside the Classroom	Key Support to Teachers and Schools
ASSESSMENT		
<ul style="list-style-type: none"> ◆ Not much support is being provided to enhance teachers' professionalism and school development. The monitoring system tends to evaluate the work of teachers in terms of quantity instead of evaluating the quality of student learning, i.e. what the students have learnt and how they learn 	<ul style="list-style-type: none"> ◆ Change the teaching and learning culture ◆ Enhance the skills of professional leadership 	<ul style="list-style-type: none"> ◆ Conduct teacher training courses (in terms of enhancing professionalism, enriching knowledge on individual Key Learning Areas) ◆ Provide training courses for principals and middle managers ◆ Set up school development groups
<ul style="list-style-type: none"> ◆ There is a tendency to polarize existing curriculum practices and new curriculum initiatives, labelling the former as undesirable and the latter as desirable 	<ul style="list-style-type: none"> ◆ Build on schools' existing effective teaching / learning practices for new curriculum initiatives or reform, strengthen teachers' professionalism continuously ◆ Create a learning environment in school, enrich teachers' knowledge in curriculum leadership, design of curriculum as well as learning contents 	<ul style="list-style-type: none"> ◆ Provide training courses for principals and middle managers ◆ Set up school development groups ◆ Provide additional funding for creating 'space' in teaching and learning ◆ Build up various modes of teacher network
<ul style="list-style-type: none"> ◆ As a result of changes in the School Places Allocation System, more and more schools have to deal with the issue of handling students with diverse learning abilities 	<ul style="list-style-type: none"> ◆ Cater for individual differences (e.g. students of mixed learning abilities, the academically low achievers and the gifted) 	<ul style="list-style-type: none"> ◆ Organize teacher training courses (e.g. enhancing teaching professionalism and courses for enriching knowledge on individual Key Learning Areas) ◆ Disseminate evidence-based findings from related researches and development projects

Chapter 3 What is Worth Learning ?

3.1 Learning Experiences

What we give these children today is the orientation to learn. By helping them acquire knowledge, skills and attitudes, we are also helping them open new frontiers for learning.

(Learning for life, A Promise to Our Children 2000)

Learning experiences are defined in the contexts of learning processes, learning contents and the social environment for students to learn how to learn. Students may attain a balanced 'moral, intellectual, physical, social and aesthetic' development through the following five learning experiences:

1. **Moral and civic education** , for developing personal character and interpersonal skills, the creativity to innovate, the spirit to live up to expectations and enjoy learning;
2. **Intellectual development** for laying a firm foundation in knowledge;
3. **Community service** to develop commitment and responsibility;
4. **Physical and aesthetic development** to lead to healthy living styles and appreciate aesthetic qualities; and
5. **Career-related experiences** to link studies with career aspirations and job opportunities.

3.2 The Whole Curriculum Framework and Its Components

3.2.1 The Whole Curriculum Framework – a structure, a tool

A quality school curriculum in the 21st century should be built on an open and flexible framework which is made up of three components: values and attitudes, generic skills and knowledge/concepts. The framework provides schools with a structure for outlining and developing different curriculum modes. In this connection, the teaching contents can be flexibly rearranged, modified or replaced in response to the needs of society and to suit the different needs of students, so as to determine the direction of teaching and learning. It ensures that curriculum planning is coherent (not overcrowded or overlapping) and continuous across all levels of primary and secondary schooling, the five learning experiences are enriched, the target for whole-person development is achieved.

3.2.2 Components of the Curriculum Framework - the Content of Learning to Learn

- (I) Key Learning Areas – the bases for knowledge building
- (II) Generic Skills – the foundation for helping students to learn how to learn
- (III) Values and Attitudes – nurturing of students' personal dispositions

(I) Key Learning Areas (KLA)

KLAs provide the bases for knowledge building and the major content for learning. They are not the names of subjects. Instead, current subjects are being organized into the 8 suggested Key Learning Areas (please refer to Appendix 3) to facilitate schools in planning a balanced curriculum. This will also ensure that all students have opportunities to study the subjects and content of each KLA to achieve a balanced whole-person development in basic education. **The 8 KLAs are not equivalent to 8 key subjects. They are not meant to replace current subjects or to do away with certain subjects. In fact, the proposed KLAs provide a platform to enhance cross-subject cooperation and facilitate students to 'learn how to learn'.**

Key Learning Areas	
Chinese Language Education	Science Education
English Language Education	Technology Education
Mathematics Education	Arts Education
Personal, Social and Humanities Education	Physical Education

(II) Generic skills

Generic skills are fundamental to helping students learn how to learn. They are to be developed through learning and teaching in the contexts of different subjects or Key Learning Areas, and are transferable to different learning situations. We propose nine fundamental generic skills which are essential. One has to note, however, that as the nature and emphasis of the KLAs are different from one another, a generic skill may be more applicable to one KLA than the other KLAs.

