Technology Education

> Position

Technology Education is the study of the purposeful application of knowledge (such as Information and Communication Technology, Materials & Structures, Operations & Manufacturing, Strategies & Management, Systems & Control and Technology & Living), skills and experiences, in using resources to create products and systems to meet human needs.

It aims at developing students' positive attitudes and values, as well as their capabilities in coping with the rapidly emerging technologies in our society; and preparing them for future changes in technology through hands-on problem-solving learning activities.

It enables students to become technologically innovative and to have the ability to critically appraise the impacts of technology on the individual, family, society and environment.

> Direction

TE KLA will be moving from a curriculum that provides students with specialised knowledge and skills to one that emphasises the development of students' understanding of their own aptitudes, interests and abilities for their future studies and career.

➤ We hope that from now to 2005-06

Our Students	Our Teachers
Primary 1 – Primary 3	
Please refer to the section on General Studies for Primary Schools	Please refer to the section on General Studies for Primary Schools
Primary 4 – Primary 6	
Please refer to the section on General Studies for Primary Schools	Please refer to the section on General Studies for Primary Schools
Secondary 1 – Secondary 3	
• (of both genders) have equal opportunities to gain access to broad and balanced learning experiences in TE	• provide equal learning opportunities in TE for both genders

Secondary 1 - Secondary 3

- engage in authentic, hands-on problem-solving learning activities using easily available materials and equipment
- develop their knowledge and skills to cope with rapidly emerging technologies
- develop their willingness to update their knowledge and skills in technology from time to time
- appraise the impacts of technology and develop critical thinking ability

- move away from subject-based teaching and specific skills training to hands-on problemsolving teaching
- integrate student learning within TE KLA and with other KLAs through different knowledge areas
- provide life-wide learning experiences to students
- encourage students to appraise their solutions
- use a variety of methods to assess students' learning processes and outcomes

Secondary 4 and above

- study through different knowledge areas in technology, such as information and communication technology, design & planning, system & management, sciences & technology, etc. according to their aptitudes, interests and abilities, in order to prepare themselves for their future studies and career
- provide multiple channels for students to study technology through different knowledge areas according to their aptitudes, interests and abilities
- provide students with a wide range of learning experiences (including workplace learning experiences) so that students are better prepared for their future studies and work
- provide learning opportunities for students to explore innovative and sustainable development in technology

- engage in authentic, hands-on problem-solving learning activities related to various applications of knowledge areas in TE, such as programming, networking, home management, design and make, graphical communication, marketing, etc. in order to acquire skills, concepts and underlying principles, etc. of the applications
- develop a global outlook on the innovative and sustainable development of technology

➤ Major Issues of Concern

- The provision of TE learning experiences to students in different schools varies significantly. It is necessary to re-engineer such provision in schools so as to provide all students with broad and balanced learning experiences in TE and prepare them to meet the challenge of rapidly emerging technologies.
- TE subjects are introduced at different points of time with different emphases to meet the social needs of that particular time, for example, the New Technical Curriculum in 1997. It is necessary to review, update and re-organise TE subjects to ensure that they are coherent, appropriate to the learning experiences of students and in line with the aims of education.
- For further illustration, the subject Computer Studies was introduced in 1982 and the latest revised syllabus was produced in 1999, while the subject Information Technology was introduced in 2000. Both subjects are related to rapidly advancing computing technologies. It is essential to construct an accommodating curriculum framework for the subjects to keep pace with the changing technologies. Such a framework is planned to be put in place as soon as possible, hopefully not later than 2003.

- TE subjects are generally resource-bound. It is essential to ensure that adequate resources, e.g. special rooms, facilities and equipment, timetable arrangements, etc., are available to facilitate the learning of TE subjects.
- The hands-on problem-solving nature of TE needs to be complemented by meaningful assessment reflecting the abilities of students. It is essential that the requirements of public examinations be in line with this, to enhance students' learning in TE subjects.
- ➤ KLA Exemplars are available in the folder of Exemplars of Curriculum Development in Schools and the curriculum bank (http://cd.ed.gov.hk).

Examples of learning activities to develop students' hands-on problem-solving abilities and their capabilities in appraising the impacts of technology are available in the curriculum bank.

The Technology Education KLA Curriculum Guide will be published in 2002.