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<u>Foreword</u>

Excel and Grow

Education holds the key to the future of Hong Kong as well as each individual. Immediately after the establishment of the Hong Kong Special Administrative Region Government, the Chief Executive entrusted the Education Commission (EC) to conduct, together with all people in Hong Kong, a comprehensive review of the education system with a view to drawing up the aims of education and a blueprint for reform for the 21st Century.

Students are the focus of the whole education reform. The basic premise is to enable every individual to pursue all-round development through life-long learning. Our education has seen much success in the past, and teachers, through their teaching and exemplary conduct, have nurtured many local talents. However, in tandem with changes taking place in the community, our students' learning needs have also changed. It is essential for our education system, including its academic structure, content and modalities, to be duly adjusted in response to these changes. Similarly, teachers should keep abreast of the times in a bid to enable our new generation to enjoy learning, to communicate effectively, and to develop their creativity and sense of commitment. Enjoying learning in no way means it is no longer necessary to work hard. Instead, we hope that students will derive enjoyment as well as a sense of satisfaction and achievement in the process of learning. Neither does the term "all-round education" connote less importance being attached to academic standards. On the contrary, a balanced development helps enhance students' all-round abilities in various domains.

This exercise is a comprehensive review on the education system, including the academic structure, the curricula and the assessment mechanism, and the interface between different stages of education. The objective is to examine how the education system could be changed to provide the most favourable environment for teaching and learning, so that students can fully realise their potential and teachers can have more room to help students learn more effectively. To conduct this review, we have set up two special working groups and more than ten sub-groups, comprising over a hundred experienced educators and members from different sectors of the community, to jointly undertake this mammoth task. During the review, we often exchanged views with people from different sectors of the community, analyzing the pros and cons of various proposals. We have also conducted two rounds of extensive consultation to invite the public's views on the aims of education for the 21st Century and the framework for education reform. The media has also shown great interest in this review, reporting on the consultation extensively and following up closely on the review's progress. This

no doubt helps to promote the community's participation in this review.

The reform needs to be supported by other factors such as the enhancement of teachers' professionalism, the participation of parents, the support of the whole community, an effective quality assurance mechanism, the devolution of responsibilities and streamlining of administrative procedures. To this end, we are liaising closely with the major education advisory and executive bodies to ensure that their policies and measures are in line with the direction of the reform.

Throughout the process of our review, there have been heated debates and doubts; hopes and complaints, allegations and touched heartstrings. Friends from all walks of life have devoted much time and painstaking efforts to the reform, putting into it their ideals and zeal. I am keenly aware that the society at large places high hope on the education reform, for it to bring about fundamental improvements to the education system.

We have now embarked on the third stage of consultation, and are now inviting the public's views on specific recommendations for the reform. The success of the education reform hinges on whether schools, teachers, students, parents as well as the community as a whole can make the culture change, re-affirming the importance of all-round education and life-long learning, and take concrete steps to support the reform. We expect that the education reform will bring considerable changes to teaching and learning. To really benefit students, schools, teachers, parents and all sectors of the society should be prepared to show commitment, make contributions, and to embrace these changes.

Your support and participation will be the key to the success of this reform.

(Antony LEUNG Kam-chung)
Chairman
Education Commission

May 2000

Chapter 1 : Review of the Role and Functions of Education in the Context of Social Transformation

The World has Changed, So Must the Education System!

1.1 Education holds the key to the all-round development of a person and prepares him/her for work and life. Education nurtures talents for the society and promotes its prosperity and progress. In an ever-changing society, it is imperative that our education system keeps pace with the times and be responsive to the needs of learners. To design an education system for the future, we must envision future changes in the society in order to cater for the needs of learners in the new society and to define the new role and functions of education in the changed environment.

Fundamental changes around the world

1.2 The world is undergoing fundamental economic, technological, social and cultural changes.

1.3 The world economy is in the midst of a radical transformation, and the industrial economy is gradually being replaced by the knowledge-based economy. Industries that rely on cheap labour are giving way to emerging industries founded on knowledge, technology and innovation. Rigid organizations, multi-layered management and strict division of labour are being displaced by lean management structures, stream-lined networks and flexible staffing. The creation, updating and application of knowledge have become the key to the success of industries, organizations and individuals.

1.4 People's lives are also undergoing momentous changes. Most jobs require a considerable amount of knowledge which needs to be constantly updated. As the job requirements change, people nowadays need to master knowledge in different domains. Therefore, in a knowledge-based society, people must keep on learning. Many countries have already adopted "life-long learning" as their national policies and have made it their priority task to provide life-long learning opportunities for their people (see Appendix I).

1.5 Rapid developments in information technology (IT) have removed

the boundaries and territorial constraints for trade, finance, transport and communication. As communication links become globalised, competition is also globalised.

Developments in Hong Kong

1.6 As an international city, Hong Kong is experiencing the same changes.

1.7 On the economic front, thanks to our people's hard work over the years, Hong Kong is now a world-class centre of finance and trade. Our staunch belief in the market economy, the level playing field, the simple tax system, the rule of law, the free flow of information and a dynamic and enterprising workforce are the key elements in sustaining Hong Kong's competitive edge.

1.8 Meanwhile, our economy is also undergoing structural changes. Hong Kong has long passed the stage of competing through low wages, and is steadily moving up the ladder of value-addedness. A knowledge-based economy is taking shape quickly. Hong Kong's future development will depend on whether we are able to harness new technologies, develop new industries, new business strategies and new operating modes, and whether we have people who are nimble and creative.

1.9 On the political front, Hong Kong has stood by the principle of "One Country, Two Systems" and has been enjoying a high degree of autonomy since our reunification with the motherland. Our relationship with the Mainland is closer than ever before. We should therefore enhance our understanding of our country, our culture, and strengthen our sense of belonging and commitment to our country.

1.10 Hong Kong's long term objective is not only to become one of the outstanding cities in China, but also the premier cosmopolitan city in Asia, embracing the cultural essence of the East and the West. In the new millenium, Hong Kong should strive to be a democratic and modern city with cultural diversity and a global outlook. Our priority should therefore be to nurture a large pool of talents, generalists and specialists alike, who are good learners, articulate, creative, adaptive, have good organizational skills and a sense of commitment.

1.11   Life-long learning is not only essential to Hong Kong; it is also gradually becoming our way of life.

The roles and functions of education in a new society

1.12   In a knowledge-based society, new knowledge keeps on emerging while existing knowledge becomes obsolete quickly.   The problems that we encounter in our daily lives and at work have become increasingly complicated and diverse, while social contact has become more frequent and enriched.   To cope with these challenges, people must break away from their old selves.   They must be equipped with more knowledge and be ready to venture into new domains of knowledge.   They need to make more efficient use of knowledge and devise novel means to solve problems. They must also continue to learn and enrich themselves throughout their lives.   Our education system must therefore lay a solid foundation and provide extensive opportunities for life-long learning.

1.13   In a knowledge-based society, the value of academic qualifications may not last forever.   Education is expected to equip each individual with abilities for lifelong learning and to enable everyone to have a fair opportunity to pursue life-long learning.   It is also the most important and fundamental condition for Hong Kong's continued development. Imparting knowledge is no longer the principal function of education.   The role of education should be to help people enhance their quality and potentials.   Education should enable everyone to be in charge of their own life and to build a future for themselves.

1.14   It is therefore necessary to redefine the roles and functions for the **different stages of education**.

1.15   Pre-primary education is the foundation and starting point for life-long learning.   Since birth, we have all been influenced by the things and people around us.   Our parents are our first teachers.   Parental care plays a very crucial part in helping children develop the right concepts and attitudes.

1.16   The role of early childhood education is to enable children to experience group life in a pleasurable and rich learning environment that can inspire their curiosity and quest for knowledge, while cultivating in them good learning habits for life.   Rote learning at this stage should be avoided as it will only hamper a child's psychological and intellectual growth.

1.17   The nine-year basic education stage should focus on developing

students' basic knowledge, abilities and attitudes to help them lay a good foundation for life-long education and all-round development. Students should at this stage develop positive values, the capability for independent thinking, judgment, critical analysis and problem-solving skills, team-work, as well as adaptability, creativity, organizational skills and communication skills. Of course, students must also possess basic knowledge in different learning areas.

1.18   In the <u>senior secondary education</u> stage, apart from further developing the above-mentioned attitudes, abilities and knowledge, students should have a broader spectrum of experiences so that they can explore their aptitudes and strengths in preparation for further study or employment.

1.19   During the <u>higher education</u> stage, students should be able to further upgrade their personal quality, broaden their horizons and equip themselves with the necessary skills for future employment. Traditionally, it was considered that degree programmes in professional domains should be highly specialized and needed not involve knowledge in other domains. However, as we move towards a knowledge-based society, such a concept is losing its footing. In today's world, no matter what professions and positions we are in, we need to be equipped with **knowledge in multiple domains, all-round analytical skills and a flexible, adaptable and creative mind**. In the face of rapid globalization, higher education should aim to give students a global perspective so that they can have the confidence to face the world whilst firmly rooted in Hong Kong.

1.20   In a life-long learning society, higher education is no longer the prerogative of formal universities. As a matter of fact, different modes of post-secondary education programmes are emerging, including full-time, half-day, distance learning or on-line courses at sub-degree level or above, providing different opportunities through various channels. More and more people are now able to upgrade themselves and develop their potentials by pursuing programmes that suit their abilities. A small elite is no longer sufficient to cope with the needs of a knowledge-based society. We have to groom a large number of talents through a higher education system that is diversified and flexible.

1.21   The role of <u>continuing education</u> is now more important than before. In a rapidly changing and keenly competitive society, there is an even greater need for all of us to continue to update our knowledge and skills, to widen our vision, to develop our potentials so that we can cope with the new challenges in our daily lives and at work.

Chapter 2 : Aims of Education for the 21st Century

Enabling our students to enjoy learning,
Enhancing their effectiveness in communication
and Developing their creativity and sense of commitment

2.1   Early last year, the Education Commission (EC) invited members of the public to participate in drawing up the aims of education for the 21st century as the basis for a review on Hong Kong's education system.   The community at large generally agreed that the overall aims of education for the 21st century should be:

> 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.

Our priority should be accorded to enabling our students to enjoy learning, enhancing their effectiveness in communication and developing their creativity and sense of commitment**.**

2.2   Having taken into account the comments received from members of the public, the EC has revised the proposed aims of education for various learning stages as follows –

(A) **Early Childhood Education**

2.3   Early childhood education is the foundation of lifelong learning.

(1) Aims

- To help children cultivate a positive attitude towards learning and good living habits in an inspiring and enjoyable environment.

(2) Objectives

We wish our children to:

- have curiosity and an inquisitive mind, as well as an interest to learn;

- experience a pleasurable and colourful group life, through which they can develop a sense of responsibility, respect others and have a balanced development covering the domains of ethics, intellect, physique, social skills and aesthetics; and

- be prepared to experiment and explore, to learn to face up to problems and find solutions, to develop self-confidence and a healthy self-concept.

(B) School Education

2.4   School education is the stage where students develop their basic life-long learning abilities and attitudes.

(1) **Aims**

To motivate students to construct a core of basic knowledge and develop their basic abilities and attitudes to prepare them for the building of a learning and civilized society.

(2) **Objectives**

(i) The objectives of the nine-year basic education are –

- to enable every student to develop to the full his/her individual potential in the domains of ethics, intellect, physique, social skills and aesthetics;

- to ensure that students attain the basic standards and encourage them to strive for excellence; and

- to encourage students to take the initiative to learn, develop the ability to think and create, and cultivate positive attitudes and values.

(ii) The objectives of senior secondary education are –

- to enable students to have a balanced and comprehensive learning experience in the academic, vocational, organizational, social service as well as the arts and sports domains to prepare them for employment, for learning and for life;

- to provide students with a diversity of options so that they can understand their abilities and aptitudes better to plan for employment and learning in their future life; and

- to nurture in students a longing for learning, independent and critical thinking, creativity, a commitment to their families, their society and their country, as well as a global outlook.

(C) Higher Education

(1) Aims

- To consolidate students' abilities and attitudes for life-long learning, and to nurture people who have confidence, a sense of justice and social responsibility and a global outlook.

(2) Objectives

- To develop students' independent and critical thinking, creativity and ability to learn independently and to explore, in preparation for the mastering of knowledge in a certain discipline;

- to foster in students an aspiration for self-improvement, a positive attitude towards life and a commitment to their families, their society and their country; and

- to enhance students' ability to learn, live and work in a diverse social and cross-cultural environment.

(D) Continuing Education

(1) Aims

- To enable learners to constantly upgrade themselves and to promote their all-round development. For the society as a

whole, continuing education helps to enhance the quality of people that is crucial to the society's future development.

(2) Objectives

- To help learners realise their own potentials and enhance personal quality;

- to help learners acquire the most up-to-date knowledge and skills they need to stay competitive in a globalised economy; and

- to provide opportunities for learners to acquire the necessary academic, professional and vocational training and qualifications to fulfil their personal aspiration and the requirements at work.

Chapter 3 : Principles of the Reform

3.1   In setting the direction and formulating the proposals for reform, the EC has adopted the following principles –

- Student-focused
- "No-loser"
- Quality
- Life-wide learning
- Society-wide mobilisation

Student-focused

3.2   The main purpose of the education reform is to give students more room and flexibility to organise and take charge of their own learning.

3.3   Students should be the main protagonists in learning. The ultimate objective of education is to enable every student to achieve all-round development according to his/her own attributes. It therefore follows that in reforming the education system and the methods of teaching and learning, students' needs and interests must be the foremost considerations.

3.4   In the society of today, we all need a solid foundation of basic knowledge, the ability to pursue learning independently and throughout our lives, the ability to keep abreast of new information and skills, and the ability to construct knowledge. The important mission of education reform is therefore to nurture in our students the ability to be independent learners who enjoy learning, communicate effectively, have creativity and a sense of commitment. They should be well-versed in physical and artistic skills, as well as intellectually and emotionally sound.

"No-loser"

3.5   There should not be, at any stage of education, dead-end screening that blocks further learning opportunities. One must grasp every opportunity throughout one's life to continue to learn and to seek self-advancement, and the efforts made should be duly recognised.

3.6   "Teaching without any discrimination" has been a cherished concept since ancient times. We should not give up on any single student, but rather let all students have the chance to prove themselves. The aim of education reform is to remove the obstacles in our system that obstruct

learning, to give more room to students to show their initiative and to develop their potential in various domains.

3.7   In a diverse education system, students can find the appropriate learning opportunity at various stages in life according to their personal development needs or job requirements, and their efforts should be duly recognized. Such a system would induce all to pursue life-long learning and promote the emergence of a learning society.

Quality

3.8   In a knowledge-based society, everyone must be equipped with a basic level of learning capacity in order that they can learn throughout their lives and constantly upgrade themselves. We must therefore enable all students to reach a basic level in terms of the various life-long learning skills during the basic education stage. At the same time, we must be able to provide opportunities for highly endowed students to achieve excellence. There must be in any education system a mechanism to ensure students learn to the best effect.

Life-wide learning

3.9   Learning must transcend the constraints of academic subjects and examinations. Students should be able to take part in a comprehensive range of learning activities both inside and outside the classroom.

3.10   In the new millennium, we must adopt a broader definition for education in order that students are able to develop multiple abilities. Activities that take place inside and outside the classroom contribute equally to a all-round education. We will elaborate on this concept in Chapter 4 and Section 2 of Chapter 5

Society-wide mobilisation

3.11   Life-long education is the important foundation on which we, and Hong Kong as a whole, can build success. The Government, the education sector, various sectors of society as well as learners themselves are all obliged to make contributions. In Chapters 8 and 9, we will examine the role that various stake-holders should assume in the education reform.

Chapter 4 : Key Components of the Reform

4.1   The proposed blueprint for reform is drawn up to implement the aims of education outlined in Chapter 2. It comprises the following key components –

- **Reforming the curricula** to provide comprehensive and balanced learning experiences
- **Improving the assessment mechanism** to facilitate teaching and learning
- **Removing obstacles to learning** in the system to create room for teaching and learning
- **Reforming the university admission system** to promote the concept of all-round development
- **Increasing post-secondary learning opportunities** to nurture more high quality talents
- **Formulating resource strategies** for the effective use of the society's resources

The above components are elaborated in the following paragraphs.

Reforming the curricula to provide comprehensive and balanced learning experiences

4.2   We develop our attitudes and abilities and construct knowledge from our learning experiences. Our knowledge of people and matters are accumulated bit by bit from what we see and hear and take part in.   We gradually learn how to analyze, judge and establish our own values. The design of the school curricula should therefore be premised on students' learning experiences.

4.3   To assist students to develop all-round abilities and positive attitudes, in preparation for lifelong learning, we must provide them with comprehensive and balanced learning experiences. We propose to provide five important learning experiences, namely intellectual development, life experiences, job-related experiences, community service as well as sports and art through reforming the curricula. The integration of various forms of formal, non-formal and informal learning activities will enable students to have an interesting and diversified learning life, helping them cultivate an interest in learning, positive values and attitudes, as well as analytical and independent thinking skills. The proposals on the reform of the curricula will be elaborated in Chapter 5.

4.4   The curricula for higher education should also be adjusted in response to new changes in our society. We propose in Section 4 of Chapter 5 that universities review the functions, content and mode of teaching of first degree programmes, and <u>maintain a balance between the breadth and depth of the curricula</u>, so that students will have exposure to other learning domains apart from their own specialised disciplines and be able to develop a broader vision and important generic skills.

Improving the assessment mechanisms to facilitate teaching and learning

4.5   The mechanisms for assessing students' performance have three functions, namely facilitating teaching and learning, certification of qualifications and selection. There are both internal and external assessment mechanisms.

4.6   The major function of **internal assessment** should be to facilitate teaching and learning and help teachers understand the learning progress and needs of their students. Teachers could take into account the results of the assessment in planning the teaching syllabus, designing teaching methods and giving guidance to individual students. For this purpose, we propose to put in place **Basic Competency Assessments in Chinese, English and Mathematics** at various stages of basic education. Schools may conduct these assessments as and when appropriate to get a better picture of students' progress in learning and to identify their strengths and weaknesses at an early stage, so that follow-up actions can be taken as soon as possible and suitable assistance can be given to students with learning problems. Details of the proposal will be elaborated in Chapter 5.

4.7   Vis-à-vis internal assessment, **public examination** serves more the functions of certification and selection. As tertiary institutions and employers often give overwhelming weight to public examination results in considering admissions or appointments, schools, teachers, parents and students generally attach great importance to these results, and devote most of their time and efforts to the examination syllabus. It is not uncommon that schools put undue emphasis on helping students get good grades, leading to the phenomenon of teaching and learning only what is to be examined.

4.8   Because of this pivotal role of public examination, its positive effect on teaching and learning could be brought out through appropriate improvements to the examination system, starting from the modes, contents and assessment methods. A flexible examination approach can give students

more room for creative and independent thinking. Linking the content of examinations with students' experiences in daily lives will raise their interest in learning and will encourage them to put more effort on useful learning activities. As regards the assessment methods, the inclusion of teachers' assessments will help to better examine those abilities that are not easily examinable through written tests (for example, the ability to organize, communicate and work with others).

4.9   As public examination is an important issue in the review on education system, the Hong Kong Examinations Authority is now conducting a comprehensive review on the public examination system. The related proposals will be elaborated in Chapter 5.

Removing obstacles to learning in the system

4.10   In the process of learning, especially at the basic education level, students should have uninterrupted, comprehensive and balanced learning lives to give full play to their potentials. We are therefore of the view that there should not be any obstacles in the system that block learning, so that they will progress in a through-road, and be able to concentrate on various learning activities that will benefit their all-round development. Nevertheless, in the existing Primary 1 (P1) and Secondary 1 (S1) admission mechanisms, students are induced to spend precious learning time on unnecessary drilling, and this undercuts their all-round development.

4.11   In the existing Primary One Admission mechanism (POA), more than half of the P1 places are allocated at the schools' discretion. Although Education Department stipulates against interviews, many schools still adopt this method to select students. To enhance their children's chances of entering the schools of their choice, some parents require their children to drill interview skills and memorize answers to questions that may be asked at interviews. On the other hand, some kindergartens also adopt an overly advanced curriculum in a bid to attract parents. This hinders both the psychological and intellectual development of children. We propose reforming the POA mechanism to reduce the incentives for drilling. The proposed POA mechanism will be elaborated in Chapter 5.

4.12   Furthermore, under the existing Secondary School Places Allocation (SSPA) mechanism, students are divided into five bands according to their primary schools' internal assessments scaled by the Academic Aptitude Test (AAT) to determine the priority in the allocation of secondary school places. Since the AAT is meant to assess students' power of reasoning, drilling should not be necessary, theoretically speaking.

However, in order to increase their students' chance to gain a school place of their choice and to establish the schools' reputation, many schools spend a lot of time drilling their students for the AAT. This distorts the curriculum of primary schools and hampers students' all-round development. Worse still, the undesirable labelling effect of the banding system imposes immense pressure upon students. We therefore propose to eliminate by stages the AAT and banding system for the purpose of allocating secondary school places. The reform proposals will be elaborated in Chapter 5.

Reforming the university admission system

4.13   University education is generally regarded as the gateway to success.   Holding high hopes for their children, many parents want their children to gain a university place.   Very often, students view being admitted to university as a reflection of their achievements.   Secondary schools with high university admission rates are therefore favoured by most parents and students.   The university admission system thus plays a crucial role in affecting the way learning and teaching is conducted in primary and secondary schools.

4.14   Universities used to admit students mainly on the strength of their public examination results.   Most schools therefore focus their teaching on those learning areas and abilities that are assessed in public examinations, at the expense of nurturing in students the necessary attitude and abilities which are of paramount importance to their future life.   Many schools, students and parents consider it a waste of time to participate in sports and cultural activities, social service and extra-curricular activities.   However, it is exactly through these learning experiences that important abilities like leadership, communication and organisation skills can be fostered.

4.15   As a matter of fact, individual faculties of some universities have recently broadened their admission criteria, giving weight to the performance of students in different aspects as well as assessing through interviews the students' communication skills, analytical power, responsiveness and interpersonal skills.   These changes have our support. We recommend that universities should give appropriate consideration to the overall performance (academic and non-academic) of the students. Admission criteria should be set on the basis of the schools' appraisal on students, the students' service record and experiences, their performance at interviews and their public examination results.   This will not only help to promote the concept of all-round development, but will also help the universities take in the genuinely worthy students.

Increasing post-secondary learning opportunities

4.16   In the past, the level of knowledge and abilities possessed by secondary school graduates might mostly meet the basic needs of daily life and work. However, as society becomes more knowledge-based, everyone must constantly update himself as knowledge and skills are quickly replaced by those which are more complicated and advanced. Thus there is a need to increase post-secondary learning opportunities and help more people to enhance their life-long learning abilities to cope with the needs of a knowledge-based society.

4.17   As a matter of fact, in many other parts of the world, the proportion of post-secondary places to the relevant age group far exceeds that in Hong Kong, which is only about 34%[5]. In the United States and Australia, the proportions are 81%[1] and 80%[2]; in the United Kingdom and in the Republic of Korea, the proportions are 52%[3] and 68%[4] respectively.

4.18   In the face of the globalised economy and high operating costs, Hong Kong must have a large pool of talents with good communication, innovative and analytical skills, generalists and specialists alike, to maintain our position as an international centre of finance and trade, and to further develop Hong Kong into a world-class cosmopolitan city. Therefore, what Hong Kong needs is a diversified education system to provide more post-secondary learning opportunities through different modes of learning.

Formulating Resource Strategy

4.19   Education is the vehicle to self-advancement, and the success of the education reform will benefit everyone in the society. To ensure the success of the reform, additional resources will be required. If effectively used, the resources we invest on education will yield very rewarding returns for all of us.

4.20   The first step to the implementation of the education reform is to formulate appropriate resource strategies. At present, education is the single largest item of public expenditure, accounting for 23% of the overall Government budget. There is only limited room for increasing government

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Note (1) : 1995 data   Note (3) : 1996 data   Notes (2), (4) : 1997 data
Source of information :   Statistical Yearbook 1999, United Nations Educational, Scientific and Cultural Organization
Note (5) : 1999 data

expenditures on education.

4.21   We would first of all propose to review how the existing public resources devoted to education are utilised. Redeployment should then be made in accordance with the effectiveness and urgency of various expenditure items in order to maximize the effectiveness of the existing resources.