Generic skills		
Collaboration Skills	Critical Thinking Skills	Problem Solving Skills
Communication Skills	Information Technology Skills	Self-management Skills
Creativity	Numeracy Skills	Study Skills

(III) Values and attitudes

Values and attitudes are defined as those qualities that an individual or society considers important as principles for conduct and that are intrinsically worthwhile. Values are fundamental to the formation of attitudes, which in turn affect the acquisition and application of the values. Values and attitudes can be cultivated through the related topics and learning targets in the 8 Key Learning Areas. They can also be nurtured individually through **moral and civic education, Chinese History and culture, environmental education, media education, health education, sex education and family education, computer ethics and other themes related to values and attitudes**. In this connection, the **life event approach** (e.g. related to individual judgement, students' lives, the relationship between individual and family or society) can be adopted to bring out the learning objectives.

3.3 The Key Learning Area Curriculum Framework and Its Features

3.3.1 General Features of the KLA Framework

The curriculum framework of each Key Learning Area comprises the following : overall aim, learning targets, strands / dimensions, learning objectives, and quality criteria (or assessment indicators).

3.3.2 Key Recommendations of the Eight Key Learning Areas

Chinese Language Education

- ◆ Enrich the balanced learning experiences of reading, writing, listening and speaking, and develop thinking skills
- ◆ Strengthen the learning of literature and Chinese culture, develop morals and values
- ◆ Relax the prescriptive choice of learning materials, widen the scope and increase the amount of reading

English Language Education

- ◆ Create a language-rich environment and provide greater opportunities for purposeful use of English
- ◆ Greater use of literary / imaginative texts to develop learners' creativity
- ◆ Collect and reflect on evidence of effective teaching and learning experiences to inform curriculum development

Mathematics Education

- ◆ Foundation part, non-foundation part and enrichment activities / topics are introduced into the curriculum to cater for the different abilities of students.

- ◆ The curriculum focuses on the development of logical thinking skills and positive attitudes towards learning Mathematics and builds related generic skills throughout students' life time
- ◆ Curriculum space is created by reserving spare teaching periods

Science Education

- ◆ Enhance students' scientific reasoning and strengthen their science process skills, encourage students to engage actively in designing and conducting experiments
- ◆ Conduct fun science and technology projects, encourage the exploration of scientific concepts and their applications in daily life
- ◆ Introduce a new subject - Integrated Science and Technology at the senior secondary level to empower students to make informed judgement in a technological society

Technology Education

- ◆ Refocus teaching and learning from skill- / content- based teaching to a learning mode which emphasizes a balance among capability, understanding and awareness
- ◆ Emphasize the socio-humanistic aspects of technology education
- ◆ Integrate learning across Technology Education subjects or with other KLA subjects through technological learning activities

Personal, Social and Humanities Education

- ◆ Organize around enquiry learning of issues related to the individual, human society and the environment at local, national and global level
- ◆ Include Chinese History elements as essential contents for learning
- ◆ Enhance personal and social education in the curriculum, provide more opportunities for the development of critical thinking skills
- ◆ Adopt a life event approach for value education

Arts Education

- ◆ The role of the teacher is more of a facilitator, cultivating students' creativity and imagination
- ◆ Schools are free to develop a school-based curriculum through different forms of arts (Drama, media arts, etc.)
- ◆ Make use of public and community facilities for Arts Education, as arts learning happens at any time and anywhere

Physical Education

- ◆ Reorganize the current syllabus and develop a coherent and comprehensive PE programme integrating formal and informal PE learning experiences

- ◆ With reference to the needs of students, schools can design their own school-based curriculum, encouraging students to explore the world of sports from different learning experiences
- ◆ Make use of community resources and promote the culture of adopting an active and healthy life style

