NSS ICT Curriculum Management, Planning and Leadership (Refreshed)

Programme

Date: 16 March 2011 (Wednesday)
Time: 2:00 p.m. – 5:00 p.m.
Venue: Rm W301, 3/F., West Block, EDB Kowloon Tong Education Services Centre, 19 Suffolk Road, Kowloon Tong

Events

2:00 p.m. **Registration**

2:10 p.m. **Review on the Implementation of NSS ICT Curriculum**
Curriculum Management, Planning and Leadership – An Introduction
Speaker: Mr LUI Sze-ming, Atkin
Curriculum Development Officer (Technology Education),
Curriculum Development Institute, Education Bureau

2:40 p.m. **Experience Sharing (1)**
Speaker: Mr CHU Ka-tim
TE KLA Coordinator & Computer Panel Head, Hong Kong True Light College

3:20 p.m. **Break and Professional Exchange**

3:45 p.m. **Experience Sharing (2)**
Speaker: Mr CHEUNG Kin-sun, Jackson
Member of CDC-HKEAA Committee on ICT (Senior Secondary)
Vice Principal & Computer Panel Head, Ho Ngai College (Sponsored by Sik Sik Yuen)

4:30 p.m. **Issues, Concerns and Strategies in Planning the NSS ICT Curriculum**
Concluding Remark
Speaker: Mr LUI Sze-ming, Atkin

4:45 p.m. **Q&A Session**

NSS ICT Curriculum Management, Planning and Leadership

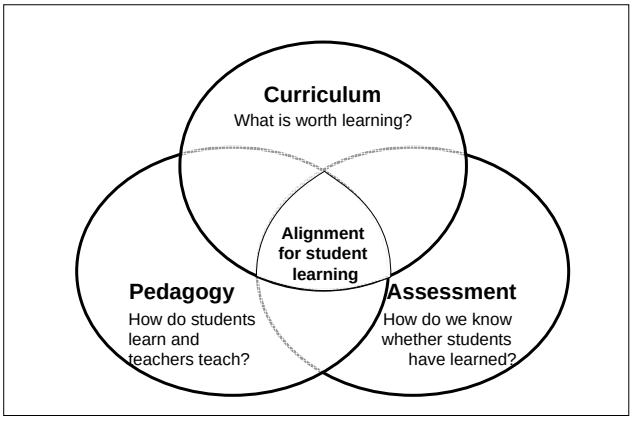
新高中資訊及通訊科技科課程管理、設計及領導

2:10pm	Review on the Implementation of NSS ICT Curriculum Curriculum Management, Planning and Leadership – An Introduction
2:40pm	Experience Sharing (1) *Mr CHU Ka-tim (Hong Kong True Light College)*
3:20pm	Break and Professional Exchange
3:45pm	Experience Sharing (2) *Mr CHEUNG Kin-sun, Jackson (SSY Ho Ngai College)*
4:30pm	Issues, Concerns and Strategies in Planning the NSS ICT Curriculum Concluding Remark
4:45pm	Q&A Session

Outline (1)

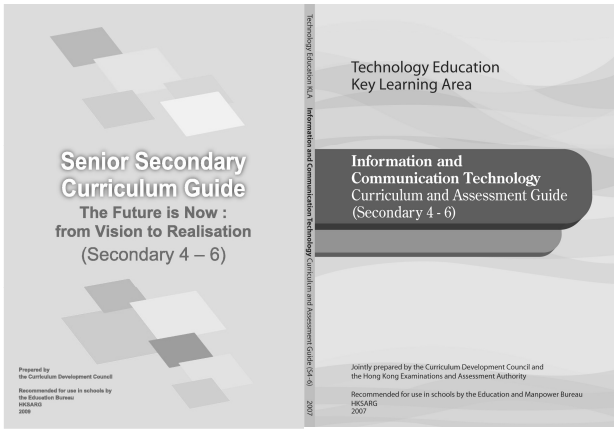
- Review on the Implementation of NSS ICT Curriculum
  - Curriculum
  - Assessment
  - Pedagogy
  - Curriculum Leadership
    - Curriculum Management, Planning and Leadership
    - Seminar Series for Middle Managers

