COS & SEN

Action for the Future —

Further Consultation on
Career-oriented Studies and
the New Senior Secondary
Academic Structure
for Special Schools

Message from Secretary for Education and Manpower

The report *The New Academic Structure for Senior Secondary Education and Higher Education – Action Plan for Investing in the Future of Hong Kong* published in May 2005 has set out the road map for introducing the new academic structure. While the design of the curriculum and assessment frameworks of the new senior secondary (NSS) subjects are being refined in response to the feedback collected from the school sector between June and September 2005, we are now moving forward to the consultation on further development of Career-oriented Studies (COS) and the NSS academic structure for special schools.

It is encouraging to see that the school sector generally welcomes the proposal to provide a diversified pathway for senior secondary students through the introduction of COS. As an integral part of the NSS curriculum, COS aims at offering choices to meet the particular needs, aptitudes and interests of students. It also helps address the issues related to student transition to employment or further studies. The proposals presented in this document are the result of hard work over the past few months. We have set out all the important principles and implementation issues for COS here, though in varying degrees of detail. Feedback from stakeholders will definitely help refine them for the best provision of COS in the new senior secondary education.

We have also set out proposals on the NSS structure and curriculum for special schools based on discussions with special schools, curriculum experts on special education and parents in the past months. *A Study of the Effectiveness of Special Schools*, recently released, provides further insight into this complex issue.

I look forward keenly to your feedback and suggestions. It is my belief that with your support, this consultation will not only take its place as the platform for embracing views and suggestions to take the two areas forward, but also reaffirm the consensus and collaboration in the community in helping all students pave their ways to success.

Professor Arthur K.C. Li
Secretary for Education and Manpower

Acronyms

C&A	Curriculum and Assessment
CAT	Credit Accumulation and Transfer
CDC	Curriculum Development Council
CDI	Curriculum Development Institute
COC	Career-oriented Curriculum (pilot of the Career-oriented Studies)
COS	Career-oriented Studies
CSEN	Committee on Special Educational Needs
DLG	Diversity Learning Grant
EMB	Education and Manpower Bureau
ESR	External School Reviews
EYE	Extension of Years of Education
FCE	Federation for Continuing Education in Tertiary Institutions
HI	Hearing Impaired
HKCAA	Hong Kong Council for Academic Accreditation
HKCEE	Hong Kong Certificate of Education Examination
HKDSE	Hong Kong Diploma of Secondary Education
HKEAA	Hong Kong Examinations and Assessment Authority
ID	Intellectual Disabilities
IE	Integrated Education
IEP	Individualised Education Programme
ITACs	Industry Training Advisory Committees
KLAs	Key Learning Areas
LOF	Learning Outcomes Framework
NGOs	Non-governmental Organisations
NSS	New Senior Secondary
OLE	Other Learning Experiences
PD	Physically Disabled

PDP	Professional Development Programmes
PYJ	Project Yi Jin
QA	Quality Assurance
QF	Qualifications Framework
QR	Qualifications Register
R&D	Research and Development
S1/2/3/4/5/6/7	Secondary 1/2/3/4/5/6/7
SBA	School-based Assessment
SCOLAR	Standing Committee on Language Education and Research
SCS	Specification of Competency Standards
SEN	Special Educational Needs
SFAS	Student Financial Assistance Scheme
SLP	Senior Secondary Student Learning Profile
SRA	Standards-referenced Assessment
SS1/2/3	Senior Secondary 1/2/3
SSE	School Self-evaluation
SWD	Social Welfare Department
sy	school year
TPPG	Teacher Professional Preparation Grant
VI	Visually Impaired
VTC	Vocational Training Council

Executive Summary

As committed in May 2005, the Education and Manpower Bureau (EMB) sets out in this consultation document the principles and implementation proposals for Career-oriented Studies (COS) and the curriculum framework for special schools in the new senior secondary academic structure.   The gists of the proposals are:

Career-oriented Studies

Purpose and Position

COS is an integral part of the new senior secondary (NSS) curriculum.   It complements the 24 NSS subjects by offering studies with stronger elements of applied learning linked to broad professional and vocational fields.   The design of COS courses will challenge all students and provide progression in both academic and career directions (Chapter 2).

Curriculum

To offer diverse options and multiple pathways for students, different areas of studies in COS will be provided for students' choice.   The areas of studies to be offered have been reviewed with the social, economic and technological needs of our society, the global trend and the underlying principles of the NSS in mind.   Courses are proposed to be organised under six areas namely Applied Science; Business, Management and Law; Creative Studies; Engineering and Production; Media and Communication; and Services, to be piloted in a progressive manner in the coming years (Chapter 4, paras. 4.2-4.4).

COS will be offered in SS2 and SS3 from 2010/11 school year onwards. In the first year of senior secondary education, students would acquire a foundation of knowledge, skills and values across Key Learning Areas.   They will also receive guidance and advice to help them make informed choices of electives in SS2 and SS3 (Chapter 4, paras. 4.5-4.8).

Recognition

There will be three levels of performance in the COS courses: 'unattained', 'attainment' and 'attainment with distinction'. The COS 'attainment' will be referenced to Level 2 or 3 of the Qualifications Framework depending on the nature and content of the COS course, and in accordance with the specifications developed by the respective industries. The performance level in COS will be recorded in the Hong Kong Diploma of Secondary Education transcript. Achievement of 'attainment with distinction' will be deemed to be comparable to Standards-referenced Assessment Level 3 or above. Besides, qualifications gained in COS will also contribute to the Senior Secondary Student Learning Profile (Chapter 4, paras. 4.9-4.13).

Quality Assurance

To achieve consistent standards across COS courses and providers and ensure that COS performance outcomes can be deemed comparable to other NSS subjects, a three-stage quality assurance mechanism will be put in place. A COS Committee will be established to oversee the entire suite of COS courses. In stage one, the COS Committee and its working groups will set out the relevant Curriculum and Assessment Frameworks for course providers to devise the individual curricula. The Committee will be responsible for evaluating and approving applications by course providers. In stage two, the Hong Kong Council for Academic Accreditation will monitor course delivery. In stage three, the Hong Kong Examinations and Assessment Authority will oversee moderation of the assessments by individual course providers to assure the comparability of assessment results within individual courses as well as across the different areas of studies (Chapter 4, paras. 4.14-4.26).

Professional Development Programmes

It is envisaged that qualified COS teachers will include teachers from the secondary and tertiary education sectors and in some instances practitioners active in the industry, professions and/or commercial endeavours. A framework for professional development of COS teachers is proposed and the avenues for potential teachers to gain the required qualifications/training will be explored (Chapter 5, paras. 5.2-5.9).

Funding

There are two distinct phases of implementation in terms of funding: the transition period and the long-term steady state after the implementation of the NSS structure in 2009.   While funding principles are being tested in the current COC pilot, it is envisaged that the students' contribution to the COS course fees will be reflected in the school fees when COS reaches a steady state.   Three funding models for COS in the long-term steady state are proposed for discussion (Chapter 5, paras. 5.10-5.21).

New Senior Secondary Academic Structure for Special Schools

Position

The overarching objective of special education is to enable students with special educational needs (SEN) to maximise their potential to the fullest extent possible, achieve as much independence as they are capable of, and become well-adjusted individuals and contributing members of the community.   The present consultation deals with the academic structure and curriculum framework for special schools.

Under the new academic structure, all students, including those with SEN, will be provided with six years of secondary education.   To ensure that students with SEN will reap the benefit of the extended years of learning, EMB is carrying out a comprehensive review (the Review) of existing special education services.   As an integral part of the Review, EMB has commissioned a study by local and overseas experts, known as *A Study of the Effectiveness of Special Schools* (*the Study*) to assess whether existing resources in special schools have been effectively deployed to support and enhance students' learning.   The present consultation document has taken into account the comments of *the Study* in relation to learning and teaching.

Curriculum and Assessment

The same curriculum framework should govern student learning, with adaptation to suit students of different learning characteristics and needs.   Students with SEN who are intellectually capable of pursuing the ordinary curriculum will aim at achieving the same curricular objectives for NSS, and be assessed in the same way as other students but with appropriate assessment accommodation.   For students with intellectual disabilities

(ID), the NSS academic structure aims to prepare them for transition to work and adult life through providing extended years of learning. The proposed NSS(ID) curriculum framework (Appendix 6) enables teachers to locate the needs of students in a continuum of Core, Electives and Other Learning Experiences. Students with SEN who can pursue COS courses will be provided with COS courses that suit their abilities and needs (Chapter 8, paras. 8.9-8.11).

For students with ID, the Individualised Education Programmes should form the basis for curriculum planning, target setting, classroom practices, inter-disciplinary problem-solving and home-school cooperation (Chapter 9, paras. 9.3-9.4).

Professional Development Programmes

Various professional development and capacity building plans will be put in place to support special schools in implementing the proposals contained in this document (Chapter 9, paras. 9.8-9.12).

Exit Pathways

With the introduction of the NSS(ID) curriculum and COS for students with SEN, there is a need to review the contents of existing training courses of the post-school institutions to ensure smooth articulation with the NSS curriculum. A longitudinal study and employment surveys would be considered to evaluate the effectiveness of the NSS academic structure for special schools.

Resource Considerations

Study findings reveal that the overall resource allocation to Hong Kong's special schools, human, financial and capital, is good by world standards. The real challenge lies in resource management. Any further allocation of resources will have to be tied to clearly defined curriculum targets and expected student learning outcomes. In view of the diverse abilities and needs of students in special schools, EMB will consider introducing more flexibility in resource deployment while schools should map out school-based strategic plans to fully utilise the flexibility to maximise the benefit of school education to students with SEN. There is also an emerging role of special schools as professional centres to support ordinary schools in the implementation of

integrated education (Chapter 11, paras. 11.1-11.9).

Senior secondary students in both ordinary and special schools will pay the same level of school fee which is set at 18% of the total unit cost of secondary education. In computing the average unit cost, the cost of both ordinary and special schools will be aggregated (Chapter 11, para. 11.10). On boarding provision, in view of the significant difference between the fees for hostels under the Social Welfare Department and the boarding section in special schools, there is scope for a gradual and phased increase in boarding fee to bring them into alignment (Chapter 11, paras. 11.11-11.13). In planning for NSS, EMB has taken into account the change in demand for boarding places and infrastructure for special schools.

The Way Forward

The key to successful implementation of the proposals in this document is the concerted effort of all stakeholders. EMB will continue to consult extensively through various channels with a view to collecting feedback and suggestions that would help charting the way forward for the "334" reform.

(blank page)

Contents

Part III   New Senior Secondary Academic Structure for Special Schools

Part IV   Participation and Communication

List of Appendices

Bibliography

(blank page)

Part I

Introduction

Chapter 1   Background and Objectives

1.1   In the report *The New Academic Structure for Senior Secondary Education and Higher Education – Action Plan for Investing in the Future of Hong Kong* (*the Action Plan*) published in May 2005, the Education and Manpower Bureau (EMB) undertook to consult the education sector further on the curriculum details and assessment modes of the 24 new senior secondary (NSS) subjects.   Wider consultation would also be held on specific issues requiring further development including Career-oriented Studies (COS) and provisions for students with Special Educational Needs (SEN).

1.2   Second drafts of the curriculum and assessment (C&A) frameworks for the proposed NSS subjects were disseminated to schools in early June 2005. Comments and suggestions on individual NSS subjects have been conveyed to the corresponding Curriculum Development Council - Hong Kong Examinations and Assessment Authority committees for their consideration.   The C&A frameworks will be finalised by mid-2006.

1.3   As regards the development of COS, discussion with stakeholders including the Federation for Continuing Education in Tertiary Institutions (FCE), Hong Kong Council for Academic Accreditation [1] (HKCAA), Hong Kong Examinations and Assessment Authority (HKEAA), and Vocational Training Council (VTC) has been on-going since May 2005, culminating in the proposal as described in **Part II (Chapters 2-6)** of this document.   The issues discussed and reported here include the purpose and position of COS in the senior secondary curriculum, how quality can be assured and recognition given to student achievement in COS, how the current piloting can benefit future developments, how COS will be funded in the long-term, and how schools and teachers can be better prepared to provide the COS courses.