3.3.3 Major Changes of Primary General Studies

- ◆ Reduce out-dated or overlapping curriculum content (around 15%), emphasize life-wide learning experiences
- ◆ Let students use Information Technology in inquiry-based learning, enhance the elements of science and technology in teaching and learning
- ◆ Emphasize personal and social education in primary one and two to enhance smooth interface with pre-primary education

3.4 Connection of Key Learning Areas

In real life, the content of the KLAs transcends the boundaries of knowledge domains. Therefore, teachers should avoid giving bits and pieces of information. Instead, during the process of learning, they can make better use of integrated subjects (such as Liberal Studies, Integrated Humanities, Integrated Science and Technology), introduce the concept of life-wide learning, design cross-KLA learning activities, help students develop a broad knowledge foundation. These will enable students learn to observe happenings from different perspectives and to connect and integrate the contents and knowledge learnt from different KLAs.

3.5 Life-wide Learning (connecting the formal and informal curriculum)

Life-wide learning refers to the learning experiences that take place beyond the classroom. It is complementary to the learning inside the classroom. Through authentic learning, the sense of involvement of students is fully enhanced. They can also learn more effectively by applying what they have learnt in different situations.

3.6 Catering for Student Diversity – the gifted and the academically low achievers

To sustain the spirit of 'education for all' and the principle of 'not giving up any student irrespective of his / her ability', we propose that schools develop a curriculum that provides different focuses (such as basic, extended, enhanced / enriched learning contents). Schools can design and develop suitable, diversified remedial courses and implement gifted education programmes that

cater for students' different needs and capabilities. In addition, we also encourage schools to provide students with varied learning opportunities (e.g. strengthen students' creativity in the course of teaching and learning) to stretch their potential to the full.

3.7 School-based Curriculum Development

Under the new curriculum framework, the concept of school-based curriculum development does not mean transferring all curriculum development work back to schools. Rather, it is an attempt to encourage schools to adapt the open curriculum framework based on the curriculum development direction, curriculum aim and curriculum guides set by the CDC. Schools can flexibly exercise their professional autonomy to select teaching contents, teaching and learning activities, homework arrangements, assessment strategies, etc. that cater for their students' needs. On the other hand, the relevant sections in the Education Department will cooperate with other organizations to strengthen the supportive services for school-based development, to conduct educational researches, to assist schools in promoting a new learning and teaching culture, and to enhance curriculum leadership among principals and teachers.

Chapter 4 Facilitating Learning and Teaching

4.1 The Principles of Facilitating Learning and Teaching

Teachers are no longer merely transmitters of knowledge but facilitators of learning.

(Learning for Life, A Promise to Our Children 2000)

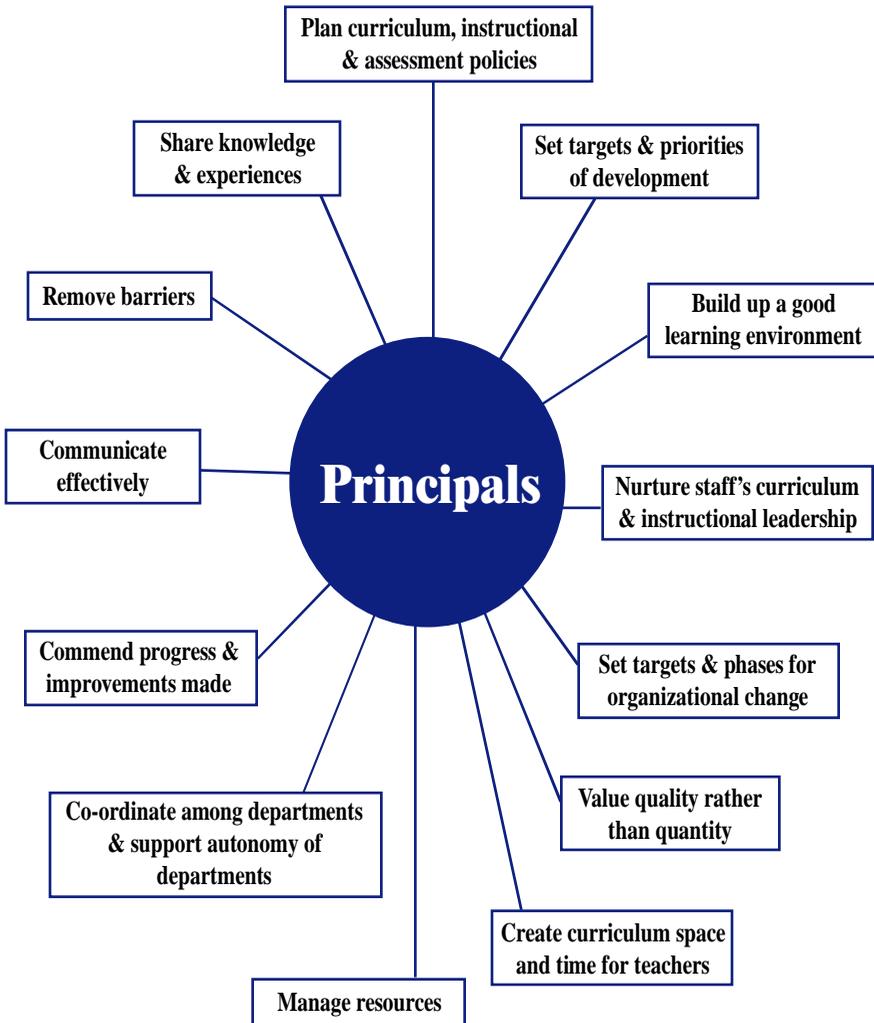
'An adaptable teaching culture, an evolving curriculum' are the prerequisites in promoting learning how to learn. In order to create more space and opportunities for teaching and learning, schools can consider the following principles:

- ◆ provide diversified learning opportunities and a quality learning environment
- ◆ improve the curriculum
- ◆ use a wide variety of learning and teaching strategies
- ◆ understand the relationship between modes of assessment and learning effectiveness
- ◆ strengthen home-school communication

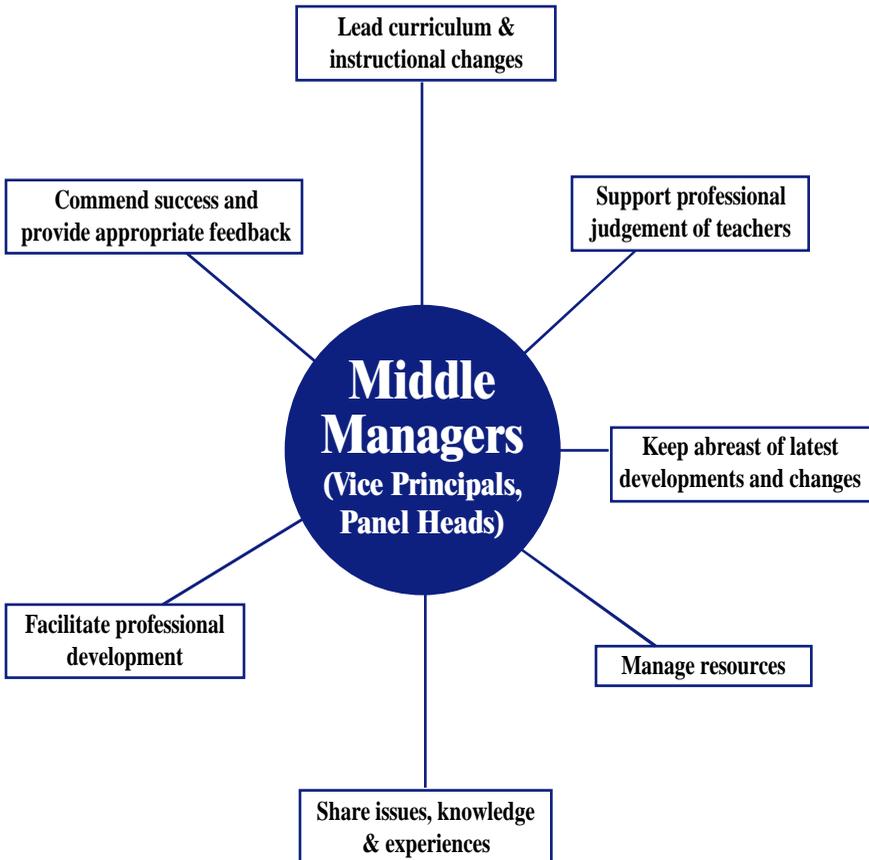
4.2 The Roles of Change Agents in Schools – School Heads, Middle Managers, School Teachers and Teacher Librarians

