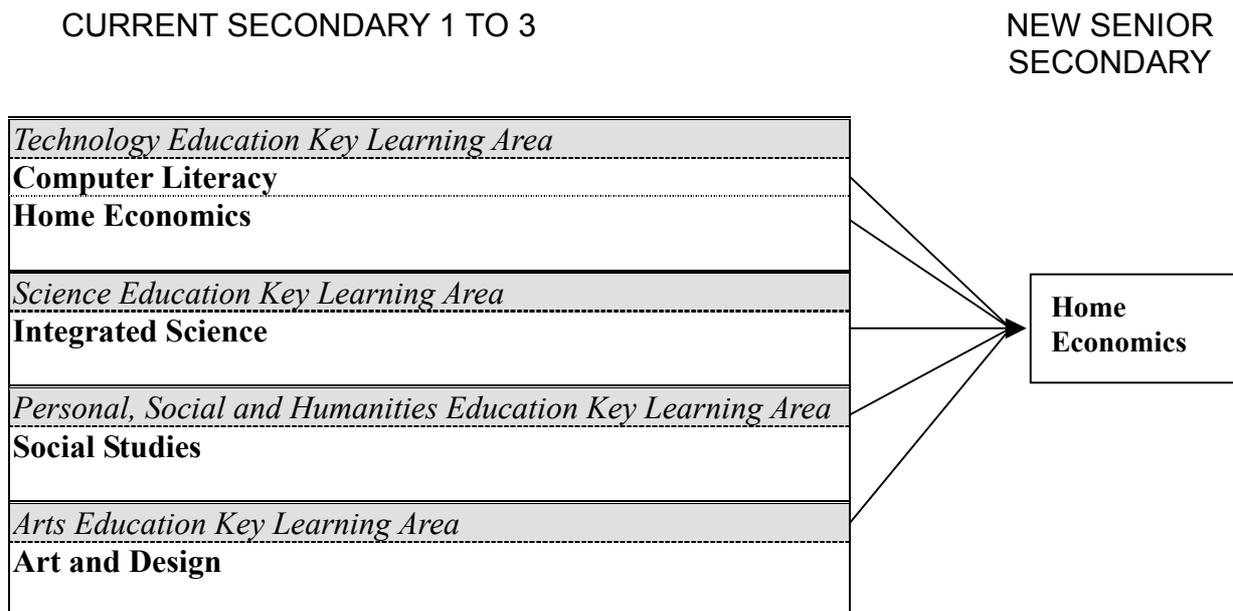


Home Economics

Introduction

- Home Economics is one of the subjects in the Technology Education Key Learning Area (TE KLA) at junior secondary level. It comprises major areas of study on food, clothing, home and family which intertwine with the six knowledge contexts proposed in the Technology Education Key Learning Area Curriculum Guide (Primary 1 – Secondary 3). The six knowledge contexts are: Information and Communication Technology, Materials and Structures, Operations and Manufacturing, Strategies and Management, Systems and Control and Technology and Living.
- The knowledge and skills that students learned across the following Key Learning Areas at junior secondary level laid the basis for their further study of the related subject in the new senior secondary curriculum. A general picture, though not exhaustive, is depicted in the following diagram:



- In the new senior secondary education structure, Home Economics (Senior Secondary) is one of the Elective Subjects to be offered under the Technology Education Key Learning Area. A brief explanation of the role and position of Technology Education can be found in the Appendix for subjects under Technology Education KLA on p.295.

Rationale

4. The proposed Home Economics elective subject promotes the well-being of individuals, families and societies through the study of the provision of basic human requirements for food, clothing and effective resources management.

5. Well-being is a dynamic phenomenon incorporating every aspect of human experience, including the physical, social, cultural, emotional, spiritual, economic, political and environmental dimensions of life, all of which are ever changing and differ across different communities, countries and cultures.