4.22   We also propose to make better use of other resources in the society as far as possible. The social sector, including social service agencies, cultural organizations, recreation and sports bodies, uniformed groups, youth service agencies, other voluntary groups and the business sector, are ready to support and co-operate with schools in providing diversified learning experiences for students with a view to enhancing the quality of education. Parents can also play an important part in rendering support to education.

4.23   The proper use of those public and community resources currently devoted to education alone cannot provide all the resources required for the education reform. We need to consider carefully how and through what channels the community at large will be able to provide the resources for implementing the education reform.

4.24   The issue of resource strategies will be discussed in Chapter 7.

Chapter 5 : Reform Proposals

After reviewing the academic structure, the curricula and the assessment mechanisms of various stages of education and the interface between different stages, the EC made the following proposals:

Stage of education	Academic structure	Allocation mechanism/ interface between different stages	Curriculum reform	Assessment mechanisms	Complementary measures
Early childhood education	To examine the feasibility of having one government department to regulate all kindergartens and child care centres	**Primary one allocation mechanism** Based on the principle of "vicinity", school places will be allocated according to school nets and parental choice. Applicants with siblings/ parents studying/ working in the school must be admitted. 15% of P.1 places will be allocated at the discretion of the schools	Strengthen the interface between early childhood and primary education. Should not use curriculum which is too advanced for the children's developmental stage.		• Raise the professional standards of principals and teachers (including duly raising the entry requirements and providing the necessary training) • Strengthen the quality assurance mechanism • Promote parent education and participation
Primary education	-	**Reform of secondary school places allocation system** **Transition:** Abolish AAT and use the school's average results of the AAT over the past three years for scaling purpose. Reduce the number of bands and increase the % of discretionary places **Long-term:** The students' school internal results will be used for allocating S1 places. Encourage the development of 'linked schools'	• Re-group all subjects into 8 key learning areas. Provide students with 5 types of learning experiences for whole-person development • Eliminate the obsolete elements of the curriculum and update the content • Promote moral and civic education, foster a reading culture, encourage the use of project learning and the use of IT in education	Introduce Basic Competency Assessments in Chinese, English and Mathematics comprising two parts: • Student assessment: assess the students' basic competencies in Chinese, English and Mathematics from P1 to S3 to facilitate the provision of guidance and support to students in need • System assessment: monitor the basic standards of all schools to facilitate schools in formulating improvement measures for effective teaching and learning	• Implement more effective remedial and enhancement measures • Promote school-based management • Enhance the professional standards and commitment of principals and teachers • Provide professional support to principals and schools • Establish district education support network • Promote parent education and participation • Make good use of talents and resources in the community to support education • Implement effective quality assurance mechanism for schools

Stage of education	Academic structure	Allocation mechanism/ interface between different stages	Curriculum reform	Assessment mechanisms	Complementary measures
Junior secondary education	-	Interface between S3 and S4 • Provide learning opportunities for all willing and able S3 graduates • Implement the new interface mechanism between S3 and S4	same as above	- same as above	- same as above
Senior secondary education	Establish a working group to examine the feasibility of implementing the proposed 3-year academic structure and formulate detailed proposals and implementation timetable. It will submit recommendations to the Government in 2002	Reform the university admission system Universities should consider the students' overall performance for the purpose of admission, such as: • Internal assessment reports by secondary schools • Portfolios prepared by students • Interviews • results in public examinations	• Provide 5 types of key learning experiences • Provide choices of different combinations • Provide more work-related experiences	• Extend the teacher assessment scheme by phases • Adopt the 'core competence approach' in HKCEE • Flexibility for S6 students to sit in HKALE • Abolish fine grades in HKCEE and HKALE	- same as above
Higher education	• Develop a transferable credit unit system among institutions and faculties • Encourage the development of different types of higher education institutions (e.g. community colleges and private universities)		• Provide inter-disciplinary learning opportunities and strengthen general education • Increase post-graduate places	Examine how the quality assurance mechanisms should be strengthened so as to ensure the standard of university graduates	• UGC to explore an appropriate funding mechanism together with the universities, so as to tie in with the reform of the university admission system and the implementation of the credit unit system • Enrich campus life
Continuing education	Provide diversified learning opportunities	A flexible admission system which provides different entry/exit points	Covering a wide range of learning areas including academic, professional, vocational education and personal development	• Develop a flexible and transferable qualifications recognition system • Establish a quality assurance mechanism	• Promote a life-long learning culture • Establish a website on continuing education • Promote cooperation among different sectors of the community • Promote the use of the existing community resources to set up lifelong learning centres

Section 1: Early Childhood Education

Building a New Culture for Quality Early Childhood Education

5.1.1　　Early childhood education is the foundation for life-long learning and all-round development. The focus of early childhood education is to help students lay a solid foundation through the provision of all-round and balanced learning experiences according to their physical and psychological development needs. Education for young children should, therefore, correspond to their developmental stage.

(A) Key components of reform

5.1.2　　In considering how the quality of early childhood education could be enhanced, the EC commissioned a comparative research on the systems of early childhood education in the United Kingdom, the Netherlands , Australia, Portugal, Mainland China, the United States, Japan, Taiwan, and Singapore. After making reference to the developments in other places and considering Hong Kong's own circumstances, the EC proposes implementing reform in the following areas:

(1)　Enhancing professional competence
(2)　Improving the quality assurance mechanism
(3)　Reforming the monitoring mechanism
(4)　Enhancing the interface between early childhood and primary education
(5)　Promoting parent education and participation

(B) Recommendations

(I)　Enhancing professional competence

5.1.3　　The professional competence of early childhood educators, including teachers and principals/supervisors of kindergartens (KGs) and child care centres (CCCs) determines the quality of early childhood education. The EC proposes to raise the professional standards of early childhood educators through training and raising their entry requirements . As indicated by the research, there are wide variations in the entry qualifications requirements for kindergarten teachers in the ten countries/regions

surveyed. In Singapore, new KG teachers should have completed Secondary 4/5 education and a 6-month certificate course. In Japan, USA, UK and the Netherlands, teacher certificate and bachelor degree qualifications are required. As for KG principals, they are subject to the same set of academic requirements as the teachers in Australia, U.K., Portugal and Taiwan, while KG principals in the Netherlands, Mainland China and Singapore must have completed certain management courses.

5.1.4   Considering the situation and needs of Hong Kong, we propose that the entry and training requirements for KG/CCC teachers must be raised. In addition, KG principals and CCC supervisors should be equipped with professional knowledge on early childhood education and management skills so as to effectively lead their teachers in providing education that corresponds to the children's needs. Our detailed proposals are as follows :

Issues	**Current situation**	**Proposal**
Entry qualifications requirements of KG/CCC teachers	• 2 passes in the Hong Kong Certificate of Education Examination (HKCEE), including one language subject	Short term • Raise the entry requirements to 5 passes in HKCEE (including Chinese and English) as soon as possible Long term • Raise the entry requirements to Certificate of Education level by stages
Qualified KG teachers	• Serving KG teachers must have completed a recognized course of teacher training (approximately 360 hours) • According to the policy objectives set by the Government, there have to be no less than 60% of 'qualified kindergarten teachers' in every kindergarten by September 2000	• Draw up an implementation timetable for requiring all new KG teachers to have completed one year of pre-service training after assessing the supply of human resources
Training of principals	• According to established government policy, all new KG principals must have completed the Certificate of Education (KG) course by September 2002	• Draw up a timetable to require all serving KG principals and CCC supervisors who have not been professionally trained to receive suitable professional training

5.1.5   To implement the above proposals, the Government and teacher training providers of early childhood education should pro-actively consider the following possibilities:

(1)   Fostering the mutual recognition and transferability of academic qualifications offered by different training bodies; and

(2) Examining the feasibility of developing a credit unit system for early childhood teacher training courses to facilitate the teachers' continuing education and attainment of standards at Certificate of Education level or above. This will help to enhance the articulation among different teacher training courses and their mutual recognition.

5.1.6   In case certain KGs or CCCs find it necessary to increase their school fees as a result of the raising of the entry qualifications requirements of KG teachers, the existing fee remission schemes will continue to ensure that no pupil will be deprived of the chance of receiving education due to lack of means.

(II) **Enhancing the quality assurance mechanism**

5.1.7   A quality assurance mechanism helps early childhood education providers understand their relative strengths and areas for improvement to facilitate them in enhancing the quality of education . The EC considers that a combination of external and internal evaluations will constitute the most effective quality assurance mechanism.

Setting quality indicators

5.1.8   An indispensable part of the quality assurance mechanism is a set of clear and proper quality indicators that serve as a basis for external and internal evaluations. At present, different bodies and organizations in Hong Kong (including Education Department (ED), Social Welfare Department (SWD) and World Organization for Early Childhood Education Hong Kong Branch 世界幼兒教育聯會香港分會) have developed and adopted different quality indicators. We are glad to see that the ED is now developing, in collaboration with representatives from the education sector, a set of standardized quality indicators so as to

provide a common basis for evaluating early childhood education in Hong Kong. The quality indicators cover the three areas of facilities and human resources in early childhood education institutions, curriculum design and implementation, and learning effectiveness of pupils.

Self-evaluation mechanism

5.1.9　　A school's self-evaluation is an important step towards self-improvement and is an integral and essential part of the quality assurance mechanism. We urge early childhood education providers to formulate the framework, procedures and tools for self-evaluation as early as possible, and to systematically review the various key aspects so as to help them understand their own effectiveness and areas for improvement better. By taking part in this process, the principals and teachers will have better communication, thus benefiting their professional development.

External evaluation and quality assurance mechanisms

5.1.10　We encourage the Government to promote the development of an external mechanism for the evaluation and quality assurance of early childhood education providers. External evaluation can be conducted by independent specialists/ institutions in early childhood education or the concerned regulatory bodies. Equipped with relevant experience and a broader perspective, these organisations/individuals can offer objective evaluation and expert advice on the schools' strengths and areas for improvement.　These organisations/individuals could also share with the schools evaluated the successful experiences of other early childhood education providers.

Enhancing transparency

5.1.11　To help parents understand the operation and teaching effectiveness of early childhood education providers, we propose that such providers should let parents know the results of their external and internal evaluations so as to enhance their communication with parents. The Government, parent-teacher associations and early childhood education providers should also help parents understand and make proper use of such information.

(III) **Reforming the monitoring mechanism**

5.1.12   Currently, early childhood education providers in Hong Kong include whole-day and half-day KGs and CCCs; they are registered and regulated by the ED and the SWD respectively, and subject to two different sets of legislation.

5.1.13   As shown by the study, the similarities and differences in the monitoring mechanisms of the ten countries/regions surveyed can be summarized as below:

(1)   It is common for KGs and CCCs to co-exist;

(2)   Age is the dividing line between KGs and CCCs; pupils of CCCs are younger, most of whom are below 3 or 4 years old, and the focuses of their services are also different; and

(3)   KGs and CCCs in most countries/regions are regulated by different government departments (such as Ministry of Education; Social Services Department/Social and Health Department) and subject to different ordinances (Education Ordinance; Child Welfare/Service Ordinance). In places like the UK and Queensland in Australia, the quality of all early childhood education/service providers are monitored by the department responsible for education.

5.1.14   Taking into account the disparate situations elsewhere, our view is that Hong Kong should have an early childhood education system and monitoring mechanism that are tailored to our specific needs. KGs and CCCs differ in their focuses of services. The former focus on providing education, while the latter mainly provide child care services. They have developed their own ways of providing services according to the needs of their clients. In keeping with the promotion of diversity, we should allow different systems and service providers to retain their own characteristics to fulfil the needs of the people they serve.

5.1.15   In fact, the Working Party on Kindergarten Education (幼稚園教育工作小組) made a series of proposals in 1995 for harmonizing the various aspects of KG and CCC operation. Currently, the Government has set common standards for the curricula, entry requirements, recommended salary and teacher training of KGs and CCCs. The Government is also planning to gradually implement, where possible, the other proposals on harmonizing the operation of KGs and CCCs.

5.1.16   Apart from harmonization, we also propose that the Government should study the feasibility of having one single body regulating all KGs and CCCs to raise the effectiveness of the regulatory work. We understand that the ED and the SWD have set up a joint working group to study this issue. We hope that action in this respect will be expedited, and that the education sector and the public will be consulted in due course.

(IV) **Enhancing the interface between early childhood and primary education**

5.1.17   Early childhood education is the starting point of formal education and is closely linked to the later stages of education. Apart from factors such as professional competence of early childhood educators and quality assurance mechanism as mentioned above, the current deficiencies in early childhood education in respect of the curriculum and teaching are also due to the following factors:

(1)   The existing system for admission to Primary 1 gives an incentive for drilling students (please refer to Section 2 for details); and

(2)   There is insufficient communication and coordination between early childhood education providers and primary schools on the curriculum and teaching methods.

5.1.18   We therefore propose to enhance the interface between early childhood and primary education and recommend that:

(1)   teacher training providers should review the teacher training courses for teachers of early childhood and primary education so that they can have a better understanding of the preceding/ensuing stage of education in terms of the curriculum, the pedagogy and child psychology;

(2)   the communication and cooperation between KG/CCCs and primary schools should be enhanced through mutual visits and joint activities;

(3)   primary schools should run adaptation programmes for Primary 1 pupils who have not attended KG to help them get used to school life as soon as possible; and

(4)   at present children can enter primary school when they reach 5 years and 8 months, but they need to be three years old before they can enter a KG. We propose to align the age of entering KG to 2 years 8 months, but at the same time step up monitoring to ensure that KGs adopt a curriculum which suits the development of children so that young children will not be pushed to pursue study beyond their developmental stage.

(V)   Promoting parent education and participation

5.1.19   Parents are a child's first teachers and the ones he trusts the most. They exert a far-reaching effect on a child's physical and psychological development. They are the most important partners of early childhood education.

5.1.20   We propose to strengthen parent education through various channels to help parents understand the process of children's physical and psychological development, their needs in different stages, and the right ways of guiding the learning of young children. For example, maternal and child health centres and nurseries of the Government, early childhood education providers

and social services groups should step up their support for parents through disseminating information on early childhood education and organizing seminars and experience sharing activities. Early childhood education providers are also encouraged to establish Parent Teacher Associations to improve communication and cooperation with parents, so that they can work in collaboration to provide care and guidance for our younger generation.

Section 2: Nine-year Basic Education

*To nurture the basic attitudes, skills and
knowledge for life-long learning*

*To ensure basic competence and
encourage the pursuit of excellence*

5.2.1   The focus of nine-year basic education is to help students achieve an all-round personal development and to attain a basic level of competence in various aspects in preparation for life-long learning.   To achieve this aim, we must reform the school curriculum and enhance teaching/learning methods, provide students with balanced learning experiences, and facilitate teaching and learning through putting in place Basic Competency Assessments in Chinese, English and Mathematics. Furthermore, students must be allowed to enjoy an all-round, balanced and coherent learning life. Reforming the admission systems for primary and secondary schools is a must.

(A) Reforming the school curriculum and Improving teaching methods

5.2.2   According to the aims of education for the 21st century, the curriculum reform must be student-focused and should aim to develop students' interest in learning, communication skills, creativity as well as sense of commitment. It should enable every student to achieve an all-round development according to his/her own attributes. (The recommendations set out below are applicable to both nine-year basic education and senior secondary education.)

(I)   Strategies

5.2.3   We propose the following strategies for the curriculum reform :

(1)   to formulate a curriculum framework that focuses on the promotion of lifelong learning and all-round development;

(2)   to promote a new culture of teaching and learning;

(3)   to provide room for teachers and students to develop an

all-round, effective, coherent and diversified learning life;

(4) to improve the modes and mechanisms of assessment to effectively support teaching and learning;

(5) to value and promote existing successful experiences; and

(6) to formulate effective curriculum reform strategies to be implemented incrementally, to pool together expertise, and to provide professional support to schools.

(II) Characteristics of lifelong learning society

5.2.4 To construct a curriculum framework that meets the needs of a lifelong learning society, there has to be a clear understanding of several important characteristics of such a society:

(1) **Learning to learn:** the way to help students lay a sound foundation for lifelong learning is to teach them how to learn - i.e., to grasp the basic learning skills, to construct their own knowledge and to apply their knowledge to analyse and solve problems.

(2) **Proactive learning:** effective study is only possible when learners take the initiative to seek knowledge, and this initiative in turns depends on their interest in learning.

(3) **Experience of learning:** the experience of learning is as important as its content. To effectively arouse students' interest in learning, stimulate their thinking, and cultivate in them a sense of integrity and civic-mindedness, it is necessary to provide them with interesting and practical learning experiences rooted in their daily lives.

(4)	***Life-wide learning:***	learning should not be limited to any form or location; learning can take place at any time, in any place (including the school, the home and the community) and in any form.
(5)	***Respecting different learning needs:***	different students have different abilities and learning needs which should be respected, so that their potential could be developed to the full.
(6)	***Continuity of learning:***	students' learning experience should not only be all-round and balanced, it should also be coherent and in keeping with the students' physical and psychological development.
(7)	***Formative assessment:***	the main function of assessment in the process of lifelong learning is to record objectively and accurately the progress and learning results of students, providing feedback for making continuous improvement.

(III) A new culture in teaching and learning

5.2.5   The key to a successful curriculum reform is to develop a new culture of teaching and learning that can bring about real changes in school life.

(1) Shifting from ***transmission of knowledge*** to ***learning how to learn***

5.2.6   The effectiveness of teaching does not lie in the number of texts taught, but what has been learnt by students. The fostering of a positive learning attitude and the strengthening of students' learning abilities are more important than the imparting of knowledge. We propose to eliminate the repetitive, outdated and unnecessary elements in the

curriculum, and to update its content (the Curriculum Development Council (CDC) proposes to trim about 20% of the curriculum which is repetitive and outdated in order to accommodate new elements of learning). Schools should make good use of the room thus created to help students foster attitudes and enhance abilities through diversified and inspiring teaching and learning methods. Students should also be encouraged to do more thinking, questioning, communicating and cooperating with others, taking part in and experiencing new things.

(2) Shifting from ***over-emphasizing academic studies*** to ***focusing on whole-person development***

5.2.7   Students should be taught how to tackle problems and work with others. To facilitate their all-round development, we should provide them with five types of essential learning experiences: life experience, social service, intellectual development, physical development, aesthetic development as well as work-related experiences.

(3) Shifting from ***compartmentalised subjects*** to ***integrated learning***

5.2.8   To tackle the problems we encounter in daily life and in the workplace, we often need to draw on the knowledge and skills that belong to different domains. It is therefore important not to compartmentalise students' learning into an inflexible subject framework. We suggest that all existing subjects can be re-grouped into eight Key Learning Areas (KLA) :

> Chinese language education
> English language education
> Mathematics education
> Science education
> Technology education
> Personal, Social and Humanities education
> Arts education
> Physical education

5.2.9   Every student should gain a balanced exposure in all these eight KLAs during the basic education stage. In the short term, schools may continue to offer different subjects in these

KLAs. We encourage teachers to make proper use of project learning to help students develop abilities and skills for analysing issues from different angles and applying knowledge in different domains.   As and when schools gradually master the skills of teaching across different subjects, we propose that the various subjects be duly integrated to enable students to have a more coherent and integrated learning experience.

5.2.10   At the same time, the CDC will ensure that the curriculum as a whole will enable students to have a good understanding of their country in order to enhance their identification with and commitment to their own country. In this respect, the core elements of the curriculum will cover various aspects of China such as culture, history, literature, art and geography.

(4) Shifting the focus from ***textbooks*** to ***diversified teaching and learning materials***

5.2.11   Textbooks are not the sole source of knowledge. As a matter of fact, people (including family members, teachers and friends) and things (including newspapers, magazines, supplementary reading materials and information presented in the media) around us, can all be excellent learning materials. The Internet, in particular, provides us with a wealth of information.   Teachers can make use of information from various sources to design school-based teaching materials that are interesting and inspiring.

A sample case:

In an English lesson, a teacher guides S.1 students to find out how a certain international news item is reported in different media (including newspapers, web pages, TV, radio, etc) in different places of the world. Students are then asked to analyse the different viewpoints expressed in these reports and to share their views in English. At the same time, the teacher gives students advice about the correct approach to reading news reports in the mass media.

(This and the other samples quoted are but a few of the samples from the database of teaching materials to be set up by the ED)

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(5) *Support from the community and learning beyond the confines of the classroom*

5.2.12   Learning is by no means limited to the classroom. Libraries, museums, various learning resources centres, public and private institutions and the countryside (such as Nature Education Paths) can all be good venues for learning to take place. Therefore, we should go beyond the confines of the classroom in designing learning activities, and make better use of other learning venues.

A sample case:

In a Secondary 2 class on Hong Kong history, a teacher brings students to the Museum of History to see artefacts related to the history of Hong Kong, explaining the historical development of Hong Kong at the same time. Then students are brought to Hong Kong Heritage Path for a field study, and they are also guided to search for more information about Hong Kong history through the Internet.

Through a series of diversified learning activities, students' interest in Hong Kong history is aroused and their understanding of the topics is enhanced.   The knowledge gained is immediately linked to their daily life, and they are inspired to think deeper about the subject.

(This and the other samples quoted are but a few of the samples from the database of teaching materials to be set up by the ED)

5.2.13   In addition, other sectors of the society (including youth service organizations, uniformed groups, cultural and arts groups, sports organizations, the business sector, professional bodies and parents) can provide valuable resources for schools to offer diversified and interesting learning experiences. For instance, the wide range of indoor and outdoor activities provided by uniformed groups, including outdoor training camps, social services and life skills training, are conducive to developing students' organisation, communication and leadership skills, creativity, adaptability, integrity and sense of commitment to the society.

(6) From ***traditional time-tabling*** to a ***flexible arrangement of learning time***

5.2.14   Schools are encouraged to make flexible use of the learning time throughout the school year according to practical needs. For example, to arrange learning activities that straddle a number of learning areas to take place over a few days or weeks; or to use several periods in a day for learning activities (such as field investigation/visit) that require more time.

(7) ***Abolishing premature streaming*** and providing **more opportunities** for students **to explore their *aptitudes and potential***

5.2.15   Adolescents may not be mature enough to have a deep understanding of their aptitudes and potentials. Premature streaming hinders the construction of a broad knowledge base, and stifles the chance for students to explore their own potential. Hence, we are in favour of abolishing the labelling of schools as grammar, industrial or pre-vocational at secondary school level. At senior secondary level, students should be allowed more room to choose learning modules that

best suit their interests and abilities, and they are also encouraged to try their hand at different learning areas.

(IV) <u>**Key Tasks**</u>

5.2.16 Whilst a number of 'pioneering' schools will try out individual items in the curriculum reform, we will encourage all schools to make reference to the points raised in sections (II) and (III) above and the curriculum framework and guides provided by the CDC to improve the design of their own curriculum, update their teaching methods and make better use of learning time and community resources to provide diverse learning experiences for students.

5.2.17 We urge schools to step up their efforts in the following tasks which are key to the success of the curriculum reform :

(1) <u>Moral and civic education</u>

5.2.18 Moral and civic education plays a very important part in the whole-person development of students. It has a wide coverage, including ethics, the development of healthy lifestyles, education on the environment, and enhancing one's identification with and commitment to the country.

5.2.19 We consider that schools should adopt an integrated and life-wide approach to the provision of moral and civic education, developing students' moral values and commitment to the country through life experience, extra-curricular activities, social services, visits to the Mainland and cross-curricular studies. At the same time, learning activities in each key learning area should incorporate elements of moral and civic education so as to cultivate students' positive values and attitudes to life, civic-mindedness, and commitment to the country and the community.

(2) <u>Promoting a reading culture</u>

5.2.20 An interest in learning is the prime driving force for life-long learning. An effective way to cultivate this attitude is through reading. We urge schools to promote a

culture of reading, making reference to the following points :

(a) the key to promoting an interest in reading is the provision of a conducive environment. Students should be encouraged to make better use of the resources in the school library and public libraries as well as the mass media, including the Internet, to read extensively and according to their own interests;

(b) to provide appropriate guidance to students, on ways to search for reading materials, on reading methods and on how to analyse and construct knowledge from reading;

(c) to encourage parents to accompany their children in reading and to give them appropriate guidance;

(d) what matters should be the pleasure that students derive from and the learning skills they develop through reading. They should not be required to produce too many reading reports as this would increase their workload and reduce their incentive to read; and

(e) to encourage students to share with their peers their thoughts and feeling about reading, as this would help develop their skills in expressing themselves and communicating with others.