Curriculum, Pedagogy and Assessment

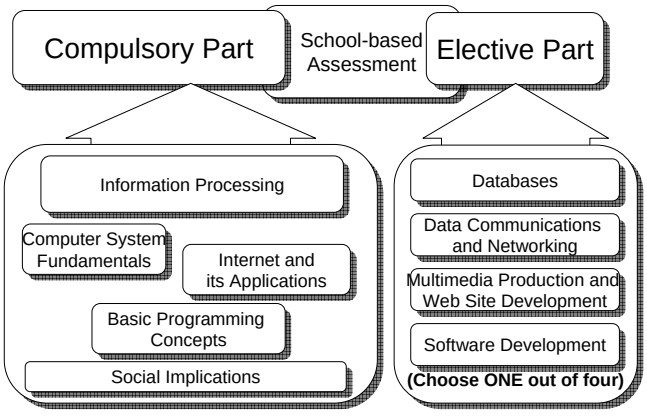


Adapted from Booklet 3, Senior Secondary Curriculum Guide (CDC, 2009)

Curriculum Guides

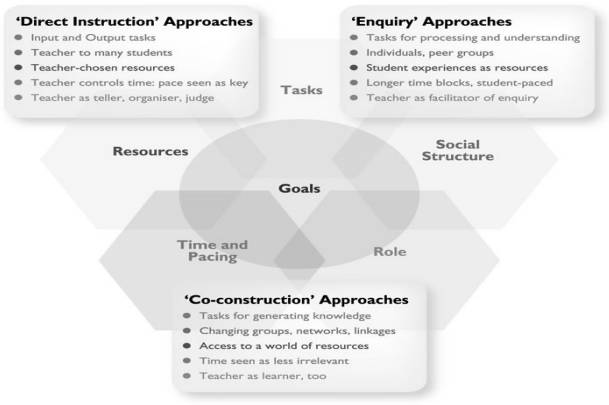


Curriculum Framework



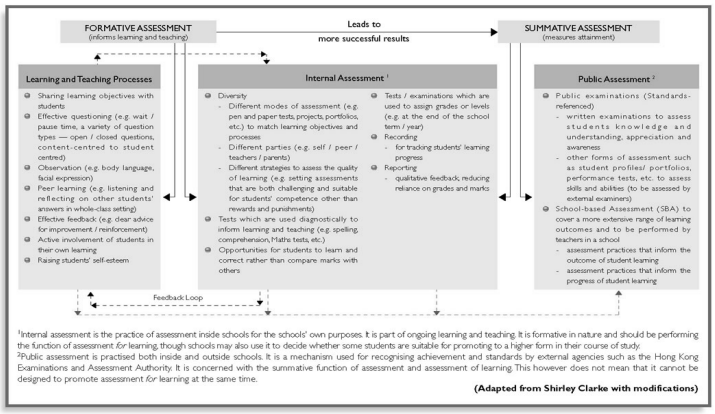
Adapted from Information and Communication Technology Curriculum and Assessment Guide (Secondary 4 – 6) (CDC and HKEAA, 2007)

Learning and Teaching Strategies



Booklet 3, Senior Secondary Curriculum Guide (CDC, 2009)

Assessment: A Framework of School Assessment Practices



Booklet 4, Senior Secondary Curriculum Guide (CDC, 2009)

Outline (2)

- Curriculum Management, Planning and Leadership – An Introduction
  - Curriculum Planning
  - Curriculum Management
  - Curriculum Leadership