6. The Home Economics (Senior Secondary) curriculum will provide students with opportunities to understand basic human necessities and to study the well-being of individuals, families and societies, building up their awareness of the various dimensions affecting well-being.

7. The curriculum at the senior secondary level will prepare students for further studies, for work or both. The curriculum at this level will therefore aim to strike a balance between breadth and depth and to respond to current social, economic and technological developments, both globally and locally. To this end, two areas of study important for lifelong learning are proposed: - food, under the title of “Food Science and Technology”; and clothing, under the title of “Fashion, Clothing and Textiles”.

Curriculum Aims

8. The aims of the Home Economics curriculum are to enable students to:

- ✧ be responsible citizens and informed consumers willing to contribute to the well-being of individuals, families and society in terms of meeting basic human needs
- ✧ demonstrate good use of management and organizational skills in handling physical and socio-economic resources for self, family, community and society
- ✧ analyse contextual factors contributing to the well-being of individual, family and society with application of knowledge from the food science and technology strand or fashion, textiles and clothing strand
- ✧ devise and implement strategies to solve complicated problems in technological contexts, in particular, food / fashion, using a range of appropriate techniques and procedures
- ✧ evaluate critically the impact of social, cultural, economic, scientific and technological developments on the well being of individuals, families and society as a whole

- ✧ further their studies and lifelong learning in food or fashion-related fields
9. Through the study of the respective strands, students are expected to:

Through Food Science and Technology Strand

- ✧ understand and appreciate the nature and properties of food and the cultural, social and economic influences on the evolution of nutritional science, food science and technology and food product development
- ✧ investigate the cultural, physical, chemical, nutritional, biological and sensory characteristics of food, and how these properties are exploited in designing and producing food products to meet specified criteria
- ✧ understand and apply scientific principles behind food preparation and the food production process in different settings to solve problems creatively
- ✧ develop capability, values and attitudes to make informed decisions that foster a healthy lifestyle and contribute positively to the social and economic future of a society

Through Fashion, Clothing and Textiles Strand

- ✧ understand the nature of fashion design, the characteristics of fibres and fabrics; the construction, production and marketing of clothing and textile products; and the evolution of fashion trends, textile technology and clothing production methods
- ✧ investigate the historical, cultural, technological and social factors in the development of fashion, clothing and textiles and their relationship to the well-being of the individual, family and society
- ✧ apply appropriate principles and techniques in presenting fashion ideas and illustrations, and in pattern and garment construction for specific requirements and considerations in different settings
- ✧ develop an aesthetic sense and creativity through the design and production processes of fashion, clothing and textile products

Curriculum Framework

(This part should be read in conjunction with the section “Curriculum Framework” of the Main Document. It should be noted that the curriculum framework suggested below is for initial consultation only. Feedback from the public will be taken into account and further details will be provided in the next stage of consultation.)

10. Around the world, there are many different modes of organizing or structuring the Home Economics curriculum at senior secondary level depending on local contextual factors and on different understandings of the value of Home Economics to the school curriculum

and its contribution to society. The following are possible modes: (i) an in-depth study of a specific area of study in Home Economics such as food or clothing (in some cases, the subject is renamed to avoid past connotations and reflect the new orientation) (ii) a broad-based study including all major areas of study in Home Economics.

11. Given the various modes of curriculum structure, two alternative frameworks are suggested for the proposed new senior secondary Home Economics curriculum for consultation. The two alternative frameworks differ mainly in what and how the learning elements regarding family living and family issues are structured. Schools and other stakeholders are encouraged to discuss the two curriculum frameworks with a view to determining which one will better prepare students to meet the challenges of the 2010s. Details of each framework are described on pp.271-276 in this document. The following is a brief comparison of the two frameworks.