---

[1] Subject to the enactment of the Accreditation of Academic and Vocational Qualifications Bill, the Council will be renamed as the Hong Kong Council for Academic and Vocational Accreditation.

1.4   For education of students with SEN, EMB has held a series of consultative meetings with schools, teachers, parents and professional bodies to solicit feedback on proposals covering a viable academic structure, curriculum design, learning outcomes, assessment mechanism, support measures and exit pathways for students with SEN, in particular the intellectually disabled.   This document sets out in **Part III (Chapters 7 - 12)** the proposed way forward for the implementation of NSS in special schools, and the way ahead for post-school opportunities.

1.5   **Part IV** (**Chapter 13**) of the document describes the multi-pronged approach to collecting views on the issues discussed in this document, and the on-going communication process leading to the successful implementation of the NSS academic structure in 2009.

1.6   The proposals presented in this document are the result of hard work and negotiation of concerned parties over the past few months.   We would like to seek views of all stakeholders on the principles for development and implementation issues of COS, and the NSS academic structure and curriculum framework for special schools.   Please send your comments to the following on or before **24 April 2006** by:

      E-mail: 334@emb.gov.hk

      Fax: 2573 5299
               2575 4318

      Mail: New Senior Secondary Academic Structure Section
               Curriculum Development Institute
               Education and Manpower Bureau
               13/F, Wu Chung House
               213 Queen's Road East
               Wan Chai, Hong Kong

For enquiries, please call:
2762 0530 (COS)
3540 7416 (NSS Academic Structure for Special Schools)

For further information on this document or progress of curriculum reform, please visit our website (http://www.emb.gov.hk/334). The FAQs (frequently asked questions) also provide useful insights and information.

(blank page)

Part II

Career-oriented Studies (COS)

Chapter 2   Purpose and Position of COS in the New Senior Secondary Curriculum

2.1   Chapter 5 of *the Action Plan* stated that COS is an integral part of the NSS curriculum that will match the interests and abilities of all students.   COS complements rather than duplicates the NSS subjects by offering studies with stronger elements of applied learning linked to broad professional and vocational fields.   The introduction of COS signifies a big step towards diversified learning opportunities in senior secondary education.   All students can gain from COS to enrich their senior secondary programme and COS is particularly relevant to students who will benefit from a strong practical orientation in their learning. This orientation can also extend into the way the core subjects of the languages, Mathematics and Liberal Studies are taught and assessed.

2.2   COS is designed to widen the learning opportunities for students in the last two years of their senior secondary schooling (i.e. SS2 and SS3) by:

- offering diverse learning programmes that are relevant to the social and economic development of Hong Kong but are not traditionally taught in schools;

- extending the learning environments available to senior secondary students through the involvement of tertiary institutions, professional bodies and employers;

- providing an initial experience of the requirements of a professional or vocational field and enhances the preparedness of students to proceed to post-secondary pathways; and

- offering a substantial outcome with links to qualifications recognised under the Qualifications Framework (QF).

2.3   Set within the integrated structure of the NSS curriculum, COS may comprise between 10% to 30% of a student's learning programme in SS2 and SS3, depending on whether a student enrols in one, two or three COS courses.

2.4   The following chapters present proposals for the overall design and implementation of COS.   Chapter 3 reviews the experience gained from piloting of COS in the current form of Career-oriented Curriculum (COC) in S4 and S5. Chapter 4 sets out recognition of COS courses and the quality assurance mechanism.   Chapter 5 discusses other implementation issues to be worked on, and seeks readers' views on the options on subsidisation of course fees.   Chapter 6 sets out further work required and the critical milestones ahead.

2.5   It is relevant to note that exposure to and experience in the world of work will be embedded in the entire NSS school curriculum, supported by career advice and pastoral guidance, and will not be confined to the formal study of COS. Nonetheless, COS courses are specific in their content and delivered in an applied context, hence are more able to engage and motivate students who learn best by doing rather than conceptualising.   Suitably structured COS courses can also challenge academically-oriented students who have particular interests or career aspirations.   A COS course focussing on applied science, for example, can complement the programme of a student who wishes to enter engineering or business.   In this way, COS can ignite an interest or develop an aptitude which can be built on later if a student wishes.

Chapter 3   The Current Stage of Piloted Development

3.1   There are currently two piloted arrangements of COS:

- the COC courses in S4 and S5; and

- the Yi Jin/Secondary Schools Collaboration Project which is a comprehensive, year-long programme in S5.

3.2   A total of 3 858 students are engaged in the two streams of COS pilots commencing in the 2005/06 school year.   The summary statistics, showing a rising trend over three years, are set out in Appendix 1.

COC Courses in S4 and S5

3.3   COS was first piloted (as COC courses) in 2003.   They are, on average, 180 hours in duration extending over two years of S4 and S5.   Over the years, COC piloting has been planned to test the concept of COS, impact on students, parents and schools, mode of implementation, quality assurance and selection of courses and providers.

3.4   The following three non-exclusive modes of COC implementation were initially conceptualised for piloting:

Mode 1: Courses take place at the venues of course providers and are taught by the staff of course providers.   Schools arrange their students to attend the courses according to the timetable agreed with the course providers.

Mode 2: Courses take place mainly in schools and are taught by the staff of course providers.   Schools work out the details of the arrangements with course providers on timetable, venue, equipment, etc.

Mode 3: Course providers entrust schools to conduct COC courses taught by qualified teachers/professionals employed by schools. Course providers are responsible for quality assurance and issuing of certificates.

Schools could also collaborate with course providers to implement COC courses in a combination of modes.

3.5   Appendix 2 lists the range of COC courses offered for the 2005-07 cohort, essentially covering Mode 1 and 2 and in some cases involving collaboration between course providers and schools (i.e. a combination of Mode 2 and 3).

The Yi Jin/Secondary Schools Collaboration Project

3.6   The Yi Jin/Secondary Schools Collaboration Project began in September 2004 and is modelled on the structure of Project Yi Jin (PYJ) (see Appendix 3). The one-year pilot programme consists of 10 modules totalling 600 contact hours, of which 420 hours are for the 7 core modules of Chinese, English I, English II, Mathematics in Practice, Information Technology Application, Putonghua and Communication Skills.   Three remaining electives to be selected from a wide variety of practical subjects make up the remaining 180 contact hours.

3.7   Participating secondary schools work in partnership with a member of the FCE.   The FCE partner is responsible for teaching at least 3 of the 10 modules on its campus.   The remaining 7 modules are taught in the participating secondary school provided that the teachers meet the minimum appointment criteria for staff teaching the existing PYJ[2].   The FCE partner supports the participating school by providing course materials, teacher training and quality assurance.

---

[2] An honours degree or equivalent in a relevant area with relevant professional qualifications plus at least two years of working experience.

3.8   The Yi Jin/Secondary Schools Collaboration Project has drawn on the success of PYJ by offering the same Yi Jin programme to students who had completed S4, or aged below 21, and had never sat for the Hong Kong Certificate of Education Examination (HKCEE).   The pilot scheme aims to provide students who have little interest in continuing the conventional S5 curriculum with an alternative route to prepare them for further studies or employment.   For the 2004/05 pilot scheme, the HKCAA is satisfied with the quality assurance mechanism underpinning the collaboration in that graduates of the Collaboration Project are considered to have reached an academic level comparable, in totality, to 5 passes in HKCEE for the purpose of further studies or employment.

3.9   In 2005/06 school year, the Collaboration Project has extended its scope with the participation of more schools.   The quality assurance mechanism of the pilot scheme will continue to be assessed by HKCAA to ensure that the same output standard as PYJ will be achieved.   It is observed that the Collaboration Project needs to adapt to the different level of maturity and motivation of the secondary school students, and to develop different teaching styles to enhance the effectiveness of the programme in the secondary school environment.

3.10   We are conducting an evaluation of the Collaboration Project.   As the pilot scheme has generally been effective in improving students' motivation to learn and aspirations for further studies, as well as their language and communication skills, confidence and self esteem, it is our policy intent to continue the Yi Jin/Secondary Schools Collaboration Project until the NSS academic structure is implemented.   In other words, the last cohort of students to participate in the Collaboration Project will be in 2009/10 school year.

3.11   From 2010 onwards, the successful elements of the Collaboration Project will be incorporated into the NSS curriculum whereby the vocational modules will be replaced by COS courses.   The NSS Chinese and English language curriculum frameworks will embody practical communication skills.   The Mathematics curriculum framework also provides for Mathematics in practice.   Liberal Studies and Other Learning Experiences (OLE) will take care of essential life skills.   The style and modes of assessment in COS, the use of Standards-referenced Assessment (SRA) and School-based Assessment (SBA) in the new Hong Kong Diploma for Secondary Education (HKDSE) would recognise a wide range of valuable learning outcomes that could not be fully reflected in the existing public examination system.

Chapter 4   The Proposed COS Framework

4.1   In the deliberation of a framework for COS which best complements the NSS curriculum, several issues have to be addressed:

- What choices of courses will be offered to students?

- How will the SS1 year support the choice of electives at SS2 and SS3?

- What recognition will be given for student learning programmes that include COS courses?

- How will the quality of COS courses be assured?

- What role will the QF, industries and the professions play in COS?

These matters are discussed in the following sections.

Areas of Studies in COS

4.2   As COS is introduced as part and parcel of the NSS curriculum to offer choices to meet the diverse learning needs of students, the areas of studies in COS are designed according to the following principles:

- **Balance** - The areas are so designed to ensure that students are provided with a range of COS courses that can cater for varied interests and abilities.

- **Coherence -** The areas complement the NSS electives by accommodating studies with stronger elements of applied learning and building upon the foundation of knowledge, skills and values students acquire across the Key Learning Areas (KLAs) in SS1.

- **Responsiveness -** The areas reflect the social, economic and technological needs of the local society and the global trend; and have the flexibility to accommodate the fluidity of such needs and trends.

- **Learning platform -** The areas provide a learning context that matches the diverse learning needs, career aspirations and interests of students, through which students develop their generic skills, values and attitudes to become life-long learners.

- **Articulation -** The areas should be able to link with further studies and employment opportunities.

4.3   Based on the above principles, we have reviewed the categorisation of COC courses to make it flexible but stable in the long term.   With a view to informing the future COS, the next cohorts of COC piloting will be based on the following areas of studies:

- Applied Science

- Business, Management and Law

- Creative Studies

- Engineering and Production

- Media and Communication

- Services

4.4   To ensure quality and consistency of standards, the number of courses offered under each area will be kept within a manageable limit through rigorous screening (see para. 4.22 below).   As relevant parties, including schools, EMB, the tertiary sector, quality assurance agencies and the relevant industries gather experience, the scale of COS will be expanded progressively.

From SS1 to Electives Including COS

4.5   SS1 lays the foundation for students to choose amongst NSS subjects and COS electives at SS2 and SS3 according to their interests, aptitude and abilities. SBA will focus on learning in SS2 and SS3, allowing the SS1 year to concentrate on building a foundation of knowledge, skills and values across the KLAs.

4.6   All students will study the core subjects of Chinese Language, English Language, Mathematics and Liberal Studies in the three years from SS1 to SS3. The core subjects will be taught and assessed in flexible ways to accommodate different styles of learning, but will employ the same curriculum framework and expected learning outcomes.   English Language is offering 'Learning English through Workplace Communication' as one of its elective modules.   Learning and teaching packages for both English and Chinese languages and Mathematics with learning contexts taken from various COS courses will be developed for school-based adaptation.   The international benchmarking results have suggested that the content of Liberal Studies suits the needs of all students owing to its contemporary nature.

4.7   In the first year of senior secondary education, students would receive guidance and advice to explore and better understand their own strengths and interests, preferred learning styles and envisaged pathways for further studies and/or work.   Students would also be introduced to the range of curriculum choices available to them in SS2 and SS3 and can choose up to three electives including COS.

4.8   Such guidance and advice may be rendered through career talks, visits, workplace-related experiences and probably taster programmes to be offered as part of the OLE under NSS (which include career-related experiences).   The taster courses will be brief in nature, aiming at giving students a general flavour of what they should have expected when they enrol in the COS courses.   Students would participate on a voluntary basis.