Curriculum Planning and Management

- Guiding principles in the curriculum planning process
  - **Curriculum planning starts at the junior secondary level** ... help them to identify their interests so that they choose the appropriate elective options …
  - Learning is made more meaningful by **introducing authentic tasks and scenarios**; and appropriate life-wide learning experiences
  - Topics are not to be taught in isolation. Appropriate **integration of curriculum areas** is encouraged;
  - Teachers are encouraged to **make flexible use of class time** to facilitate learning …;
  - Teachers are encouraged to make use of both **formative assessment** and summative assessment to inform learning and teaching
- Curriculum Management
  - **initiate the sharing of teaching** ideas, knowledge and experiences to foster peer collaboration, support and professional exchange to improve the learning and teaching of ICT;

Outline (3)

- Issues, Concerns and Strategies in Planning the NSS ICT Curriculum
  - Curriculum Planning
    - 6-year curriculum planning, interfacing with junior secondary
    - Progression
    - Choice of Elective Option
  - Curriculum Management
    - Learner Diversity
    - Meaningful learning
  - Curriculum Leadership
    - Plan-Implement-Evaluate
    - Resource Usage
    - Build Capacity

→
- Assessment for Learning
- Other Learning Experiences
- Student Learning Profile
- Catering for Learner Diversity

Guiding Principles in Curriculum Planning (pp.69-70)

- **Curriculum planning starts at the junior secondary level** where teachers will have ample opportunities to know what students have achieved in the area of ICT and help them to identify their interests so that they choose the appropriate elective options to further their study in specific areas of ICT;
- Learning is made more meaningful by introducing **authentic tasks and scenarios**; and appropriate **life-wide learning experiences**;

Technology Education Key Learning Area

Technology Education KLA

Primary

General Studies

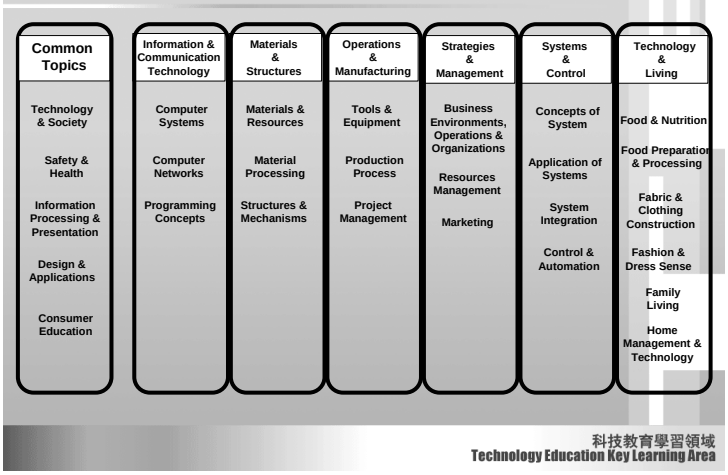
Junior Secondary

e.g., Technological Subjects, Computer, Business, Home Economics

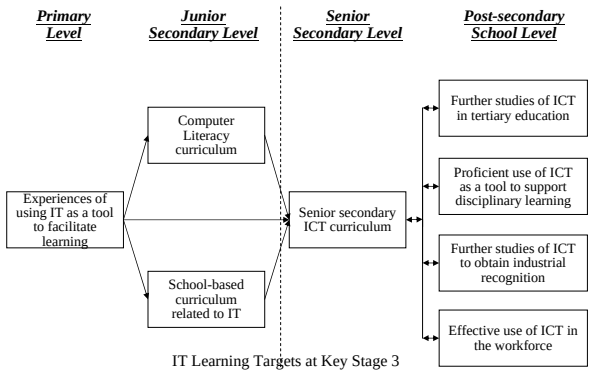
New Senior Secondary

- Business, Accounting and Financial Studies
- Information and Communication Technology
- Technology and Living
- Health Management and Social Care
- Design and Applied Technology

Learning Elements under Knowledge Contexts in Technology Education



The continuum of learning for students in ICT



Adapted from Information and Communication Technology Curriculum and Assessment Guide (Secondary 4 – 6) (CDC and HKEAA, 2007)

Guiding Principles in Curriculum Planning (pp.69-70)