Alternative Framework One

12. This framework comprises two separate strands for students to have in-depth study of a specific area under Home Economics. They could choose either the Food Science and Technology Strand or the Fashion, Clothing and Textiles Strand according to their interest and/or inclination. Each strand has a Compulsory Part and an Elective Part. For each strand, students are required to complete the Compulsory Part and choose any 2 out of 3 modules from the Elective Part.

13. A ‘systems thinking’ approach is applied in structuring the framework. The learning elements of both strands are structured around major concepts in Technology Education such as user’s perspective, materials, processing, technology across individual, family, community and global levels. The purpose is to help students to have a deeper understanding of their inter-relationships and complexities and develop a broad perspective in identifying real causes of issues and possible solutions.

Alternative Framework Two

14. In Framework Two, students would study a compulsory module on Family and Consumer Issues in addition to the elective parts on Food Studies and Nutrition or Fashion Studies and Textiles. In addition to the compulsory part, students could also choose any 2 out of the 3 modules in the appropriate Elective Part according to their interest and/or inclination.

15. Alternative Framework Two is designed to provide students with a broad understanding of family and consumer issues such as family culture and tradition, family relationship, contemporary family issues in Hong Kong, managing family finance and resources, the impact of environmental and ecological issues on the family, etc.

Alternative Framework One

(The curriculum framework suggested below is for initial consultation only. Feedback from the public will be taken into account and further details will be provided in the next stage of consultation.)

16. Details of the Alternative Framework One are as follows:

Home Economics			
Food Science and Technology Strand		Fashion, Clothing and Textiles Strand	
Compulsory Part	Lesson Time (hrs.)	Compulsory Part	Lesson Time (hrs.)
Food for Functional Needs	20	Clothing for Functional Needs	20
Nutrition and Health	30	Fashion Sense	15
Food Commodities	30	Fashion Design	25
Food Preparation and Processing Technologies	35	Fibres and Fabrics	20
Consumers' Behaviour in Choice of Food	20	Clothing Construction	35
		Consumers' Behaviour in Choice of Clothing and Textile Products	20
Sub-total: 135 hrs.		Sub-total: 135 hrs.	
Elective Part (Any 2 Modules from below)	Lesson Time	Elective Part (Any 2 Modules from below)	Lesson Time
1. Food Culture	60 hours for each	1. Fashion Studies	60 hours for each
2. Extended Study of Food Science and Technology		2. Textile Technology	
3. Food Product Research and Development		3. Apparel Industry	
Sub-total: 120 hrs.		Sub-total: 120 hrs.	
Total: 255 hrs.		Total: 255 hrs.	

Compulsory Part		
Food Science and Technology Strand	Key Concepts	Fashion, Clothing and Textiles Strand
<p>Food for Functional Needs</p> <ul style="list-style-type: none"> ➤ Nutrients (macro and micro nutrients) ➤ Reactions of food and nutrients inside human bodies (digestion, absorption, utilization, accumulation, excretion, etc.) ➤ Functions of food and nutrients in human bodies (e.g. body building / repairing, energy giving, making enzymes / hormones / body fluid, maintain homeostasis of body) <p>Consumers' Behaviour in Choices of Food</p> <p>To make informed decisions to meet the needs of individuals, family members and society as a whole by considering the following:</p> <ul style="list-style-type: none"> ➤ Health concerns (e.g. food research findings) ➤ Lifestyles and family living ➤ Social and emotional aspects of food ➤ Environmental issues (e.g. organic food, food packaging) ➤ Peer and media influence ➤ Impacts of marketing (e.g. advertising) <p>Nutrition and Health</p> <ul style="list-style-type: none"> ➤ Nutritional requirements and needs of family members (e.g. babies, toddlers, children, teenagers, adults, elderly, pregnant women) and special dietary needs of family members (e.g. convalescents, vegetarians) ➤ Dietary goals and guidelines (e.g. meeting nutritional needs of different age groups in the family) ➤ Healthy eating and meal planning (e.g. to plan meals for family members with consideration to their budget, occupational needs, family occasions) ➤ Diet-related eating disorders (e.g. nutritional disorder problems encountered by family members such as obesity) 	<p><i>User's Perspective</i></p>	<p>Clothing for Functional Needs</p> <ul style="list-style-type: none"> ➤ Considerations of design and material, human ergonomics, occasions and activities (e.g. uniforms, clothing for children and elderly, maternity wear, protective clothing, clothing for sports, leisure and entertainment, business) <p>Consumers' Behaviour in Choices of Clothing and Textile Products</p> <p>To make informed decisions to meet the needs of individuals, family members and society as a whole by considering the following:</p> <ul style="list-style-type: none"> ➤ Health concerns (e.g. textile research findings) ➤ Social role, lifestyles and family living ➤ Environmental issues (e.g. water pollution, sources of fibres and fabrics) ➤ Peer and media influence ➤ The impact of marketing (e.g. advertising) <p>Fashion Sense</p> <ul style="list-style-type: none"> ➤ Origins of fashion, evolution of fashion ➤ Identity of fashion (personal, national, cultural, religious, social) ➤ Image and fashion