Recognition for COS

4.9   The present 2-year COC courses span S4 and S5 and the courses assess whether students meet a single threshold standard which is pegged to an existing HKCEE subject 'pass' (Grade E) for progression purposes.   When the NSS structure is implemented, there will be three levels of performance in the COS courses: 'unattained', 'attainment', and 'attainment with distinction'.   Students who complete the requirements of the threshold exit level in a COS course will have attained the competency standard and will receive QF credit points for that achievement.   The COS 'attainment' (competence) level will be referenced to Level 2 or 3 of the QF depending on the nature and content of the COS courses, and in accordance with the specifications developed by the respective industries.

4.10   The QF is a progression ladder, which employs two dimensions - levels and credits - to measure the height and depth of qualifications, and enables all qualifications, whether they are academic or vocational in nature, to be linked. The seven vertical levels of the QF convey the outcome standards of a qualification, while the horizontal volume of learning is measured by the credit value assigned to the qualification.   (For details of the QF, please refer to Appendix 4.)

4.11   Each QF level specifies a suite of generic and industry-specific competencies.   The award of the level of 'attainment with distinction' does not earn additional credit points under the QF.   This arrangement is sufficient for progression to professional and sub-degree qualifications.

4.12   The HKDSE transcript will record the learning outcomes for the COS courses, in terms of the levels and credit units awarded under the QF, and also will give recognition to the student's level of performance.   Achievement of 'attainment with distinction' will be deemed to be comparable to SRA Level 3 or above.   This will be useful for the purpose of admission to university.

4.13   Qualifications gained in COS will also contribute to the Senior Secondary Student Learning Profile (SLP).

Quality Assurance of COS Courses

4.14   The nature and objective of COS call for different delivery and assessment modes to maintain its responsiveness to economy and society.   Assessment will typically involve several components, e.g. competency assessment; completion of a project; and/or completion of tests/assignments.   The assessment will focus on the collection of evidence that can be validated and authenticated.   A range of methods can be employed, including verified observation, portfolios of work, demonstrations, simulations, individual and team projects, live performances, recorded performances, peer assessment and verified work experience.

4.15   A quality assurance (QA) mechanism will be required to ensure that performance outcomes can be deemed comparable to other subjects in the NSS on one hand, and there is consistency of standards across courses and providers on the other.

4.16   The arrangements for QA require firm oversight of the COS curriculum, assessment and course delivery to achieve consistent standards, and a clear assignment of responsibility for these activities.

4.17   This will be achieved by establishing a single COS Committee to oversee the entire suite of COS courses, underpinned by a number of working groups each responsible for an area of studies.   In the longer term, this committee will be re-constituted as a Standing Committee of the Curriculum Development Council (CDC) and jointly serviced by Curriculum Development Institute (CDI) and HKEAA.   Membership will draw on expertise from schools, the tertiary sector, HKCAA, and relevant industries and professions.

4.18   The primary role of the COS Committee is to:

- oversee the development of the C&A Frameworks for COS courses by individual working groups;

- assess COS proposals from potential providers;

- oversee the quality assurance of COS; and

- advise EMB on the implementation of COS as an integrated component of the NSS.

4.19   A three-stage QA Framework overseen by the COS Committee will ensure the standards of COS courses on their own and across the course providers.

Stage 1 - Development of C&A Frameworks

4.20   C&A Frameworks will underpin quality assurance and implementation by setting out the principles for curriculum and assessment design for the COS courses and the requirements expected of course providers.

4.21   COS curriculum design will employ the same principles as the 24 NSS subjects, but emphasise applied learning in the economic and social context of Hong Kong by adopting the competency standards developed and endorsed by the industries under the QF as appropriate, and coherence with NSS subjects within a school-directed learning programme.

4.22   The COS Committee through the working groups will also be responsible for evaluating and approving applications by course providers, based on the following considerations:

- Course providers' proven capacity to offer quality courses at levels appropriate for senior secondary students with potential for articulation to post-secondary pathways; and

- The proposed curriculum and assessment details, focusing on the applicant's capability to deliver the contents specified in the relevant C&A Frameworks.

Stage 2 - Delivery

4.23   HKCAA will monitor course delivery, and providers are required to address identified shortcomings.

Stage 3 - Moderation of Assessment

4.24   HKEAA will be responsible for the moderation of assessments made by individual course providers to assure comparability of assessment results within individual courses, and across COS areas of studies.   Moderation of assessments will be based on quality assurance of the assessment processes and quality control of assessment results.   Quality assurance of assessment processes involves defining criteria for assessment; provision of exemplars of students' work and site visits by moderators.   Quality control of assessment results involves provision of guidelines on setting of assessment tasks; inspection of samples of students' work and review by the standards panel.

Piloting of the QA Mechanism

4.25   As a transitional arrangement, a preparatory COS committee will be set up in 2006 until the COS Committee is in place to:

- review and refine the COC pilot arrangements to inform the implementation of COS;

- work on the C&A Frameworks for the COS areas of studies; and

- advise EMB on transitional issues from COC to COS.

4.26   The arrangements for quality assurance are summarised below:

Curriculum	Course Delivery	Assessment and Moderation
A single **COS Committee** (established under the CDC) with the assistance of working groups established under it ➢ set the C&A Frameworks for COS courses ➢ assess the course proposals of potential course providers **Course Providers** develop curriculum for individual courses	**HKCAA** scrutinises the quality of provision in action and reports to the COS Committee	**HKEAA** ➢ sets standards for the awards of 'attainment' and 'attainment with distinction' ➢ works with providers to develop assessment schemes and rubrics **Course Providers** conduct the assessment of students according to the agreed assessment framework **Moderation process managed by HKEAA** ensures comparability of assessment results for the COS courses COS results are reported as part of the HKDSE

Chapter 5   Other Implementation Issues

5.1   To support the development and progressive expansion of COS to meet demands, it will be necessary to assure a steady supply of qualified teachers and to provide resources for schools and students so that COS will be a real option. Schools will also have to establish the infrastructure for career and pastoral support for students in making decisions on COS courses to ensure that their programmes of studies are well integrated and have coherence for future learning.

Professional Development Programmes

5.2   In the second consultation on the NSS curriculum, 55% of schools indicated their intention to offer COS courses and requested professional development opportunities for secondary school teachers to take up COS teaching in the future. It is estimated that around 400 to 500 secondary teachers wish to take part in the teaching of COC/COS.

5.3   In *the Action Plan*, EMB reported that it would:

- work together with relevant stakeholders to establish a clear profile of the teacher competencies required for delivering COS courses and exploring effective pedagogical-content practices;

- set up programmes with relevant teacher education providers to prepare serving teachers to teach COS competently; and

- work collaboratively with outside organisations to provide mentorship to students in their learning of COS, and to develop personnel experienced in the profession or vocation to become competent teachers of COS.

5.4 To further these commitments, a proposed framework for professional development of COS teachers is being developed, an outline of which is shown in Figure 5.1 below. The framework focuses on five dimensions of competencies for the successful delivery of COS courses which will be taught by qualified COS teachers who may include teachers from the secondary and tertiary education sectors, and practitioners active in industry, the professions or commercial endeavours.

Dimension	Required Professional Development / Work Experience
A. Understanding of Students and their Needs	Teacher education in understanding school age students and in pedagogical skills
B. Command of Teaching and Facilitating Skills	
C. Command of Subject Knowledge and Skills	Training in the subject discipline (which may relate to one or more COS areas of studies)
D. Positive Attitude	Not reflected by paper qualifications, but by the inclinations of teachers and the cultivation of positive attitude
E. Authentic Experience	Work/trade experience

Figure 5.1   The five dimensions for COS teaching

5.5 The course providers have the responsibility to ensure that teachers of COS possess basic competency level for Dimensions A to D, and the ability to draw in expertise, either from their own background or from outside, on Dimension E. The teachers will be advised to undertake ongoing professional development programmes (PDP) to master all the five dimensions of the COS framework.

5.6   Three streams of PDP are therefore anticipated:

(a)   Serving teachers with experience of teaching secondary students - the expected PDP will aim to assist such teachers to acquire work/trade experience (Dimension E) and updated subject knowledge (Dimension C);

(b)   Tertiary institution teachers and practitioners with specialist knowledge and experiences - the expected PDP will focus on enhancing the understanding of school-aged students (Dimension A) and command of teaching and facilitating skills (Dimension B);

(c)   All teachers will build up a PDP profile to portray their updated subject knowledge and skills (Dimension C) and work/trade experience (Dimension E).   Teachers are expected to master competency-based teaching and assessment, which involves the continuous collection of valid and reliable evidence of knowledge and skills which are demonstrated by practical application.

5.7   Professional development may take the form of structured courses, job attachment, school-based training and mentoring.   The mechanism for assessing and certifying the teachers' practical skills and suitability for teaching COS will need to be further explored.

5.8   As in the case of PDP for teachers of other NSS subjects, schools are free to use the school funds or the Teacher Professional Preparation Grant (TPPG) to support the professional development of teachers for COS.   School leaders are encouraged to discuss with teachers on the school's human resource plan, and priorities in the deployment of school funds for professional development.

5.9   Teachers who wish to teach COS may also take advantage of the "Sabbatical Leave for Teacher Professional Development Scheme", the details of which are set out in Appendix 5.

Funding for COS

5.10   Funding for COS will address two distinct phases of implementation:

- the transition period and intermediate steps which will occur through the evolving COC pilots;

- the longer-term steady state after the initial implementation of the NSS structure.

Transition Period and Intermediate Steps in 2005-09 for COC

5.11   The Government has committed resources of HK$115.6 million for the transition period leading up to 2009 to encourage the growth of diversity of curriculum, assessment and pathways in the senior secondary schools including COC pilots.

5.12   Recurrent provision for the COS, among other things, will be disbursed through a Diversity Learning Grant (DLG). The Government has committed recurrent funding to support diversification of learning opportunities for students, including COS, in the NSS curriculum.   In the context of increased but limited funding provision, a viable funding model which maximises the benefits for students needs to be worked out in consultation with schools.   Three possible options are set out in para. 5.19 below.

5.13   The first cohort of the COC pilots in 2003-05 was funded by schools and students, and some courses were subsidised by the course providers.   Students generally fulfilled the course requirements outside school hours.   In the second cohort of 2004-06, courses and student numbers expanded and schools were encouraged to integrate the courses into the school programme and use part of their resources to subsidise the course fees for students.

5.14   The funding of the third cohort (2005-07) has put the following principles to test:

- Students will contribute not more than 18% of the COC course fees. Students with financial difficulty can apply for fee assistance, in part or in full. This arrangement ensures that no student would be deprived of a diverse education because of financial hardship.

- The Government will make up the remaining 82% with the schools contributing 41% from existing resources. Where schools have difficulty meeting their share of the costs, the Government will consider making up the shortfall.

- The Government bears the cost of quality assurance.

- Course providers contribute to the cost of course development.

These arrangements apply for the third cohort only. Feedback and further evaluation will inform funding arrangements in the future.

Longer Term Steady State Funding for COS

5.15   We see a good case for tripartite contribution from parents/students, the Government and schools in funding the COS.

Contribution by Parents/Students

5.16   The overall guiding principle on future funding arrangements is that a student should not be deterred from choosing any programme in senior secondary which matches their interest, aspirations and aptitude for financial reasons.

5.17   In the steady state, it is intended that students' contribution to the course fee will be reflected in the school fees.   This will mean that the unit cost of COS will become part of the unit cost of the senior secondary education.   Cases of hardship will be offset through the Student Financial Assistance Scheme and the

Comprehensive Social Security Assistance Scheme.

Government's and Schools' Contribution

5.18   As for the Government's contribution under the steady state, the cost will consist of three major components:

- Subsidisation of COS course fees will be based on actual demand from students.   The money from the DLG will support COS courses, and contribute to other ways in which diversity can be built into student programmes, such as electives which may have low student enrolment like French by establishing networked classes.

- Assistance for students with financial hardship.

- Payment for quality assurance to be carried out by the HKCAA and HKEAA.

5.19   On subsidisation of course fees, we envisage three possible models:

Option (a)   Schools apply to EMB for additional funding to top up their expenditure in providing COS courses to their students. EMB vets the applications based on a number of factors, including the number of students enrolled in the COS courses, the financial position of the school, the school's plan in institutionalising COS in its senior secondary curriculum, etc.