- Topics are not to be taught in isolation. **Appropriate integration of curriculum areas** is encouraged;
- Learning is not confined to time-tabled lessons. Schools should **make use of learning opportunities beyond the classroom** to maximise learning effectiveness;

Guiding Principles in Curriculum Planning (pp.69-70)

- **Teachers are encouraged to work together** as a team to plan the senior secondary ICT curriculum, to develop learning materials, activities and tasks, and to collaborate with teachers of other KLAs on cross-curricular projects;
- Teachers are encouraged to make **flexible use of class time** to facilitate learning (e.g. single periods for theoretical topics, and double or triple periods for practical tasks.); and

Guiding Principles in Curriculum Planning (pp.69-70)

- Teachers are encouraged to **make use of both formative assessment** (e.g. portfolios and projects) **and summative assessment** to inform learning and teaching.

Progression – Guiding Principle (p.70)

- The senior secondary ICT curriculum is designed to enable students to explore their **interests**, **potential** and aspirations for **further studies** and **careers**.
- It is built upon students' **prior knowledge and skills** in their computer literacy studies from primary through junior secondary.
- To help students achieve the curriculum aims and objectives, schools should feel free to **vary the organisation and teaching sequence of learning elements**.

Progression – Consideration in devising school-based curriculum plan

- Teaching Space and Lesson Allocation
  - Multiple electives
  - Team teaching
    - (e.g. one teacher for compulsory part and one for elective part)
  - "Network program"
- Time allocation and SBA
  - Lesson time allocation for each year
  - SBA arrangement including mark submission schedule
  - 1 mock exam vs. 2 exams in S6

Progression – Consideration in devising school-based curriculum plan

- Core and Elective modules
  - teach the modules in the compulsory part prior to the option in the elective part
  - teaching the option in the elective part immediately after the related module(s) in compulsory part is covered
- Alternative pathways
  - Taster Year, New Pupil in S5
  - Acceleration (programme) - for gifted learners
  - Subject drop-out (e.g. to ApL)
    - "The knowledge and skills of ICT taught in S4 are transferable to other subjects even if students opt not to study ICT from S5 onwards."

Curriculum Planning Strategies (pp.77-79)

- For students of different abilities and inclinations
- Making student learning more meaningful
  - Designing authentic experiences
    - Community service project
    - Reading authentic materials
  - Engaging in life-wide learning
    - Visits to different IT organisations
    - Participation in IT-oriented competitions

Curriculum Management (pp.79-82)

- Areas of Work
  - Understand the Curriculum and Learning Context
  - Plan and Implement the Curriculum
  - Evaluate the Curriculum
  - Develop Resources
  - Build Capacity
- Roles of Different School Personnel
  - ICT Teachers
  - TE KLA Co-ordinator / ICT Panel Chairperson
  - School Head

Plan and Implement the Curriculum

- Design and implement schemes of work to help students achieve the curriculum aims and learning targets of the senior secondary ICT curriculum
- Design modes of assessment and tasks to promote assessment for learning

Evaluate the Curriculum

- Review the senior secondary ICT curriculum and teaching and learning on a regular basis through collecting data from different sources, analysing student learning, and
- making adjustments whenever necessary.

Roles of Different School Personnel

- Managing the ICT curriculum efficiently to promote effective learning and teaching requires a clear division of duties and collaboration among ICT teachers, TE KLA co-ordinator / ICT panel chairperson and the school head, who have different roles in the planning, development and implementation of the school-based ICT curriculum.

Roles - ICT Teachers

- acquaint themselves fully with the structure, organisation and learning targets of the curriculum;
- help students to identify their specific area(s) of interest in ICT;
- explain clearly to students the overall aims, learning targets, and expectations of the school-based ICT curriculum;

Roles - ICT Teachers

- foster an active learning environment for students, strengthen their skills in learning how to learn, and help to develop their full potential in learning ICT;
- initiate the sharing of teaching ideas, knowledge and experiences to foster peer collaboration, support and professional exchange to improve the learning and teaching of ICT;
- keep abreast of the latest developments in ICT curricula and innovations in ICT; and

Roles - ICT Teachers

- participate actively in professional development courses, workshops, seminars, etc. to enhance professionalism.