(3) Project learning

5.2.21   Project learning refers to focused study on a particular topic. It can help students enhance their learning abilities and confidence, and explore their interests and potentials. Through project learning, students can get to the crux of a problem and view it from different perspectives. Topics can be set by teachers or students, and work can be carried out on an individual basis or in groups involving collaboration with others. The following is a sample case:

> *A sample case:*
>
> *(a) students are divided into groups and study a topic selected by themselves*

(b) after discussion, Group A selects "Hong Kong Buildings" as their project topic

(c) the students discuss how to explore the topic and define the issues to be studied, and decide to examine the characteristics of Hong Kong's buildings in the seventies from the historical, cultural, geographical and economic aspects.

(d) in a spirit of collaboration, all group members share the work of collecting materials, and they assign themselves different tasks according to their own interests and abilities, such as searching the internet, conducting surveys, interviews and undertaking field study.

(e) they collate and analyse the collected materials together, discuss and express their own views. In the process, they learn to respect the views of others, to analyse rationally and to reach consensus.

(f) they write up a report and present it to other peers.

(g) during the whole process, the teacher provides guidance and encouragement, and makes assessments on students' performance (in respect of communication skills and independent thinking etc.)

(This and the other samples quoted are but a few of the samples from the database of teaching materials to be set up by the ED)

5.2.22   The above sample case illustrates that project work is an effective way to develop students' higher order thinking (e.g. critical thinking, creativity and problem solving skills) and foster interpersonal skills, ability to work with others and an attitude for independent learning.

5.2.23   We therefore encourage schools to make use of project learning to nurture various abilities, knowledge and attitudes in students. They should take note of the following:

(a)   the <u>process</u> of project work is more significant than its results. The teacher's guidance is very important for

helping students to learn through participating in project work;

(b) the teacher should observe the performance of students during project work and give encouragement and advice where appropriate to help them improve and develop potential; and

(c) teachers may make reference to the students' performance in project work in assessing their progress and overall performance.

(4) The use of information technology (IT)

5.2.24 The proper use of IT can greatly enhance the effectiveness of teaching and learning. Teachers can access valuable teaching materials on the Internet, and make use of the various teaching support networks. They may teach students to search for information on the Internet, and use IT to teach in a more lively and interactive manner. Students would become more interested in learning and exploration, and find it easier to understand abstract concepts. The ultimate aim is to enable students to learn on their own and throughout their lives. We urge schools to strengthen their use of IT to help teachers and students improve effectiveness in teaching and learning.

(V) **Major learning targets at each stage**

5.2.25 To realise the aims of education outlined in Chapter 2, we need to set learning targets for each learning stage from primary to senior secondary levels.

(1) After completing key stage 1 (P3), students are expected to:

(a) have mastered basic skills in reading and writing; developed an interest in and a habit of reading;

(b) have good living habits, know how to take care of themselves and get along with others;

(c) have experienced learning that is relevant to their daily lives;

(d)   have mastered the basic skills of utilizing IT to learn;

(e)   have basic knowledge of mathematics; and

(f)   have developed some aesthetic sensitivity.

(2)   <u>After completing Key Stage 2 (P6)</u>, students are expected to:

(a)   have mastered the basic reading and writing skills; be able to read and communicate effectively at a higher level, both orally and in writing;

(b)   have mastered a basic understanding of mathematical and scientific concepts; have the habit of exploring science with an open mind; and be able to continue to learn in the learning areas of mathematics and science;

(c)   participate actively in group life; have healthy psychological development and physical fitness;

(d)   have mastered basic learning skills and thinking abilities and know how to look for various learning resources and obtain knowledge independently;

(e)   have positive values, care about society, and identify theirselves with their own nation; and

(f)   be able to appreciate beauty and arts.

(3)   <u>After the completion of Key Stage 3(S3)</u>, students are expected to:

(a)   learn independently;

(b)   be adept in applying IT in learning;

(c)   be equipped with the capability for reasoning, problem-solving and knowledge application, and creativity;

(d)   be bi-literate and tri-lingual (i.e. able to read and write fluent Chinese and English, and communicate orally in Cantonese, English and Putonghua);

(e) have experienced an education process that is all-round and life-wide;

(f) have mastered basic concepts in all the key learning areas;

(g) concern themselves with the developments in China and their relationship with other developments around the world;

(h) be civic-minded;

(i) be health-conscious, considerate and respectful to others; and

(j) develop the interest in and ability of aesthetic appreciation.

(4) After the completion of Key Stage 4 (after S5), students are expected to:

(a) have established a sound foundation of skills in preparation for lifelong learning;

(b) have a good physique and civic awareness, as well as a sense of commitment to the society and their country;

(c) possess a solid grounding in mathematics, languages and other learning domains in preparation for higher education;

(d) have a global vision;

(e) have an adequate understanding and foretaste of the career chosen and of the job market; and

(f) enjoy and possess the ability of aesthetic appreciation.

(VI) School-based assessment system

5.2.26   A school's internal assessment mechanism is part of the curriculum.   It mainly serves to assist teachers and parents to

understand students' learning progress, their needs as well as their strengths and weaknesses, so that appropriate measures can be taken to help students learn more effectively and to maximize their potentials. Students will also be able to understand themselves better.

5.2.27   The internal assessment mechanism of schools should be adjusted in line with the overall curriculum reform.   Schools may wish to consider the following proposals :

Mode of assessment

(1)   Written examination is only one of the assessment modes. Schools can make use of many different modes of assessment such as flexible formative assessment (including observation of students' performance in classroom and participation in project work) to have a more comprehensive understanding of students' performance.

(2)   The use of quantitative assessment should be minimized to make way for more analytical assessment, which provides more useful feedback for teaching and learning.

Focus of assessment

(1)   Students' attitudes and abilities, rather than the knowledge they memorize, should be emphasized.

(2)   Emphasis should not be placed solely on the work completed by students (such as homework and project presentation); more attention should be paid to their performance and the problems encountered in the learning process.

Frequency of assessment

Excessive dictation exercises, mechanical drilling, tests and examinations should be avoided to allow students more time to participate in useful and diversified learning activities.

5.2.28   To assist schools to effectively assess their students, we propose to introduce Basic Competency Assessments in Chinese, English and Mathematics, which will provide another tool for

schools to gauge students' learning progress and needs (This proposal is explained in detail in Part B below).

(VII) **Strategies for Implementation**

(1) **Curriculum development**

5.2.29   The CDC is now conducting a holistic review of the primary and secondary school curricula, and is in the process of formulating an open and flexible <u>curriculum framework</u>. Based on the framework, the CDC will also prepare <u>curriculum guides</u> that will outline the learning experiences to be provided and the attitudes, abilities and knowledge to be cultivated at every key learning stage of school education. Different examples will be provided for teachers' reference. Schools are expected to develop their school-based curricula with reference to the framework.

<u>Participation of Experts</u>

5.2.30   To design a new curriculum framework and curriculum guides that will better meet the expectations and practical needs of the society, the CDC will invite experts in the key learning areas and sectors concerned (such as employers) to participate in designing the curriculum.

<u>Reference to international experience</u>

5.2.31   The CDC will also make reference to the latest trends in curriculum development around the world.

<u>Streamlining the process of curriculum development</u>

5.2.32   The curriculum must keep pace with the times and the changes in the needs of learners. The new curriculum framework will be more open and flexible to allow schools to develop school-based curricula. In the long term, we suggest that a comprehensive review on the interface between curriculum development and the public examination process should be conducted, so that the work of curriculum updating can be conducted more effectively and efficiently in future.

(2) <u>**Professional support**</u>

5.2.33   To pave way for successful implementation of the curriculum reform, apart from providing a curriculum framework and curriculum guides, relevant professional support should also be provided to teachers.

(i)   <u>Develop and disseminate</u> <u>successful experience</u>

- The CDC will work with pioneering schools and tertiary institutions to pilot the key items on the reform agenda.

- Exchange and disseminate successful experiences through the networks of schools and teachers.

- Set up an online database of teaching resources, to provide schools with information on teaching resources, support services and successful experiences.

- The sectors concerned (such as district school networks or community services organizations) are encouraged to set up district networks on their own initiative to strengthen cooperation between schools and the other supporting sectors.

(ii)   <u>On-site support</u>

- The ED will strengthen the services of its curriculum support teams for primary and secondary schools, to help them develop curriculum leaders and to provide professional advice and assistance in developing school-based curriculum.

(iii)   <u>Professional development programmes</u>

- To strengthen the element of 'curriculum development and leadership' in the training courses for school principals.

- The ED will set up online teacher training courses and launch courses on 'Curriculum and Assessment', 'Catering for Students' Needs', 'Learning Motivation', 'English', 'Science' and 'Gifted Education' within this year. Courses in other learning areas will be introduced by stages in 2001.

(B) <u>Basic Competency Assessments in Chinese, English and Mathematics</u>

<u>*The objective of the assessment*</u>

5.2.34   The objective of introducing Basic Competency Assessments in Chinese, English and Mathematics (BCA) is to provide a tool that performs the following functions:

(a)   to enable teachers and parents to understand students' learning needs and difficulties in order to provide timely assistance. At the same time, through appropriate measures, it also allows more room for students to realise their potentials, so that whilst their basic competence in the key learning areas is guaranteed, they are also able to give of their best.

(b)   to provide the Government and school management with information on how schools on the whole are doing in respect of the key learning areas, so that the Government will be able to provide support to those schools who need it, and to monitor the effectiveness of education policies.

When the BCA are in place, the Hong Kong Attainment Test will be phased out.

<u>*The design of assessments*</u>

5.2.35   In the document for the second stage consultation, the EC proposed the introduction of 'Core Competency Tests", one part of which would be administered on-line by schools themselves, whilst the other part would be a secure test to be administered centrally. In December 1999, the Government commissioned an assessment expert to conduct a study on how such a scheme could be implemented. The consultant recommended that, to align the assessments with the teaching and learning activities taking place in schools, the assessments should be

closely linked with the school curriculum.

5.2.36   The EC proposes to rename the 'Core Competency Tests' as 'Basic Competency Assessment'. The BCA will comprise two parts, namely Student Assessment and System Assessment. The former will diagnose individual student's competence in the key learning areas to facilitate schools in giving more effective support and guidance to students who need it. The latter will monitor the performance of the entire school sector in the key learning areas, and will facilitate schools in formulating improvement programmes on the basis of assessment data and their own development needs.

Student Assessment

5.2.37   The Student Assessment programme has the following characteristics:

(a)	Nature of assessment :	This is a low-stake, voluntary test programme designed to diagnose and improve students' learning. Test materials will be provided centrally, and schools can administer the assessment programme and take follow-up actions on their own.
(b)	Mode of assessment:	A computerized and adaptive testing mode will be used for the selection and assembling of test items, administration of the assessment, scoring, recording and result analysis.
(c)	Time Schedule :	Schools may administer the assessments according to their own teaching schedule and needs any time during the school year.
(d)	Scope of assessment:	The initial target is the key learning areas of Chinese, English and Mathematics at all levels from P1 to S3, and the assessment will be progressively extended to other learning areas when necessary.
(e)	Content of assessment:	It is closely related to the teaching content and covers the major topics in the school curriculum. For example, a list of major assessment topics will be drawn up for each learning area. Teachers may conduct assessments on those

topics that suit their own teaching schedule.

(f) Form of assessment : It will consist of a pool of diversified item format developed with the aid of multi-media technology. In addition to the tests provided under Student Assessment, adequate exemplars will also be available for teachers' reference in order to produce their own exercises for assessment.

(g) Scoring : Basic attainment standards will be set jointly by experts, educators and lay members of the community. The criterion-referenced scores provided will show whether students have mastered the knowledge and skills in various learning areas and whether they have attained basic standards.

(h) Supporting materials : There will be supplementary materials for remedial and enhancement purposes. Such materials should be designed for individualized learning so that students can do these exercises and assessments on their own under the guidance of their teachers.

(i) Parents' involvement :	To enhance the involvement of parents in students' learning, it is recommended that schools should consider providing two types of information to parents through electronic means (e.g. set up their own websites and send messages through e-mail): 1) information on the learning progress of the students. This information should be criterion-referenced i.e. showing only whether the student has reached the basic attainment standards in the various learning areas, rather than the scores and ranks; 2) remedial exercises and guidance for their children to make up for the deficiencies at home. Interaction between teachers and parents on the children's progress is also encouraged.
(j) Access to information :	Stakeholders should have access to different levels of information as required. Only administrators appointed by the school authority should be eligible to information on the school's central server in order to operate the Student Assessment programme and to evaluate the effectiveness of their own curriculum. Teachers should only have access to the information about their own students, and parents should only have access to their children's records and remedial materials.

System Assessment

5.2.38 The System Assessment programme aims at monitoring the overall performance of schools in Hong Kong. The information on whether schools attain the basic standards in key learning areas helps monitor the changes in the overall standard of students over time. In the longer run, the assessment information obtained can be used for comparison with the standards in other regions and countries. Monitoring whether individual schools attain the basic standards in key learning areas is premised on the need for accountability, with an ultimate objective to improve the quality of teaching and learning in schools.

5.2.39 The System Assessment programme has the following characteristics:

(a)	Nature of assessment :	This is a secure test, to be administered by the Government for students in P3, P6 and S3. Participation of schools is compulsory, for the purpose of analysing students' performances at the school and territory-wide level.
(b)	Mode of assessment:	In order to provide a wider scope of assessment, the use of a sampling design is recommended so that students will be tested on a larger number of items, producing a more comprehensive picture of the performances of all local schools in key learning areas. It is also recommended that the assessment topics be rotated for use by schools each year to broaden the coverage of the assessment.
(c)	Administration :	The assessment will be centrally administered in collaboration with schools. In the long run, the assessment should be conducted in a computerized and adaptive mode while in the short run, students may still have to take the assessment in written form.
(d)	Time Schedule :	To be held at the end of each school year. The test for P6 students will take place after the announcement of Secondary School Places Allocation results.
(e)	Scope :	The assessment will cover the key learning areas of Chinese, English and Mathematics initially and will be gradually extended to other learning areas when necessary.
(f)	Content :	Based on the scope of the Student Assessment, topics suitable for central assessment will be selected for the System Assessment.

(g)	Form of Assessment :	The form of assessment and type of test items should be similar to those used in the Student Assessment programme. As the scope of assessment is the same, test items can be re-used to enhance the relevance of the two instruments.
(h)	Scoring :	The test items should be standardized so that the data obtained in the two assessment programmes as well as the data obtained in different years can be compared.
(i)	Access to Information :	The basic objective of the System Assessment programme is to improve the curriculum and teaching and learning in schools. Since the assessment data of individual schools are for self-evaluation purpose, the test results of individual schools should not be ranked or made known to the public. the ED should help the schools to analyze and make use of the information, and provide support services to help schools make improvement.

Implementation

5.2.40   The scope of Student Assessment is wider than that of the System Assessment in terms of content, format and item type. As the former is meant to serve as the basis for developing the latter, we should start working on the Student Assessment programme first.   In addition, the basic attainment standards of various learning areas should be set before System Assessment is implemented.

5.2.41   Owing to the close relationship between the two assessment programmes, they should be co-ordinated by the same body.   In view of the characteristics of these two instruments, this body should be professionally qualified and experienced necessary in the development of assessment programmes. Besides, it should at the same time enhance its capability in the following areas:

(a) professional knowledge and experience in designing computerised assessments, including multi-media test items suitable for on-line assessment, computing technology for auto-

marking etc.;

(b) updated knowledge on assessment, for example, authentic assessment, portfolio etc.;

(c) new sampling techniques, such as multiple-matrix sampling method, error calculation etc.

Time Schedule

5.2.42   We expect the prototype of Student Assessment can be piloted in mid-2002 with full implementation at all levels from P1 to S3 in 2005/06. In view of the fact that the System Assessment programme will be developed on the ground work of Student Assessment, we propose the implementation time-table as follows:

Proposed date	**Student Assessment**	**School Assessment**
2000/01	Under preparation	Under preparation
2001/02	P3	Under preparation
2002/03	P4, P5 and P6	Under preparation
2003/04	S1 and S3	P3
2004/05	S2	P6
2005/06	P1 and P2	S3

Supporting conditions

5.2.43   The development of the two assessment programmes require considerable resources and manpower. Whilst the provision of hardware is essential, the 'software' that promotes a culture change is a crucial factor to success. The areas of concern are the assessment culture and the culture for IT-assisted assessment.

5.2.44   The current assessment culture in Hong Kong is still steeped in traditions. The ultimate purpose of assessment should be to provide information that helps to promote teaching and learning, and forms part of the teaching process. However, in reality, teaching and learning is now geared towards tests and examinations.   Emphasis is not placed on how much students have learnt or whether teachers, parents and students themselves have a clear picture of students' learning progress, but rather

on scores, ranking and grades. Furthermore, to facilitate marking and scoring, assessments are based on standard answers which hinders the development of critical thinking skills and reduces students' motivation for self-learning. In short, teachers, students, parents and the society in general should abandon their traditional concept of assessment and embrace the new assessment culture. Teachers, in particular, should master the skills for conducting assessment.

5.2.45 The proposed Student and System Assessments are to be administered with the aid of the latest technology. On the basis of present developments, we believe that the IT infrastructure in schools in Hong Kong should be adequate for this purpose. However, we still need to do more to encourage teachers to have more use of IT. The multimedia IT facilities should not only be used in classroom presentation, collation of information and project studies. They should also be used as a tool for assessment and individualized instruction, as well as for helping students overcome their learning difficulties. Changing the traditional concept of assessment and fostering a new IT culture are important factors in the success of the education reform.

(C) Reform of the School Places Allocation System

Guiding Principle

5.2.46 The guiding principle for the reform of the school places allocation system is to remove the obstacles to learning and to create more room for teaching and learning. The reform proposals regarding admission to primary and secondary schools therefore aims at allowing students to have a continuous and all-round learning.

(I) Primary One Admission System

Problems with the existing system

5.2.47 The aims of early childhood education should be to let children experience pleasurable and active group life and diversified learning, so that they will develop interest in learning and good living habits. Under the existing system, we see an undesirable phenomenon where competition to enter more popular primary schools is very keen. As a result, in order to enhance the chance of their pupils' being admitted to the 'elite' primary schools, kindergartens resort to drilling. Worse still, some parents condone such practice of making excessive demands on young children. The curriculum in kindergartens becomes so twisted that the realisation of the

aims of early childhood education becomes impracticable, and the work of regulating the kindergarten curriculum is made very difficult and time-consuming. Consequently, one of the keys to creating an environment for teaching and learning in kindergartens is to improve the admission mechanism for primary schools.

5.2.48 Besides, the existing point system (計分辦法準則) of the Primary One Admission (POA) system has long been a controversy. Some people have criticized it on the grounds of 'nepotism', that the background of parents plays a significant role in determining whether their children can enter certain primary schools; some people also hold the view that the present mechanism causes wide disparity among primary schools. On the other hand, it has been counter-argued that schools should be allowed to retain their own culture and tradition, and the school place allocation system should allow these schools a greater degree of autonomy in the admission of pupils.

Proposed reform of the POA system

5.2.49 The Subcommittee on Review of School Education (The Subcommittee)(學校教育檢討小組) of the Board of Education pointed out in its review of the POA system in 1996 that the existing point system for POA was too complicated. The Subcommittee had made attempts to simplify it, but no consensus could be reached. In fact, because the ability difference of children below the age of six is insignificant, most advanced countries and regions have adopted the principle of vicinity in allocating P1 places. The EC is of the opinion that admission to primary schools should not be based on ability; instead, admission should be based on the principle of vicinity as far as possible, supplemented by a number of uncontroversial criteria for priority entry, such as whether the pupil has siblings/parents who go to/work in the same school. The proposed admission mechanism adopts the following principles:

(a) To adopt the principle of vicinity and allocation is done by computers at random according to school nets and parental choice. School nets may be adjusted as appropriate and the ED to conduct further study on detailed arrangements.

(b) To admit pupils with siblings studying or parents working in the same school as a matter of course so that escorting pupils to and from schools is made more convenient.

(c) To cater for schools' wish to retain their own tradition, schools can have full discretion to admit pupils up to 15% of its available P1 places; and such 'discretionary places' will not be subject to the

restrictions on school nets.

5.2.50 Young children should never be subject to the pressure of competing for school places, or any excessive drilling associated with entrance examinations. The reason for the 15% discretionary places is to address schools' concern about keeping their tradition, and has nothing to do with selection by merit. Thus, the EC holds the view that schools must comply with certain principles in allocating the discretionary places. These principles are: no public examinations in any form, including written examinations and interviews; and the disclosure of entry requirements, including any point system and the weightings of individual criterion. For candidates with equal scores, lots should be drawn. Basing on the existing point system, the ED will provide a list of criteria for schools to choose from. Schools may also formulate their own criteria, but they should ensure that they are in compliance with the law, such as the Equal Opportunities Ordinance. Since the POA system is closely related to the Secondary School Places Allocation system, its implementation timetable will be introduced in the next section.

(II) Reform of Secondary School Places Allocation System

A Through-road for Nine-year Basic Education

The vision for reform

5.2.51 During the second stage of public consultation, the EC proposed the following long-term vision for the future Secondary School Places Allocation (SSPA) system:

(a) The nine years of basic education will be a continuous stage and pupils are no longer required to take any high-stake public examinations.

(b) There will not be any allocation bands so that the undesirable labelling effect on schools and pupils will be removed.

(c) The allocation of secondary school places will not be based on any public examinations since any high-stake examination is bound to lead to excessive drilling.

Pre-conditions for the vision

5.2.52   The EC has also proposed during the second stage of public consultation six pre-conditions for fulfilling this vision:

(a)   Some have criticised that in the implementation of a 'through road' in the nine years of basic education, parents will try, through various means, to get their children into the 'elite' schools, and the competition at the point of P1 entry will be exacerbated. The EC is of the view that if the effectiveness of the teaching and learning in schools is enhanced, the competition for places in the 'elite' schools will not be as keen as it is.

(b)   An effective way to enhance the schools' quality is to put in place a quality assurance mechanism for both schools and students.

(c)   Most parents hope that their children will be able to receive higher education. If there are adequate places in the post-secondary sector and more channels to access higher education, the competition to get into the 'elite' schools will be less keen.

(d)   There should be an appropriate mechanism to enhance the quality of both the low achievers and high achievers to ensure that all students develop to their full. The under-performing students should be able to receive the necessary assistance in order to attain the basic requirements.

(e)   As there will be greater difference of abilities among students in the same school, teachers should be appropriately trained to handle students with mixed abilities and not to give up on any one student.

(f)   to reform the POA system to give a fairer chance for all students, and to modify the arrangements for allocation of S3 leavers.

Consensus on Secondary School Places Allocation (SSPA)

5.2.53   The adverse effects of the existing SSPA system are major obstacles in the nine years of basic education. A consensus in the community has emerged after the second stage public consultation for:

(a)   the early abolition of the Academic Aptitude Tests (AAT); and

(b)   the phasing out by stages of the banding system to remove the undesirable labelling effects on students and schools.

5.2.54 Meanwhile, agreement has also been reached on the above pre-conditions for achieving the vision proposed during the second stage of public consultation. The problem now is that despite the strong calls from the public for abolishing the AAT and the banding system, because the pre-conditions outlined above are not yet fully in place, the reform measures must not be carried out in haste. The EC therefore suggests two approaches of taking the reform forward: (I) to speed up the emergence of the pre-conditions; (II) to implement the reform in a gradual manner. Please refer to Appendix IV of this document for measures and arrangements to be taken by the ED to facilitate the reform.

The date for abolishing the AAT

5.2.55 The drawbacks of the AAT had caught the attention of the Subcommittee on the Review of School Education, but no satisfactory solutions were available. It seems that the majority view is to abolish the AAT as soon as possible, but the question is when it should be abolished and what the replacement mechanism should be. It has been suggested that the AAT should be abolished in 2000/01 school year. It should be noted that the P.5 pupils of this academic year have entered the SSPA cycle for 1999/2001. To avoid confusion and unfairness, it has been the practice of the ED to notify schools, pupils and parents of any change in the allocation system before the SSPA cycle begins. The timing for the abolition of the AAT should also be determined by whether the proposed replacement mechanism would gather wide support from all the sectors concerned.