Option (b)   Schools share part of the funding of COS courses calculated on the basis of encashed teaching load in offering a school subject of the same duration on a per capita basis. EMB will top up the difference.

Option (c)   The funding for offering COS courses is embedded in the annual subvention.   Schools can flexibly deploy their resources to make available a variety of COS courses to meet the learning needs of their students.

5.20   Option (a) seems to be the best option to meet the needs of individual schools, but the administrative overheads will be high (and the required contribution will reflect the higher cost) while at the same time, the vetting process might not match schools' planning and implementation cycle.   Option (b) involves a formula, the details of which will have to be worked out with schools with regard to the various possible scenarios in course planning and year-to-year enrolment variations.   Option (c) is the simplest but does not take account of the different needs of schools.   It also lacks incentive to encourage schools to offer a diversified curriculum to their students that includes COS.

5.21   A rigorous model for assessing the cost of COS courses will ensure that schools and course providers keep course fees to an acceptable level.   Off-site delivery, partnership arrangements with tertiary providers, networks of schools contributing to classes delivered at a single school, and schools operating as specialist centres or regional providers of COS will also contribute to maintaining a realistic cost environment.

Catering for Diverse Interests and Abilities of All Students

5.22   The proposed COS C&A Frameworks will apply to students of all abilities, including non Chinese-speaking students and students with SEN.   Adaptation of curriculum, supportive assessment arrangements and choice of medium of instruction will ensure all students can benefit from the NSS curriculum, including COS.   Part III of this document provides further details on how the NSS curriculum will cater for students of SEN.

Chapter 6　Further Work Required and Critical Milestones Ahead

Further Work Required

6.1　The proposals set out in Chapters 4 and 5 will become the building blocks of COS in the NSS curriculum after being fine-tuned in response to views collected in this consultation.　The critical milestones are set out in para. 6.3 below.

6.2　During the development of these proposals, thoughts have been given to a number of implementation issues which still require further exploration in the piloting years.　It would be very useful if readers could let us know their preliminary views on these issues:

Nomenclature

- Some colleagues from the school sector have proposed a change in nomenclature so as to reflect the objectives of COS more accurately - COS is not and should not be confused with pre-employment nor vocational training.　Suggestions include 'applied learning' and 'contextual learning', etc.　Comments are most welcome.

Pastoral Guidance

- How to give students an overview of possible opening of COS choices through their SS1 studies, so as to make informed choices of electives (including COS) for SS2 and SS3?

- How to support schools in building up their capacity in supporting students, in terms of career guidance and counselling, so that they can identify their interests and career aspiration and make informed decisions in the choice of elective subjects and in overcoming obstacles during their studies?

Professional Development

- What are the desirable core and ancillary PDP components for COS teachers?   How should these be delivered and certified?

Funding

- How to support schools to put in place a school plan so as to use their resources effectively in providing a variety of COS courses to their students to meet their learning needs?

- How could the best results be achieved through sharing of resources, cluster schools or learning centres for subjects (including COS courses) with value and potential but small student enrolment? How should these options be implemented?

- What is the best funding model which can better utilise scarce resources, while at the same time ensure that schools will offer access to students who will benefit from COS?

- What funding model/approach can best facilitate the guiding principle at para. 5.16?

Community Support

- In what way could employers and community in general support the development of COS and help to facilitate students taking COS courses?

Critical Milestones Ahead

6.3   The following table sets out the key milestones for implementation from 2006 to 2009:

Key Areas	2006	2007	2008	2009
COS Committee [paras. 4.17-4.18]	➢ Setting up the preparatory COS committee ➢ Trying out the various functions of the preparatory COS committee through COC piloting		➢ Migrating from the preparatory COS committee to COS Committee	
Development of C&A Framework [paras. 4.2-4.4]	➢ Depicting the areas of studies for COS ➢ Prioritising the areas of studies for piloting	➢ Reviewing and refining the areas of studies for COS ➢ Establishing a mechanism for reviewing and revising the C&A frameworks for COS	➢ Reviewing and consolidating the C&A frameworks for 2010-12 cohort	➢ Development of courses by course providers based on the C&A frameworks
Quality Assurance [paras. 4.14-4.25]	➢ Piloting the QA mechanism focusing on curriculum and course delivery	➢ Piloting the QA mechanism focusing on assessment and moderation	➢ Reviewing and revising the QA mechanism for COS	➢ Implementing the QA for NSS COS
Professional Development Programmes [paras. 5.2-5.9]	➢ Running workshops for school administrators ➢ Prioritising the training needs and identifying potential providers ➢ Small scale piloting of PDP for COS	➢ Systematic planning of PDP ➢ Introducing PDP progressively ➢ Reviewing, revising and prioritising PDP as appropriate		➢ Focusing PDP to match the COS courses for the 2010-12 cohort
Funding [paras. 5.10-5.21]	➢ Soliciting views of stakeholders on the funding models proposed in the consultation document ➢ Adopting a funding model for piloting in 2006-08 cohort	➢ Reviewing, revising and adopting the funding model of 2007-09 cohort in the light of feedback from stakeholders	➢ Reviewing, revising and adopting the funding model of 2008-10 cohort in the light of feedback from stakeholders	➢ Migrating the funding model to NSS in consultation with stakeholders

Part III

New Senior Secondary Academic Structure

for Special Schools

Chapter 7   The Government's Position on Special Education

7.1   With implementation of the NSS, the Government has pledged to provide six years of secondary education for all students, including those with SEN.   To ensure that students with SEN will reap the benefit of the extended years of learning, EMB is carrying out a comprehensive review (the Review) of existing special education services which have a bearing on the development of NSS curriculum for students with SEN.   The Review will include an evaluation of integrated education (IE) in ordinary schools and, built on the feedback from the present consultation, chart the way forward for the provision of education in special schools.

7.2   As an integral part of the Review, EMB has commissioned a study by local and overseas experts on the effectiveness of resource management in special schools, known as *A Study of the Effectiveness of Special Schools* (*the Study*) in the last quarter of 2005.   *The Study*[3] concludes among other things that:

- the overall resource allocation to Hong Kong's special schools, human, financial and capital, is good by world standards. The real challenge lies in resource management.   The extent to which these resources are appropriately and effectively deployed varies greatly from school to school;

- in the more successful schools, the management of resources is characterised by a strong sense of purpose, distributed leadership, team work and evidence-based prioritisation.   However, quality leadership is insufficiently established among some special schools and management at all levels calls for improvement;

---

[3] *The Study* covered ten special schools for students of various disabilities.   The report of *the Study* can be found on EMB's website: http://www.emb.gov.hk.

- in many of the schools, it is necessary to develop a broader curriculum that will help prepare students for independent living. The range of teaching strategies used is often narrow and didactic. Also, strengthened systems for monitoring learning and teaching, and tracking the progress of students need to be put in place;

- parents and schools currently cooperate well but that should be a partnership which demands more of students, setting and maintaining higher expectations of achievement; and

- there should be a clear statement on the overall purposes of special education and an agreed curriculum framework.

7.3   The present consultation deals with the academic structure and curriculum framework for special schools.   Other issues will be dealt with in the Review.

Position and Purpose of Special Education

7.4   Special education is provided for children to overcome their barrier in learning arising from disability or learning difficulties.   The overarching objective is to enable students with SEN to maximise their potential to the fullest possible extent, achieve as much independence as they are capable of, and become well-adjusted individuals and contributing members of the community.

7.5   It is Government policy to place students with SEN in ordinary schools insofar as they can benefit from integrated education.   However, for students with severe, profound or multiple disabilities who cannot benefit from ordinary school settings, they will be placed in special schools where their disabilities, impairments and learning difficulties will be properly managed, while opportunities will be arranged for them to interact with ordinary students in other settings to enhance learning and social integration.

7.6   The following chapters present proposals on the design and provision of special education under NSS that centre around improving student learning to achieve the purpose in para. 7.4.   Chapter 8 sets out the way forward for the development of the curriculum framework for students with SEN.   Chapter 9 outlines student assessment and the support for professional development. Chapter 10 highlights quality assurance and discusses the exit pathways for students with SEN.   Chapter 11 discusses resources considerations and invites comments for further discussion.   Chapter 12 sets out the critical milestones in preparation for the implementation of NSS in special schools in 2009.

Underlying Principles

7.7   The following broad principles underpin the design and provision of senior secondary education for students with SEN:

- The same curriculum framework should govern student learning throughout the 12-year primary and secondary education, with adaptation to suit students of different learning characteristics and needs.

- Students with SEN who are intellectually capable of pursuing the ordinary curriculum will aim at achieving the same curricular objectives for NSS, and be assessed in the same way as other students but with appropriate assessment accommodation.

- For students with intellectual disabilities[4] (ID), the NSS education aims to provide extended years of learning to prepare them for transition to work and adult life.   The emphasis will be to enhance their vocational awareness and preparation for independent living, with due regard for whole-person development and nurturing of life-long learning capabilities.

---

[4] The term "intellectual disabilities" is used to replace "mentally handicapped" to be in line with the global trend.

- Students with ID will adopt a NSS(ID) curriculum building upon the prior knowledge and experiences acquired at the basic education level and the Extension of Years of Education (EYE) Programme. The NSS(ID) curriculum will comprise the same three components, namely core, electives and OLE, and adopt an integrated approach to learning. Each component is placed along a continuum with suitable curriculum adaptation, learning and teaching activities and assessment mode to suit different learning needs.

- The NSS(ID) curriculum also aims to provide students, where appropriate, with practical skill training and enhance interface with the post-school pathways.

- Under the overall curriculum framework and expected learning outcomes, Individualised Education Programme (IEP) will define the learning goals, pace of learning and level of attainment for individual students with ID. Teachers, specialists, parents and, where appropriate, students will participate in developing the IEP and put in place mechanisms for monitoring progress and learning outcomes.

Proposed Structure for Special Schools under NSS

7.8   It is the policy of the Government to facilitate integration of students with SEN in ordinary schools only where students would so benefit. Experience shows that some students are better off continuing their senior secondary education in special schools. Taking into account the students' abilities and progression pathways, we propose the academic structure for each type of special schools as follows:

Schools for the Visually Impaired

7.9   At present, the school for the visually impaired (VI) offers the ordinary curriculum up to junior secondary level.   Its students have integrated successfully into ordinary schools at various class levels.   We propose to maintain the existing academic structure.   School placement services will be provided to enable students to be placed at appropriate class levels in ordinary schools, as and when they are ready for integration.

Schools for the Hearing Impaired

7.10   Students in schools for the hearing impaired (HI) have severe to profound hearing impairment, which causes delays in language acquisition and development. They may also have serious disability in auditory reception and oral expression. We propose to maintain 10 years of basic education for these students with normal intellectual ability to prepare them better for the 3-year senior secondary education.

Schools for the Physically Disabled

7.11   Students in schools for the physically disabled (PD) have severe or multiple physical disabilities.   Their learning is frequently and regularly disrupted by various therapies and hospitalisation.   We propose to maintain 10 years of basic education for PD students with normal intellectual ability to prepare them better for the 3-year senior secondary education.

Schools for Social Development

7.12   Students in schools for social development have emotional and behavioural difficulties that are transient in nature.   They should be re-integrated into ordinary schools when the transient problem subsides.   However, some students may relapse and some may encounter, or continue to have, difficulties in the senior secondary levels.   We therefore propose that the academic structure be extended by 3 years to cover senior secondary education.

Schools for the Intellectually Disabled

7.13   On grounds of equity, we propose to provide students with ID, including those attending VI, HI and PD schools, 3 years junior secondary education and 3 years senior secondary education.   They will be challenged to improve their learning through the IEP which will define the expected learning outcomes.

Hospital School

7.14   At present, the Hospital School caters for children up to junior secondary level in 17 hospital units.   Service is provided for students once they enter the hospital irrespective of the length of stay.   Students do take sick leave from time to time, even if they are not hospitalised.   Currently they are provided with education services only if they are home-bound for at least three months and upon the request of parents.   It is therefore questionable whether students should be given lessons in hospital, if they stay for less than three days, since the education service provided is mainly compensatory and remedial in nature.   On the other hand, we propose to extend hospital education service to provide for students at the senior secondary levels.