Roles - TE KLA Co-ordinator / ICT Panel Chairperson

- set a **clear direction** and plan **for its own school-based ICT curriculum**;
- **decide on which modules to offer in the Elective Part**, taking into account students' needs, interests and prior knowledge in ICT, as well as teachers' strengths and practical constraints;
- collect and analyse evidence of students' learning to make informed decisions in curriculum planning and instruction;

Roles - TE KLA Co-ordinator / ICT Panel Chairperson

- monitor the implementation of the curriculum, and make appropriate adjustments in strategies for learning and teaching; and
- **manage and use the learning and teaching resources, including hardware, software and computer rooms**, systematically and effectively.

Roles - School Head

- Understand students' needs, strengths and interests, as well as the significance of learning ICT in their whole-person development;
- Understand the strengths of teachers, and **assist the TE KLA co-ordinator / ICT panel chairperson to deploy teachers flexibly to teach the Compulsory and Elective Parts of the curriculum**;

Roles - School Head

- Co-ordinate the work of KLA leaders and subject panels, and set clear targets in curriculum development and management;
- **Provide support for trying out new initiatives in the learning and teaching of the ICT curriculum (e.g. flexible time-tabling to facilitate collaborative teaching** and peer lesson observation among teachers; and **flexible grouping of students for topics of different kinds**);

Roles - School Head

- Convey a clear message to parents regarding the significance of ICT education; and
- Network with other schools to facilitate professional exchange of information and sharing of good practices.

Resource Support (p.69)

- Most TE KLA electives require equipment, software, storage, and material. In most schools, the existing facilities are considered adequate for offering the electives. Schools should focus on the interests, needs, and abilities of their students in planning their school-based curricula. Where schools anticipate problems associated with low enrolment, they may **consider collaborating with other schools to form networked classes for the electives**.

Emphases in the Second 5-year Plan (2007-2012) of Curriculum Reform

- Enhance Assessment for Learning including:
  - emphasising students' self-directed learning in order to help learners to understand how they learn and pave the way for life-long learning;
  - adopting more flexible and diversified assessment methods to recognise the different potentials and abilities of students;
  - providing appropriate and clear feedback; and
  - allowing students' active participation in assessment activities and prompting them to adopt quality reflective thinking.

(SSCG 1.4.2)

Reflective Questions

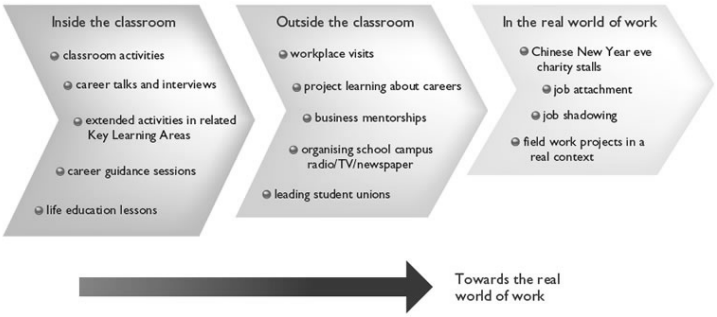
- What is your school's assessment policy?
- What are the strengths and weaknesses of your school's assessment policy and practices?
- How would you change the school's assessment policy and practices in order to cater better for learning in the New Academic Structure and specific SS subjects?
- How are the assessment activities different at the SS level, when compared with the junior secondary level, in particular in stretching the potential of the students in your school?