Compulsory Part		
Food Science and Technology Strand	Key Concepts	Fashion, Clothing and Textiles Strand
Food Commodities <ul style="list-style-type: none"> ➤ Nutritive value of food components ➤ Physical, biological, biochemical properties of food components (e.g. properties of carbohydrates, protein and fat) ➤ Experimental studies of food and its properties 	Materials	Fibres and Fabrics <ul style="list-style-type: none"> ➤ Natural and manufactured fibres (e.g. physical and chemical properties, testing) ➤ Fabric construction ➤ Fabric finishes
Food Preparation and Processing Technologies <ul style="list-style-type: none"> ➤ Scientific principles in food preparation and processing (e.g. effects of temperature, oxygen, acidity) ➤ Techniques in food preparation and food processing (e.g. primary and secondary processing) ➤ Food preservation (e.g. dehydration, pickling) ➤ Food hygiene and safety (food-borne diseases, food safety control measures) 	Process Technology	Clothing Construction <ul style="list-style-type: none"> ➤ Materials and equipment ➤ Construction processes (patterns, garments and accessories) ➤ Application of technology Fashion Design <ul style="list-style-type: none"> ➤ Design process (concepts and principles of design) ➤ Design brief and considerations ➤ Design illustrations

Food Science and Technology Strand	Fashion, Clothing and Textiles Strand
Elective Part (Any 2)	Elective Part (Any 2)
<p>1. Food Culture</p> <ul style="list-style-type: none"> ➤ Development of Food Culture – historical, social, economical, technological factors, etc. ➤ Food Culture and Health – relations and implications ➤ Impact of socio-economic, scientific, technological developments on food culture and related food product development – features of food products in different places, etc. 	<p>1. Fashion Studies</p> <ul style="list-style-type: none"> ➤ Development of Fashion – fad and fashion, historical perspective (design features at different eras), trend setting and trend development, adoption and blending of cultural elements ➤ Fashion Creation – design inspirations, development of a design collection, presentation and creative expression, IT application
<p>2. Extended Study of Food Science and Technology</p> <ul style="list-style-type: none"> ➤ Food Microbiology - classification of micro-organisms: (e.g. fungi, bacteria and virus), principles of food contamination, food spoilage and food poisoning, common food-borne disease causing micro-organisms, food production and manufacturing, micro-organisms used in food production ➤ Food Packaging - purpose of food packaging, food packaging materials, labelling requirements and regulations, nutritional information and labels ➤ Management of Food Safety - food hygiene and safety control plans and measures, concept of Hazard Analysis Critical Control Point (HACCP) ➤ Biotechnology in Food Production – micro-organisms used in food production, genetically modified food, etc. 	<p>2. Textiles and Textile Technology</p> <ul style="list-style-type: none"> ➤ Textile Materials – fabric production, fabric finishes, quality control, universal uses of textiles ➤ Novelty Fibres and Fabrics – creation of new products, impacts of technological development
<p>3. Food Product Research and Development</p> <ul style="list-style-type: none"> ➤ Principles of Research and Development of Food Products - information and market research of food products ➤ Designing and Developing of Food Products - design and make food products to meet certain specifications ➤ Sensory Test and Quality Evaluation of Food Products - analyse the appearance, taste, colour, smell, texture, temperature, etc. of different food products; investigate and identify factors and variables for causing such sensory effects; principles of sensory evaluation tests, e.g. paired comparison test, triangle test; statistical sensory analysis ➤ Quality Control and Assurance of Food Products - principles and real practice in different food related settings ➤ Marketing of Food Products – different marketing strategies on food products 	<p>3. Apparel Industry</p> <ul style="list-style-type: none"> ➤ Fashion and Clothing Business– influences on its development (economic cycles, business policy, availability of resources and manpower, etc.), advertising and marketing (local and global market) ➤ Logistics Development - forecasting of fashion trend, supply chain management, production management, etc.