5.2.56 Public views on the date of and the arrangements for the abolition of the AAT will be gauged during the third stage public consultation. The EC proposes, in principle, to abolish the AAT in the 2000/01 school year and, in its place, to make use of the schools' average AAT results over the past three years to scale their internal assessment scores, and to retain the present percentage of discretionary places. As to whether the five bands should be reduced to three at the same time, the EC hopes to consult the public before making a final proposal. If the AAT can only be abolished in the 2001/02 school year, the bands should be reduced to three and the percentage of discretionary places raised to 20% immediately. If the AAT is to be abolished in the 2000/01 school year, the views of P.5 pupils and their parents should be taken into consideration; the EC hopes to have the coordinated views from these parents and primary schools. The ED has also examined the possible technical problems associated with a change of the

SSPA system in the 2000/01 school year, and is prepared to make the necessary adjustments required.

Supporting conditions

5.2.57 Removing the obstacles presented by the AAT and the banding system would appear to involve changes in the mechanism and structure only. However, the entire education sector and the general public should also make a paradigm shift. Merely removing the obstacles would not create the room that we need to improve teaching and learning. The changes in people's mindset should include:

- The focus of education reform is the internal motivation for study, rather than external rewards, punishments or threats. To allow pupils to have wider and meaningful learning experiences induces internal motivation. Public examinations should not be used as the 'whip' or 'wand'. When the AAT is abolished, schools should have more room to promote students' all-round education and to cultivate their interest in learning, communication skills, sense of commitment and creativity.

- The labelling effect of the banding system hinders healthy and equitable learning. Our reform may remove the tangible label, but educators should also eliminate the intangible label —students of different abilities in different domains are not an obstacle to but a resource for teaching. Students with different abilities can be mutually complementary to the development of multiple intelligence. Hence, learning how to adapt to teaching students with mixed abilities is an enormous challenge to schools.

Reform framework

5.2.58 In the second stage of public consultation, there was support for the 'Through Train' concept as one of the ways to achieve continuity in the nine years of basic education. However, as analysed above, we need time to put in place all the pre-conditions, and the EC favours a gradual approach to implementation so that all parties concerned will have more time to put in place the pre-conditions and to undergo the paradigm shift. The proposal now put forward by the EC is a transitional one which retains the basic elements of the SSPA mechanism, with the aim to build on the present strength. The following is a summary of the major changes:

Basic elements of the secondary school places allocation mechanism	Major changes proposed by the transitional plan
Internal Assessments	• No significant change • The weighting for individual subjects for calculating internal assessment scores will be adjusted to promote all-round education • Schools are encouraged to use diversified assessment modes
Academic Aptitude Test	• To be abolished as early as possible • To use the school's average AAT results over the past three years to scale the internal assessment results
School Nets	• Proper fine-tuning will be made annually, taking into account the supply and demand of places
Banding System and Random Number	• Initially to reduce the five bands to three equal bands to minimise the labelling effect • Each pupil will still get a randomly assigned number by computer to decide the priority for allocation within the same band
Parental Choice	• Basically unchanged • Parents will have a wider choice of schools with the increase of discretionary places

Basic elements of the secondary school places allocation mechanism	Major changes proposed by the transitional plan
Discretionary Places	• To increase to no more than 20% by steps within five years • Each student can only apply for one school, with no restriction on the school net • No written tests should be conducted, and schools should make public their criteria for admission • Schools will be encouraged to consider students' performance in different aspects
Feeder and Nominated Schools	• Schools are encouraged to evolve into 'through trains' within five years • If schools are unwilling to turn into 'through trains', the nominated schools and feeder schools will have to discontinue their ties by September 2005 and September 2008 respectively. (Please refer to Para. 5.2.65)

Internal assessments

5.2.59   Students' chance of being admitted into a school favoured by their parents largely depends on their school results. The transitional plan is in favour of retaining school internal assessment as an element of the SSPA. The emphasis and form of internal assessments should be in line with the curriculum reform.   For example, physical education, art and cultural subjects should be included in the assessment and given due weight; the forms of assessment should be more diversified to include forms other than written assessment to evaluate the knowledge, skills and attitude of students. Teacher training should also be adjusted accordingly.

Scaling instrument

5.2.60   The function of the AAT is to scale schools' internal assessments to

make for fair comparison among all schools' internal results. Assuming the abolition of the AAT, and in view of the fact that differences do exist among schools at present, there would still be a need for a scaling tool for the time being. Since there is a high degree of stability in schools' AAT results over the past few years, researchers have tried to use the average AAT results over the past three years to predict the AAT results for the coming few years, and no significant change has been found. It can therefore be concluded that the average AAT results in the past three years can be used as a substitute for the AAT for the coming five years. The EC therefore proposes that after the abolition of the AAT, schools' average AAT results over the past three years will be used as a tool to scale schools' internal assessments.

5.2.61   When the pre-conditions are all in place, and the overall standards of students have been raised, there will be a lesser need for scaling schools' internal assessments. The EC therefore proposes that after five years of transition (i.e. from the 2005/06 school year onwards), allocation of school places will be based on schools' internal assessments only. Consideration will also be given then to further increase the proportion of discretionary places and to further reduce the number of bands. We propose to conduct a mid-term review in 2004/05 to make recommendations on the proportion of discretionary places and the number of bands.

5.2.62   As for new schools (including primary schools with less than three years' record of AAT results), the ED will consider the feasibility of the following three methods:

- To use the average AAT results of new schools in the same district over the past three years;

- To use the average AAT results of all schools in the same district over the past three years;

- To use the average results of the latest AAT (i.e. the third year) of all schools in the same district which have only sat the AAT for three years.

Research shows that during the first few years, new schools tend to achieve progressively better results in the AAT. In fact, to those schools which have sat the AAT for no more than three years, the third method above is most suitable, as the average results of the latest test (i.e. the third year) are closest to the actual results these schools have obtained. But for schools that have never taken the AAT, the second method is preferred, as the average results of all schools in the same district over the past three years are closest to the

actual results these schools have obtained.

Banding for school places allocation

5.2.63   If the banding system were to be abolished or the number of bands for school places allocation were to be reduced significantly with immediate effect, there would be great differences in student ability in many secondary schools; they would need to cater for students whose ability range straddles four or five bands. Though mixed ability teaching is an agreed target, schools, teachers, students and parties concerned need time to adjust to it. Hence, we propose that the bands for school places allocation should be gradually reduced, and the support for schools to adapt to mixed ability teaching should be strengthened.   During this process of change, the impact of the measures should be constantly monitored, and the effectiveness of support measures and services should also be assessed.

Discretionary places and parental choice

5.2.64   The reason for raising the proportion of discretionary places is to provide schools with the incentive to strive for improvement and excellence, and to give parents more choice. This is in line with the rationale for discretionary places in the POA system. This would also introduce a certain degree of market force into the SSPA system.

Feeder schools and nominated schools

5.2.65   The EC proposes that feeder schools / nominated schools should decide before October, 2001 whether to turn into 'through train' model, i.e. the secondary schools have to take in all the students of their feeder / nominated primary schools. If the schools do not want to make this change, their ties will have to be discontinued. If feeder schools wish to discontinue their ties, they have to announce it before a new POA cycle begins (i.e. before October 2001), to take effect formally after seven years (i.e. in September 2008 when the first batch of P1 students admitted after the announcement go up to S1). For nominated schools wishing to do likewise, the announcement should be made before October 2001 before the POA cycle begins, to take effect after four years (i.e. September 2005). However, an issue to be addressed is that a secondary school may be associated with more than one primary school, and it does not have enough places for all the pupils of its feeder/ nominated primary schools. There are also secondary schools which do not have sufficient places for its feeder/nominated primary school, although the primary school is the only one it is associated with.

5.2.66   Secondary schools are now only required to admit those pupils of their feeder/nominated primary schools who fall within Band 3 or above. During the implementation of the transitional plan, the number of bands will be reduced to three. In the revised banding system, it is proposed that secondary schools should admit pupils of their feeder/nominated primary schools who fall within the new Band 2 or above. When ultimately students are allocated places in three bands according to schools' internal assessment only, secondary schools will have to admit all the pupils in their feeder/nominated primary schools regardless of their results, as long as there are enough places.

5.2.67   In the existing system, secondary schools only reserve 85% and 25% of their places for their feeder/nominated primary schools respectively after deducting repeater places and discretionary places. During the implementation of the transitional plan, the proportion of discretionary places will be gradually increased and the number of a secondary school's discretionary places should be the number of places remaining after the pupils of its feeder/nominated primary school have been admitted, or it should be set according to the percentage proposed in the transitional plan, whichever is the less.

'Through Train' (一條龍)

5.2.68   The concept of 'through train' enables students to be directly promoted to their associated secondary schools without going through the SSPA system. However, the concept is not designed to solve the problem of school places allocation only; it serves to strengthen the linkage between different stages of education and adapts to the natural course of the physical and psychological developments of students. The principles behind the concept of 'through train' are as follows:

i.   Primary and secondary schools applying to form 'through train' should have the same philosophy and aspiration for education; there should be genuine consistency in the curriculum, teaching methodology and students' personal development

ii.   Based on the principle of 'no-loser', the number of places in the secondary school must exceed that of its linked primary school, and it must admit all the students of its linked primary schools so that there will not be any unnecessary selection, and students of other schools will still have the chance to be admitted to the secondary school. If the parents of the primary school do not want their children to go to its linked secondary school, they can

either apply for the discretionary places of other schools or join the central allocation.

iii. The primary and secondary schools applying for the change must have the same mode of financing to ensure that a consistent standard is applied in admitting students. (Since private schools and Direct Subsidy Scheme schools admit their own students, they are not subject to this constraint.) As for feeder/nominated schools that have different modes of financing, the EC proposes that the sponsoring bodies and schools concerned should be given ten years to formulate their own solution.

Timetable for the transitional plan

5.2.69   The proposed transitional plan will last for five years, which means that the Government and stakeholders will have not less than five years to put in place the necessary pre-conditions. The timetable for implementation is proposed as follows:

| Time | Secondary school places allocation method | | | Remarks |
	Number of bands	Proportion of discretionary places	Scaling tools	
2000/01	remains at 5 or reduced to 3 (depending on the outcome of consultation)	Remains 10%	• AAT can be abolished as early as this year • to be replaced by the average AAT results over the past three years	• to start implementing support measures no later than 2000/01 • newly-established primary and secondary schools may choose to form 'through train'

Time	Secondary school places allocation method			Remarks
	Number of bands	**Proportion of discretionary places**	**Scaling tools**	
2001/02	reduced to 3	Gradually raised to no more than 20%	• replaced by the average AAT results over the past three years (if the AAT has not been abolished by 2000/01 school year, the results of the AAT in 2000/01 will not be counted)	• by the second half of the 2001/02 school year, Student Assessment programme for P.3 pupils will be introduced
2002/03	remains at 3	Gradually raised to no more than 20%	• same as the preceding year	• deadline for feeder /nominated schools to decide whether to turn into 'through train'. Nominated schools and feeder schools should discontinue their ties in 3 years and 6 years respectively • new POA system will be implemented (for students who apply for P1 places in October 2001)
2003/04	remains at 3	Gradually raised to no more than 20%	• same as the preceding year	• assuming the abolition of the AAT in the 2000/01 school year, the first batch of students after the abolition will be promoted from S3 to S4; the Student Assessment programme for S3 should be in place

Time	Secondary school places allocation method			Remarks
	Number of bands	Proportion of discretionary places	Scaling tools	
				• 'through train' formed by existing primary and secondary schools will start operation
2004/05	remains at 3	Gradually raised to no more than 20%	• same as the preceding year	• mid-term review, to make proposals on the proportion of discretionary places and the number of bands
2005/06	Depends on the outcome of the review	To be raised to no more than 30%, depending on the outcome of the review	• students given bands for school places allocation according to schools' internal assessment only	

5.2.70   The proposed new system for POA will be implemented in 2002/03 to allow schools and parents more time to adapt to the new arrangement. To avoid advancing the pressure of competing for school places to the point of entry to P1, the implementation of 'through train' must be in line with the new POA system. However, as mentioned above, the spirit of having 'through train' is to achieve continuity throughout the nine years of basic education. There is a genuine need to allow more time for schools to consider this option. The Government will, however, strictly enforce the prohibition on interviews for admitting P1 students during the transitional period.

Mechanism to handle technical issues

5.2.71   As the above proposals involve major changes, support is required to resolve specific technical problems (such as the scaling mechanism for new and small schools). The EC proposes the establishment of a provisional technical support group in the ED to handle these problems.

Section 3: Senior Secondary Education

5.3.1   Within the framework of life-long learning, senior secondary education should further consolidate students' foundation for pursuing life-long learning, help students understand their **aptitudes, interests and abilities**, and explore and develop their diverse potentials. With a good understanding of their own strengths and weaknesses, students will be able to **plan for their future studies and career**.

5.3.2   Moreover, many students start working when they leave secondary school. Senior secondary education should therefore help students develop their generic skills (including language, numeracy, communication, information technology and interpersonal skills) and positive attitudes and values, which are the **basic requirements for self-reliance and employment**.

(A) Develop a senior secondary education system providing diversified curricula and different channels

5.3.3   In senior secondary education, we recommend that students should be able to choose among different channels to find the learning opportunities that best suit their aptitudes, interests and abilities.

5.3.4   Nowadays, it is difficult for junior secondary school leavers to seek employment. We recommend that the overall senior secondary education system, including subsidized and non-subsidized school places, should **provide learning opportunities for all Secondary 3 graduates who wish and are able to continue their studies**. This system should have the following characteristics:

(1)   there should be a variety of curricula that cater for students of different aptitudes and abilities

(2)   These curricula could include those provided within the CDC's curriculum framework, those that emphasise employment-related learning experiences, and other types of curriculum (such as the International Baccalaureate Curriculum or other curricula recognised by tertiary institutions, professional bodies and employers). What matters is that the qualifications obtained on completion of such curricula is given due recognition for the purpose of employment and further studies.

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(3) These curricula could be provided by different institutions, including ordinary schools which provide a complete secondary school curriculum, senior secondary / sixth form colleges which focus on post-S3 education, and vocational training institutions (including bodies like the Institute of Vocational Education and the Industrial Training Centres under the Vocational Training Council (VTC), and the Construction Industry Training Authority). These institutions have their respective strengths and are able to tailor their programmes to the target students. Those students who are not inclined towards an academically oriented curriculum may wish to select a curriculum with a more practical slant, as it would help them enhance their employability.

(4) all of these curricula should help to develop the generic skills and attitude of students mentioned in paragraph 5.3.2. above, in order to lay a good foundation for their future life, employment, and life-long learning, and these curricula must be constantly modified to keep up with the times.

(B) <u>The interface between nine-year basic education and senior secondary education</u>

5.3.5   Senior secondary education should be non-compulsory and should allow students to choose a curriculum that suits their interests and abilities. When the senior secondary education system is able to provide learning opportunities for all S3 graduates who are willing and able to pursue further studies, we recommend the following mechanism be put in place for the interface between nine-year basic education and senior secondary education –

(1) First of all, S3 graduates can choose to apply for other types of courses (e.g. those offered by the VTC or senior secondary colleges);

(2) In the spirit of 'school-based management', secondary schools can allocate their S4 places and S3 repeating quota to students who choose not to change school.

   (i) We recommend schools to determine students' promotion to S4 according to the following principles:

      • To allow students who wish and have the ability to

promote to the senior secondary level;

- whether a student should be regarded as "being able" to pursue senior secondary education should be assessed by making reference to his/her performance in the BCA and overall performance in the school.

(ii) On the condition that no additional public resources are incurred, schools may adjust the number of S4 places and repeaters' places for S3 according to the needs of students.

(iii) However, repeating is only one way to help students; schools may also wish to adopt cross-grade setting for certain subjects, on the condition that no additional public resources are involved, and that every student should not receive subsidised junior secondary education for more than five years (including the years of repeating).

(3) After offering S4 places and S3 repeaters' quota to their own S3 graduates, secondary schools may allocate the remaining school places to other S3 graduates at their own discretion.

(4) any school places that remain after the above three steps will be given through central allocation to S3 graduates who do not have a S4 place yet.

Implementation Timeframe

5.3.6 We recommend to gradually increase senior secondary education opportunities based on the above recommendations. This new interface mechanism for S3 and S4 should be in place by the 8th year after the implementation of the transitional secondary school places allocation mechanism (i.e. when those students admitted to S1 in the last year of implementing the transitional mechanism proposed in paragraph 5.2.69 above are promoted to S4).

(C) Academic structure of senior secondary education

(1) The existing structure

5.3.7 Some people have pointed out that our existing 2-year senior secondary education system focuses on preparing students for the Hong Kong Certificate of Education Examination (HKCEE),

whilst the two-year sixth form education emphasizes helping students gain entry into universities. This '2+2' academic structure in effect dissects students' studies after S3 into two sections with different emphases. Since students have to complete a full curriculum and prepare for a public examination in about one and a half years, they have limited time for other learning activities. Moreover, as the two-year sixth form curriculum is designed to meet universities' requirements, the course contents are rather specialized and difficult. As a result, students' scope of learning is rather narrow and certain parts of the curriculum overlap with the university's first-degree programme.

(2) <u>Envisaged structure for senior secondary education</u>

5.3.8   From the point of view of the academic structure, a 3-year senior secondary education would make for more coherence in the post-S3 curriculum, and students would have more time to take part in more diverse learning activities, to take modules across a number of disciplines, and thus be able to construct a broad knowledge base that will help them lay a good foundation for life-long learning to equip them for the knowledge-based society.

5.3.9   Moreover, many countries around the world adopt a 6-year secondary education system (or a 12-year primary plus secondary education system) and 4-year first-degree curricula. Hence, a 3-year senior secondary education structure may strengthen the linkage between Hong Kong's senior secondary education system and the academic structure of higher education in other countries.

5.3.10   If the proposed new academic structure of senior secondary education is to be adopted, the current 3-year first-degree programmes will normally be extended to 4 years.   In this case, the first-degree programmes will have more room to satisfy the requirements of individual disciplines (especially those that are relatively more specialised) such that the need for stipulating the subjects to be taken by students in secondary education will be greatly reduced.   Secondary students will then be able to study a broader curriculum.

(3) Issues concerning the implementation of a 3-year senior secondary education system

5.3.11   The above indicates that the proposed 3-year academic structure for senior secondary education has its own merits.   But before a decision can be taken on whether the proposed new academic structure should be adopted, careful consideration must be given to all the issues involved, including the supporting conditions and the transitional arrangements.

(i)   Supporting conditions

5.3.12   The following objective conditions would have to be met:

(a) Curriculum guides

5.3.13   Before implementing a new curriculum, it is necessary to prepare the syllabuses and guidelines for senior secondary education to provide a basis for schools to develop school-based curricula. Moreover, the new curriculum should start at Senior Secondary1 to ensure coherence. The CDC anticipates that the development of the new senior secondary curriculum will take 2 to 3 years.

(b) Preparation of schools and teachers

5.3.14   Based on the new curriculum for senior secondary levels, schools will have to prepare teaching materials, re-arrange duties and assign teachers to undertake the necessary training. Sufficient time should be allowed for teacher training to make sure that teachers can master the concepts, knowledge and skills to design school-based curriculum, to teach the new curriculum, and to nurture and disseminate successful experiences.

(c) Re-organization of class structure and provision of new school places

5.3.15   At present, about 34% of S5 graduates of public-sector schools can proceed to the 2-year sixth-form courses in public-sector schools.   If the new

academic structure were implemented, it is envisaged that most students at Senior Secondary 2 level would be promoted to Senior Secondary 3 in the same school. Hence, the existing number of classrooms would be insufficient. It would be necessary to build a considerable number of new school premises.   Sufficient time would need to be allowed for identifying school sites and planning for school construction projects.

(d) Establishment of a new public examination

5.3.16   As envisaged by the Hong Kong Examinations Authority (HKEA), it will take two years to draft a new examination syllabus for the new system in collaboration with CDC.

5.3.17   Moreover, the Authority will take another one and a half years to set the Grade E standard, compile the Grade E descriptions and consult secondary schools and higher education institutes and employers, etc. It will take more time if there are great discrepancies between the HKEA's recommendations and the views collected. In addition, the existing HKCEE and the Hong Kong Advanced Level Examination (HKALE) are enjoying wide recognition by educational institutions overseas. The HKEA would need to provide the new examination syllabus and specimen questions to overseas organizations concerned to secure their recognition and acceptance of the new examination in order to minimize any adverse effect on those students who wish to pursue their studies abroad.

(e) Universities to adjust their admission system

5.3.18   During the transition period, the S5 graduates competing for entry into universities will possess two different types of qualifications (those attained through the current HKALE and those through the new public examination). Each university would have to set up a fair and reasonable admission system to assess these two types of qualifications. This system should be announced before the first batch of secondary schools begins to adopt the new senior secondary structure.

(f) Universities to adjust their first degree programmes

5.3.19   When the new senior secondary structure and curriculum are fully implemented in secondary schools, the duration of study and course content in senior secondary education will be different. The new curriculum will be broader and more diversified and will focus on nurturing students' attitudes and abilities. Universities will have to adjust their first degree programmes in terms of their duration, contents and structure. During the transition period, there will be two groups of secondary school graduates, i.e. those who have taken the current senior secondary curriculum and those who have taken the new one, to be admitted into universities. To meet these students' different needs, universities will have to adjust their first degree courses in a flexible manner. If senior secondary education is to adopt a 3-year model, the current 3-year first degree programmes will normally be extended to 4 years. But the exact duration of each individual first-degree programme should be decided on the basis of its actual needs.

5.3.20   At present, public resources on higher education already account for one-third of the Government's total expenditure on education. On a per capita basis, the Government's recurrent expenditure on each university student is sufficient to subsidize 6 secondary school places or 10 primary school places. Hence, it would be undesirable to further increase the recurrent expenditure on university education. If universities find it necessary to extend the duration of study for all or some of their first degree courses, they would need to consider how the change can be made within the current level of government subsidy, on the condition that the number of students entering universities each year is not reduced and the quality of university education is not affected. We would encourage the universities to find ways of using their resources more flexibly and effectively, and to solicit other resources from the society. In fact, financial support from private organizations is a major source of finance

for university education in many places all over the world.

(g) <u>Increasing post-secondary learning opportunities and channels leading to higher education</u>

5.3.21 Since the envisaged senior secondary education structure will only involve one public examination, the number of students undertaking this examination will be significantly increased. There will be even keener competition for the same number of university places. Hence, one of the prerequisites for implementing the new academic structure is a mature system where higher education is provided by a diversity of institutions (e.g. community colleges), so that more opportunities are available to secondary school graduates to pursue further studies. The courses offered by these institutions should have recognition from universities and should be articulated with degree programmes.

(h) <u>Overall enhancement of students' standards</u>

5.3.22 At the same time, enhanced student standards across the board is another supporting condition for implementing the new system. Under the new system, most Senior Secondary 3 students will sit the new examination, which will be more advanced than the HKCEE. If the standards of secondary school students are not substantially raised, many of them will have difficulty with the new examination. There will probably be more students failing the examination, leading to more frustration and feelings of setback

5.3.23 Therefore, prior to the <u>full</u> implementation of the 3-year model, it is necessary to reinforce students' foundation in basic education so that they will be able to face the new public examination.

(ii) Transitional arrangement

5.3.24   There are two possible ways in which the current system could transit to the 3-year senior education system:

 (a)   **One-off change across the board**

  (1)   Merits

   5.3.25   This will minimize the following problems that will probably arise from parallel implementation of the two systems:

   - Under the SSPA system, most S.1 places are allocated to students centrally by the computer on the basis of their academic achievement. In the new system, when students make their choice of school, they will have no prior knowledge about the academic structure of the school to which they are eventually allocated.

   - In the case of parallel implementation, the HKEA would have to conduct three public examinations (i.e.the HKCEE, the HKALE and the new public examination) at the same time. This will incur substantial human and financial resources and will lead to a lot of confusion.

   - During the transition period, universities will have to adjust their curricula to cater for the different learning needs of the two groups of students from two different senior secondary systems.

  (2)   Technical difficulties with implementation

   5.3.26   If all public-sector secondary schools are to switch to the new structure in the same school year, two batches of secondary school students will graduate in the same school year after 3 years (i.e. the last batch of Secondary 7 graduates under the old system and the first batch of senior secondary 3 graduates under the new system). Without a

corresponding increase in the number of university places, these graduates will have to face keener competition than before. Yet, universities would have tremendous difficulties in doubling their first year places.

(b) <u>By batch and by phase</u>

5.3.27 In the view of the above considerations, some recommend that public sector secondary schools should change to the new structure by batches over three to four years.

(1) <u>Merits</u>

- Schools that are better prepared can make the change first. Their experiences in developing the new curriculum and teaching materials will be useful references for other schools.

