

**Personal, Social & Humanities Education
Key Learning Area**

**Economics Curriculum Guide
(Secondary 4 - 5)**

**Prepared by
The Curriculum Development Council**

**Recommended for use in schools by
The Education and Manpower Bureau
HKSAR 2003**

Secondary Schools

Curriculum Guide

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Membership of the Ad Hoc Committee on the Review of the Curriculum for Economics at S4-5 Level

(From 21 March 2000)

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PREAMBLE

This Curriculum Guide is one of the series prepared by the Hong Kong Curriculum Development Council for use in secondary schools.

The Curriculum Development Council is an advisory body giving recommendations to the Hong Kong Special Administrative Region Government on all matters relating to curriculum development for the school system from kindergarten to sixth form. Its membership includes heads of schools, practising teachers, parents, employers, academics from tertiary institutions, professionals from related fields or related bodies, representatives from the Hong Kong Examinations and Assessment Authority and the Vocational Training Council, as well as officers from the Education and Manpower Bureau.

This Curriculum Guide is recommended by the Education and Manpower Bureau for use in secondary schools. The curriculum developed for the senior secondary levels normally lead to appropriate examinations provided by the Hong Kong Examinations and Assessment Authority.

The Curriculum Development Council will review the curriculum from time to time in the light of classroom experiences. All comments and suggestions on the Curriculum Guide may be sent to:

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(I) INTRODUCTION

All individuals, organizations and societies face the basic problem of using scarce resources to satisfy unlimited wants. The study of economics provides students with the knowledge and skills which promote an understanding of the economic dimension of life involving the production and consumption of goods and services.

The overarching aim of economic education at S4-5 level is to foster in students the thinking skills and economic knowledge necessary to become effective and participating citizens. Upon understanding basic economic concepts and development of skills and values, students are expected to be able to apply basic economic principles to decisions they will make as consumers, producers, savers, investors and citizens of Hong Kong and the world as a whole.

Students nowadays face a wide range of economic decisions. If they would be wise consumers, prudent savers, and knowledgeable investors, they need pertinent knowledge and skills. After the completion of this curriculum, students will understand that because resources are scarce relative to our wants, individuals and societies have to make choices among alternative uses. Students will also understand that these choices and trade-offs will affect the quality of lives. From the macroeconomics perspective, students begin to understand how government manages the economy to achieve social goals like full employment, price stability and economic growth.

As students gain a more complete understanding of the economic dimension of the world, they would be able to make more reasoned decisions, and be in fuller control of their economic future.

(II) AIMS AND OBJECTIVES

Aims

The purpose of including Economics in the curriculum lies mainly in developing and enhancing the abilities of students to make sense out of economic phenomena and to make effective decisions about economic issues.

The general aims of this course are to:

1. develop in students curiosity and interest in economic problems and issues facing individuals, societies, countries and the world as a whole;
2. provide students of varying aptitudes with the basic economic knowledge and skills necessary to understand better the world in which they live, reason about economic issues and participate more fully as responsible citizens in the decision-making processes of a modern society;
3. enable students to understand the basic economic problem of the allocation of scarce resources to alternative uses, the more important economic forces and institutions with which they will come into contact as producers and consumers, as well as the interdependence of economic activities;
4. develop in students the ability to communicate through the effective use of economic terminology, data, concepts and principles; and
5. enable students to understand controversies over economic issues, respect private property rights and exercise responsible citizenship.

Objectives

The objectives of the S4-5 economics curriculum are to help students acquire:

I. Knowledge and Understanding

Students should be able to know and demonstrate an understanding of :

1. economic terminology, concepts, principles and theories to help explain economic behaviour and phenomena;
2. basic economic problems faced by every individual and society, and alternative methods for resource allocation;
3. demand, supply and price;
4. nature and organization of production, factor productivity, competition and market structures;

5. measurement of economic aggregates as well as the uses and limitations of these measures;
6. principles and significance of international trade; and
7. economic roles of the government and financial institutions.

II. Skills and the Economic Way of Thinking

A. Students should be able to:

1. use economic terminology, concepts, principles, theories and methods to identify, investigate, discuss, analyze, and evaluate economic issues and problems;
2. select, organize, interpret and process economic information/data which are obtained from various sources and presented in a variety of forms; distinguish facts from opinions as well as relevant from irrelevant evidence in the discussion of economic issues;
3. organize and communicate logically, objectively and effectively economic ideas, descriptions and arguments using verbal, graphical, numerical, statistical and electronic means; and
4. work independently in individual tasks as well as collaborate and cooperate with others in teamwork.

B. Economic Way of Thinking

The economic way of thinking refers to an approach for making logical and reasoned decisions by using relevant economic concepts and generalizations. Since economics deals with choices about the use of limited resources to satisfy unlimited wants, decision-making is the central skill of economics (Banaszak, 1987).