Alternative Framework Two

(The curriculum framework suggested below is for initial consultation only. Feedback from the public will be taken into account and further details will be provided in the next stage of consultation.)

17. Details of Alternative Framework Two are as follows:

Home Economics										
Lesson Time	Compulsory Part	Lesson Time								
45 hrs.	1. Family and Consumer Issues <ul style="list-style-type: none"> ● Family Culture and Tradition (demographics in HK, concept of family, family patterns, family roles and relationship, family customs, family needs, law and legislation relating to family, etc.) ● Family Relationship (communication and interaction, family norms and rules, role conflicts, generation conflicts, etc.) ● Contemporary family in HK (family planning, domestic violence, divorce rates, divorce laws, poverty, housing, education, etc.) ● Family Finance and Resource Management (family budget, purchase decision, consumerism, etc.) ● Impact of Environmental and Ecological Issues on Family (health and safety issues, pollution, energy and fuel conservation, etc.) ● Consumers' behaviours in food or clothing choice (influence of mass media, marketing strategies, life style, health consciousness, social and emotional needs, physiological and psychological needs, etc.) 	45 hrs.								
110 hrs.	Students will choose only one of the following strands <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Food Studies and Nutrition Strand</th> <th style="text-align: center;">Fashion Studies and Textiles Strand</th> </tr> </thead> <tbody> <tr> <td>2. Nutrition and Wellness (nutrients and diet, absorption and digestion, nutritional requirement of family members, healthy eating and meal planning, nutritional disorders, etc.)</td> <td>2. Fashion Sense and Fashion Design (concepts and principles of design, design brief and considerations, design illustrations, etc.)</td> </tr> <tr> <td>3. Food commodities (Nutritive value of food commodities, physical, biological, biochemical properties of food components, etc.)</td> <td>3. Fibres and Fabrics (natural, regenerated and man-made fibres, fibre properties, fabric construction, fabric finishes, impact of technological development, etc.)</td> </tr> <tr> <td>4. Food Management and Application (scientific principles of food preparation and processing, techniques in food preparation and processing, diet analysis impact of food on health, current dietary guidelines, etc.)</td> <td>4. Creative expression in fashion (design brief, fashion design and illustrations, garment technology, creation of apparel collection, etc.)</td> </tr> </tbody> </table>	Food Studies and Nutrition Strand	Fashion Studies and Textiles Strand	2. Nutrition and Wellness (nutrients and diet, absorption and digestion, nutritional requirement of family members, healthy eating and meal planning, nutritional disorders, etc.)	2. Fashion Sense and Fashion Design (concepts and principles of design, design brief and considerations, design illustrations, etc.)	3. Food commodities (Nutritive value of food commodities, physical, biological, biochemical properties of food components, etc.)	3. Fibres and Fabrics (natural, regenerated and man-made fibres, fibre properties, fabric construction, fabric finishes, impact of technological development, etc.)	4. Food Management and Application (scientific principles of food preparation and processing, techniques in food preparation and processing, diet analysis impact of food on health, current dietary guidelines, etc.)	4. Creative expression in fashion (design brief, fashion design and illustrations, garment technology, creation of apparel collection, etc.)	110 hrs.
Food Studies and Nutrition Strand	Fashion Studies and Textiles Strand									
2. Nutrition and Wellness (nutrients and diet, absorption and digestion, nutritional requirement of family members, healthy eating and meal planning, nutritional disorders, etc.)	2. Fashion Sense and Fashion Design (concepts and principles of design, design brief and considerations, design illustrations, etc.)									
3. Food commodities (Nutritive value of food commodities, physical, biological, biochemical properties of food components, etc.)	3. Fibres and Fabrics (natural, regenerated and man-made fibres, fibre properties, fabric construction, fabric finishes, impact of technological development, etc.)									
4. Food Management and Application (scientific principles of food preparation and processing, techniques in food preparation and processing, diet analysis impact of food on health, current dietary guidelines, etc.)	4. Creative expression in fashion (design brief, fashion design and illustrations, garment technology, creation of apparel collection, etc.)									
Sub-total: 155 hrs.		Sub-total: 155hrs.								