- When the first batch of schools has changed to the new structure, the Government will be able to evaluate the effectiveness of the new structure and deal with any problems accordingly.

- The technical difficulties as described in scenario (a) above can be avoided.

(2) <u>Technical problems with implementation</u>

See paragraph (a)(1) above.

(4) <u>Review in 2002</u>

5.3.28 <u>The EC will set up a working group to examine the feasibility of implementing the proposed 3-year structure for senior secondary education and formulate detailed proposals as well as implementation timetable. It will submit its recommendations to the Government in 2002.</u>

5.3.29 In the meantime, the University Grants Committee (UGC), together with the universities, should find ways to solve the

following problems:

(i) How should universities modify their admission mechanisms to tie in with the change? Matters for consideration in this respect include:

    (a) During the transition period, how should universities assess the different qualifications of S7 graduates under the old system and Senior Secondary 3 graduates under the new system?

    (b) During the transition period and thereafter, will universities increase their enrolments? Should any ratio be set for secondary graduates from the new and the old systems?

    (c) Will students be encouraged or required to study a broader senior secondary curriculum (e.g. science students to take more arts subjects and vice versa, or more emphasis on the Liberal Studies subject)?

(ii) How should the content, structure and length of study of first degree programmes be adjusted?

    (a) <u>Length of study</u>: Is it necessary to provide Senior Secondary 3 graduates with a longer first degree programme?

    (b) <u>Content</u>: How should the content of first degree programmes be changed to tie in with the new senior secondary curriculum? What would be the differences in content between the new and the existing first degree programmes?

    (c) <u>Credit unit system</u>: to tie in with the new first degree programme, is it possible to implement a fully flexible and transferable credit unit system so as to allow students to determine their own pace of study according to their abilities and to provide different entry points for university education?

(iii) If the first degree programmes are to be extended, how should the following issues be resolved?

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(a) Are the existing facilities sufficient? If not, how would the universities find the necessary resources?

(b) Are existing human resources sufficient to cope with the change?

(c) Should there be any change to the way the curriculum is delivered? How can the quality of the new curriculum be assured?

(iv) How much time is required to effect the above changes? What is the earliest time to announce the details (e.g. regarding how the admission mechanisms and the first-degree programmes will be changed)?

(D) <u>Reform of the senior secondary curriculum</u>

5.3.30   The recommendations for reforming the senior secondary curriculum are based on the overall curriculum reform as described in Section2(A) of this Chapter.

(1) <u>Focuses of the reform</u>

5.3.31   To achieve the objectives of senior secondary education (see Chapter 2), we recommend the focus of the reform of the senior secondary curriculum to be:

(i) To provide the <u>five types of learning experiences</u> as described in section 2(A) of this Chapter so as to help students explore and develop their diverse interests and potentials, cultivate their moral values, civic consciousness and national sentiments, and further enhance their capability (including communication, numeracy, learning skills, critical analysis and problem solving skills, information technology, , creativity, collaboration and self-management skills) and important attitudes and values.

Compared with basic education, senior secondary education should provide students with more <u>work-related experiences,</u> enhance their knowledge about the working life, help them develop a positive attitude towards work, and help them explore their own aptitudes and abilities to prepare them for

future employment.

(ii)   To provide <u>a broad-based senior secondary curriculum</u> to enable students to acquire experiences in various key learning areas, construct a broad knowledge base and enhance their ability to analyze problems.

(iii)   To provide <u>different subject combinations and learning modules</u> so that students can choose according to their aptitudes, abilities and interests.

(2)   Assessment/Record of students' overall performance

5.3.32   After secondary school, students often need to provide evidence of academic qualifications and record of performance in school for the purpose of employment or further studies. To fully reflect students' personality and abilities in various domains, and to give them useful feedback, we recommend schools to conduct overall assessments on and to record students' participation and performance in different learning activities.

5.3.33   Apart from recording students' internal examination results, schools may consider including the following information in the students' portfolio:

(i)   Students' records of participation in different types of learning activities (e.g. sports, art, co-curricular activities, community services and work-related activities);

(ii)   Comments on students' participation in the above activities;

(iii)   Comments on students' personal qualities (including moral values, civic consciousness, enthusiasm to serve others, sense of responsibility, interpersonal relationship, leadership, perseverance and confidence, etc);

(iv)   Comments on students' multiple abilities (e.g. communication, organization, self-learning, analysis, use of information technology and creativity, etc.).

(3)   Recommended change in subjects and combinations

5.3.34   In addition to the internal assessment record mentioned

in (2) above, senior secondary students generally undertake courses for the HKCEE as well as the HKALE/AS Level in order to obtain certain recognized qualifications for the purpose of further study and employment. To enable students to take courses across different learning areas, we have the following recommendations.

(i) <u>Curriculum reform within the existing academic structure</u>

5.3.35 Curriculum Development Council (CDC) recommends the following within the existing senior secondary structure:

(a) <u>For S4 and S5</u>

(1) <u>To introduce new S4 and S5 HKCEE subjects, such as</u>

- Integrated Humanities
- Integrated Science and Technology

(2) <u>Recommended subject combinations</u>:

Chinese + English + Mathematics + A + B
+ curriculum chosen from other 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'.

(3) To refine the curriculum for various key learning areas according to the latest aims of education and the latest curriculum framework proposed by CDC.

(b) <u>For S6 and S7</u>

(1) <u>Changes in subjects</u>

- To strengthen the part on project learning in the subject of Liberal Studies at the AS level with a view to enhancing students' self-learning ability and critical thinking. Students may choose those modules which are different from the specialized subjects they have taken (e.g. science students may take Today's China, and arts students may take Science, Technology and Social studies)

- To revise on a need basis the existing curricula at the HKCEE level and the AL/AS level and to enhance students' basic abilities (e.g. creativity and problem solving skills, etc.) according to the latest curriculum framework proposed by CDC.

(2) <u>Proposed subject combinations</u>

- Use of English at the AS level +

- Chinese Language and Culture at the AS level +

- Liberal Studies at the AS level (one specialized module and one project) or one independent project +

- One AL subject and one AS level subject <u>or</u> two AL subjects (students may increase or decrease the number of subjects taken to suit their own abilities)

(ii) <u>Under the proposed new senior secondary academic structure</u>

(a) <u>At the initial stage</u>

- To extend the existing and the proposed S4/S5 subjects to S6 level (i.e. the new Senior Secondary 3)

(b) <u>Long-term goal</u>

- To gradually split the existing subjects (e.g. Geography, History, Physics, Chemistry, etc.) into various learning modules for students to choose according to their own abilities

- To gradually introduce new elective modules so as to allow students more choices to suit their individual needs and abilities

- These courses can be academic, job-related, leisure/social, or project-based in nature, etc. Some courses, in addition to classroom learning, should be supported by co-curricular activities, community services and job-related experiences

- The elective courses under the key learning areas should be updated regularly to meet the development and the changing needs of the society

(E) **Public examinations**

5.3.36   For the society and the individual, public examinations serve the functions of certification and selection. We acknowledge the value of public examinations.   Public examinations are viewed by many as a relatively fair and objective assessment mechanism which provides a chance for the grassroots to progress up the social ladder.

5.3.37   Because of the importance attached to public examinations, students' learning has become examination-oriented. To ensure that public examinations maximize their positive signalling effect, we recommend to improve the content, mode and marking system of public examinations.

5.3.38   We must also recognize that public examinations have their own limitations. It is not possible to evaluate students' <u>overall</u> abilities no matter how public examinations are reformed. Therefore, apart from public examinations, other modes of assessment should be fully utilized to comprehensively assess students' performance and abilities.

5.3.39   In view of the above, the HKEA has made the following recommendations to reform the existing public examination system –

(1)   **Extending the 'Teacher Assessment Scheme'**

5.3.40   The 'Teacher Assessment Scheme' is now in operation for a number of subjects at the HKALE level.   Teachers evaluate their students' performance in certain aspects which are normally not assessable in public examinations.   After appropriate moderation, these assessment records are included in students' public examination results. The HKEA recommends to extend the 'Teacher Assessment Scheme' to other subjects at the HKALE level and, when appropriate, introduce it to the HKCEE level step by step.

5.3.41   This assessment scheme has the following advantages:

(i)   it evaluates abilities which are normally not easily assessed through a paper-and-pencil test. It gives consideration to students' abilities in various domains and their overall learning process. This will encourage all-round development;

(ii)   it gives a fuller picture of students' performance and reinforces the positive effects of public examinations; and

(iii)   it helps to address the drawback of judging students based on their performance in one single examination.

(2)   **Introducing core-competence approach to HKCEE subjects:**

5.3.42   At present, the HKCEE follows the norm-referencing approach (commonly known as 'drawing curves'). An examination using this approach reflects individual candidates' performance in comparison with all other candidates. Yet, it fails to indicate whether the candidates indeed possess the basic skills

and knowledge required of a S5 graduate.

5.3.43   To reinforce the HKCEE's certification function while maintaining the standards, the HKEA recommends to include a 'core-competence' part in the examinations to assess the basic skills and knowledge considered by curriculum specialists to be essential for S5 students. The HKEA will adopt the 'criterion-referencing' approach to measure students' standards at this core competence part, and candidates will be able to work towards objective standards without having to compare with the others. They will be awarded a grade E if they can achieve the basic attainment in the core-competence part of the subject examination.

5.3.44   The proposed 'core-competence' approach has the following advantages:

   (a)   It reflects more clearly whether students have mastered the basic knowledge and skills. The HKEA will consider compiling grade descriptions for grade E so as to enhance the certification function of the HKCEE.

   (b)   It helps students identify the most essential elements of the curriculum so that they can concentrate on mastering the basics first before going further.

(3)   <u>Allowing S6 students to sit for the HKALE</u>

5.3.45   Students should be given the opportunity to sit for public examinations according to their own pace and abilities. The HKEA recommends to allow S6 students to apply to sit the HKALE for some or all subjects, subject to the consent of their schools.

(4)   <u>Abolishing the fine grades in the HKCEE and HKALE</u>

5.3.46   At present, fine grades (i.e. classifying grades A to F into A(01) to F(12)) are provided in reporting students' performance in the HKCEE and the HKALE for university admission purposes. While universities are beginning to pay more attention to students' overall performance rather than relying solely on public examination results, the fine grades are no longer necessary. Since the HKEA has already announced that fine grades would be used

in reporting the HKCEE and HKALE results in 2001, it recommends to abolish this system with effect from 2002. Members of the public may provide views on whether the implementation of this proposed change should be advanced to 2001.

5.3.47   In addition to the above recommendations of the HKEA, the EC recommends the following measures to reform the public examination system:

(1)   To strengthen the linkage between examination papers and the basic knowledge and skills that need to be acquired by students covering more issues that are related to students' daily lives.

(2)   To refine the mode and marking system of examinations to allow students more room for independent thinking and creativity, e.g. if students' answers are innovative and unique, they should be awarded extra marks as an encouragement so long as they are reasonable even if they are different from the model answers. This will help to discourage students from rote-learning.

(3)   To conduct the same examination more than once a year so that students do not have to wait for one whole year to re-sit the examination

(4)   To examine the feasibility of introducing a public examination on Chinese and English covering different proficiency and focusing more on practical use. Students can sit for this examination at various learning stages, or even when they are at work, to acquire the qualifications they need.

5.3.48   For (1) and (2) above, we note that the HKEA has already adopted these as guiding principles for designing examination papers. We hope that the Authority will reinforce this further.

5.3.49   Besides, we hope to gather the public's views on the following:

(1)   Should a new public examination be set up to assess

candidates' abilities of using Chinese and English languages as a tool for thinking, analysis and communication? Such an examination needs not be related to the school curriculum. Individual candidates may apply to sit for it, and education institutions and employers may consider giving recognition to the qualifications attached to such an examination.

(2)   In selecting students for admission, should universities give more consideration to results of other internationally recognised examinations, so as to allow students and individual candidates more choices?

(3)   How can we streamline the processes related to the updating of public examinations that are related to school curriculum, so that they can be promptly modified to tie in with the changes of the society?

Section 4: Higher Education

To establish a diversified, multi-channel, flexible and interlinked system of higher education

To increase post-secondary learning opportunities

To nurture quality people who possess knowledge and virtues, broad-mindedness, commitment, global vision, creativity and adaptability

(A) Definition of Higher Education

5.4.1　Higher education has traditionally been equated with universities.　However, the term 'higher education' has now been broadened to cover all learning opportunities above the secondary school level.　Apart from universities, there are many other educational institutions (e.g. post-secondary colleges, extra-mural departments of universities and non-local tertiary institutions) which provide various higher education courses in Hong Kong.

(B) Functions of Higher Education

5.4.2　In the past, planning for higher education was mainly geared towards the training of manpower for the society.　Similarly, the curriculum was by and large based on the requirements of the professions and the trades concerned.

5.4.3　With the advent of information technology in the 21st Century, the problems that university graduates may encounter, both in daily life and at work, will require multi-faceted analytical skills as well as knowledge that straddles a combination of disciplines.　The knowledge and skills acquired in a single professional field will no longer suffice. In view of this, university faculties of specialized or general disciplines should provide students with <u>multi-disciplinary learning experiences, which will broaden their knowledge base and vision, as well as enhance their problem-solving power and adaptability.</u>

5.4.4   Another function of higher education is to train up quality people to contribute to the economic growth of Hong Kong and the development of a stable and harmonious society. We need people who are cultured, aspiring and civic-minded and who have commitment and global vision to be the cornerstones of society.   In a knowledge-based economy, we need to provide more opportunities for our young people to pursue higher education.

5.4.5   A lot of concerns have been expressed recently about the quality of our university graduates, particularly with regard to their language skills. We agree that good language skills are essential to life-long learning and the key to surviving in a knowledge-based society. Whilst the development of language skills should mainly take place at the basic education stage, these skills should be further consolidated at the universities, and there should be an effective mechanism to ensure that our university graduates attain the required language standards.

(C) A Diversified Higher Education System

5.4.6   We envisage that a diversified higher education system should consist of the following components:

(i) <u>Universities</u> - degree-awarding educational institutions.   They include:
- University Grants Committee (UGC)-funded institutions;
- Open University of Hong Kong; and
- private universities.

(ii) <u>Post-secondary colleges</u> - institutions which provide courses above secondary school level, including community colleges.

(iii) <u>Continuing education institutions</u> – those continuing education institutions which provide courses above secondary school level.

5.4.7   This system should contain the following features:

(i) <u>multiple channels and diversity</u>:
Students can choose learning modes and channels according to their abilities and needs.

(ii) <u>multiple entry and exit points</u>:
It allows students to join, suspend or continue their higher education studies at any stage in their life according to their own needs and circumstances.   The credits they have accumulated from completed learning units will be duly recognized when they resume relevant studies in future.

(iii) <u>quality assurance and mutually recognized qualifications</u>
The quality of courses provided by an institution and the recognition these courses receive from employers, professional bodies and other institutions are inter-related.   To win confidence and due recognition, the institutions must put in place sound quality assurance mechanisms to ensure that the courses they provide reach the required standards.   Moreover, we encourage higher education institutions to work together to develop a mechanism for mutual recognition of qualifications so that qualifications awarded by one will be duly accepted by others.

(D) Framework for Reform

(1) Universities

(i) Definition of first degrees

5.4.8   In the past, a holder of a bachelor's degree was generally regarded as a 'learned' person in a particular discipline, with sufficient knowledge and skills to be fully functional in that particular field. However, in today's society where knowledge and skills are being constantly updated, everyone needs to update his knowledge and skills to meet the ever-changing demands. In a life-long learning society, <u>bachelor's degree programmes are no longer a terminus of learning</u>. On completion of their bachelor's degree programmes, many students will pursue further studies in different ways according to their learning needs. So, what meaning should a first degree carry and what role should it play today?

5.4.9   In some reformed bachelor's degree programmes, students are no longer required to acquire during the duration of their studies <u>all</u> the knowledge necessary for their future careers. Instead, such programmes put stress on helping students grasp important concepts, as well as enabling them to find solutions

on their own. Besides, an outstanding professional or executive should also possess professional conduct, be decisive, communicative, adaptive, and able to see problems from different angles. All these are important attributes that first-degree programmes should aim to develop in our students.

5.4.10   To meet the demands of learners in a new society, we recommend that universities review the functions, contents, focuses and modes of teaching of their first degree programmes, so as to <u>strike the right balance between the breadth and the depth of such programmes</u>. This would, in addition to helping students master the necessary knowledge for specific disciplines, give them exposure to other learning areas and help them develop a broader vision and important generic skills.

5.4.11   In addition, if the three-year senior secondary education system proposed in Part C of Section 3 is to be implemented, universities should consider providing new first degree programmes for graduates of the three-year senior secondary education system in order to ensure continuity in their studies. What then would be the difference between the new and old first degree programmes? To cope with the transition to the new secondary education system, universities will also need to examine how they can provide the new and the old first degree programmes at the same time for students coming out from two secondary education systems.

(ii)   The enrichment of campus life

5.4.12   Campus life is an integral part of a quality university education. A comprehensive and rich campus life helps students develop strength of character, master life skills, broaden their horizons and cultivate a sense of commitment to the community. We would therefore recommend that universities should encourage students to take part in a variety of extra-curricular activities such as community services, sports, and the art. Universities should also provide students with more exposure at an international level and let students acquire more practical experience in the workplace, such as starting one's own business. Students could be a valuable human resource to universities, if put to good use.

(iii) Reform of the University Admission System

5.4.13   The system for admission to university does not only assist in selecting suitable candidates for university education, but also exerts great influence on how learning is conducted in schools. It is therefore one of the key foci in this education reform.

(a) Shortcomings in the Existing System

5.4.14   Many universities around the world devote a lot of time and efforts to making sure that the most suitable candidates are admitted. Comparatively speaking, the admission system in Hong Kong is much simpler. The following problems have been identified in the present system:

(1) Public examination results are over-emphasized without taking into account students' all round performance; and

(2) There are too many subject-specific requirements, and as a result, secondary school students are not totally free to choose subjects of their own preference. This also contributes indirectly to the strict division between the arts and science streams.

5.4.15   We note that in recent years, local universities have gradually introduced new mechanisms, such as Principal Recommendation Scheme, to give due regard to students' performance in non-academic fields. Besides, individual departments of some universities have also made significant changes in the admission system. For example, they have broadened the admission criteria to cover students' performance in various aspects, and interviews are conducted to evaluate students' communication, analytical, adaptive and social skills. These reforms are worth supporting and should be given due recognition.

(b) Considerations for the Review of University Admission System

5.4.16 To meet the society's need for quality university graduates and to convey to primary and secondary schools the correct message for all-round education, we urge all universities to conduct a comprehensive review of the existing admission system, paying attention to the following:

(1) The changing needs of society

In today's knowledge-based society, we need generalists and specialists who are good at self-learning, communicative, innovative, adaptive, have good organisational skills and a sense of commitment. Therefore the admission mechanism should aim to select those candidates who possess these qualities. Moreover, in view of the importance of generic skills, the admission mechanism should allow secondary school students to have more room to choose their preferred subjects.

(2) Maintaining language standards

Universities must maintain their admission requirements in respect of language standards. The current minimum requirements (a pass in both Chinese and English in the Hong Kong Advanced Supplementary Level Examination) should not be relaxed.

(3) Impact on Primary and Secondary Education

When the universities contemplate reforms to the university admission system, its impact on primary and secondary education should be given due regard.

(4) <u>The Three-year Senior Secondary Education</u>

If the three-year senior secondary education system proposed in Part C of Section 3 were to be implemented, the universities would need to consider the following questions:

- During the transition period, how should universities consider the academic qualifications of S7 graduates of the current system and senior secondary school graduates of the proposed system?

- During and after the transition period, will the total intake of university students be greater than it is now, and will it be necessary to fix a ratio between graduates of the current system and graduates of the proposed system for admission?

- Will senior secondary school students be encouraged or required to take a broader curriculum (e.g. taking some humanities subjects in the science stream, or some science subjects in the arts stream, or taking liberal studies, etc.)?

(5) <u>To further increase transparency</u>

In view of its significance, the university admission system must be fair, open and transparent.

(c) Proposed Reforms

5.4.17   We recommend that the universities <u>give due consideration to students' all-round performance</u> when setting admission criteria.   Apart from public examination results, they may consider the following information in making a comprehensive evaluation of the overall performance of students:

(1) internal assessment reports of the secondary schools (including academic and non-academic performance);

(2) portfolios prepared by students; and

(3) interviews.

5.4.18   As regards the requirements on subjects taken by students in secondary school, we recommend that the universities consider the following reform proposals:

(1) Universities should give priority to those students who take the Liberal Studies subject at the Advanced Supplementary (AS) level as this subject can help students broaden their knowledge horizons and develop important generic skills.

(2) While setting the subject requirement for university admission, universities should as far as possible replace Advanced Level subjects with AS level subjects, and minimize the number of specified subjects, so that secondary school students will have more room to choose subjects across different learning areas.

5.4.19   As the focus and requirements of different universities and departments vary, we urge all universities to reform their admission system(s) and announce the revised admission criteria as soon as possible.

5.4.20   We also propose that consideration be given to what changes would be required to allow universities more flexibility to take in students at various levels, such as admitting into their second year meritorious graduates of community colleges and other post-secondary institutions, on the condition that the total number of students entering universities each year is not reduced. This will help to enlarge the pool of candidates that universities can consider for admission, and is thus beneficial to the universities' effort to maintain the quality of entrants. We propose that the UGC and the universities

should review the current funding mechanism to allow for this flexibility.

5.4.21   On condition that no additional public resources are required, consideration may be given to allowing individual universities and faculties to admit a small number of outstanding S6 students. The following issues may need to be examined:

> (i)   will this be beneficial to the students who have been admitted ?
>
> (ii)   how will it affect the secondary schools ?
>
> (iii)   do we need to set an upper limit on the number of S6 students that each faculty would admit (e.g. not more than 10% of the places offered by the faculty) ?

(iv)   A Portable and Transferable Credit Unit System

5.4.22   In order to allow more room for students to <u>choose learning modules according to their own interests and pace,</u> we recommend universities to work towards *a transferable and articulated credit unit system among institutions and departments*,   so that students' choice will not be confined to programmes offered by one department of a particular institution.   Institutions and individual departments would also be able to focus resources on their own strengths with a view to developing their own areas of excellence.   If the 3-year senior secondary education system were to be implemented, universities would need to adopt a transferable credit system before admitting the first batch of graduates from the new system.

5.4.23   As for undergraduates, campus life and studying with fellow students will remain essential experiences for their character development.   We expect that even when the proposed credit unit system is fully in place, and when undergraduates have a wider choice of programmes, they will still have to select one institution as the principal base of study.

5.4.24　We note that discussions are already being held among institutions on the transferability of credits, and some initial progress has been made. We would urge universities to continue their efforts to achieve a higher degree of transferability and articulation of credit units among the institutions.

(v) Duration of study

5.4.25　If the proposed new academic structure of senior secondary education is to be adopted, the current 3-year first-degree programmes will normally be extended to 4 years. In this case, the first-degree programmes will have more room to satisfy the requirements of individual disciplines (especially those that are relatively more specialised) such that the need for stipulating the subjects to be taken by students in secondary education will be greatly reduced. Secondary students will then be able to study a broader curriculum.

5.4.26　Since the nature, contents and duration of undergraduate programmes vary, the duration of each undergraduate programme should be set in accordance with the programme's actual requirements. As mentioned above, substantial public resources have already been devoted to higher education, and thus no further increase is proposed. If universities need additional resources as a result of adjusting the duration of their programmes, they will need to find ways to use existing resources more effectively, or consider bringing in resources from other quarters of the community. We propose that universities may decide on their own the duration of individual degree programmes, on the condition that no additional public resources are required, and that the total number of students admitted to universities each year is not reduced. However, universities will need to address the issues of providing adequate facilities and staffing, and raising additional resources.

5.4.27　We envisage that when the credit unit system proposed in paragraph (iv) above is implemented, universities will be able to determine the duration of their programmes with higher flexibility. Therefore, the duration of study will vary from programme to programme, and the pace of study will also vary

from student to student. In fact, the university sector of most countries is undergoing continual reform in response to changes in the society. A novel and more flexible approach to deal with the issue of the duration of study is called for.