- *(SSCG 4.3.3)*

Aims and Expected Outcomes of Other Learning Experiences

- To widen students' horizons, and to develop their life-long interests
- To nurture positive values and attitudes
- To provide students with a broad and balanced curriculum with essential learning experiences alongside the core and elective components (including ApL courses) in order to nurture the five essential Chinese virtues, 'Ethics, Intellect, Physical Development, Social Skills and Aesthetics' (德、智、體、羣、美)
- To facilitate students' all-round development as life-long learners with a focus on sustainable capacities. The expected outcomes include students:
  - becoming active, informed and responsible citizens;
  - developing respect for plural values and interests in the arts;
  - adopting a healthy lifestyle; and
  - enhancing career aspirations and positive work ethics.
- *(SSCG 5A.3)*

Some examples of learning activities



Areas of OLE

- Moral and Civic Education
- Community Service
- Career-related Experiences
- Aesthetic Development
- Physical Development

Suggested Expected Outcomes -- Community Service

- identify and reflect on various social issues / concerns encountered in Community Service experiences;
- develop positive attitudes (e.g. respect and caring for others, social responsibility) and related generic skills (e.g. collaboration) to prepare for future voluntary service involvement; and
- nurture life-long interest and habits in Community Service.

Suggested Expected Outcomes -- Career-related Experiences

- enhance up-to-date knowledge about 'the world of work';
- acquire knowledge related to employability, in order to encourage personal career planning and development; and
- reflect on work ethics, and employers' expectations in the current labour market.

Any examples related to ICT curriculum?

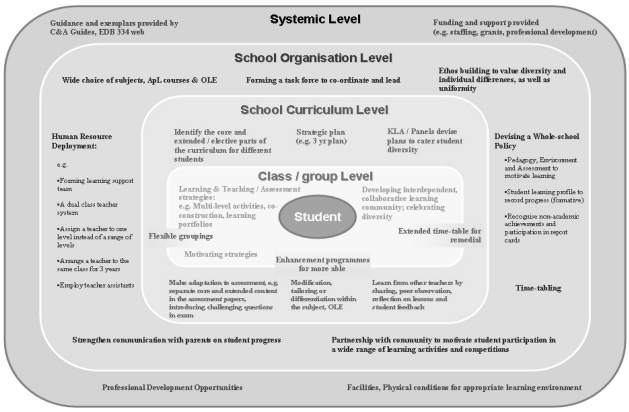
Content of Student Learning Profile

To serve as evidence of whole-person development, the content of an SLP may include brief information on:

- academic performance in school (other than results in the HKDSE Examination);
- Other Learning Experiences (OLE);
- performance/ awards gained outside school; and
- student's self-accounts (e.g. highlighting any impressive learning experiences or career goal setting).

Any examples related to ICT curriculum?

Catering for Learner Diversity



Booklet 7, Senior Secondary Curriculum Guide (CDC, 2009)

Curriculum planning level (7.3.1)

- The curriculum can be appropriately adapted to suit the different needs and abilities of students. …
- A range of strategies can be adopted to maximise the development of the more able students and to help the less able ones to learn more effectively. For example, teachers may design enhancement and enrichment activities for the more able students and adopt different groupings to help the less able students.

Classroom learning and teaching level (7.3.2)

- Gathering background information on students, including their interests, strengths and weaknesses
- Varying the level of difficulty and the content covered
- Varying questioning techniques and the amount and level of support provided, for example, providing additional support such as using mind-maps and diagrams to aid comprehension for less able students, asking open-ended questions with fewer hints for more able students, using concrete examples to illustrate concepts for less able students and symbolic language for the more able ones

Classroom learning and teaching level (7.3.2)

- Varying the teaching approach, such as using less challenging modes and content in assessment to provide the less able students with an opportunity to succeed
- Promoting independent learning and group learning to release teachers from the need to work with all students at the same time
- Being responsive to student performances and needs that may not be expected in the classroom and giving constructive feedback that helps learning
- Formulating a teaching plan for the whole class using core and extension resources for different student groups.

Maze or Matrix !?

	Curriculum	Pedagogy	Assessment
Different Ability			
Different Learning Style			
Different Interest / Aptitude			