Generally speaking, the making of economic decision(s) involves the following steps:

1. Identify the details of the decision situation and the choice involved.
2. Determine the goal(s) to be attained.
3. Identify all alternatives.
4. Consider the cost, benefits, outcomes and consequences of each alternative.
5. Decide on the best alternative for reaching the desired goal(s).
6. Review and evaluate the decision.

In making economic decisions, it would also be useful to take into consideration factors as trade-offs, short-term and long-term effects, supply-demand, marginal and cost-benefit analyses.

III. Values and Attitudes

Underlying the 'positive' approach in the learning and teaching of Economics at S4-5 level are values/attitudes such as respect for private property rights, as well as active and responsible participation which is essential for good citizenship. Comprehension of economic problems alone does not equate with responsible participation. Thus a desire for involvement among students should be inculcated. When approaching social and economic problems, students should be concerned about and analyze the issues with the economic knowledge and skills they have acquired, be ready to participate effectively and responsibly and react to situations with an open mind.

(III) SYLLABUS OUTLINE

<i>Topic</i>	<i>No. of periods</i>
1. The basic economic problems	(8)
1.1 The source of economic problems: scarcity	1
1.2 Choice and opportunity cost	2
1.3 The three basic economic problems: What? How? For whom?	2
1.4 How society tackles the three basic economic problems	3
2 Demand, supply and price	(34)
2.1 Individual demand	7
2.2 Market demand	1
2.3 Price elasticity of demand	5
2.4 Individual supply	7
2.5 Market supply	1
2.6 Price elasticity of supply	2
2.7 Interaction between demand, supply and price	6
2.8 Market intervention	5
3. Production	(24)
3.1 Definition	1
3.2 Types/stages of production	1
3.3 Types of goods and services produced	1
3.4 Division of labour: types, advantages, disadvantages, limitations	3
3.5 Factors of production	10
3.6 Production in the short-run and the long-run	8
4. Units of production (The firm)	(18)
4.1 Definition of a firm	1
4.2 Forms of control and ownership	11
4.3 Integration: types and motives	6
5. Market structure	(11)
5.1 Definition of market	1
5.2 Perfect competition; imperfect competition: monopoly, oligopoly and monopolistic competition	10

<i>Topic</i>	<i>No. of periods</i>
6. National income	(29)
6.1 Meaning of national income	1
6.2 Circular flow of economic activities	1
6.3 Gross Domestic Product (GDP)	9
6.4 Gross National Product (GNP)	1
6.5 Uses and limitations of national income statistics as an indicator of economic welfare and for international comparison	2
6.6 Factors affecting national income	6
6.7 Business cycles, unemployment and changes in the general price level	9
7. Money and banking	(19)
7.1 Nature and functions of money	5
7.2 Banks: functions and services	6
7.3 Money supply	6
7.4 Hong Kong as a financial centre	2
8. Public finance	(24)
8.1 Government revenue	11
8.2 Public expenditure	7
8.3 Government budget	6
9. International trade	(25)
9.1 Absolute advantage, comparative advantage and gains from trade	9
9.2 Balance of payments	5
9.3 Exchange rate	2
9.4 Trade barriers	5
9.5 Hong Kong's international trade	4
(Total : 192)	

(IV) CURRICULUM GUIDE

TOPIC 1: THE BASIC ECONOMIC PROBLEMS

Introduction

The resources in our world are scarce. Therefore individuals, as well as societies as a whole have to face the problems of scarcity and choice. When we make choices, alternatives must be identified and evaluated according to relevant criteria. With limited resources, opportunity cost will invariably be incurred when we make decisions. An economic system is a framework that a society uses to allocate its scarce resources to produce and distribute goods and services to satisfy people's wants. In general, decisions about production and distribution can be made by society's customs and traditions, government's decisions, and the market mechanism.

Specific Objectives

After studying the topic, students should be able to:

- (i) understand that individuals and societies have to face the problem of scarcity;
- (ii) understand that in making choice due to scarcity, opportunity cost arises;
- (iii) give examples of social, political and economic processes to tackle the basic economic problems; and
- (iv) recognize the importance of private property rights in the market economy.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
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1. THE BASIC ECONOMIC PROBLEMS

- | | | | |
|---|---|---|---|
| 1.1 The source of economic problems: scarcity | (i) unlimited wants and limited resources | 1 | Discussion: Select common examples of free goods like air, water. Identify different situations in which the same good can become either economic good or free good. Ask students to point out the differences in these situations. Generalize the meaning of free good and economic good through discussion. |
| | (ii) free and economic goods | | |