(vi) <u>**The quality assurance mechanism**</u>

5.4.28   At present, the mechanism for self-accreditation, which includes evaluation by external experts, plays the role of ensuring the quality of university programmes. Since 1997, the UGC has been conducting Teaching and Learning Quality Process Reviews (TLQPR) to help universities enhance the effectiveness of their quality assurance processes. The UGC has completed the first round of the review, and will proceed with the second round in the 2001/02 to 2003/04 triennium. We agree that these reviews are conducive to maintaining the quality of university programmes, and would request that the UGC to consider the following propositions:

- besides reviewing the teaching and learning quality assurance processes, should external assessments be conducted on the effectiveness of teaching and learning (such as the standards of graduates)?

- how might the universities' self-accrediting mechanisms be appropriately strengthened?

5.4.29   The main function of universities is to nurture future leaders, and we have high expectations that our university graduates will be the cornerstone of the society in the future. Universities need to respond positively to the concerns in recent years about the standards of university graduates, and to take necessary steps to ensure that students graduating from universities measure up to the required standards.

(vii) <u>**The development of postgraduate programmes**</u>

5.4.30   One of the important economic strategies of Hong Kong is the promotion of innovation and technology. To underpin this strategy, we need experts in various specialised fields and technology areas such as information technology and biotechnology.   We recommend that the number of research postgraduate places should be increased to nurture the

manpower that we need to propel the economic development of Hong Kong.

5.4.31   Besides, as first degree programmes need to put more emphasis on generic skills and broader learning experiences, taught post-graduate programmes will become more important in terms of nurturing expertise in various domains. We propose to increase the number of taught post-graduate places on a self-financing basis to facilitate further studies in various specialised fields.

(viii) <u>Promoting the development of private higher education institutions</u>

5.4.32   It is a common phenomenon in many places for private institutions to participate in the running of universities. In the United States, private universities account for approximately 33% of the total number of universities in the country, while in Japan and Korea, the ratio is 74%. This provides a channel for all sectors of the society to contribute resources and efforts to higher education, as a result of which more students will stand to benefit.

5.4.33   We propose that the Government could adopt the following approaches to promote the development of private higher education institutions:

(a)   encouraging existing private post-secondary colleges or other education bodies to upgrade to universities upon appropriate accreditation. We note that Shue Yan College, with the assistance of the Government, has commissioned the Hong Kong Council for Academic Accreditation to conduct accreditation for some of its proposed degree programmes. This is a step forward in the development of private universities;

(b)   providing a conducive environment for the development of private higher education institutions, such as encouraging distinguished overseas universities to set up private universities in Hong Kong;

(c)   encouraging the development of higher education institutions through any other feasible ways.

5.4.34   We recommend that the Government should actively consider the formulation of appropriate policies with a view to encouraging the development of private higher education institutions, so that the education system of Hong Kong can be more diversified and vigorous. In formulating such policies, the Government will need to consider the following issues –

(a)   what should be the definition of 'private universities'?

(b)   how to ensure the quality of the programmes provided by private universities ?

(c)   what should be the procedures for establishing a private university in Hong Kong? Is it necessary to legislate for it?

(d)   how should private universities position themselves? How should they be differentiated from the Open University of Hong Kong?

(e)   in view of the fact that, discounting the 18% borne by students, the costs of Hong Kong's universities are fully paid by Government, is there any room for private universities to survive here? What assistance should be provided by the Government?

(2) Community Colleges

(i)   Definition

5.4.35   "Community Colleges" refer to education institutions that perform one or more of the following functions:

(a) Providing learners with an alternative route to higher education which, to a certain extent, articulates with university programmes;

(b) Providing a second opportunity to learners who have yet to attain qualifications at secondary level through formal education; and

(c) Providing a variety of learning opportunities to assist individual learners to acquire skills and qualifications that are recognized by employers to enhance their employability.

(ii) **Operational Principles**

5.4.36   Community colleges should operate along the following principles:

(a) 'Lenient entry, stringent exit' : In comparison with universities, the entry requirements of community colleges should be relatively more lenient. This will enable more people to fulfil their aspiration for higher education programmes that suit their abilities. At the same time, community colleges should have a sound mechanism to ensure that their graduates meet the required standards. This will help secure recognition from employers, professional bodies and universities for their qualifications.

(b) Flexible mode of learning : The mode of learning in community colleges should be as flexible as possible (such as in the form of lectures, group discussions, group projects, on-line learning and correspondence courses) to meet students' individual circumstances and needs.

(c) Flexible course duration : Community colleges should adopt a flexible mechanism (for example, a credit unit system) which will allow students of different abilities and circumstances to learn at their own pace.

(d) Diversified sources of subsidies : The funding for community colleges could come from the private sector, charitable education funds, non-profit-making organizations, or the collection of school fees, etc. This will allow a wider spectrum of the society to contribute to education in Hong Kong.

(iii) **Promoting the Development of Community Colleges**

5.4.37 We encourage the following sectors/institutions to take an active part in promoting the development of

community colleges so as to provide diversified opportunities for learners to pursue higher education:

(a) <u>The Government</u>   may formulate relevant policies to provide a conducive environment for the development of community colleges. The Government may facilitate the establishment of a mechanism for articulation of qualifications and quality assurance. We are aware that the Government is planning to further expand the Non-means Tested Loan Scheme to cover professional and educational courses offered in Hong Kong by registered schools, non-local tertiary institutions, professional organizations and recognized training institutions. The Government may also consider granting low-interest loans to those students with financial difficulties.

(b) <u>The Universities</u>   consider giving proper recognition to qualifications conferred by community colleges, admitting high achievers from these colleges as well as granting partial course exemption as appropriate. Universities currently offering professional diploma or advanced diploma courses may actively consider whether some of these courses should be converted into associate degree courses to meet the learning needs of students.

(c) <u>Post-secondary colleges and institutions</u>   consider providing courses modeled on those offered by community colleges.

(d) <u>Other sectors / institutions</u>   we encourage all other sectors and institutions to support and promote in various ways the development of

community colleges.

(3) Continuing Education

5.4.38 We will discuss in more details in Section 5 the development of continuing education (including post-secondary studies) in Hong Kong and put forward some specific recommendations for public consultation.

Setting up of a Working Group

5.4.39 The proposals concerning university admission, a transferable credit unit system and the duration of first degree programmes will be further examined and implemented by UGC and the concerned institutions. We propose to form a working group under the EC to further consider, in consultation with the UGC, how to promote the development of private universities and to enhance the interface between universities and other post-secondary institutions (such as community colleges and continuing education institutions), and formulate specific proposals. The Working Group may comprise representatives from the Education and Manpower Bureau, the Education Commission, the UGC, and the institutions concerned.

Section 5: Continuing Education

5.5.1　As mentioned in earlier chapters, in a knowledge-based society, our demand for continuing education is much higher than before.

5.5.2　Continuing education performs multiple functions -

(1) It gives full play to one's potentials and enhances the quality of the individual.

(2) It enables learners to acquire up-to-date knowledge and skills to stay competitive in the rapidly changing and increasingly globalized economy.

(3) It allows learners to acquire qualifications in academic, professional or vocational training, which meet their personal aspirations and occupational needs.

(A) Current Position

5.5.3　Continuing education has been developing rapidly in the past few years. Institutions providing continuing education have been expanding both in number and in size.　As indicated in a survey conducted by the Government last year, a total of more than 5 000 courses for continuing studies were offered by around 600 institutions as at 1 November last year, and more than 330 000 students were enrolled.　As the development of continuing education is mainly market-oriented, its mode of operation is flexible and diversified; the design of the courses are mainly oriented towards learners' demands; and the courses offered are wide-ranging, covering academic, professional and vocational domains as well as personal development. This aptly reflects the variety of the community's needs for continuing education.

5.5.4　These developments are encouraging. It is envisaged that continuing education will play an increasingly important role in the overall system of life-long learning in the future.

(B) Proposed Directions for Future Development

5.5.5   Building on its present strengths, continuing education should further develop towards the following directions:

(1) Flexibility and openness

5.5.6   Flexibility and diversification should remain the guiding principles for the development of continuing education.   To cater for the needs of the community for life-long learning, the contents and mode of continuing education should be adjusted to align with changes in the society and students' aspirations.

(2) Mechanism for quality assurance, accreditation and transfer of qualifications

5.5.7   As mentioned before, quality assurance and accreditation are inter-related.   To enable students to choose the modes of learning that best suit their personal interests, abilities and aspirations, and to accord due recognition to the qualifications attained through different channels and modes of study, we propose to establish a comprehensive mechanism whereby qualifications are mutually recognised and transferable among various continuing education / formal education / professional / vocational training programmes.

5.5.8   Such a qualifications framework should include the following features:

(i) Quality assurance

A sound mechanism for qualifications assessment and accreditation should be put in place (e.g. accrediting the standards of various programmes by recognised accrediting agencies).

(ii) Openness and diversification

There should be multiple points of entry and exit on the qualifications ladder.

(iii) Portability

For those who are unable to complete a programme at one go, a certain qualification commensurate with the modules completed should be awarded, and such qualifications should be duly recognised when the learners resume their studies in future.

(iv) Flexibility and transferability

The qualifications acquired through various channels should be transferable so that students may migrate to another mode of learning geared to their own needs.

(v) Focus on learning outcome

The credits accumulated from different modes of learning (including working experience or other experiences in life) should count as well.

(3) Continuing professional development in the workplace

5.5.9 The workplace is an ideal arena for continuous professional development. In some countries, this concept has given rise to a new form of continuing education: "work-oriented learning programme" organized jointly by employers and providers of continuing education. This is an area worthy of exploration by the local continuing education community.

(4) The internationalization of continuing education

5.5.10 The present momentum of internationalization should be sustained. There should be more co-operation with overseas tertiary institutions in offering specialized programmes that are unavailable in Hong Kong and to draw on their experience and expertise.

(5) The use of information technology

5.5.11 The rapid development of the Internet and cyber learning poses major challenges to continuing education worldwide. Local providers of continuing education should harness the power of the new technology to further promote lifelong learning. In

addition, continuing education will play an increasingly important role in equipping learners with up-to-date knowledge in information technology.

(6) Resources

5.5.12 Continuing education should be funded on the 'user-pays' principle, as it helps to develop one's potentials and raise one's personal qualities. However, the entire community is obliged to promote continuing education. We therefore look to people of various sectors, such as employers, professional bodies and social bodies to contribute manpower and resources. Where resources permit, the Government should consider providing assistance to those learners with financial difficulties and those who have become unemployable due to the economic restructuring (such as by providing re-training opportunities) to enhance their learning abilities and employability. We consider this to be very important in maintaining a stable and harmonious society.

(C) Community-wide Efforts in Promoting Continuing Education

5.5.13 We recommend that different sectors of the community assume the following roles in promoting continuing education:

The Government

- To provide an environment that is conducive to the development of continuing education and to co-ordinate the efforts of all the interested parties (e.g. providers of continuing education, accreditation authorities, professional bodies, employers, etc.) The Government has taken the first step to encourage various providers of vocational training to join hands in developing a ladder of transferable qualifications. We hope that the Government will continue its effort towards the establishment of a more comprehensive qualifications framework in collaboration with the sectors concerned.

- To encourage continuing learning by offering incentives (e.g. non-means tested and low-interest loans, tax concessions, etc.)

- To facilitate the under-privileged (e.g. learners with a low education level and having financial difficulties) in pursuing continuing learning to help them improve their quality of life.

Employers

- To encourage the employees to pursue continuing learning by providing learning/training (including in-house training) opportunities, granting leave and financial assistance as appropriate.

- To collaborate with providers of continuing education/professional bodies and to exchange training materials

Providers of continuing education

- To provide the community with quality and practical programmes of continuing education.

- In collaboration with the Government, employers, professional bodies and the industries, to help various industries understand their training needs and gain access to the latest information on the labour market, and to assist the small and outmoded industries update themselves.

Voluntary/community organizations

- To provide the grassroots with information and counselling services on continuing education through an extensive community network.

- To offer diverse programmes and activities in the community to cultivate people's interest in learning.

Accreditation authorities

- To consider, with other interested parties including providers of continuing education, the Government, employers and professional bodies, how to set up a flexible mechanism for the evaluation, accreditation and transfer of academic qualifications, in order to enhance the portability and transferability of continuing education programmes of different types and levels.

Professional organizations

- To encourage members to pursue further studies and provide opportunities for continuing learning.

- To put in place a working experience accreditation mechanism allowing learners with relevant working experience to apply for exemption of some professional courses.

- To work with other relevant sectors to establish a qualifications accreditation and recognition mechanism.

Mass media

- To help promote the concept of lifelong learning.

- To provide the public with the latest information on continuing education and to facilitate the provision of diversified learning channels (such as setting up an education television station and network services on education, etc.)

(D) Specific Recommendations

(1) Setting up a working group on continuing education

5.5.14   In the context of this review, we have set out the proposed broad directions for the future development of continuing education. The next step will be to set up a working group to advise the Government on the policies and specific initiatives on continuing education (e.g. bringing various sectors together to establish a comprehensive mechanism for accreditation of academic qualifications).

(2) Establishing a database for continuing education

5.5.15   We are aware that the Government is collecting information on continuing education courses offered in Hong Kong and is designing a website to provide learners with a quick and easy way to search for courses that they are interested in and qualified to apply for.   We fully support this initiative and hope that all the relevant Government departments (e.g. Labour Department, Careers and Guidance Services Section of Education Department, etc.) and organizations (e.g. youth centres, voluntary organizations, etc.) would make the best use of the website to assist those who are looking for suitable courses.

(3) <u>Establishing lifelong learning centres</u>

5.5.16   We recommend that continuing education institutions or community service organizations should make use of the existing community resources to set up lifelong learning centres that embrace teaching facilities, libraries, information technology equipment, study rooms and advisory services.   We recommend that educational institutions /public organizations (e.g. schools, community halls, tertiary institutions, language education institutions, etc.) should consider allowing continuing education providers and learners to use their classrooms, lecture rooms and libraries on a cost-recovery basis.

(4) <u>Working out supporting measures for continuing education</u>

5.5.17   We are aware that the Government is planning to further expand the Non-Means Tested Loan Scheme to cover professional and educational courses offered in Hong Kong by registered schools, non-local tertiary institutions, professional organizations and recognized training institutions.   This will help those who wish to pursue continuing learning but lack the means to do so.   We support this initiative and recommend that the proposed working group as mentioned in paragraph (1) above to work out other measures to help learners pursue continuing learning.

Section 6 : Catering for Multiple Abilities and Diverse Learning Needs

5.6.1   As mentioned in Chapter 2, the ultimate aim of education is to enable each student to attain all-round development according to his/her own attributes.   To achieve this, we must provide suitable assistance and guidance in accordance with their abilities and learning needs, so that they can develop their potential to the full.

Multiple abilities of students

5.6.2   Traditionally, the development of academic ability has been the main focus in education. But in fact every person is gifted in various areas. We should help students explore their multiple abilities as early as possible so that these abilities can be developed to the full.   We should also help students to make use of different abilities simultaneously to learn effectively.

Different learning needs of students

5.6.3   Apart from different abilities, students may have different learning problems or difficulties which require certain kinds of assistance and guidance.   To help students solve their problems and enable them to learn effectively, we must try to <u>understand</u> their learning needs <u>as early as possible</u> and render assistance and guidance accordingly.   Even the gifted students may have various learning obstacles.   If they are not given proper assistance, their potentials will not be realised.

5.6.4   To cater for the learning needs of different students and develop their multiple abilities, we must create a favourable learning environment and suitable conditions both at the macro (the community as a whole) and micro (the assistance provided by schools) levels.

(A) Community support and cooperation

5.6.5   To create a favourable learning environment for students to fully develop their potential, it will be very useful if we can foster a culture in the community that attaches great importance to the multiple abilities of students and respects their different learning needs. Concrete support from the community is essential.

(1) The role of the Government

5.6.6   In assisting all schools to cater for students' different needs and to develop students' multiple abilities, we recommend that the Government should play the following roles:

- We recommend that the Government should further encourage schools to formulate appropriate teaching policies and strategies using the school-based approach, draw up school-based curriculum and adopt diversified teaching and evaluation methods so as to cater for the different learning needs of students and develop their multiple abilities.

- The Government should also provide professional support to teachers and help them enhance their abilities in meeting the different learning needs of their students.

- The Government may consider using schools' effectiveness in catering for students' diverse needs as an indicator of schools' performance.   This could be an incentive for them to step up efforts in this respect.

5.6.7   Regarding the Government's role in promoting integrated education and gifted education, our recommendations are outlined below.

The promotion of integrated education

5.6.8   ED started promoting integrated education in 1997.   The objective is to cultivate an accommodating school environment to let children with special education needs studying in normal schools develop their potentials fully and forge a cordial and amicable relationship with their classmates.   This will be achieved through collaboration and mutual support among teachers, parents and students, curriculum tailoring and diverse teaching and assessment methods.

5.6.9   A total of 7 primary schools and 2 secondary schools took part in the 2-year pilot scheme for integrated education, adopting the "whole-school" approach.   the ED provided professional support to the participating schools, and organized training courses, seminars and workshops to equip teachers with the knowledge and attitude necessary to implement integrated education, and to foster the sharing of experience among teachers.

5.6.10 ED has commissioned a consultancy study on the effectiveness of the scheme. The results show that:

(i)   the principal's leadership was the key to the success of the scheme;

(ii) students with special educational needs who participated in the programme generally made progress in terms of academic performance and interpersonal skills;

(iii) those schools that effectively carried out integrated education succeeded in creating a supportive and amicable environment. This did not only foster students' attitude towards mutual support and respect for others, but also enhanced teachers' confidence, knowledge and skills for helping students with special educational needs;

(iv) as shown by the research, however, many teachers still lacked confidence in mastering the skills in caring and catering for students' diverse learning needs.

5.6.11 After considering the findings, the steering group responsible for monitoring the implementation of the pilot scheme proposed that the Government should continue the existing policy of helping students with special educational needs to be integrated into ordinary schools as far as possible.   Also, more schools should be encouraged to join the programme using the "whole-school" approach to achieve the target of expanding the programme to 20 schools gradually by the 2000/01 school year and 40 schools by the 2001/02 school year.   The Government has accepted the proposal and expanded the programme to 21 schools in the 1999/2000 school year, and plans to cover 40 schools by the 2000/01 school year.

5.6.12 We propose that the Government should continue to promote integrated education incrementally as far as practicable and encourage more schools to join the scheme with the "whole-school" approach.   The use of resources now allocated to this area (including special classes, roving counselling services and after-class counselling services etc.) should also be reviewed to maximize the cost-effectiveness.

5.6.13　As a long-term goal, we propose that Hong Kong should develop towards "inclusion".　At present, the interpretations of 'inclusion' in different parts of the world are not exactly the same. In this context, "inclusion" refers to an education system that provides proper assistance to students according to their learning needs in order to help them develop their potentials fully.　In such a system, we will still need special schools to perform the unique function of catering to students with serious and multiple impairments.　For these students, special schools can still provide the most suitable learning environment to help them learn effectively.　What matters is that every student should be able to learn in an environment that is most appropriate to him/her.

The promotion of gifted education

5.6.14　Gifted education has not received much attention in the past, and not many gifted students could obtain appropriate opportunities to fully realise their potentials.　In the recent years, the Government has made much efforts in this respect.　In 1994, the ED carried out a Pilot Scheme on School-based Curriculum for Gifted Students（「學業成績卓越學生校本課程試驗計劃」）.　In 1995, the ED established the Fung Han Chu Gifted Education Centre（馮漢柱資優教育中心）to support the implementation of school-based curriculum, and a professional team comprising curriculum officers was formed in 1996 to support schools.

5.6.15　In 1998, the ED completed the review on the Pilot Scheme and formulated a plan on the future development of gifted education in Hong Kong in the light of the experiences gained.　It was proposed that elements of gifted education (including higher-order thinking skills, creativity, and social skills) should be incorporated into the school curriculum, thereby enriching and extending it. Using a school-based approach, schools could then explore and develop students' potentials in different aspects while catering for students' different learning needs.　For those students with relatively higher abilities, schools could provide specialized courses to train them in a systematic manner.　For the gifted students, the ED suggests that schools may, apart from providing school-based assistance, make use of other resources in the society as much as possible to provide them with special training (such as teacher mentor schemes, personalised training programs and early advancement to higher classes).

5.6.16 Our view is that the above proposals are conducive to the development of gifted education in Hong Kong. As a long-term strategy, however, we think there is a need to go beyond the scope of school-based programmes, and to mobilise all parties concerned in the society to work for the development of gifted education. We propose the following:

(i) Formulating a comprehensive strategy

We propose to formulate a comprehensive strategy for gifted education that takes account of the social, economic and educational changes in Hong Kong. The policy should provide for helping gifted students achieve full development of their potentials systematically through different school-based and non-school based programmes. Coordination of these programmes and activities should also be strengthened to achieve the maximum cost-effectivenesss in terms of human and financial resources invested on gifted education.

(ii) Emphasis on multiple abilities

In promoting gifted education, the development of academic ability should not be the only concern. Ample opportunities should also be provided to students with talents in different domains (such as sports, leadership and art, etc.)

(iii) Wider participation and collaboration

More will need to be done to promote the understanding of teachers, parents and the community at large about students' multiple abilities and to mobilize support for and participation in the promotion of gifted education.

(iv) Avoiding a labelling effect

The purpose of gifted education is to help students fully exploit their potentials, but not to label them as outstanding. We do not hope that schools and parents would subject students to harmful drilling in order that they can become gifted students.

(2) Parental Support

5.6.17   The views and stances of parents affect the policies of schools to a large extent. If parents can support catering for students' diverse abilities and learning needs, it will facilitate the implementation of such policies. In the case of integrated education, for example, adequate and sincere communication and cooperation between schools and parents will increase the chance of the programme's success.

5.6.18   Besides, close communication between parents and schools would help both to understand the learning needs of students. If schools and parents could join hands to provide the necessary assistance to students both at schools and at homes, it would help to improve students' learning effectiveness.

(3) Teacher Training Institutions

5.6.19   We propose that teacher training institutions should enrich the contents of teachers' pre-service training courses to help teachers develop the correct attitude and the necessary skills to cater for students' different learning needs and prepare them psychologically for the problems that may be encountered in future in dealing with students' differences. Training opportunities should also be provided to in-service teachers to enhance and update their knowledge and skills in this respect.

5.6.20   We propose that training for principals should prepare them for leading their schools in catering for students' different needs, conducting curriculum tailoring, adopting different teaching and assessment methods, and promoting whole-school cooperation.

5.6.21   Besides, teacher training institutions are also encouraged to provide professional support to schools, for example, by conducting research and developing effective methods of catering for students' different learning needs, promoting these methods among schools and providing professional advice to schools.

(4) Support by the rest of the society

5.6.22 Different sectors of the society are also encouraged to jointly promote the culture of respecting students' different learning needs and to give support to schools in terms of human and other resources, for example, to help schools carry out supporting measures for students with learning difficulties or to support various gifted education programmes.

(B) Policies and Measures of Schools

5.6.23 At the school level, it is necessary to formulate clear policies and adopt appropriate measures to develop students' multiple abilities and meet their diverse needs. The following can be considered by schools:

(1) To identify students' learning needs as early as possible and provide appropriate assistance to students with learning impairments in the emotional, intellectual and physical aspects (please refer to Appendix III).

(2) To design school-based curriculum according to students' abilities and needs on the basis of the flexible and open curriculum framework provided by Curriculum Development Council.

(3) There should preferably be different types of grouping for students at different levels and a greater degree of flexibility in adopting different teaching methods such as subject grouping and collaborative learning.

(4) To mobilize all members of a school (including teachers, students, parents, etc) to support the implementation of integrated education. As shown by the experience of the pilot scheme on integrated education, in those schools which succeeded in implementing the scheme, they could create a supportive environment within the school. This did not only foster students' care and respect for others, but also enhanced teachers' confidence, knowledge and skills in providing assistance to students. The leadership of principals and the coopeation of all members of the schools are crucial factors.

(5) For students with higher abilities, schools could adopt the teaching methods in accordance with the gifted education programme outlined in Section A paragraph 5.6.15. Students with exceptional talents should be arranged to receive individualised guidance by utilizing support provided by the community to help them develop their areas of strength even more effectively.

(6) To keep in close contact with parents and help them understand the importance of teaching according to students' abilities, and to establish partnership with them.

(7) To maximise the use of resources provided by the Government and the society as a whole in implementing various measures, such as the facilities and professional services provided by rehabilitation agencies, the Quality Education Fund, various education funds, and human and financial resources that parents could contribute.