Chapter 8   Development of Curriculum Framework

Curriculum Framework for Students Capable of Pursuing the Ordinary Curriculum

8.1   Students with SEN, but not ID, should follow the same programme of 4 core subjects, 2 or 3 electives, and OLE under NSS as other students in ordinary schools. Students will be assessed based on the same criteria but with special accommodation such as adjustment of examination time, special seating arrangement, etc. EMB and HKEAA will ensure appropriate arrangements to help students with SEN.

8.2   Currently, around 50 out of the 62 special schools operate only one class per level. Students with SEN who are intellectually capable of following the ordinary curriculum should have access to a range of elective subjects as other students. However, the small school size and small number of senior secondary classes will limit the choice and combination of NSS subjects to be offered. EMB will encourage special schools to collaborate and share resources with other special schools and/or ordinary schools in the vicinity to provide a wider range of NSS courses for their students.

Curriculum Framework for Students with Intellectual Disabilities

8.3   Students with ID learn at different pace and in different ways. The key to effective learning is flexibility and responsiveness to individual needs. The 12-year curriculum framework for students with ID will be based on the concept of whole person development to ensure a balanced and manageable curriculum commensurate with the cognitive capability of the student.

8.4   The curriculum design for NSS(ID) has made reference to local and overseas experiences.   The design principles are:

Learning Goals

- The seven learning goals[5] of the curriculum framework will be suitably adapted to suit the characteristics and practical needs of individual students, in terms of content, pace of learning, and expected learning outcomes.

- In order to lead a quality and meaningful life in the community, students with ID need to develop sound social skills.   These include positive peer relationships, self-esteem and ability to work as a member of a group or team.   These will be embedded in the core, electives and OLE as an integral part of the NSS(ID) curriculum.

Prior Knowledge in Basic Education

- The NSS(ID) curriculum should help students progress beyond their current level of attainment through the basic education.

- Schools require evidence-based assessment of the prior knowledge and experiences already acquired, which will inform the design of the IEP under the senior secondary curriculum.

The Structure and Learning Outcomes of NSS(ID) Curriculum

- Language, mathematics and independent living will form the core of learning to meet the practical needs of work and life beyond schooling.

---

[5] The Seven Learning Goals are Responsibilities, National Identity, Habit of Reading, Language Skills, Learning Skills, Breadth of Knowledge and Healthy Lifestyle.

- Some students with ID could aspire to attain threshold Level 1 in HKDSE for all or some of the core subjects of NSS (Chinese Language, English Language, Mathematics and Liberal Studies). Other students with ID would have educational programmes in literacy, numeracy, and independent living targeted to their needs and which are based on high expectations of progress.

- Where appropriate, the core is complemented by electives or other school-based programmes, including OLE to reinforce the development of positive values and attitudes, and the capability to explore and learn in an authentic environment.

- The Committee on Special Educational Needs (CSEN) of the CDC, with professional support from CDI, local and international experts, and frontline teachers, will develop the various subject curriculum frameworks in core and electives for informing what students should learn. The curriculum frameworks would be supported by the development of learning outcomes which will indicate what students are expected to achieve and the yardsticks for assessing students with ID.

- In Chinese Language, English Language and Mathematics, the Learning Outcomes Framework (LOF) covering the 4 Key Stages in ordinary schools to be rolled out in 2006 could be partly used for assessing the attainments of students with ID at the higher ability end. The first level of the LOF could be further developed or fine-tuned to describe performance at sub-levels of Level 1. With such development, feedback to learning of students with ID could be given to improve learning, and their achievements could also be recognised.

- As Hong Kong has little experience in this area, the initial stage of development will rely on expert judgement with input from overseas

experts and reference to experiences of EYE. The initial NSS(ID) framework will be used in the pilot in conjunction with the draft subject curriculum framework for students with ID and be validated to develop a more consolidated LOF for them.

- For curriculum areas adapted for ID students without a LOF, broad learning outcomes would be initially developed with reference to overseas experiences together with expert judgement, and be validated in the local context through a pilot.

- HKEAA will take part in the development of learning outcomes and advise on the validation and assessment design and processes.

- During the course of development, HKEAA will explore and develop an assessment mechanism that helps certify achievements of students with ID.

Lateral Coherence

- It is necessary to align the curriculum intentions and expected learning outcomes to avoid either too low or too high expectations of students and inconsistent expectations amongst different components of a student programme.

- In this connection, it is noteworthy that *the Study* has concluded that to extend students' potential beyond the existing level of attainment would be as essential as to promote the lateral coherence amongst KLAs.

- Each school needs to establish an effective mechanism for developing a version of the school-based curriculum framework, stating the expected learning outcomes with due regard for the characteristics of its students, and monitoring the progress of learning.

Interface with Further Education and the World of Work

- The NSS(ID) curriculum in general, and the IEP in particular, should prepare students for independent living and post-school learning opportunities at skills centres, integrated vocational training centres or other forms of training and employment.

Core, Electives and Other Learning Experiences

8.5   The proposed NSS(ID) curriculum framework enables teachers to locate the needs of students on a continuum of Core, Electives and OLE (Appendix 6).

8.6   Appropriate COS courses could be provided to students having the capability of attaining the threshold or higher standards in these areas.

8.7   Through OLE, such as leisure and recreational activities, the NSS(ID) curriculum will provide opportunity for whole-person development and better preparation for adult life.

8.8   EMB will conduct research and development projects (Seed Projects) jointly with schools, local and international experts to pilot the subject curriculum frameworks where local experiences are lacking.   The purpose is to provide the professional and practical knowledge and experiences necessary for finalising the curriculum frameworks and learning outcomes, as well as the content of PDP. Schools will be invited to take part in the pilot and the scale of the projects should be manageable.

COS for Students with SEN

8.9   There are two options of COS for students with SEN:

(a)   For students without ID, as they will follow the ordinary school curriculum, in principle, they should join the same COS courses as

other students.   Where necessary, special arrangement or support will be provided, e.g. reading aid for students with visual impairment.   Mode 1[6] of implementation, i.e. courses delivered at the venues of the course providers and taught by the staff of the course providers, will provide more variety of COS courses to cater for the interests and aptitudes of students, and should be encouraged.

(b)   For students with ID, COS courses with appropriate adaptation to provide vocational awareness and where appropriate practical skills will suit the needs of these students better.   EMB is working with potential course providers to offer suitable courses for these students under the COC pilot.   A more targeted approach would be to develop COS courses for students with ID to suit the competency requirements of potential employers.   This approach will help improve the employability of the students.

8.10   Depending on the course design and the students' ability, credits may be awarded under the QF to give recognition to the competency standards attained in a particular area for further education or employment.

8.11   To better cater for the needs of students with SEN, consideration will be given to inviting non-governmental organisations (NGOs) which have a proven record of serving such students to be course providers.   To ensure the standard of COS, all courses, including those that may be adapted and designed for students with SEN, will undergo the same rigorous quality assurance process (see Chapter 4 of Part II).

---

[6] For details of the three modes of COS delivery, please see para. 3.4 in Part II.

Chapter 9   Learning and Teaching Support and Student Assessment

9.1   Students with SEN can make significant learning progress if their special needs and learning styles are appropriately addressed by means of flexible grouping, adjustments in learning time, assessment accommodations and appropriate support.

Student Assessment

Assessment for Students with Disabilities other than ID

9.2   Students with SEN studying the ordinary curriculum are expected to take part in internal assessment of the school and public assessment leading to the HKDSE like other students.   EMB and HKEAA will provide special accommodations such as seating arrangements, time allowance, tools and assistive technology, format and layout of examination papers, exemptions, etc. to support access to the assessment processes.

Assessment for Students with ID

9.3   The IEP sets out the goals and contents of the learning programme to help collect evidence about the progress of students.   It is desirable for these students to have a strengthened IEP at different stages of learning.   We shall provide further guidelines on how to link school-based assessment policies and modes of assessment to align with the adapted curriculum framework.   The Basic Competency Assessment could be appropriately adapted for students with ID as a reference to maintain student progress and understand their learning difficulties.

9.4   As a means to strengthen the monitoring of learning and teaching and tracking the progress of individual students, teachers of special schools should make full use of the IEP in determining priorities for student learning, and in

identifying key skills to be enhanced across the whole curriculum. The IEP should form the basis for curriculum planning, target setting, classroom practices, inter-disciplinary problem-solving and home-school cooperation. As a mechanism for monitoring the learning outcomes of teaching, it will provide impetus and stimulus for teachers to experiment with new approaches.

Certification

9.5 As a long-term goal, systemic assessment will be developed to give recognition to the achievement and efforts of students with ID. The experiences of assessment in the process of IEP and other school-based assessment practice will help to inform the development of new systemic assessment modes.

9.6 The involvement of HKEAA early in the development of curriculum-related learning outcomes framework for students with ID will ensure continuity of experiences in providing public assessment and certification of students with SEN in the long run.

Student Learning Profile

9.7 Like students taking the ordinary curriculum, each student with ID should have a SLP that recognises his full range of achievements. EMB will further discuss the details with schools and provide advice on the format of the SLP.

Capacity Building and Professional Development

9.8   All special schools with a senior secondary section, or likely to operate one, have been provided with the TPPG for capacity building and professional development.   Special schools are encouraged to make use of the grant to create space for teachers for various professional development opportunities (courses, school-based support, sharing and networks) to enhance their professional capacity to support the reform.   A series of workshops for school leaders of special schools will be organised in 2006.

Professional Development Programmes for Special School Teachers

9.9   Professional development opportunities for teachers would be planned on the basis that the serving SEN teachers are all professionally trained in SEN and have possessed the generic competencies of catering for different disabilities. Hence, further professional development opportunities would focus on what is required for implementing the recommendations on the NSS curriculum for students with SEN.   These would include understanding the C&A (learning outcome) frameworks, the use of IEP, learning and teaching strategies including collaborative teaching, assessment for learning, curriculum leadership and management (including effective use of resources, managing change, school-based curriculum design and assessment), student guidance and counselling, the development of OLE, and the SLP.   The contents of the programmes would be supported by knowledge and experiences generated from research and development projects.

9.10   While courses related to the above would be provided according to the specific needs of teachers in special schools, some of the courses offered in NSS subjects would also be relevant to teachers in special schools, e.g. enriching subject knowledge, introducing and interpreting NSS curricula.   These will also help promote cross-fertilisation of expertise amongst teachers from different school background.

9.11   The modes of professional development opportunities would include programmes with fixed hours for the introduction of theories supported by exemplary practice, and some hand-on experiences, school-based support service that help curriculum and school development in individual schools according to the specific school contexts, sharing and networks.   Schools are developing as learning organisations through strategies such as collaborative lesson planning, appointing a staff development co-ordinator and developing a resource bank. Self-learning and reflective practice on the part of heads and teachers are also encouraged to raise the overall professional capacity of schools.

9.12   PDP on 'Understanding C&A Frameworks' and 'Learning and Teaching Strategies' will commence in the 2006/07 school year to prepare teachers in mapping out the adapted curriculum contents and developing the expected learning outcomes of the NSS(ID) curriculum.   Structured courses on curriculum planning, development of a network learning community amongst schools for students with ID will commence in mid-2007 when more experiences have been gained from the research and development (R&D) projects.

Role of Parents

9.13   Parents' involvement in the implementation of IEP and reviewing progress has been found to be very effective in other countries and in Hong Kong.   Parents should have high but realistic expectations on learning outcomes and communicate them clearly to the school through established channels.   They should cooperate with teachers in reinforcing the learning in school through practice at home, and record progress and observations to the school.

Role of School Leaders

9.14   School leaders have the responsibility to establish a clear sense of purpose and direction, and put in place an appropriate school management and organisation structure to support effective change.   This will have direct impact on how resources are allocated.   As identified in *the Study*, one of the major challenges for special schools lies in resource management, including staff deployment, to support development tasks, formulate priorities and monitor progress for continuous improvement.

9.15   In developing the school-based curriculum, school leaders must ensure a coherent programme that encourages high expectations as to what can be achieved, taking account of the characteristics of its students and with assessment for learning as part of the curriculum design.   Schools should use the IEP mechanism to monitor learning and teaching and keep parents informed of the progress of students in their learning.

Chapter 10 QA Mechanism for the Implementation of NSS Education in Special Schools and Exit Pathways

10.1 With the provision of senior secondary education, special schools will assume the responsibility for preparing students for a smooth transition to post-school occupation, in terms of training, employment or other arrangements. This will become one of the outcome measures of the effectiveness of a special school.