School heads, middle managers, teachers and teacher librarians are the agents of change in helping students to learn how to learn. Their suggested roles are presented in diagrammatic form as follows:

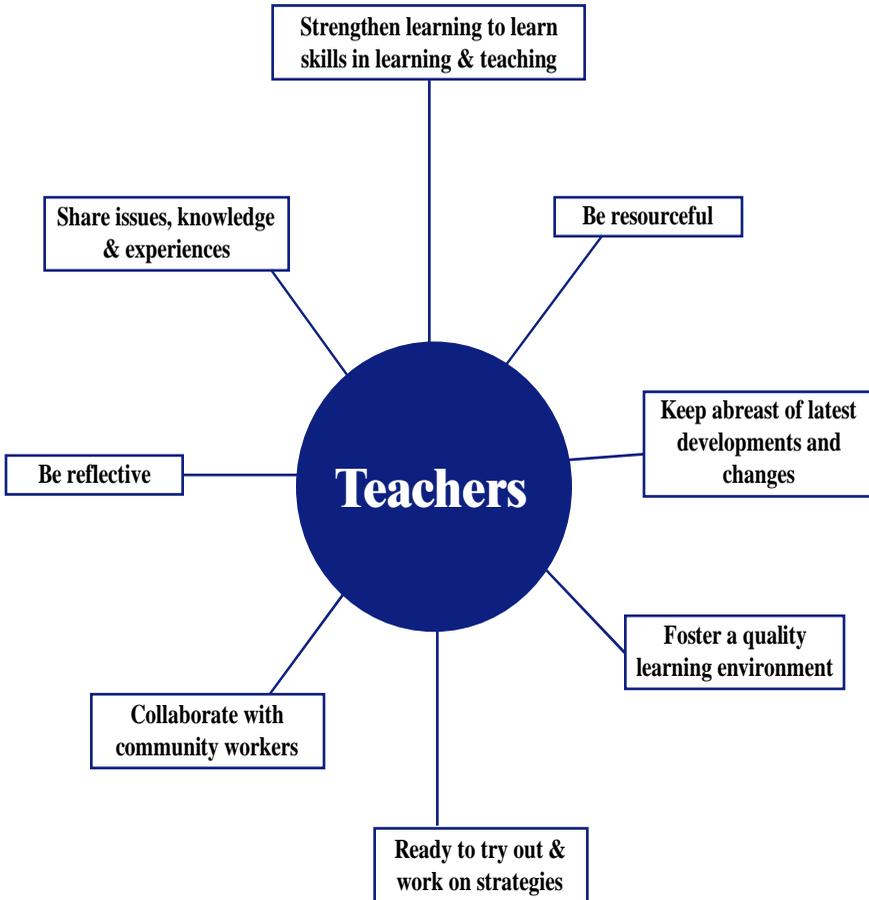
Roles of Principals in Facilitating Learning to Learn



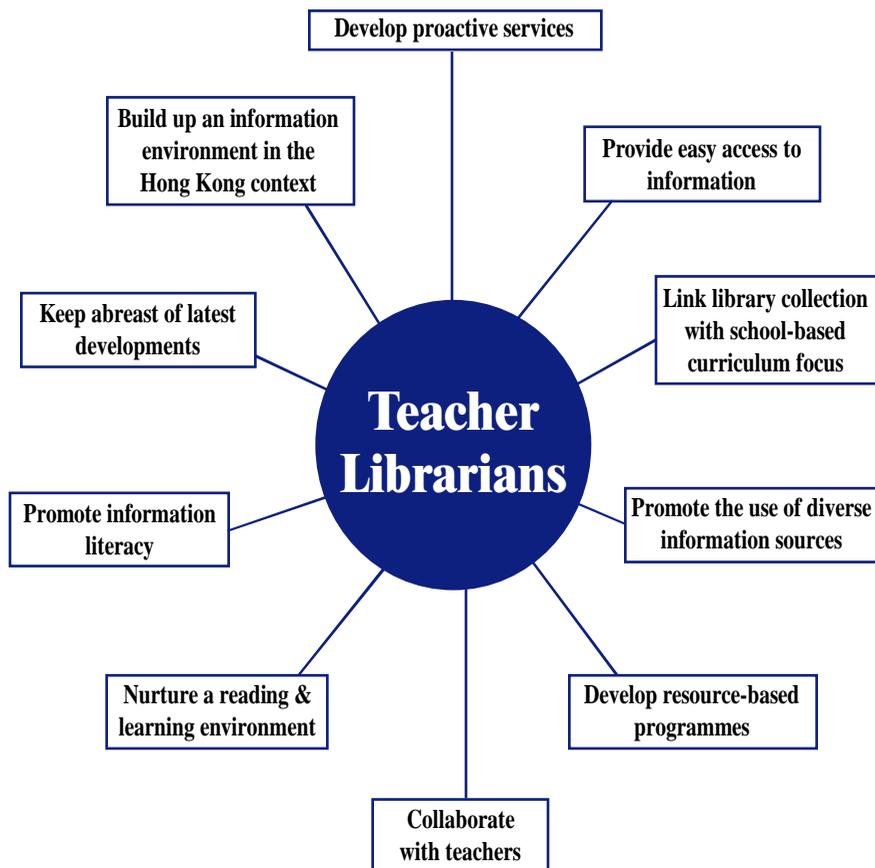
Roles of Middle Managers in Facilitating Learning to Learn