The Roles of Special Schools

5.6.24 The roles of some of the special schools will need to be adjusted in line with the development of integrated education. There should be an effective mechanism to select the appropriate special schools to act as regional special education resources centres, apart from their function of providing special education. The facilities of these schools and the knowledge and skills of their professional staff can provide useful support to other schools in the same district, and can assist in school-based training. In fact, special schools for children with visual and hearing impairments have been playing this role to a certain extent to promote the exchange of experiences and professional development of teachers in the past 20 years.

Chapter 6: Implementation Strategies

6.1 The education reform is an enormous and complex improvement process. Appropriate strategies for implementation will be the key to its success. We propose to adopt the following implementation strategies.

(A) Setting Priorities

6.2 We propose to prioritise the reform proposals on the basis of the following considerations:

(1) The urgency and seriousness of the problem that the reform measure aims to tackle;

(2) The reform measure's impact on promoting the quality of education, all-round development and lifelong learning;

(3) Whether the essential pre-conditions are in place;

(4) Whether the proposed sequence of implementation is logical.

6.3 On the basis of the above considerations, we propose that the following should be the priority items of reform –

- Reform of secondary school places allocation mechanism;
- Reform of primary one admission mechanism;
- Reform of university admission system;
- Reform of the primary and secondary school curricula;
- Improvement of the existing public examinations;
- Implementing assessment programmes to ensure basic standards and to nurture excellence;
- Enhancing the quality of early childhood education;
- Enhancing the professional competence of principals and teachers;
- Increasing post-secondary learning opportunities.

6.4 The proposed implementation timeframe for the education reform is set out at Appendix II.

(B) <u>Implementing changes incrementally</u>

6.5   We propose that those reform measures which involve more radical changes (such as the reform of the SSPA) should be implemented by phases. This would enable all parties concerned to better adjust to the changes and, during the transitional period, it would be possible to promptly remedy any problems that are detected.

(C) <u>Piloting changes</u>

6.6   For those reform measures that require a longer period of time to develop and covers a wider spectrum (such as the curriculum reform), we propose to conduct pilot schemes in schools which are more ready, and then promote the successful experiences to other schools.

(D) <u>Undertaking continuous monitoring and interim reviews</u>

6.7   Education and Manpower Bureau (EMB), EC, the ED and Board of Education will jointly and closely monitor the implementation of the reform, conduct interim reviews after each stage and make proper adjustment where necessary. The public will be consulted if major changes to the original plans are required.

(E) <u>Conducting overall coordination</u>

6.8   For better coordination, we propose to establish a monitoring team within the EMB to take charge of coordinating and monitoring the implementation of the reform, and will report the progress regularly to EC.

6.9   EMB and the EC will continue to coordinate the work of the major education advisory bodies and relevant government departments to ensure that various education policies and measures are in line with the education reform. We will also continue to keep in touch with various concerned parties (such as educators, parents, students, employers, etc.) to gather opinions on the implementation of the reform.

Chapter 7: Resource Strategy

7.1　　　Education can help each individual enhance his or her quality and abilities. It also contributes to society's progress and prosperity. The success of the education reform will benefit each and every individual in society. To realize the reform, extra resources will be required.　If put to effective use, our investment in education will bring us enormous returns which will far exceed the costs incurred.

7.2　　　The successful implementation of the education reform calls for an appropriate resource strategy to ensure that the resources allocated for education can achieve the maximum effect.

(A) Resources currently devoted to education

7.3.　　　The Government has all along attached great importance to education and made substantial commitment in terms of resources. Education is now the single largest item of public expenditure. It takes up over one-fifth of the Government's total recurrent expenditure, amounting to $45 billion or equivalent to 4% of Hong Kong's Gross Domestic Product.　In comparison, the proportion of private contribution to education is less than 10% of the total expenditure on education. This is smaller than that in many other places (e.g. the proportion in Germany is 22%[1] and in Australia is 18%[2]).

7.4　　　At present, the proportion of public resources devoted to various stages of education is as follows:

Early childhood and primary education	23.8%
Secondary education	36.2%
Post-secondary education	32.7%
Others	7.3%

7.5　　　To support the education reform, the Government has earmarked $800 million in the 2000/01 Draft Estimates to allow the making of an early start on the implementation of the priority items. Apart from the education reform, the Government will continue to proceed with other commitments which call for substantial additional

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[1] 1995 data
[2] 1995 data
　Source: Education at a Glance OECD Indicators 1998

+resources, such as whole-day primary schooling, the application of IT in education, and increasing the number of teachers who are professionally trained and degree-holders. A total of 1640 graduate teacher posts will be created in 2000/01 and 2001/02 at a recurrent expenditure of $500 million, so that by 2001/02, 35% of all primary teaching posts will be graduate posts. Besides, 100 IT Co-ordinator posts will be created in 2000/01 and more than 300 teaching posts will be provided in the coming two years for promoting the application of IT in education, co-ordinating school library services, and implementing the Chinese and English Extensive Reading Schemes. These measures will incur an additional recurrent expenditure of $130 million. From 2000/01 to 2002/03, the Government will also build 54 primary schools to attain the target of allowing 60% primary students to study in whole-day primary schools by September in 2002. This will incur $5.3 billion capital expenditure and $570 million recurrent expenditure respectively.

7.6   In view of the high proportion of public expenditure currently devoted to education and the implementation of the committed new initiatives which will also require a considerable amount of additional resources, we need proper strategies for making effective use of public resources and the community's resources. To realize the education reform, all sectors of society, in particular the learners themselves, must be prepared to make greater contributions.

(B) Proposed resource strategy

(1) Principles

7.7   We propose to adopt the following principles in setting the proposed resource strategy:

(i)   Concerted efforts of the whole community

7.8   The fruits of education benefit everyone in society, particularly the learners themselves. Education is not only the whole society's joint investment, but also an investment for the learners themselves. Both society and the individual should make a contribution to the education reform.

(ii) <u>**According priority to basic education**</u>

7.9 It is the Government's obligation to help all children of the right age attain certain education level, so as to prepare them for future work and life. Early childhood and primary education is a key stage where the foundation for lifelong learning is laid. When considering how additional resources are to be allocated, priority should be given to early childhood and primary education (e.g. in such areas as training and professional support for teachers and principals of pre-school institutions, lightening the workload of primary school teachers, promoting the school-based curriculum reform and improving the learning assessment mechanisms, etc.)

7.10 As the public resources now devoted to higher education already make up about one-third of the total resources allocated to education, it would not be appropriate to increase the recurrent subsidy to universities. We would encourage the tertiary institutions to make more effective and flexible use of their existing resources, and to seek resources from other channels. In fact, the private sector is a significant source of funding for universities in many other parts of the world.

7.11 We are aware that the Government is planning to further expand the Non-Means Tested Loan Scheme to cover professional and educational courses offered in Hong Kong by registered schools, non-local tertiary institutions, professional organizations and recognized training institutions. This will help those who wish to pursue continuing learning but lack the means to do so.

(iii) <u>**Focusing on effective teaching and learning**</u>

7.12 Any additional public resources should be devoted to those reform measures which directly enhance the effectiveness of teaching and learning, such as professional support for teachers, measures to raise teachers' professional competence, and measures to ensure students' basic standards and to promote excellence.

(2) **Reform measures that require additional resources**

7.13　　Among those measures proposed to be launched in the next three years, the following will require additional resources:

Education stage	Reform/supporting measures
Early childhood education	- to provide training for in-service KG principals and CCC supervisors - to increase students' fee remission as a result of raising the entry requirement of KG teachers - to provide training for KG teachers - to improve the teacher-to-pupil ratio for KG
Primary and secondary	- to provide training for teachers - to provide professional support for schools - to help schools streamline work processes and simplify their management structures to reduce the workload of teachers - to set up Basic Competency Assessments for Chinese, English and Mathematics - to reform the curriculum
Other measures	to set up a monitoring team to be responsible for coordinating efforts on the education reforms

(3) **Proposed resource strategy**

7.14　　We propose the following resource strategy and would welcome views from members of the public:

(i) Effective utilization of existing resources

- The substantial public resources currently devoted to education should be put to more effective use. Existing activities should be better integrated, and any savings thus achieved would be used to implement the reform items. There is a need to achieve better division of work within schools and to streamline work processes.

- The Quality Education Fund should be used effectively to provide non-recurrent funding for the reform.

(ii) <u>Better use of other resources</u>

- Many other organisations (including youth service organizations, uniformed groups, cultural and arts groups, sports organizations, professional bodies, voluntary groups) are most willing to provide support for education. In fact, a lot of them are already organizing various types of activities for students such as training camps, workshops and seminars, to develop students' leadership and communication skills, as well as their potentials in sports and art. Such activities also help students cultivate moral values and civic-mindedness.

- Many people in the business sector are also highly supportive. Apart from providing students with work-related learning experiences, they are prepared to make financial contributions to education. Schools and other education bodies should make the best use of contributions from the private sector.

- Schools should make better use of various public and community facilities to raise the effectiveness of teaching and learning, such as libraries, museums, cultural and arts facilities and various learning resources centres.

- Parents play a very important role in supporting education. There should be a partnership between schools and parents, as the latter can provide support in the form of human and financial resources. In fact, many parents nowadays are spending a lot of money on their children, paying for extra activities like private tuition, dance and music classes etc. If some of these resources could be channelled to the school system, it would greatly benefit the all-round development of their own children. We believe many parents are prepared to do so in order to enable their children to receive better education. We should therefore provide channels for parents to contribute. In many other parts of the world, the proportion of education spending shouldered by parents and learners themselves is much higher than in Hong Kong. We propose that, in respect of post-secondary education,

consideration be given to appropriately adjusting the proportion of tuition fees to the total cost of education.

- We should encourage more private participation in running schools. We should also promote the development of private universities, community colleges, private schools and the Direct Subsidy Scheme schools so as to provide more channels for different sectors of the community to contribute towards education.

Chapter 8: The roles of frontline educators

8.1   Frontline educators (including school heads and teachers) are key personnel to the success of the education reform.

(I)   Past contributions made by frontline educators

8.2   School heads and teachers have nurtured numerous talents for Hong Kong. One of the aims of the education reform is to allow them more flexibility and autonomy so that they are given a freer hand to exercise their professionalism and make contributions to society.

(II)   The changing roles of school heads and teachers

8.3   Students' learning needs are changing along with the changes in the society. Nowadays, everyone needs to be able to construct knowledge on his or her own as well as to grasp new concepts and technology promptly. Under these new circumstances, we need to be more cultivated and committed to the society to face ever-emerging challenges and lead a quality life and help Hong Kong develop into a cosmopolitan city with style and luster. Against this background, school heads and teachers are facing the following changes in their roles:

- From someone who transmits knowledge to someone who inspires students to construct knowledge

- From someone who implements the curriculum to someone who participates in the development of school-based curriculum

- From someone who executes policies to someone who leads and contributes to the reform

(III)   Professional development of school heads and teachers

8.4   To meet the changes in the roles mentioned above, school heads and teachers need to:

- be more proactive and pursue lifelong learning

- enhance professional competence

- have a stronger sense of commitment

(IV) <u>**Support to school heads and teachers**</u>

8.5   To help school heads and teachers perform their roles most effectively in the education reform so as to maximize students' learning effectiveness, the ED is working with the concerned sectors (such as universities, teacher training institutions and professionals) to strengthen the professional support provided to principals and teachers. For example:

- Providing web-based education training courses to facilitate school heads and teachers in accessing knowledge and skills related to curriculum development and new teaching methods;

- Setting-up a web-based teaching database to facilitate schools in accessing information related to teaching resources, support services and successful experiences;

- Providing school-based support to primary and secondary schools to train up curriculum leaders as well as to provide professional advice and assistance on the development of school-based curriculum;

- Promoting the dissemination of successful experiences through school and teacher networks.

8.6   The University Grants Committee and the Advisory Committee on Teacher Education and Qualifications submitted to the Government in 1998 recommendations on how to enhance the professional competence and status of teachers. In the same year, the Government decided to increase substantially the number of training places at sub-degree level or above for teachers in the following several years. It will continue to follow up on the other proposals, including the development of a professional development ladder for teachers. The EC will promote the establishment of a General Teaching Council in due course.

Chapter 9:   Support of other Stakeholders

9.1   Apart from teachers' support, the support of other stakeholders is essential to enabling the education reform to bring about actual changes in teaching and learning so as to provide more room for students' all-round development.

(1) Students

As masters of their own learning, students should make the best use of every opportunity to learn. They should take the initiative to think, question, communicate, collaborate, participate, experiment and explore so as to construct knowledge, develop multiple abilities and enhance their personal quality, thereby laying a sound foundation for life, work and lifelong learning.

(2) Parents

Parents are the closest and the most reliable mentors to students. Parents' viewpoints and guidance have a great impact on students' learning attitudes and effectiveness. They can help students learn effectively in the following ways:

(i)   according due emphasis to the concept of lifelong learning and all-round development and helping students cultivate this concept by words and deeds;

(ii) maintaining close communication and cooperation with schools to understand students' learning needs and provide proper guidance to students at home;

(iii) participating actively in school-based management with a view to enhancing the quality of education;

(iv) providing schools with human and financial support so as to reduce teachers' workload and help schools develop an environment conducive to all-round education.

(3) Government and education advisory bodies

(i)   Institutions/organizations involved in formulating and implementing education policies and measures should keep in

close contact to ensure that all education policies (e.g. on the medium of instruction, the use of information technology in education and promoting the diversity of education) and measures are in line with the direction of the education reform;

(ii) to implement the education reform successfully, the Government should put in place various supporting measures including providing professional support to schools and teachers, promoting teachers' professional development, reducing teachers' workload, and implementing school-based management and more effective remedial and enhancement measures.

(4) Teacher education providers

(i) Teacher education providers should update the content of training courses and increase their relevance so as to help principals and teachers acquire the knowledge and skills required for the implementation of the education reform;

(ii) They should participate in the design and development of curriculum;

(iii) They should conduct research on new teaching pedagogy and carry out pilot schemes on key curriculum reform items in collaboration with the CDI and pilot schools.

(5) Quality Education Fund

(i) To support the education reform, the Quality Education Fund encourages schools and other applicants to submit proposals which will facilitate the implementation of the education reform. It also promotes cooperation among primary schools, secondary schools, universities, other education institutions and other social organizations. The successful experiences so developed will provide a solid foundation for the implementation of the education reform;

(ii) The Quality Education Fund supports a lot of school-based projects undertaken by teachers. Through participating in these projects, teachers' professional competence and confidence are enhanced and their professionalism is further enhanced through the exchange and dissemination of experiences.

(6) **Other Sectors**

(i) Youth service groups, uniformed groups, culture and art organizations, sports groups and professional organizations can offer human and financial support to provide students with more diversified and interesting learning experiences and help them develop their personality, master life skills, broaden their perspective, enhance personal qualities and cultivate a sense of commitment to society;

(ii) Apart from providing students with job-related experiences (e.g. visiting commercial institutes in various fields and providing opportunities to obtain practical work experiences), commercial institutes/personnel are encouraged to provide financial, technical and other support to education.

(iii) We encourage the community to contribute to education through participating in running schools and promoting the development of private universities, community colleges, private schools and direct subsidy schools.

Chapter 10 : Concluding Remarks

10.1   The implementation of the education reform is not just for bringing benefits now, but also for the sake of the future.   Our society keeps on changing.   There is an urgent need to implement the education reform as soon as possible.   Your support and participation are crucial to the success of the reform, and your opinions would enable this reform to meet the needs and expectations of the society.

10.2   You are welcome to send your views to the Education Commission Secretariat by post, by fax or by e-mail on or before 31 July 2000:

Address:	**Education Commission Secretariat**, Room 714, Central Government Offices (Main Wing), Lower Albert Road, Central, Hong Kong
Fax number:	2537 4591
E-mail address:	educom@netvigator.com
Telephone number:	2810 3874

10.3   The Education Commission will hold a series of seminars. You are welcome to participate in these seminars to discuss the above reform proposals.

Education Reforms in Other Places
Shanghai

1. Basic line of thinking:

Marketize human resources, rationalize distribution and structures, diversify the system for running schools, allow variations in investment, enhance teachers' quality, modernize education equipment, and internationalize education.

2. Strategies and measures:

a. Based on the demands of social economic development, improve education system and education structure
- Pre-school education and senior secondary education will be further developed and age limit of universal education will be raised.
- To ease the intense competition among students to enter prestigious secondary schools, the government will encourage individual key schools with favourable conditions to self-divide into two separately operating schools, one for senior secondary classes and the other for junior secondary classes. Simultaneously the junior secondary school will actively pursue the nine-year-through school system.
- A system of higher vocational education, based on the current model of post-secondary education and training, will be established.
- Specialized disciplines in tertiary institutes will be strengthened.
- Graduate schools will be a key development.
- Postgraduate continuing education will be emphasized with a view to establishing a system of lifelong education.

b. Adjust distribution of schools
- In higher education, the aim is to bridge the gaps between the central level and the local level, as well as between ordinary tertiary institutes and adult institutes. Strengthening their cooperation and merging some of them are necessary.
- Poorly-performing schools in rural area will be renewed, or re-built, or removed/merged.
- The number of vocational and technical schools will be cut down.
- Local amateur universities will join other local educational institutes to form community colleges.

c. Strength the teaching profession
- By 2000, new teachers will have been appointed according to qualification standards.
- Practising teachers' knowledge is being updated.
- The development of key teachers at mid- and young ages is being accelerated.
- Experts or teachers are introduced from overseas.
- The teacher appraisal system gets improved.

d. Speed up the key items of educational development
- From 2000 to 2010, through improving university campuses, scientific research-related public services and facilities are strengthened.
- Development of interactive distance learning is being started after initial completion of computer network to support education and scientific research in Shanghai.
- By 2000, the following will have been completed: new campus of the Shanghai Medical University at Pu Dong District, expansion of the University of Shanghai, the new building for the Shanghai Normal University.

e. Expand the means for education involvement of the government; open up new ways and establish new mechanisms for education investments
- Annual educational expenditure is to satisfy (1) annual growth rate of government funding for education surpasses growth rate of recurrent revenue; (2) educational expenditure per student increases by stages; (3) teachers salary and students' public spending increase by stages.

Education Reforms in Other Places
Taipei

1. Concepts of the Education Reform

    a.   Accelerate education reform to build a world class capital.

    b.   Build new schools to face the challenges of the new century.

    c.   Reduce the restrictions on education to stimulate vigour.

    d.   Teach each student well to serve the interest of society at large.

    e.   Strengthen professional autonomy to create new school culture.

    f.   Encourage pluralism in participation and to share the responsibility of making education policy.

    g.   Distribute resources rationally to establish equal opportunities in education.

    h.   Accelerate education research to induce education innovations.

2. Reforms

a. Democratic school organization

- According to the amended National Education Law announced in February, 1997 head teachers of primary and secondary schools are to be selected by election.

b. Diversified school management

- The law allows the public to run schools set up by the government. Because of this, the management models of schools will become more diversified.
- Several schools carry out localized education innovations as well as multi-cultural and bilingual education.

c. Refined curriculum content

- The Ministry of Education puts more emphasis on the love for one's family, hometown and one's own country.
- Instead of practising subject-based curricula, it integrates the traditional subjects into seven learning areas.
- The new curriculum is divided into two categories, the "Core Curriculum" (80% of the total number of periods) and the "Flexible Curriculum" (20%).

d. Lively modes of teaching and learning

- Several primary schools make use of the abundant natural resources to carry out rural education.

e. Broad and international education

- In the Nine-year Integrated Curriculum, English is formally listed as part of Elementary Six and Elementary Five curriculum. Implementation will start in 2001.
- In the proposed "White Paper for Information Technology Education in Taipei City", it is planned that within three years, they will achieve the goal of having "a network for each and every school" and "interconnectivity of all networks".

f. Special education

- In the "White Paper for the Education of the Physically and Mentally Handicapped", special education policy was made.

g. Enriched early childhood education

- Consultative Document for the Early Childhood Reform Education in Taipei City has been prepared by the Ministry of Education.

h. Proactive administrative services in education

- Administration is streamlined and educational professionalism is re-emphasized.

Education Reform in Other Places
Singapore

1. **Direction of Development Since 1985**
    a. Providing at least 10-year basic education
    b. Exploring more routes to post-secondary and polytechnic education
    c. Increasing access to university education
    d. Giving greater "autonomy" to schools with high added values
    e. Transforming school management, curriculum development, teaching and learning, and teacher education.

2. **Lifelong Learning**
    a. The Ministry of Education launched CoRT (Cognitive Research Trust) to actively promote the teaching of thinking skills. The National University of Singapore (NUS) has advocated the personalized approach to teaching. Most faculties have moved to modular systems for some self-pacing in learning.
    b. Continuing education: NUS has created the Office for Continuing Education to strengthen the university-community interface.

3. **Basic Education - Mission, Vision and Goals**
    a. Mission:
        Moulding the Future of the Nation - ensuring continuous renewal and regeneration of both leadership and citizenry.
    b. Vision: Thinking Schools, Learning Nation -
        i. Schools as learning organizations.
        ii. Nations envisioning a national culture and social environment that promotes lifelong learning.
    c. Goals: The Desired Outcomes of Education -
        i. Emphasizing on fundamentals, i.e. developing people in the moral, cognitive, physical, social and aesthetic spheres
        ii. Nurturing the young not only as individuals but also as citizens.

4. **The Latest Developments of Basic Education**
    a. National Education
    - Think global, but stay local.

    b. The Masterplan for Information Technology in Education
    - The emphasis is IT literacy rather than specific IT skills. Students must be IT-savvy , comfortable and confident in an IT environment and able to pick up new skills and adapt along the way.

    c. The Curriculum Review
    - For many years, schools have attempted to over-teach content knowledge. A conscious decision must be made to impart thinking skills, learning skills and process skills so that the young can engage in lifelong learning, without over-swinging to the other extreme.

    d. Review of the Teacher Training System
    - Initial teacher training is to develop the values, attitudes, and pedagogical instincts of teachers.
    - Continual teacher training: More opportunities for non-graduate teachers to pursue degree studies have been opened up.

Education Reforms in Other Places
Japan

A variety of Councils have been reporting on the current educational reform since 1997.

1.   To enhance emotional education from infancy
   a.   Enhancement of educational strengths in the community and household
   b.   Cultivation of children's sound minds in schools
   c.   Cultivation of children's "zest for living" and actualisation of school life with free scope for children's growth
   d.   Training teachers to deal with children's distress

2.   To realise the school system that helps children develop their individuality and give them diverse choices
   a.   Promotion of the unified lower and upper secondary school system
   b.   Increased flexibility in entrance requirements for universities and graduate schools
   c.   Improvement of articulation between elementary and secondary education and higher education
   d.   Loosening of the restrictions on school district for public elementary and lower secondary schools
   e.   Tighter co-operation between kindergarten and day nursery

3.   To re-organize schools out of respect for individual schools' autonomy
   a.   Development of independent and active education - improvement of local education administration systems and their operation
   b.   Establishing independence and autonomy at schools
   c.   Promotion of a liberal and lively social education - Improvement of the social education administrative system

4.   To promote university reform and research activities
   a.   Establishing the vision of universities in the twenty-first century
   b.   Promotion of foreign student exchange
   c.   Promotion of comprehensive development of scientific research in universities and applied science and technology - enhancement of measures to realise a nation based on creativity of science and technology
   d.   Promotion of research co-operation between universities and industries

Education Reforms in Other Places
Korea

I - 5

1. Directions of Education Reform
a. More specialized schools and more diverse educational programs will be established, contributing to the cultivation of creativity.
b. Schools will be given more autonomy in their own governance.
c. The principles of freedom and equality will allow more opportunity for people to develop their own potentials.
d. Using information technology to improve classroom instruction.
e. High-tech schools in rural areas will be used as local cultural centers for citizens.

2. Basic Education
a. The reform will alter the examination-oriented and teacher-oriented culture.
b. An incentive program for teachers has been launched.
c. Schools will be given more responsibility for self-improvement.
d. Schools will offer extended after-school programs to alleviate the financial burden of parents. Students will be encouraged to take up voluntary work.
e. Teacher policy is reformed. Teacher unions are approved since 1999. Reward and promotion will be based on competency rather than only on length of service. A school will be able to recruit its own principal and teachers.

3. Higher Education
a. The new admission system, to be in place in 2002, will allow talents in special areas to be admitted.
b. Graduate programs will be fostered.
c. Autonomy and accountability will be increased.

4. Lifelong and Vocational Education
a. Government will build the infrastructure for a lifelong education system and establish life education centers.
b. Credit Bank System has been adopted to link diverse educational institutions across both formal and non-formal.
c. Cooperation between schools and industries has been improved.