Quality Assurance

10.2 As with ordinary schools, special schools are required to conduct regular self-evaluation in line with the School Development and Accountability Framework. Findings of External School Reviews (ESR) on special schools reveal that they have put in place mechanisms for School Self-evaluation (SSE) but the extent to which SSE impacts on school development, especially on student learning and providing feedback for continuing improvement of the school curriculum varies greatly. Leadership in terms of capacity for managing change needs to be improved. More effective monitoring procedures have to be introduced to collect evidence of achievement of the targets set by the schools. Sponsoring bodies need to be closely involved in the monitoring process to ensure timely and effective intervention as and when required.

10.3 To support the implementation of NSS education, each special school needs to set clearer directions for enhancing student learning and fostering student autonomy consistent with their capabilities. Working on the principle of 'one curriculum framework for all', each school has to develop a broad and challenging school-based curriculum which goes beyond rehabilitation and is capable of stretching the potential of students to the full. Principals and middle managers need to play a more proactive role in helping their staff adopt new teaching

strategies and assessment methods conducive to enhancing learning outcomes, and to deploy resources to support the staff. Effective procedures have to be introduced to ensure that the progress of students is assessed and monitored regularly. Where appropriate, parents are to be fully involved in these procedures.

10.4 As regards the evaluation of senior form curriculum, special schools with students studying the ordinary curriculum have to monitor, in particular, the specific learning support programmes developed to ensure that effective adaptive measures are in place. Special schools with adapted curriculum for students with ID have to review the effectiveness of their school-based curriculum adaptations, the process of IEP, learning and teaching strategies, and assessment modes tailored to their students.

10.5 To complement the effort of schools in self-evaluation, EMB will continue to offer schools with constructive advice for improvement of their school-based initiatives through ESR or focused inspections as appropriate. Findings on the key concerns and good practices identified in the process of ESR and focused inspections will be consolidated to help refine future curriculum planning.

Exit Pathways

(a) Existing Practices

10.6 At present, special schools usually refer prospective school leavers to VTC for assessment of the most suitable type of post-school institutions for the students based on which student referral and placement will be made, subject to parental consent.

10.7 A comprehensive range of training courses/programmes are offered at VTC Skills Centres for the purposes of improving trainees' employment prospects and preparing them for open employment. VTC reviews and updates the

courses/programmes each year to meet market demands and the aspirations of people with disabilities. Representatives from government departments, NGOs, special schools and experts from industries offer advice on new courses and improvement to existing courses. Also, vocational counselling service is provided to trainees of Skills Centres to strengthen their abilities to secure and retain employment.

10.8 Day training and vocational rehabilitation services funded by Social Welfare Department (SWD) and operated by NGOs are generally person-centred. From time to time, SWD and NGOs will review and adjust the training contents of these services to meet the ability of the trainees and the trend of employment market.

(b) The Way Forward

10.9 With the introduction of the NSS(ID) curriculum including COS for students with SEN, there is a need to review the contents of existing training courses of the post-school institutions to ensure smooth articulation with the NSS curriculum. A longitudinal study and employment surveys would be considered to evaluate the effectiveness of the NSS for students of special schools.

10.10 Collaboration among the education, welfare, rehabilitation, business and vocational training sectors is crucial in reaping the maximum benefits of the NSS for students with SEN in order to enhance their employability and employment opportunities, and to facilitate the smooth transition of students with SEN from school to meaningful employment, post-school training and adult life.

Chapter 11   Resource Considerations

Resource Provisions

11.1   We are committed to the implementation of the NSS academic structure and have earmarked resources to cater for the potential demand for additional number of classes in special schools.

11.2   As mentioned in *the Action Plan*, the appropriate level of resources for special schools for students with ID will be determined when details of the NSS(ID) curriculum, the learning outcomes and assessment standards have been worked out and agreed with the key stakeholders.   Experiences from the existing EYE Programme for students with ID will provide valuable input to developing the NSS(ID) curriculum and as an indication of the resource requirement.   The NSS(ID) curriculum will be piloted before full implementation.

11.3   First and foremost, we have to ensure the effective deployment of existing resources before considering further allocation of resources.   In this connection, *the Study* has concluded that special schools are well resourced by international standards.   The real challenge may not be to increase the overall level of resourcing but to utilise existing resources more effectively in order to make changes in curriculum and teaching that will open up greater educational and life opportunities for their students.   More specifically, *the Study* has identified the following resource management issues in some of the schools inspected:

- principals and middle managers are not able to oversee and coordinate allocation and deployment of existing resources based on priorities;

- lack of awareness of the importance of monitoring and reviewing of existing resources;

- deployment of human resources is based on administrative

consideration and perceptions of fairness in workload, rather than on student learning;

- deployment of teachers, specialist and supporting staff is too rigid and inflexible, with insufficient challenge or inappropriate role for staff;

- upgrading of facilities and equipment, secured by hard-earned external funding, is not matched to student needs, so insufficiently used; and

- under-use of the computer room and library, and insufficient use of IT to support learning and teaching, and to manage assessment data.

However, *the Study* does highlight that there is much good practice in some or parts of schools, which can serve as models for overall improvement across the special school sector.

11.4   In view of the heavy investment of resources in special education, the community legitimately expects high quality of special education that will maximise the potential of students with SEN. The findings of *the Study* are important issues for reflection of special schools in mapping out their future role and functions under NSS. A change of mindset and an emphasis on student learning are necessary to maximise the benefits of existing resources.   It is in this connection that enhancements to the quality of school leadership will improve the focus on student learning.   Any further allocation of resources will have to be tied to clearly defined curriculum targets and expected student learning outcomes.

11.5   In view of the diverse abilities and needs of students in special schools, we shall consider introducing more flexibility in resource deployment, for example, the use of cash grants or encashment of staff entitlement to facilitate special schools to acquire the most appropriate personnel or services to serve the needs of their students in a more targeted and cost-effective manner.

11.6   As regression of learning often occurs for students with ID or multiple disabilities, there have been requests from parents for more flexible arrangement of school days, such as shortening the summer vacation instead of prolonging activities during normal school days and re-deploying specialist staff to help students strengthen their mastery of independent living skills during long school holidays.   This will also help strengthen the school-leaver programme prior to post-school placement.

11.7   At present, many parents are willing to be actively engaged in supporting school activities.   Some parents serve as teacher aides in the classrooms, coaches in the extra-curricular sessions or helpers in the lunch time activities.   Their presence helps to strengthen home-school collaboration and/or parent-child relationship.

11.8   While we see a continuing need for special schools to cater for students with profound/multiple disabilities, we also see an emerging role of special schools as professional centres to support ordinary schools in the implementation of IE.   Based on the experience gained from special schools designated as resource centres for IE, EMB will explore further measures to strengthen the role and capacity of special schools in supporting IE, such as providing student attachment/partial schooling service to some ordinary school students for specific intervention/adjustment programmes, and as community resource centres on SEN services as well as regional centres of network support for ordinary schools. There are also collaboration opportunities between special and ordinary schools to enable interaction of their students for the benefits of learning as well as for social integration.

11.9   At present, the majority of special schools do not operate senior secondary classes.

> (a)   For special schools that offer the ordinary curriculum but with no experience in offering senior secondary curriculum, we will assist

and support them to get prepared for the senior secondary curriculum, and when ready, to try-out senior secondary classes before implementation of the new academic structure.

(b) For schools with students with ID, we shall invite some of them to take part in the pilot projects in developing the NSS(ID) curriculum and the development of learning and teaching materials in the 3 years starting from the 2006/07 school year before full implementation in the 2009/10 school year. It is anticipated that the experiences gained from the EYE programme will form the foundation on which students' knowledge gained from the basic education will be reinforced and integrated with high level learning at the senior secondary level. The pilot would be conducted in collaboration with parties concerned, especially those who have previous experience in providing educational service for students beyond the years of basic education for SEN. Support will be given to schools to create space for the R&D projects. Tacit knowledge and experience gained in the process will be consolidated and disseminated. It is anticipated that the project will inform any necessary support measures for these schools.

School Fees of Senior Secondary Classes

11.10 Existing government policy on tuition fee requires students to pay 18% of the cost of senior secondary education. Students with financial difficulties can apply for financial assistance through the SFAS thus ensuring no student is deprived of the opportunity for education at the senior secondary level. The same policy will apply to senior secondary students in both ordinary and special schools. In computing the average unit cost, the cost of both ordinary and special schools will be aggregated. In other words, students from both ordinary and special schools will pay the same level of school fee.

Boarding Service and Boarding Fees in Special Schools

11.11   At present, boarding facilities planned on a territory-wide basis are provided in some special schools to help students with genuine needs reduce their daily travelling time from home to school and vice versa during school days.

11.12   The introduction of senior secondary classes in special schools with boarding sections will lead to an increase in the demand for boarding service. Resources have been earmarked for increasing the overall boarding capacity.

11.13   The unit cost of a boarding place varies with the types of special school and ranges from $76,000 to $186,000 per year.   The existing boarding fee is around $440 per boarder per month.   By comparison, the fees for hostels under SWD range from $1,600 to $1,800 per boarder per month.   There is scope for an increase in the boarding fee for students with SEN through a gradual and phased approach.   Parents with financial difficulties may continue to seek financial assistance through the SFAS.

School Conversion Work

11.14   Special schools that do not operate senior secondary classes at present will have to critically examine the physical accommodation of the school premises to ensure that there is sufficient space to accommodate additional classes for the introduction of the NSS academic structure.

Chapter 12   Critical Milestones

Reaching Consensus

12.1   Successful implementation of the NSS academic system for students with SEN will require the concerted effort of all stakeholders.

12.2   EMB will continue with formal and informal professional exchange and conduct consultation sessions with parties concerned, including school sponsoring bodies, professional associations, special school heads and teachers, parents and academics.   The CDC's CSEN comprising school heads, teachers, academics, parents and representatives of HKEAA will work on the details of the curriculum and assessment in preparation for implementation of the NSS (ID) curriculum in 2009.   EMB will continue with the multi-pronged communication with various stakeholders through the "334" Web Bulletin, regular liaison meetings with different parties and school visits.

Critical Milestones for Key Actions

12.3   The critical milestones for key actions of NSS(ID) curriculum and professional development are as follows:

Key Areas	2006	2007	2008	2009
Policy on SEN "334"				➤ Implementing the NSS (SEN)
Curriculum Development [paras. 8.4-8.8, 11.9, 12.2]	➤ Producing guidelines for NSS(ID) with broad framework on core and electives for implementing R&D projects ➤ Launching R&D project on NSS(ID) curriculum	➤ Developing 1st draft of C&A Guides for NSS(ID)	➤ Developing 2nd draft of C&A Guides for NSS(ID) ➤ Revising and consolidating the C&A Guides for NSS(ID)	
Learning / Teaching (L/T) resources [para. 11.9]		➤ Disseminating curriculum exemplars on NSS(ID)	➤ Disseminating by phases curriculum resources, packages & exemplars on NSS(ID)	
Professional Development Programmes [paras. 9.9-9.12]	➤ Workshops for heads and teachers of special schools ➤ PDP for heads and teachers of special schools such as Curriculum leadership and management; Implementing IEP and Curriculum adaptation on NSS(ID)	➤ Focusing PDP for heads and teachers for students with ID to match the development of R&D project such as :- ✧ Development of network learning community ✧ Student Learning Profile ✧ Enriching subject knowledge on specific KLAs ✧ Sub-levels learning outcomes		
Assessment and HKEAA Recognition [paras. 8.4, 9.6, 12.2]		➤ Collaborating with HKEAA in developing LOF for students with ID	➤ Reviewing and revising the LOF for students with ID	➤ Consolidating the LOF framework for students with ID ➤ Studying and developing systemic assessment for students with ID in collaboration with HKEAA