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
1.2 Choice and opportunity cost	(i) economic decisions involving choices among alternatives (ii) concept of cost in economics	2	<p>(1) Discussion: Ask students to talk about choices they have made in the past week and identify the possible alternatives they have given up in making the above decisions. Ask them to state the opportunity cost in each case. Finally students are reminded that opportunity cost is not all possible alternatives but the highest-valued option forgone.</p> <p>(2) Information collection: Ask students to collect newspaper cuttings on scarcity faced by the Hong Kong economy and the world as a whole.</p>
1.3 The three basic economic problems: What? How? For whom?		2	<p>Activity: Bring a VCD to the classroom and ask students to suggest a list of ways to decide who should get the VCD. Remind students that the VCD is a scarce good. Write the list of ways on the blackboard. Divide the class into groups and ask them to discuss the advantages and disadvantages of the suggested method of rationing. Students can be guided to see the advantages of rationing by price.</p>
1.4 How society tackles the three basic economic problems	(i) by society's customs and traditions (ii) by government decisions (iii) by the market mechanism	3	<p>(1) Discussion: Ask students to compare the methods used by different countries/territories to allocate goods and services, such as houses and education.</p> <p>(2) Discussion: Ask students to name a few things (e.g. textbooks, sports shoes, etc.) which they own, and discuss the possible consequences if their classmates are allowed to use or take away these things from them without their permission. Subsequently discuss the significance of private property rights in a market economy.</p>

TOPIC 2: DEMAND, SUPPLY AND PRICE

Introduction

Market prices are determined by the demand for and supply of goods and services. People react to price signals when making choices in production and consumption. Sometimes government intervenes in the market to control prices and/or quantities but there are costs and benefits in exercising such controls.

Specific Objectives

After studying the topic, students should be able to:

- (i) distinguish between change in demand and change in quantity demanded, as well as change in supply and change in quantity supplied ;
- (ii) add the individual demand and supply curves horizontally to obtain the market demand and supply curves;
- (iii) identify factors affecting individual and market demand and supply;
- (iv) calculate the price elasticities of demand and supply and interpret the elasticity coefficient;
- (v) use examples to illustrate the application of the elasticity concept;
- (vi) identify factors affecting price elasticities of demand and supply;
- (vii) understand the effects of change in demand and/or change in supply; and
- (viii) recognize the impact of market intervention on price and quantity.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
2. DEMAND, SUPPLY AND PRICE			
2.1 Individual demand	<p>(i) factors affecting individual demand</p> <p>(ii) complements and substitutes, superior and inferior goods (N.B. Giffen goods NOT required)</p> <p>(iii) individual demand schedule and importance of the <i>ceteris paribus</i> assumption</p> <p>(iv) difference between change in quantity demanded and change in demand</p>	7	<p>(1) Class survey: Choose a commodity that students would like to buy. (e.g. a DVD movie, a Halloween mask, soft drink of a certain brand, etc.). Conduct a survey to see how many students would buy at various prices. Help them to prepare individual demand and class (market) demand schedules. Plot the two demand curves.</p> <p>(2) Discussion: Ask students to give an example of close substitutes for the commodity they choose in (1). Ask them to discuss how the change in price of the close substitute could affect the demand schedule of the commodity in (1). Compile the new individual and class demand schedules and demand curves for the commodity chosen in (1). Ask students to discuss other factors that could affect individual demand and market demand.</p> <p>(3) Discussion: Compare the two individual demand curves prepared in (1) and (2). Ask students to discuss the difference between change in quantity demanded and change in demand.</p>
2.2 Market demand			<p>(i) horizontal summation of individual demand curves</p> <p>(ii) factors affecting market demand</p>