Roles of Teachers in Facilitating Learning to Learn



Roles of Teacher Librarians in Facilitating Learning to Learn



Conclusion - Society-wide Mobilisation, Support of Other Stakeholders

The success of the curriculum reform hinges on the concerted effort and contributions of the government, educators, various sectors of society and parents. We appeal to all parents to collaborate with frontline educators so that their children's learning process will not stop outside the classrooms. For practical suggestions on how parents can help in facilitating their children to learn how to learn, please refer to the related pamphlet on 'Learning to Learn'.

Furthermore, we sincerely invite members of the public to join in the discussion and give your valuable comments on the recommendations and strategies as proposed in the set of consultation documents -'Learning to Learn'. In this way, you can help to pave the way for curriculum development towards a new milestone in the next decade, and to create a quality learning environment and opportunities for the younger generation, as well as to realize the ideal of whole-person education among students.

Publication Schedule of Curriculum Guides

Curriculum Guides	Year of Issue
Guide to the Pre-primary Curriculum (already issued in 1996)	NA
Basic Education Curriculum Guide	2001
Senior Secondary Education Curriculum Guide	2003 (tentative) (pending the outcome of the feasibility study of the senior secondary academic structure by EC's working group)
Key Learning Area Curriculum Guides	2001
<ul style="list-style-type: none"> • Chinese Language Education • English Language Education • Mathematics Education • Science Education • Technology Education • Personal, Social and Humanities Education • Arts Education • Physical Education 	
Chinese Language Education	
<ul style="list-style-type: none"> • Secondary Chinese Language Subject Guide • AL* Chinese Literature Subject Guide • Primary Chinese Language Subject Guide 	2001 2002 2003
English Language Education	
<ul style="list-style-type: none"> • English Language (P1-6) Subject Guide • English Literature (S4-5) Subject Guide 	2003 2004
Mathematics Education	
<ul style="list-style-type: none"> • Additional Mathematics (S4-5) Subject Guide 	2001
Technology Education	
<ul style="list-style-type: none"> • AL Principles of Accounts Subject Guide • Integrated Science & Technology (S4-5) Subject Guide • Computer Studies and Applications (S4-5) Subject Guide • Home Economics (S1-3) Subject Guide 	2001 2002 2002 (tentative) 2002 (tentative)
Science Education	
<ul style="list-style-type: none"> • AL Biology Subject Guide • Biology (S4-5) Subject Guide • Chemistry (S4-5) Subject Guide • Physics (S4-5) Subject Guide 	2002 2002 2002 2002

Curriculum Guides	Year of Issue
Personal, Social & Humanities Education	
• ASL# Ethics & Religious Studies Subject Guide	2001
• ASL & AL Government & Public Affairs Subject Guide	2001
• ASL Liberal Studies Subject Guide	2002
• Chinese History (S4-5) Subject Guide	2002
• Economics (S4-5) Subject Guide	2002
• Geography (S4-5) Subject Guide	2002
• Integrated Humanities (S4-5) Subject Guide	2002
• History (S4-5) Subject Guide	2003
• General Studies (P1-6) Subject Guide	2002
Arts Education	
• Art & Craft (P1-6) Subject Guide	2002
• Art & Design (S1-3) Subject Guide	2002 (tentative)
• Art & Design (S4-5) Subject Guide	2003
• Music (P1-S3) Subject Guide	2002 (tentative)
• Music (S4-5) Subject Guide	2003
Physical Education	
• Physical Education (P1-S7) Subject Guide	2003