(blank page)
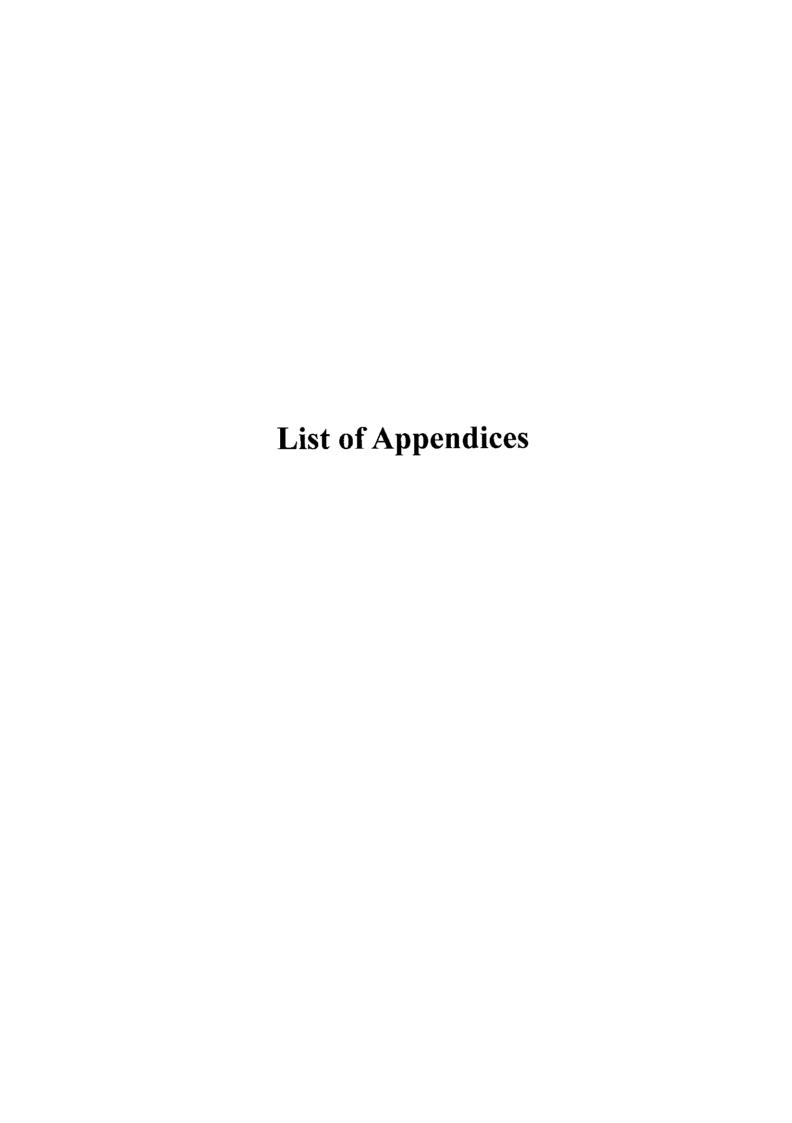
Part IV

Participation and Communication

Chapter 13   Communication with Stakeholders

13.1   In *the Action Plan*, a multi-pronged strategy for managing the complex change to the new academic structure was presented.   The four elements of this strategy, namely coherence-making, setting up critical milestones, periodic review for timely responsive adjustment, and enhancing participation and communication, will continue to be applied vigorously on the issues covered by this documents as well as the other facets of the "334" reform.

13.2   In formulating details to substantiate this document, EMB has made good reference to *the Action Plan* to ensure close alignment of key issues with the holistic policies for "334".   Results from the present consultation will contribute to the writing up of the *Senior Secondary Curriculum Guide* to be released later this year.   The Critical Milestones in Chapters 6 and 12 will guide further work and a regular review process will be an essential feedback mechanism for determining whether adjustments are necessary.

13.3   There will be on-going review of the processes leading up to each critical milestone.   Inputs from local and international consultants and stakeholders will be sought, focus group meetings will be organised, curriculum visits will be made, and regular review/evaluation will be used to provide formative feedback. Timely actions would be taken to ensure that each critical milestone is achieved.

13.4   EMB is grateful for the very high level of participation and commitment of the school sector in its consultative efforts.   The feedback has led to some significant improvements in the curriculum design.   Through continuous dialogue at every level, practical issues and concerns have been unearthed for timely action. Stakeholders have also demonstrated substantial support to the direction of the reform.

13.5   It remains our firm belief that the reform of the new academic systems will succeed when the whole community in Hong Kong contributes to it and if there is an effective sharing of effort and expertise.

13.6   On this basis, EMB will continue to seek communication with school leaders, school sponsoring bodies, teachers, parents, students, employers, tertiary institutions, professional bodies and various government agencies and non-governmental organisations through -

- the "334" Web Bulletin

- Formal advisory bodies such as Education Commission, CDC and Standing Committee on Language Education and Research (SCOLAR)

- Submission and explanation at the relevant panels and sub-committees of the Legislative Council

- Regular liaison meeting/forum with different parties

- Visits to schools

- Other forms of submission

13.7   Formal consultation on the issues described in Parts II and III will commence immediately after release of this document. Separate briefings on COS and NSS academic structure for special schools will be arranged for schools, course providers and other stakeholders. Follow-up surveys will also be conducted with schools to help finalise the proposals. Key information will be updated to the "334" Web Bulletin to facilitate discussion.

13.8   Interested schools will be invited to take part in the pilot projects from 2006 onwards to help develop the NSS(ID) curriculum.   As for COS, the finalised proposals on curriculum and quality assurance will be piloted on a limited scale in the 2006-08 cohort.   Tertiary institutions, professionals and industry experts will be involved in the research efforts.   Experience gained in the pilots will be channelled into regular evaluation exercises with the aim to inform the implementation of the new academic structure.

(blank page)

List of Appendices

The Two Streams of COS Pilots

COC Pilot	2003-05 sy	2004-06 sy	2005-07 sy
No. of course providers	2	2	4
No. of courses	12+2 (12 COC pilot courses + 2 partnership courses offered by VTC)	32	32
No. of schools	57+7 (57 COC pilot schools + 7 VTC partnership schools)	132	133
Total student enrolment	588 *Mode 1: 382* *Students from VTC partnership schools: 206*	1 979 *Mode 1: 870* *Mode 2: 1 109* *(50 classes)*	2 919 *Mode 1: 808* *Mode 2: 2 111* *(84 classes)*
PYJ/Secondary Schools Collaboration Project		**2004/05 sy**	**2005/06 sy**
No. of schools		10	18
No. of classes		17	29
No. of students enrolled		550	939

COC Courses Offered for the 2005-07 Cohort

Course	Course Provider
Arts and Media	
Cartoon Character Design	Vocational Training Council
Fundamental Movie Production	Caritas Adult and Higher Education Service
Multimedia Game Design	Vocational Training Council
Video Production	Vocational Training Council
Business	
Business Enterprise Start-Up	Vocational Training Council
Logistics Fundamentals	Caritas Adult and Higher Education Service
Practical and Computerised Accounting for Small and Medium Enterprises	HK Association of Accounting Technicians - Caritas Adult and Higher Education Service
Practical and Computerised Accounting for Small and Medium Enterprises	HK Association of Accounting Technicians - Vocational Training Council
Design	
Fashion Design	Caritas Adult and Higher Education Service
Fundamental Fashion and Image Design	Vocational Training Council
Hair Design	Vocational Training Council
Introduction to Creative Design for Product, Interior and Advertising	Vocational Training Council
Spatial Interior Design	Caritas Adult and Higher Education Service
Engineering	
Architectural Design and Model Making	Vocational Training Council
Automotive Technology in Practice	Caritas Adult and Higher Education Service
Fundamental Building Services	Vocational Training Council
Fundamental Vehicle Servicing	Vocational Training Council
Intelligent Robot and Design	Vocational Training Council
Food Production and Management	
Fundamental Chinese Food Preparation	Vocational Training Council
Fundamental Food and Beverage Service	Vocational Training Council
Fundamental Western Bakery and Pastry	Vocational Training Council
Fundamental Western Food Preparation	Vocational Training Council
Information Technology	
Computer Networking	Vocational Training Council
Creative Multimedia Studies	Vocational Training Council
Leisure, Tourism and Hospitality	
Fundamental Hotel Operations	Vocational Training Council
Fundamental Travel and Tourism Services	Caritas Adult and Higher Education Service
Introduction to Leisure and Tourism Studies	Vocational Training Council
Performing Arts	
Introduction to Theatre Art	Hong Kong Academy for Performing Arts
Make-up and Body Painting	Caritas Adult and Higher Education Service
Modelling and Personal Image	Caritas Adult and Higher Education Service
Services	
Beauty Therapy	Caritas Adult and Higher Education Service
Fundamental Health Care Practice	Caritas Adult and Higher Education Service
Taking Off in the Retail World	Vocational Training Council

Project Yi Jin

Project Yi Jin (PYJ) is a second-chance programme targeting at mature students re-engaging in education or school-leavers who were unsuccessful in the Hong Kong Certificate of Education Examination (HKCEE). PYJ was launched in October 2000 as a bridging programme to provide an alternative route and to expand the continuing education opportunities for the target groups. It is run by the Federation for Continuing Education in Tertiary Institutions (FCE). A student who has successfully completed the 10 modules will be awarded a Certificate.

This PYJ Certificate has been assessed by the Hong Kong Council for Academic Accreditation as comparable to five passes in HKCEE for continuing education and employment purposes. Holders of the PYJ Certificate can further their studies in the member institutions of FCE. They are also accepted by Government as meeting the entry requirement of over 30 civil service posts which require five passes (including English and Chinese) in HKCEE.

Establishment of a Qualifications Framework and Its Associated Quality Assurance Mechanism

The advent of globalisation and rapid advances in information technologies have triggered fundamental changes to the economic structure of Hong Kong. The world we are living in today is one interdependent global market place. Technological advancements have reduced the distance between nations and people. It also brings direct competition into markets of both products and services. Hong Kong is transforming into a knowledge-based economy in order to maintain its competitiveness.

The exponential growth of knowledge means that knowledge and skills become obsolete relatively rapidly. There is a limited shelf life for what we have learnt from school and through work. Life-long learning is no longer a slogan but a fact of life as we recognise the need for everyone to continue to upgrade and update oneself so as to keep pace with changes and remain competitive in the workplace.

About 33% of our working population have educational attainment at or below junior secondary level, while the proportion of the workforce with tertiary education is about 27%. There is mismatch between job requirements and the qualifications of workers. It is clear that we need to upgrade the quality of our human capital and provide individuals with opportunities to optimise their potential to meet the ever-changing demands of the economy.

The existing education and training system in Hong Kong is inadequate in fostering a vibrant, flexible and responsive environment that promotes life-long learning. There is a proliferation of qualifications in the market, which lack common benchmarks of quality. Both learners and industry are uncertain about the outcomes of education and training and whether their needs are adequately met. Progression ladders are unclear, thus making it difficult for learners to draw up their own roadmaps to upgrade themselves and acquire higher qualifications.

To address these inadequacies and foster an environment conducive to life-long learning, the Government decided in February 2004 to establish a cross-sectoral Qualifications Framework (QF) and its associated quality assurance mechanism for Hong Kong. The framework will enable the development of flexible and diverse progression pathways with multiple entry and exit points. There will be common benchmarks for

quality assurance of qualifications.   The framework will also serve as a platform that facilitates articulation to maximise flexibility of learning.   With better clarity of programmes and qualifications, learners can map their own progression pathways to their destinations.   Employers will have a better understanding of the complex range of qualifications available.

The Qualifications Framework

The QF is a seven-level hierarchy that orders and supports academic as well as vocational qualifications.   Each level is characterised by a set of generic descriptors that are outcome-based.   The outcome standards state, in broad terms, what a person should know, understand and be able to do at a particular level.   In the academic field, outcome standards are the learning outcomes that are set by scholars.   In the vocational field, outcome standards are determined by members of the respective industries through a consensual process.   As a voluntary system, the QF provides objective benchmarks for quality assurance of different levels of qualifications, giving clear information on the standard of courses, qualifications and providers.

Specifications of Competency Standards

The QF is underpinned by industry-specific competency standards, known as the Specification of Competency Standards (SCS).   They represent the industry benchmarks for the skills, knowledge and attribute required for good performance at different levels. The specifications are practical, and at the same time sufficiently broad and flexible, encompassing not only the needs of today, but also projected requirements in the foreseeable future.   They will become the basis for curriculum design of related education and training courses.   As the outcomes of qualifications cover the skills and standards required of the workforce, the SCS-based qualifications will be valued by the industries and employers.