	Food Studies and Nutrition Strand	Fashion Studies and Textiles Strand	
Lesson Time	Elective Part (Any 2)	Elective Part (Any 2)	Lesson Time
50 hours for each	1. Food Supply and Food Culture (food history, local and global food supplies, global food issues, food myths, food for our future, ordinances and legislation relating to food, etc.)	1. Fashion Studies (fashion history, culture and trend analysis, image and identity, fashion trend forecasting, historical, contemporary and social issues relating to fashion, etc.)	50 hours for each
	2. Food Science and Technology (Food microbiology, food safety and hygiene, food preservation, food additives, etc.)	2. Textiles and Textile Technology (textile science, technology application, new trends in development, novelty fibres and fabric creation, etc.)	
	3. Food Product Development (food products research and development, food manufacturing, sensory test and food quality management, food packaging and marketing, etc.)	3. Apparel Industry (development of fashion and clothing business, production sequence and management, fashion merchandising, advertising and marketing, etc.)	
Sub-total: 100 hrs.		Sub-total: 100 hrs.	
Total: 255 hrs.		Total: 255 hrs.	

Learning and Teaching

18. As students have different abilities, learning styles (e.g. mastery, interpersonal, understanding, self-expressive) and each may possess various combinations of multiple intelligences (e.g. verbal-linguistic, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, intra-personal, naturalist, etc.), teachers are encouraged to adopt a variety of learning and teaching strategies and provide differentiated instruction to cater for student differences, to facilitate effective learning of abstract concepts, and to develop higher order thinking skills.

19. The learning tasks and activities designed should be thought-provoking and meaningful to students, with a view to motivating them, and to consolidating or enhancing their understanding and their ability to put theory into practice. They should be so designed as to strengthen their skills in planning, organizing, managing and using physical and social resources effectively in a range of contexts, and to further develop transferable skills such as problem solving in novel situations. Demonstration, discussion, questioning, case studies, games, projects, laboratory work, simulation exercise, debate, role play, visits, field-trips, etc. can all be considered whenever appropriate.

20. Feedback, whether verbal, written or in the form of body language is crucial in the everyday learning and teaching process. Teachers are encouraged to provide quality feedback to students regularly and positively to help them understand their strengths and weaknesses, and plan improvement.

Assessment

(This part should be read in conjunction with the section “Assessment” of the Main Document.)

Aims of Assessment

21. Assessment is the practice of collecting evidence of student learning. The aims of assessment are to improve learning and teaching as well as to recognise the achievement of students. Assessment should be designed in line with the curriculum aims and framework and with the learning process.