Note

* AL - *Advanced Level*

ASL - *Advanced Supplementary Level*

Suggested Lesson Time Allocation for Primary / Secondary Schools

Primary Level (P1-P6)

Total Lesson Time¹ over 6 Years

Approximately 4200 hours for whole-day schools (WD) and 4000 hours for bi-sessional schools (BS). Calculation is based on the following:

- Lesson Time² per week (WD) : 4.7 hours (per day) x 5 (days) = 23.5 hours
- Lesson Time per week (BS) : 4.1 hours (per day) x 5.5 (days) = 22.5 hours
- Number of teaching weeks per year = 30 weeks

Pupils in both whole-day and bi-sessional schools should be entitled to not less than 3400 hours of total lesson time. Bi-sessional schools will have less time for flexible use when compared with whole-day schools.

The school hours³ of whole-day schools, e.g. from 8:00 a.m. to 4:00 p.m., are much longer than those of bi-sessional schools. The additional time is not meant for lengthening lesson time. Apart from total lesson time, whole-day schools should spare more time within the school hours to plan a variety of activities and programmes conducive to whole-person development and life-wide learning. Pupils should be provided with more opportunities for self-learning, collaborative learning, developing social skills and aesthetics, etc.

Lesson Time for Flexible Use

Approximately 10% - 19% (about 420 hours to 800 hours) for whole-day primary schools and 10% - 15% (about 400 hours to 600 hours) for bi-sessional schools.

Schools can use the time for activities that meet their individual needs and contexts, e.g. activities/learning programmes for remedial or enrichment/enhancement purposes, cross-curricular activities, fieldwork, promoting reading, etc.

Key Learning Areas	Subjects	Suggested Percentage of Lesson Time Allocation*		
Chinese Language Education	Chinese Language, Putonghua	25% - 30%		
English Language Education	English Language	17% - 22%		
Mathematics Education	Mathematics	12% - 15%		
Science Education Technology Education Personal, Social and Humanities Education	} General Studies	12% - 15%		
Arts Education			Art & Craft Music	10% - 15%
Physical Education			Physical Education	5% - 8%

* refers to whole-day primary schools

Junior Secondary Level (S1-S3)

To provide students with a broad and balanced curriculum and the essential learning experiences using the new curriculum framework, adjustments may be required progressively in some schools in the next few years.

Total Lesson Time over 3 Years

About 2700 hours

Calculation of Lesson Time is based on the following:

- Lesson time per week = 6 hours (per day) x 5 (days) = 30 hours
- No. of teaching weeks per year = 30

Lesson Time for Flexible Use

5% - 15% time for flexible use of the schools is about 135 hours to 405 hours over 3 years.

Schools can use the time for learning activities and programmes that meet their individual needs and contexts. These activities and programmes could be for remedial or enhancement purposes in the form of additional study within the key learning areas or from school-developed programmes, or activities such as activity weeks, China visits, outward bound experiences, leadership training camps, etc.

Key Learning Areas	Suggested Percentage Lesson Time Allocation
Chinese Language Education	17% - 22%
English Language Education	17% - 20%
Mathematics Education	12% - 15%
Science Education	8% - 15%
	The time allocation of 8% to 10% is intended for schools whose curriculum has a technology education orientation. This curriculum should connect students' learning experiences in science and technology education.
Technology Education	8% - 15% (25% - 35%) [#]
Personal, Social and Humanities Education	10% - 20%
	The time allocation of 10% to 15% is intended for schools whose curriculum has a technology education orientation, so as to ensure that the essential contents for personal, social and humanities learning, including Chinese History and culture, can be accommodated.
Arts Education	8% - 10%
Physical Education	5% - 8%

[#] The time allocation of 25% to 35% is intended for schools chosen to have a curriculum with a strong orientation in technology education. These schools generally have the background that technology subjects would be better vehicles for their students to develop generic skills. In these schools, the lesson time, in terms of percentages, allocated to other key learning areas will be lower than in schools across the territory.