The Education and Manpower Bureau is setting up Industry Training Advisory Committees (ITACs) to develop SCSs under the QF.   So far, ITACs have been formed for nine industries, namely, Printing & Publishing, Watch & Clock, Chinese Catering, Hairdressing, Property Management, Electrical & Mechanical Services, Jewellery, Information & Communications Technology, and Automotive.   The ITAC comprises representatives of the employers, employees, professional bodies and other stakeholders. We are reaching out to other industries and professions and expect to form more ITACs in

the following months.   Overseas experience suggests that it will take considerable time to develop a comprehensive QF that covers all economic sectors.   We hope that with the support of the stakeholders, it will not take us too long to cover the majority of trades and industries that employ the bulk of the workforce.

Credit Accumulation and Transfer System

The whole and modular qualifications under the QF are defined by levels and credits, which provide a measure of the height and depth of the education and training outcomes.   Consequently, it is vital to have a common approach to assign credit and ensure its consistent application in order to achieve credit accumulation and transfer (CAT).   Career-oriented Studies (COS) in secondary schools will be credit-based to facilitate advancement to further education and qualifications.

To pursue life-long learning, workers particularly require flexibility in the mode and pattern of learning to cater for their work and family responsibilities.   A CAT system will provide the flexibility to suit individual circumstances and minimise duplication in training.

At present, there is no institutionalised CAT system in the tertiary education sector.   The successful implementation of a CAT system for the sector will rely on the willingness and readiness of the tertiary institutions to come together to formulate a mutually acceptable arrangement.   As a matter of priority, we focus on the sector below degree level, which is diverse and in greater need of a common credit approach.   When a common credit approach has been established for this sector, they should be unified with the degree sector subsequently for CAT purpose.   We are conducting a study to develop a common credit approach for the sector below degree level.

Quality Assurance Mechanism

To ensure the credibility of qualifications awarded by a wide range of education and training providers under the QF, we need to develop a mechanism of academic and vocational accreditation to assure the quality of these qualifications.   To this end, we introduced the Accreditation of Academic and Vocational Qualifications Bill (the Bill) into the Legislative Council in July 2005.   A Bills Committee is scrutinising the Bill.

Under the Bill, we have specified the Hong Kong Council for Academic Accreditation (HKCAA) as the Accreditation Authority and the Qualifications Register (QR) Authority.   HKCAA is tasked with the responsibility of assuring the quality of qualifications recognised under the QF.   As the QR Authority, HKCAA is required to administer the QR, which will be a web-based database on qualifications, learning programmes and providers that are recognised under the QF.   The Register will provide a centralised source of information for reference by the general public including learners, employers, providers, as well as the local and international communities.   Subject to the enactment of the Bill, the QR will acquire a statutory status and become the public face of the QF.

The QF and the COS

Both the QF and the reform of the academic structure for senior secondary education and higher education (the "334" reform) serve the common goal of promoting life-long learning and catering for the need of multiple and flexible progression pathways. For the COS, their assessment should be competency-based and school-based.   They will seek their currency through reference to the QF, in particular, the SCSs.   The completion of COS will lead to the award of a modular qualification (i.e. Statement of Attainment of a number of competency units) of the industry.

With the production of SCSs by the industries, the education and training providers can design suitable SCS-based courses for students.   Under the QF, the modular qualifications can be accumulated and converted into whole qualifications over time.   In other words, COS will lay a good foundation for students to pursue further studies in post-secondary institutions, or attainment of professional qualifications.

For further information on the QF, please visit the following web-site: http://www.hkqf.gov.hk (only Chinese version is available at the moment).

Sabbatical Leave for Teacher Professional Development Scheme

The Sabbatical Leave for Teacher Professional Development Scheme will be piloted on a small scale in the 2006/07 school year.   The aim of the scheme is to enable serving teachers to engage in full-time study while maintaining a steady salary income.

Under the proposed scheme, teachers may take one-year (or two-year) study leave to undertake full-time study.   The teachers will be paid 80% (or 66% for two-year study leave) of their prevailing salary in the leave period.   The salary paid in the leave period will be gradually deducted from the salary in the next four years.   The practicability of this initiative and the administrative issues involved will be reviewed before announcing the details of the scheme.

Continuum of Learning Needs of Students with ID

Components of Learning	Learning Needs		
	← low capability —— moderate capability —— high capability →		
Core	**Communication:** To comprehend and respond to familiar instructions and conversations experienced in daily life situations. **Pre-Mathematical Development:** To comprehend pre-mathematical concepts that enable the child to orientate himself/herself in physical and social environment, e.g. colour, size, location, space, time and one-to-one matching. **Independent Living:** To become aware of familiar people, objects and events; to acquire skills for performing routine daily task with the help of others.	**Functional Chinese:** To communicate with restricted speech and text in familiar daily life and work situations. **Functional Mathematics:** To understand mathematical concepts sufficiently to be able to apply them in daily transactions and other functional or social activities, e.g. shapes, numbers, volume, numerical presentations such as graphs and simple computations . **Independent Living:** To have some capacity to initiate actions and accept responsibility in daily life situations.	**Chinese Language:** To communicate reasonably well in speech and text in familiar and contextual work and daily life situations. **Functional Mathematics:** To apply computation skills in daily transactions and planning, such as calculating total expenditure, comparing prices and estimating monthly expenditure, etc. and mathematical knowledge and skills in interpreting and producing data such as comparing sizes and presenting simple statistical findings. **Independent Living:** To have the capacity to plan for themselves a way of living that one finds fulfilling and worthwhile.

Components of Learning	Learning Needs		
	← low capability ——— moderate capability ——— high capability →		
Electives	To participate in and learn to enjoy cross-curricular activities such as enjoying music and rhythmic movement, etc.	To develop an interest in cross-curricular studies and acquire knowledge through related KLAs and vocational exposure.	To cultivate an interest in cross-curricular studies and acquire knowledge through KLAs/subjects, COS/vocational preparation for further development.
	←————————————————→		
Other Learning Experiences	To apply skills in taking care of one's physical, mental and social-emotional needs through various learning experiences for transition to adult life.	To understand and regulate one's physical, mental and social-emotional needs through various learning experiences for transition to adult life.	To understand, develop and assess one's physical, mental and social-emotional needs through various learning experiences for transition and planning of adult life.
	←————————————————→		

Bibliography

Publications

Kohler, P.D. & Field, S. (2003). Transition-focused education: Foundation for the future. *The Journal of Special Education*, 37(3), pp.174-183.

Kraemer, B.R. & Blacher, J. (2001). Transition for young adults with severe mental retardation: School preparation, parent expectations, and family involvement. *Mental Retardation*, 39(6), pp.423-435.

Lieberman, A. & Miller, L. (eds.) (2001). *Teachers Caught in the Action: Professional Development that Matters*. N.Y.: Teachers College, Columbia University.

Luongo-Orlando, K. (2003). *Authentic Assessment: Designing performance-based tasks*. Markham, Ont.: Pembroke Publishers.

McNamara, O. (ed.) (2002). *Becoming an Evidence-based practitioner*, Routledge Falmer: London and New York.

Spinelli, C. G. (2002). *Classroom Assessment for Students with Special Needs in Inclusive Settings*. Upper Saddle River, N.J.: Merrill Prentice Hall.

Reports

Organisation for Economic Co-operation and Development (2000) *From initial education to working life – making transitions work*, Paris: Organisation for Economic Co-operation and Development.

Organisation for Economic Co-operation and Development (2000) *Motivating students for lifelong learning*, Paris: Organisation for Economic Co-operation and Development.

The World Bank (2005) *Expanding Opportunities and Building Competencies for Young People – A New Agenda for Secondary Education*, Washington, DC: The World Bank.

Websites

California Department of Education. *Career Technical Programmes in California*
<http://www.cde.ca.gov/ci/ct/>

Cirius Danmark. *Upper Secondary Education in Denmark*
<http://www.ciriusonline.dk/Default.asp?ID=3763>

Department for Education and Skills. *Curriculum and Qualification*s
< http://www.dfes.gov.uk/14-19/index.cfm?sid=3>

Department for Education and Skills. *Evaluation of Increased Flexibility for 14 to 16 Year Olds Programme: The Second Year*
<http://www.dfes.gov.uk/research/data/uploadfiles/RR609.pdf>

Department for Education and Skills. *General Certificate of Secondary Education (GCSE) in Vocational Subjects*
<http://www.dfes.gov.uk/qualifications/mainSection.cfm?sID=63&ssID=199>

Department for Education and Skills. *Qualifications for Schools and Colleges: Vocational A Levels / Vocational Certificate of Education (VCEs)*
<http://www.dfes.gov.uk/qualifications/mainSection.cfm?sID=46&ssID=132>

Edexcel. *Qualifications: BTEC Firsts*
<http://www.edexcel.org.uk/quals/first/>

EdNA Online Education Network Australia. *Education Topics in Vocational Education & Training*
<http://www.edna.edu.au/edna/browse/0,12650>

EuroVetNet. *Education, Training System and Future Development in Vocational Education and Training in Sweden*
<http://www.lhs.se/eurovetnet/sweden.html#ini>

EuroVetNet. *Some Changes and On Going Development Activities in the Vocational Education and Training (VET) in the Swedish System*
<http://www.lhs.se/eurovetnet/VETSweden-development.pdf>

LearnMore Resource Centre. *Indiana Department Workforce Development (DWD): Career Clusters*
<http://www.learnmoreindiana.org/careers/clusters/>

Maryland Department of Labor, Licensing & Regulation. *Maryland Career and Workforce Information*
<http://www.dllr.state.md.us/lmi/improvingoccupationalinfo/clusterdefinitions.htm>

NSW Board of Vocational Education and Training. *Vocational Education and Training in New South Wales*
<http://www.bvet.nsw.gov.au/>

PA Department of Education. *Career and Technical Education Programmes Offered in Pennsylvania*
<http://www.pde.state.pa.us/career_edu/cwp/browse.asp?A=115&BMDRN=2000&BCOB=0&C=26045>

Qualification and Curriculum Authority - Special Educational Needs
<http://www.qca.org.uk/8649.html>

Qualifications and Curriculum Authority. *Framework of Sector and Subject Categories*
<http://www.qca.org.uk/239_2135.html>

Queensland Government. *Qualification Levels in Queensland*
<http://www.trainandemploy.qld.gov.au/client/courses/qualification_levels/index.htm#vocational>

Queensland Government. *Technical And Further Education (TAFE) in Queensland*
<http://www.tafe.qld.gov.au/>

SOFWeb. *Vocational Education (VET) in Schools*
<http://www.sofweb.vic.edu.au/voced/index.htm>

Stage 6 Special Program of Study - Citizenship and Society Life Skills
<http://www.boardofstudies.nsw.edu.au/syllabus_hsc/pdf_doc/sps/sps_citizenship.pdf>

Stage 6 Special Program of Study - Personal Development, Health and Physical Education Life Skills
<http://www.boardofstudies.nsw.edu.au/syllabus_hsc/pdf_doc/sps/sps_pdhpe.pdf>

Stage 6 Special Program of Study - Work and the Community Life Skills Courses
<http://www.boardofstudies.nsw.edu.au/syllabus_hsc/pdf_doc/sps/sps_workplace.pdf>

Texas Education Agency. *Career and Technology Education in Texas*
<http://www.tea.state.tx.us/cte/index.html>

The Massachusetts Career Vocational Technical Education Resource Center. *Vocational Technical Education Curriculum Frameworks*
<http://www.mccte.org/frameworks/>

U.S. Department of Education. *Career and Technical Education in the US*
<http://www.ed.gov/about/offices/list/ovae/pi/cte/index.html>

Victorian Curriculum and Assessment Authority. *Victorian Certificate of Applied Learning (VCAL)*
<http://www.vcaa.vic.edu.au/vcal/index.html>

Victorian Curriculum and Assessment Authority. *Vocational Education and Training (VET) in Victoria*
<http://www.vcaa.vic.edu.au/vet/index.html>

Vocational Learning. *National Vocational Qualifications (NVQ)*
<http://www.vocationallearning.org.uk/parents/qualifications/#nvq>

Vocational Learning. *Qualification for Young People Aged 14 to 19 Years*
<http://www.vocationallearning.org.uk/parents/qualifications/>