Internal Assessment

22. Internal assessment refers to the assessment practices that schools employ as part of the learning and teaching process during the three years of senior secondary study in Home Economics. It serves the purpose of providing feedback to improve learning and teaching and of reporting student progress at appropriate times (e.g. at the end of school year, etc.).

23. The design of internal assessment will depend on a number of factors, including the nature of the subject, the culture of the school, the learning needs of the students, the state of school-based curriculum planning etc. It may include assessment activities such as keeping a record of student performance in the learning process; task-based exercises to assess students understanding and mastering of a particular concept or skills, e.g. the principles of a balanced diet; more holistic exercises for students to demonstrate their ability to apply the concepts and skills they have been learning in the subject, e.g. in analysing the dietary pattern of a particular group; as well as tests and examinations at appropriate times.

24. Schools may wish to adopt a recording and reporting system in which student learning progress in the subject can be recorded and reported, e.g. through a portfolio and the keeping of evidence.

Public Assessment

Standards-referenced Assessment (SRA)

25. Public assessment of Home Economics leads to a qualification in the subject to be offered by the Hong Kong Examinations and Assessment Authority. In the public assessment of Home Economics, a standards-referenced approach will be adopted for grading and reporting student performance. The purpose of this approach is to recognize what each student can do in each subject at the end of the 3-year senior secondary education stage. Each student's performance will be matched against a set of performance standards, rather than compared to the performance of other students. It makes the implicit standards explicit by providing specific indication of student performance. Descriptors will be provided for the set of standards at a later stage.

Modes of public assessment

26. Initial proposal of the public assessment will include a written examination component and a School-based Assessment component.

(a) Written examination

Written examination will take up 70-80% of the total weighting. Two papers around 4 hours duration in total will be set.

(b) School-based Assessment (SBA)

The public assessment will include an SBA component that will take up 20-30% of the total weighting. The merits of adopting SBA are as follows:

- SBA provides a more valid assessment than an external written examination alone, since it can cover a more extensive range of learning outcomes through employing a wider range of assessment modes that are not necessarily possible in written examinations.
- SBA enables the sustained work of students to be assessed. It provides a more comprehensive picture of student performance throughout the period of study rather than their performance in a one-off examination alone.

27. It should be noted that SBA is not an “add-on” element in the curriculum. Assessing students’ performance through practices such as class discussion and class observation is a normal in class and out-of-class activity. The assessment modes selected for SBA in Home Economics will be appropriate to the learning objectives and processes that are to be assessed. The design and implementation of SBA should avoid unduly increasing the workload of both teachers and students.

Supporting Measures

Learning and Teaching Resources

28. To support schools to implement the curriculum, a Curriculum and Assessment Guide on Senior Secondary Home Economics will be published to provide information on the curriculum aims, learning objectives, learning targets, course requirements and examination. The Guide will also serve as a framework to guide teachers on teaching content, suggested pedagogies and learning strategies, and School-based Assessment. Other support materials may include sample examination questions and guidelines on the implementation of School-based Assessment.

29. The nature and the expectations of the Home Economics curriculum call for a wide range of learning and teaching resources / support materials, which include reference books, related policy documents / reports, research findings, information leaflets / brochures, newspapers, etc. Students are also expected to use the Internet to search for information as required. Teaching packages will be produced by Education and Manpower Bureau for teachers’ reference. Readers can refer to the Curriculum Development Institute web page (<http://www.emb.gov.hk/cd>) for more information.

Professional Development Programmes

30. Related professional development programmes have been started and more programmes will be organized to equip teachers with the updated knowledge and repertoire required for implementing the curriculum. Programmes of the following categories will be organized:

- ✧ Curriculum Leadership
- ✧ Knowledge Update
- ✧ Learning and Teaching
- ✧ Assessment

(Blank page)