Senior Secondary Level (S4-S5)

The recommended subject combinations for S4 & S5 as stated in the Education Commission's *Reform Proposals for the Education System in Hong Kong (2000)* are as follows:

Chinese + English + Mathematics + A + B + other subjects from the 8 Key Learning Areas

'A' represents taking at least one subject in the Key Learning Area of 'Personal, Social and Humanities Education'. If a student only chooses one subject from this learning area, the school should advise him / her to take 'Integrated Humanities'.

'B' represents taking at least one subject in the Key Learning Areas of 'Science education' or 'Technology Education'. If a student chooses altogether only one subject from these two learning areas, the school should advise him / her to take 'Integrated Science and Technology'.

Over the 2 years (from S4 to S5), the total lesson time is approximately 1600 hours. Lesson time is calculated based on the following:

Average lesson time per week = 30 hours

Average number of teaching weeks for S4 = 30 teaching weeks

Average number of teaching weeks for S5 = 24 teaching weeks

At present, the 1600 hours are generally spent on the 7 – 10 examinable subjects the school offers to the students (which may include Physical Education and / or Arts Education) plus Assembly / Form period(s) and non-examinable Physical Education and / or Art lessons.

It is understandable that schools put a lot of emphasis on the examinable subjects. Flexibility is given to schools to allocate the lesson time according to the needs of the students and the characteristics of the school. At the same time, schools must bear in mind the aims of education and provide all the essential learning experiences: **intellectual development, moral and civic education, community service, physical and aesthetic development and career-related experiences** to their students. Schools can include in their curricula those activities or learning programmes which may be carry out beyond the classroom, in order to offer all-round and balanced learning opportunities to their students to help their whole person development.

Note:

1. Total lesson time: Time for class teaching for the whole year
2. Lesson time: Time allocated to various subjects or key learning areas in the school time-table
3. School hours: Time that students stay in school to learn each day

Subjects under the Eight Key Learning Areas (KLA)

<p>Chinese Language Education KLA</p> <ul style="list-style-type: none"> • Chinese Language • Chinese Language & Culture • Chinese Literature • Putonghua <p>English Language Education KLA</p> <ul style="list-style-type: none"> • English Language • English Literature • Use of English <p>Technology Education KLA</p> <ul style="list-style-type: none"> • Automobile Technology • Business Fundamentals • Business Studies • Catering Services • Commerce • Computer Applications • Computer Literacy • Computer Studies • Design & Technology • Design Fundamentals • Desktop Publishing • Electronics • Electronics & Electricity • Engineering Science • Fashion Design • General Studies • Graphical Communication / Technical Drawing* • Home Economics • Information Technology • Principles of Accounts • Retail Merchandising • Technological Studies • Technology Fundamentals / Metalwork* • Textiles • Word Processing & Business Communication (English) / Typewriting* <p>Physical Education KLA</p> <ul style="list-style-type: none"> • Physical Education 	<p>Mathematics Education KLA</p> <ul style="list-style-type: none"> • Additional Mathematics • Applied Mathematics • Mathematics and Statistics • Mathematics • Pure Mathematics <p>Science Education KLA</p> <ul style="list-style-type: none"> • Biology • Chemistry • General Studies • Human Biology • Physics • Science <p>Personal, Social and Humanities Education KLA</p> <ul style="list-style-type: none"> • Buddhist Studies • Chinese History • Civic Education • Economic & Public Affairs • Economics • Ethics & Religious Studies • General Studies • Geography • Government & Public Affairs • History • Liberal Studies • Religious Studies (Christianity) • Social Studies • Travel & Tourism <p>Arts Education KLA</p> <ul style="list-style-type: none"> • Art and Craft • Art and Design • Ceramics • Music
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* Phasing out subjects

Views on 'Learning to Learn' Consultation Document

With reference to the recommendations and strategies proposed in the 'Learning to Learn' consultation document, please give us your valuable views on the following:

1. The principles of the curriculum reform, the aim of the school curriculum and learning goals, the curriculum framework (e.g.: key learning areas, generic skills, values and attitudes)

2. Approach to curriculum development, phases of curriculum development, development strategies and support to schools and teachers

You are welcome to send your views to the Curriculum Development Council Secretariat by post, fax or e-mail **on or before 15 February 2001**.

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