5. Information Technology Education

a. Government supports the construction of necessary facilities, the establishment of an information network, and the training of teachers.
b. Software and electronic textbooks are developed and distributed to schools.
c. Teachers are encouraged to use computers in subject-centred education.

Education Reforms in Other Places
Chicago

The Chicago school reform was initiated in 1987. Today it is still very much of enormous scope and in the process of developing.

1. **Key Features**

    a. Parents and community members gained formal authority with respect to their neighbourhood school.
       - Local School Council (LSC) for each school includes parents and community members. LSC can hire/dismiss the school principal, can control the school budget and the three-year School Improvement Plan (SIP).

    b. Principal's authority over building and staff was increased.
       - Principal's status – from tenure to performance contract.
       - Authority to hire/dismiss teachers; shortened process to remove incompetent teachers.

    c. Teachers' role and influence in school decision making were increased.
       - There are two teacher votes in the LSC. Teachers also performs an advisory role to LSC regarding curriculum, instruction and budget.

    d. There are greater revenue equity across the system and new discretionary resources at the school level to foster restructuring
       - Limit central office administrative expenses
       - Promote school-based budgeting
       - Increase discretionary revenues

    e. Assure that authority remains decentralised
       - Eliminate central authority to name school principals
       - Restrict central control over curriculum
       - Eliminate line control over regular school operations

    f. Focus local schools' effort on substantially improving student learning
       - Establish system-wide goal for student learning
       - Schools to develop and update school improvement plan
       - School system to report on progress

2. **Major Lessons**

    a. Sufficient choice of schools by parents and students is necessary.
    b. It is necessary to enhance the basic human, social, intellectual, and fiscal resources available in a specific school community. Principals have to work together with a supportive base of parents, teachers and community members to mobilise initiatives. They need to do so in two dimensions: (i) to strengthen the ties between school professionals and the clientele they are to serve, and (ii) to promote a coherent professional community and to direct resources towards enhancing the quality of instruction.

Education Reforms in Other Places
USA

1.   Context
    a.   Extreme diversity: A single school often contains students born in 20 to even 40 countries.   The legislature in each of the 50 states establishes the rules that govern most of what happens in public schools.   States differ greatly in financial willingness and ability to fund public education.

    b.   Federal government funds only 10% of public education and thus has limited opportunities to initiate national reforms.

2.   Developments
a. Performance standards

- There is consensus that core skills and faculty in reading and mathematics are crucial.
- The federal Department of Education (DoE) promotes both content and performance standards to facilitate measurements of success.

b. Innovative technology

- The Department's Technology Innovation Challenge Grants increases students' access to educational technology and to integrate this technology into teaching and learning.

c. Quality of teachers

- States insist that colleges raise entrance requirements for teachers-to-be and that they should have at least a minor in the subjects they intend to teach.
- The DoE is implementing a program of Teacher Quality Enhancement Grants in 2000 and the Eisenhower Professional Development State Grants to support high-quality professional development.

d. Quality of students

- The DoE, through the Elementary and Secondary Education Act, funds services that enable at-risk students in low-income communities to meet challenging academic standards.

e. Overall quality of the education system

- In 1999, the Education Accountability Act proposed
    - all school to end promoting students to the next grade based on their age rather than on their satisfactory performance;
    - all states and districts to improve their worst performing schools or to close them;
    - all states and districts to be held responsible for the quality of their teachers;
    - all new teachers to pass performance examinations.

Proposed Timeframe for Implementation of the Education Reform

Learning Stage	Priority Items	Interim Measures	Long Term Goals
Early childhood education	• To raise the entry requirements of kindergarten (KG) teachers to 5 passes in the Hong Kong Certificate of Education Examination (HKCEE) (including Chinese and English) • To reform the Primary One Admission (POA) system. Applicants with siblings studying or parents working in the same school must be admitted. Schools can allocate up to 15% of their P.1 places at their discretion. The remaining P.1 school places will be allocated centrally according to the school nets and the parents' choices. It is proposed that those pupils who will submit their P.1 application forms in 2001 and enter P.1 in September 2002 will be the first batch of students admitted to P.1 under the new POA mechanism. • To develop a set of common quality indicators, and establish a quality assurance system comprising internal and external evaluation mechanisms to provide feedback to early childhood institutions on their strengths and areas for improvement	• To require all new KG teachers to have completed one year of pre-service training • To require all serving KG principals and Child Care Center (CCC) supervisors, who have not been professionally trained, to receive suitable professional training • Early childhood institutions inform parents of the results of external and internal evaluations to enhance transparency and promote communication with parents	• To raise by stages the entry requirements of KG t • eachers to Certificate of Education level • To examine the feasibility of having one single department in charge of regulating all KGs and CCCs
9-year basic education	• To reform the school curricula to promote all round education • To reform the Secondary School Places Allocation (SSPA) system. If accepted by the public, the Academic Aptitude Test (AAT) can be abolished in the 2000/01 school year at the earliest. Within the first five years, it is suggested to make use of the schools' average AAT results over the past three years to scale their internal scores, to reduce the number of bands to three, and to increase by stages the proportion of discretionary places from 10% to not more than 20%. Individual primary and secondary schools may apply to become linked schools. • To put in place by phases Basic Competency Assessments (BCA) in Chinese, English and Mathematics and at the same time strengthen remedial measures	• To conduct an interim review on the SSPA mechanism and make proposals on the proportion of discretionary places and the number of bands • To continue to implement BCA in Chinese, English and Mathematics at various levels • To continue to implement the curriculum reform • To implement a new mechanism on the interface between S3 and S4 and allow students who are willing and able to promote to the senior secondary level	• No high-stake public examination for allocating S.1 places. The banding system should be phased out gradually • Continue to promote a new culture of teaching and learning and improve the assessment mechanisms

Learning Stage	Priority Items	Interim Measures	Long Term Goals
Senior secondary education	• To implement the curriculum reform, broadening the senior secondary curriculum to enable students to acquire experience in various key learning areas and providing choices of different combinations of subject or learning modules to students • To improve the public examination system, extending the 'Teacher Assessment Scheme', introducing the 'core-competence' approach in the HKCEE, allowing S.6 students to take the HKALE, and abolishing the fine grades in the HKCEE and HKALE	• EC will set up a working group to examine the feasibility of implementing the proposed 3-year academic structure for senior secondary education, formulate detailed proposals and implementation timetable. It will submit recommendations to the Government in 2002 • To continue to implement the curriculum reform	• To continue to develop the curriculum reform to enable the students to consolidate their abilities for lifelong learning and for future life and employment • the Government will take into consideration the results of the review in 2002 to decide whether to implement the proposed 3-year academic structure for senior secondary education
Higher education	• To encourage universities to review the functions, content, focuses and modes of teaching of first degree programmes, so as to maintain the right balance between the breadth and the depth of such programmes • All universities conduct a comprehensive review of the existing admission system • All universities work towards a transferable credit unit system among institutions and departments. To facilitate the implementation of the credit unit system, UGC will discuss with all concerned institutions to work out an appropriate funding methodology • Various concerned parties, including the government, universities, post-secondary colleges, etc. actively promote the development of community colleges • To encourage the universities to enrich the campus life so as to enhance students' quality and commitment to the community	• To promote the development of private universities/post-secondary institutions • Universities may consider introducing more flexibility into the admission system to take in students at various levels • To increase the number of post-graduate places • To continue to promote the development of community colleges; establish a mechanism to ensure that the graduates meet the required standards and develop a mechanism for mutual recognition of qualifications	• A diversified higher education system becomes well-developed. It provides learners with more opportunities and channels to pursue higher education • A mechanism for mutual recognition of qualifications covering different programmes offered by various tertiary institutions has been put in place • All institutions continue to strengthen the quality assurance mechanisms

Learning Stage	Priority Items	Interim Measures	Long Term Goals
Continuing education	• To set up a working group to advise the government on the policy and measures concerning continuing education • To promote the use of the website on continuing education (which will be set up soon) to facilitate lifelong learning • To encourage various concerned organisations to make use of the existing community resources to set up lifelong learning centres.	• To promote the establishment of a comprehensive qualifications accreditation and recognition mechanism covering different types of programmes and educational institutions • To encourage various sectors of the community to support continuing education by contributing manpower and resources. Where resources permit, the Government will consider implementing further measures to promote continuing education	• A comprehensive qualifications accreditation and recognition mechanism covering various continuing education/formal education/ professional/ vocational training programmes has been put in place • A lifelong learning society has been developed

Basic Assistance that may be Provided by Teachers
to Students with Special Educational Needs in Ordinary Schools

I   Learning difficulties in sensory aspect
Including hearing impairment, visual impairment or speech difficulties in varying degrees

 1.1 Major features:
- poor articulation of speech
- weak in breath and pitch control
- voices tend to be monotonous and difficult to communicate with others
- difficulties in understanding abstract vocabulary, complicated sentence structures and unfamiliar concepts
- difficulties in writing and reading
- poor ability in abstract thinking and analysis
- difficulties in perception and concept formation – inability to receive visual information prevents them from consolidating their perceptual experiences into concepts
- delay in physical and motor developments – lack of visual stimulation for motor developments
- disadvantaged in social skills and emotional developments
- difficulties in visual functioning – slow learning and short attention span
- inability to communicate effectively with others
- lack of interest in learning and social life

 1.2 Possible basic assistance:
  - for students with hearing impairment
- encourage students to wear hearing aids to well use their residual hearing
- when talking to students, teachers should speak clearly in a normal speed and let students have a clear view of their facial expressions and lip movements
- use more visual aids to help students grasp the key learning points

  - for students with visual impairment
- encourage teachers and ordinary students to feed visually-impaired students with more information on the surrounding environment to help them better understand the things around them
- let visually-impaired students learn through "first hand experiences"
- encourage visually-impaired students to do more physical exercises and remind them of the correct postures
- encourage ordinary students to pay more attention to the needs of visually-impaired students and give them appropriate assistance
- encourage students to take the initiative to communicate with and care for others, and learn together
- let visually-impaired students participate in activities and share the work
- encourage ordinary students to read out or lend their notes
- teachers should read out the teaching materials written on the blackboard or projected onto the screen by the projector
- teachers should prepare notes or materials for visually- impaired students beforehand
- encourage the use of visual enhancement aids

  -for students with speech difficulties
- give them equal chances to express themselves orally in class
- give them more individual guidance after school and develop a good student-teacher relationship so that they will be more open and enthusiastic towards the learning activities in the classroom

II Learning difficulties in physical aspect
Including those students who are physical handicapped, receive treatment on and off in hospitals or are hospitalized for a short period of time, or multiple handicapped

2.1 Major features:
- learning efficacy being affected by limited physical movement
- difficult to catch up with learning progress in school due to frequent absence from classes
- weak ability to take care of themselves

2.2 Possible basic assistance:
- encourage physically handicapped students to participate in various school activities, including physical activities, according to their abilities
- mobilize students to form a "partners' support network" so that any unexpected and sudden needs of physically handicapped students can be detected as early as possible and immediate assistance be made available to them. Teachers can also be notified of such needs as soon as possible.
- allow family members to provide physically handicapped students with assistance in daily life, including taking drugs, going to toilet, changing physical positions
- respect students' privacy and should be out of good intention to help students when collecting information
- encourage students to care for and help classmates who are ill
- encourage students who are ill to "come to terms with their illness"

III Learning difficulties in intellectual aspect and related to concentration ability
Including students who are mentally handicapped, have difficulties in reading and copying, are autistic, hyperactive, with weak concentration, developmental delay, or giftedness.   Students, with learning difficulties caused by maladjustment and drastic changes in life are also included in this group.

3.1 Major features:
- difficulties in learning and social adjustment
- slow learning
- difficulty in understanding concepts
- difficulties in mastering knowledge and skills
- great difficulties in reading and copying: many errors and omissions
- weak persistence, easily giving up when encountering difficulties
- poor concentration
- lack of confidence and weak motive to pursue learning due to prolonged experience of failure
- performance in learning often lower than that of ordinary students
- unable to grasp effective learning methods
- maladjustment problem resulting from lack of self-control ability
- students with autism have difficulties in comprehension of speech and oral expression, lack the characteristics of imitating and learning, and have difficulties in establishing relationships with other people
- students, who have poor concentration ability, often appear to have failed to take heed of teachers' speech, produce substandard homework and have weak self-control ability. They sometime raise enquiries before teachers or classmates completely spell out a question, thus interrupting other's conversation.   In doing so, they are easily to be misunderstood by teachers and classmates as being impolite or insincere.
- out of their own control, hyperactive students often cannot sit properly and like to have physical movement inside a classroom.   Teachers and classmates may think that they intentionally cause troubles.
- gifted students may be misunderstood by others as lack of concentration and uncompromising.   Being limited by ordinary curricula, they will encounter difficulties in balancing their emotion and maintaining good social life.

3.2 Possible basic assistance:
- for students who are mentally handicapped or have developmental delay
- tailor the curriculum and implement individual learning programmes

- split up teaching procedures into smaller units
- use different teaching media. For example : use teaching aids such as visual, audio and sensory stimulants to facilitate teaching as different people respond differently to stimulations. The application of one single stimulant may deprive students of the chance to receive the information
- encourage students to explore and develop potentials in areas other than intellect, such as sports and arts so as to help students build up confidence
- teachers should use norm-referenced principle to assess students' performance and encourage students to continuously improve themselves instead of competing with others

- for students with learning difficulties
  - provide more individual guidance and give them recognition for their good performances to enhance their confidence
  - suitably adjust and arrange the curricula to enhance students' learning motivation and interest
  - assess students in a format other than written tests or examinations so that they can more easily show what they have learned

- for students with autism
  - help students acquire a sense of security within the school environment
  - respect the choice of students and accept their limitations
  - explain to them any changes to the routine beforehand and ask them to repeat to you what the changes will be
  - adopt the active behaviour management approach to help students minimize and even stop compulsive and mechanical acts
  - develop students' strengths and encourage them to maximize their potentials
  - establish a student support network to strengthen the social and communication skills of autistic students

- for students who lack concentration or are hyper-active
  - understand their physical limitations and adopt an accepting attitude to assist them to strengthen self-confidence and build up self-control ability
  - assign duties to them, thus giving them a 'legitimate' status to have physical movement in a classroom
  - adopt flexible teaching strategies which have positive effect on all students
  - encourage students to seek advice from professionals since some of them will have marked improvements in learning after taking medicines

- for gifted students
  - do not label students
  - provide room for adaptation and flexibility in the basic courses
  - enhance the contents of key learning areas/basic courses
  - apply more frequently strategies suitable for gifted/non-gifted students in developing their thinking ability
  - provide more in-depth topics to enhance their learning
  - ensure students have a balanced and comprehensive development (especially in affective development)
  - consider the need to speed up teaching, compress the curriculum or grade skipping
  - provide appropriate opportunities for students to participate in competitions and learn from observations

IV Learning difficulties in behavioral aspect
Including learning difficulties caused by physical and emotional factors （when some students, who are hyperactive, lack concentration or have maladjustedment, fail to receive attention, acceptance and appropriate assistance in an early stage, they may develop to have behavioral problems）

4.1 Major features:
- polarised conditions in respect of emotional stability and behavioral pattern
- lack of recognition and attention at home
- lack of interest in school activities
- destructive behavior
- weak concentration

- weak self-confidence
- poor academic results
- poor interpersonal relationship

4.2 Possible basic assistance:
- To design life skills course for students and guide them to understand their own needs and to reasonably satisfy the needs. In addition, students should be taught to better understand and control their own emotions. Regarding social development, schools should create suitable environment for maladjusted students to learn how to get along with other people
- Schools should systematically educate parents to understand the growth and development as well as physical and psychological needs of their children. Effective parenting training should be provided for parents so students may feel the closeness with and support from family members
- the school and teachers should work together to create conditions conducive to successful learning for maladjusted students, and only in this way will they adopt an active attitude in learning. Interactive teaching and various kinds of award scheme can foster students' motivation to learn
- schools should organize community activities with a purpose in mind so that students may re-affirm their abilities and values through community service. At the same time, students can also find out that the knowledge and experiences obtained in school have their practical values
- establish students' organizations in school and provide students with proper guidance so that they can organize activities and participate in personnel management, thereby learning how to get along with other people
- provide immediate counselling to students who have sudden emotional changes, for example becoming extremely active or quiet

V General assistance to students
- make learning process in classroom more interesting
- cater for students' needs as far as possible in terms of school facilities
- make appropriate adaptations to the curriculum and teaching methods
- more use of awards and encouragement to strengthen students' confidence
- implement good peer education and encourage students to help and learn from one another
- divide all students in the class into 'study groups' consisting of two to three students. For effective learning, one or two students could be motivated to reach out to those with learning difficulties and be their 'study partners', giving them advice and encouragement
- help them build confidence and friendship through the formation of 'study groups of three' and the support and encouragement of their 'learning partners'
- maintain good relationships and effective communication with students and their parents. In doing so, teachers and parents can exchange views on their understanding of the students' situation and mutually help each other in providing appropriate assistance and support to students.
- make full use of the resources provided by parents in counselling their children
- when dealing with certain students' learning difficulties, for example autism, it may be necessary to seek advice from professionals so as to provide support for teachers and direct service for students
- maintain close co-operation with other supportive staff
- make use of available community resources
- suitably arrange the format of homework, tests and examination, for example replacing copying-based assignments by discussion-focused work
- design various forms of test or examination topics for mentally handicapped students
- extend test or examination time limit for students with visual impairment and learning difficulties
- Fully develop students' potential and allow them to acquire successful learning experience in schools

Supporting Measures for Education Reform

Reforms	Supporting Measures	Time for Implementation
(1) Enhance the professional standard of principals and teachers (a) Provide suitable training	**Training for principals** • Develop a continuing professional education framework for potential senior teachers, newly-appointed principals and serving principals, which is tailor-made for school heads to enhance their leadership role.	Within the year 2000
	• In consultation with the Association of School Heads, study the need for the continuing professional development of serving principals.	2000/01 school year
	• Study the possibility of establishing a principals' centre and promote the setting of a network for experience - sharing among principals.	2000/01 school year
	• Provide a set of assessment tools for newly - appointed principals to help them understand the professional ability needed for the leadership and management of their school, as well as school administration programmes and leadership development programmes for newly - appointed principals.	July to August 2000
	• Newly - appointed principals should complete a specific professional training programme before appointment.	2004/05 school year
	Training for Teachers • Enhance on-the-job training for teachers by strengthening the content on teacher development and induction for newly -appointed teachers	

Reforms	Supporting Measures	Time for Implementation
	• Study the feasibility of providing modular training courses parallel to the part time certificate of education courses for serving teachers who have not yet received formal training so that they can learn about a more flexible approach on teaching in the course of learning.	2000/01 school year
(b) Sharing of successful experience	• Enhance the effectiveness of the Diploma in Education and teacher certificate courses by reviewing the relevance between teacher training and actual teaching work.	Starting from April 2000
	• Discuss with the principals from various districts and the representatives of school councils the promotion of IT in education and share successful experiences.	Implemented
	• Set up district teacher networks to facilitate experience - sharing among teachers and to disseminate successful teaching experience among secondary, primary and kindergarten teachers in order to enhance the quality of teaching and learning.	Starting from March 2000
(c) Provide professional support	• Provide comprehensive school-based support to about 100 primary schools. • Provide web – based study courses through the teacher's data base.	
(d) Set up the framework of teacher's professional development	• Study the core competence and professional development of teachers.	2000/01 school year
(2) Measures for enhancing the performances of high and low-achievers	• In order to cater for individual differences and assist low-achievers in learning, various supports will be provided, including resource classes, remedial teaching, School-based Remedial Support Programme, School-based Curriculum Tailoring Scheme and Central Curriculum Development Support Team. • Provide enrichment courses for gifted students and provide training for their principals, teachers and parents.	Implemented

Reforms	Supporting Measures	Time for Implementation
	• Conduct a three-year pilot programme to study the effective ways to cater for individual differences.	Starting from March 2000
	• Re-allocate the existing resources for various measures to allow schools to adopt their own measures for enhancing the performances of high and low-achievers according to their own needs.	Starting from September 2000
	• Improve various learning domains in different learning stages to take into account the learning abilities and development of individual students.	
	• Set up relevant assessment tools for the use of teachers and related personnel.	
	• Provide quality education training to teachers and principals and set up communication networks.	
(3) Promote parent education and home-school co-operation	• Jointly conduct the 'Parents of the 21 Century Movement' with the Home-School Co-operation Committee. Details should include the provision of financial support to parent education programmes and encourage schools or teacher-parent associations to conduct different parent learning activities.	Implemented
	• Publish school profiles to provide parents with various information and materials for school selection and at the same time, make them understand that academic attainment should not be the only factor for school selection.	Starting from January 2000
	• The Home-School Co-operation Committee should be registered as an independent body to enhance its autonomy status and representativeness in order to meet the demand of parents.	September 2000
(4) School-based Management		

Reforms	Supporting Measures	Time for Implementation
(a) Promote and implement school-based management	• Financial Management :	
	— Streamline the allocation procedures for the provision of a number of grants and provide necessary support. Assist schools in the training of staff, recruitment of part-time staff, procurement of auxiliary equipment and flexible arrangement of financial matters so as to enhance the effectiveness of school-based management;	Implemented
	— Provide 'Operating Expenses Block Grant' to schools to facilitate the flexible use of grants.	From September 2000 onwards
	• Administrative streamlining and delegation of authority to allow greater autonomy in schools :	
	— give schools greater autonomy and accountability in handling personnel, financial and administrative matters ;	Implemented
	— Compile the Administrative Handbook for schools' reference;	2000/01 school year
	— Amend the Code of Aid so that financial, management and administrative procedures can tie in with the education reform.	2001/02 school year
(b) Enhance the monitoring of schools by the school management committee	• In order to monitor the overall performance of schools, schools have to submit their annual report and annual school plan, devise work targets and progress, as well as carry out self-evaluation.	Implemented
	• Establish a staff appraisal system to assess the performance of staff.	2001/02 school year
	• In order to enhance the transparency and accountability of schools, the School-based Management Advisory Committee recommended that school management committees should include representatives of parents, teachers, alumni and members of the community. It was also recommended that school managers should declare their interests so as to enhance the support to schools and better monitor school administration.	From 2001/02 school year onwards

Reforms	Supporting Measures	Time for Implementation
	• Amend the Education Ordinance to facilitate the implementation of the SMC framework as recommended by the School-based Management Advisory Committee.	From May 2000 onwards
	• Supporting measures for school managers :	
	— Provision of training courses to newly-appointed and serving managers;	Implemented
	— Compilation of the Guidelines for School Managers;	2001/02 school year
	— Compilation of the Handbook for School Managers;	2001/02 school year
(5) Quality Assurance Mechanism (a) Promote the culture of self-evaluation in schools	• Establish the Task Group on Schools' Self-evaluation.	Implemented
	• Develop the framework of self-evaluation in schools.	
	• Formulate, develop and improve the assessment tools.	
	• Develop the guidelines and reference materials on quality assurance as well as the guide on the use of performance indicators for distribution to all primary, secondary and special schools in Hong Kong. Review, amend and develop the performance indicators for self-evaluation of schools.	
	• Organize and promote the professional development activities for teachers.	
	• Provide the data on related items for schools to conduct self-evaluation.	
	• Develop a comprehensive database on schools to facilitate the survey, comparison and analysis of information on self-evaluation.	From September 2000 onwards

Reforms	Supporting Measures	Time for Implementation
(b) Implement whole school inspection and suggest ways to improve the quality of education	• Conduct quality assurance inspections. Let the schools understand their key strengths and areas for improvements through whole school inspection, open procedures, information collected from various sources, highly transparent performance indicators and all-round judgment supported by front-line education practitioners and lay members, so as to assist the schools in setting the direction for future development. • Implement the school-based support service. In line with the areas for improvements under various teaching and learning domains as proposed in the QAI report, assist schools as a partner to implement improvement measures and take follow-up actions when necessary.	Implemented
(6) Promote the operation of a regional/ territory-wide communication network, and optimize the use of regional resources	• Strengthen whole school support through various District Education offices of ED. • Set up an education intranet for dissemination of good practices and sharing of curricular resources among teachers • Provide regional support services through student counselling centres, so as to encourage schools of the same region to form a counselling network which suits the needs of local schools, and to promote regional professional exchange so that schools in the same region may learn from each other's practices on the proper utilization of regional resources.	September 2000 Feasibility study commenced in February 2000 1999/2000 school year