Syllabus Content	Guidance Notes	Periods	Suggested Activities
2.3 Price elasticity of demand	<ul style="list-style-type: none"> (i) arc elasticity (N.B. Point elasticity, cross elasticity and income elasticity NOT required) (ii) relationship between price elasticity and total revenue (iii) factors affecting price elasticity of demand 	5	<ul style="list-style-type: none"> (1) Compare the price elasticity of demand for a commodity (e.g. air tickets of business travelers and non-business travelers for the same trip). Using the relationship between price elasticity and total revenue, discuss what pricing strategy the airline company should adopt in order to increase total revenue. (2) Discussion: Discuss with students factors affecting the price elasticity of demand for the commodity in (1) (e.g. air tickets). (3) With the aid of spreadsheet software, design interactive worksheets for illustrating the concept of price elasticity of demand as well as the relationship between price elasticity of demand and the total revenue.
2.4 Individual supply	<ul style="list-style-type: none"> (i) factors affecting individual supply (ii) individual supply schedule and importance of the ceteris paribus assumption (iii) difference between change in quantity supplied and change in supply 	7	<ul style="list-style-type: none"> (1) Class survey: Assign students as suppliers of the commodity as stated in 2.1 (1). Ask them to decide the quantities they are able and willing to supply at various prices. Help them to prepare individual supply and class (market) supply schedules. Plot the two supply curves. (2) Discussion: Ask students to name a factor that may affect the supply of the commodity. Ask students to discuss how the original supply schedule could be affected. Compile the new individual and class supply schedules and supply curves. Discuss other factors that could affect individual supply and market supply.
2.5 Market supply	<ul style="list-style-type: none"> (i) horizontal summation of individual supply curves (ii) factors affecting market supply 	1	<ul style="list-style-type: none"> (3) Discussion: Compare the two individual supply curves prepared in (1) and (2). Ask students to discuss the difference between change in quantity supplied and change in supply.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
2.6 Price elasticity of supply	(i) arc elasticity (N.B. Point elasticity and cross elasticity NOT required) (ii) factors affecting price elasticity of supply	2	<p>(1) Ask students to name and compare the elasticity of supply of two items (e.g. supply of shark fins versus eggs) and discuss the factors affecting the price elasticity of supply.</p> <p>(2) With the aid of spreadsheet software, design interactive worksheets for illustrating the concept of elasticity of supply.</p>
2.7 Interaction between demand, supply and price	(i) definition of equilibrium: no tendency to change (ii) equilibrium price, effects of change in demand and/or change in supply on equilibrium price	6	<p>(1) Make use of the market demand and market supply curves derived in previous lessons to demonstrate the determination of equilibrium price.</p> <p>(2) Discussion: Ask students to explain how the price of the commodity in 2.1(1) will be affected if the price of its close substitute falls.</p> <p>(3) Discussion: Ask students to explain how the price of its close substitute will be affected if the supply of the commodity in 2.1(1) falls.</p> <p>(4) With the aid of spreadsheet software, illustrate how demand and supply interact to determine the market price and quantity of a good or service, and how changes in demand and supply lead to changes in market prices and quantities.</p>
2.8 Market intervention	graphical illustration of price ceiling, price floor, quota, unit tax and unit subsidy and their impact on price and quantity	5	Discussion: Ask students to list examples of market intervention in Hong Kong (e.g. wage of Filipino maids). Discuss the impact of market intervention on price and quantity.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
I Price intervention: price ceiling and price floor			
II Quantity intervention: quota	illustration by a kinked supply curve only		
III Unit tax and unit subsidy	determination of the share of the tax burden/subsidy between producers and consumers	(1) Ask students to draw diagrams with different price elasticities of demand and supply and find out the share of tax burden/subsidy borne by producers and consumers. (2) With the aid of spreadsheet software, illustrate the effect of per-unit tax on price and quantity of a good or service.	

TOPIC 3: PRODUCTION

Introduction

There are different types of production in an economy, namely primary, secondary and tertiary production, and they are interdependent. People specialize in one job and depend on each other to produce the goods and services they want. In the course of production, when quantities of variable factor(s) are continuously added to fixed factors of production, the marginal output will eventually decrease. The average cost of a firm ultimately increases as output increases. Output cannot be expanded continuously without limits.

Specific Objectives

After studying the topic, students should be able to:

- (i) describe the different types of production, their inter-relationship and recognize their contributions to the local economy;
- (ii) recognize the advantages, disadvantages and limitations of division of labour;
- (iii) define and classify factors of production and describe their nature and functions;
- (iv) define short run and long run production;
- (v) explain and apply the law of diminishing returns; and
- (vi) understand economies and diseconomies of scale.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
3 PRODUCTION			
3.1 Definition	1	1	(1) Activity: Ask students to produce a flow chart showing the different stages in producing a certain commodity.
3.2 Types/stages of production	1		(2) Discussion: Ask students to find out information from the Hong Kong Yearbooks and other publications on the classification of industries. Ask them to compare and account for the relative importance of different types of production to the local economy.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
3.3 Types of goods and services produced	(i) producer goods (ii) consumer goods (iii) services	1	(3) Class Activities: Make use of the teaching module 'Primary Production, Secondary Production and Tertiary Production' produced by the Education and Manpower Bureau for the planning of class activities.
3.4 Division of labour: types, advantages, disadvantages, limitations	simple, complex and regional	3	Simulation Game: Set a simple task which can be completed in the classroom. Divide the class into three groups. To complete the task, one group is encouraged to practise division of labour while another group is not allowed any division. The last group is to ensure that the rules of the game are obeyed. After the game, ask students to point out the advantages and disadvantages of division of labour from the viewpoints of workers and employers.
3.5 Factors of production	I Definition II Classification	10	(1) Case study: Select several products commonly found in students' daily lives (e.g. textbook, computer game). Ask students to identify the inputs for these products and classify these inputs under different factors of production. (2) Discussion: Ask students to look up labour force data in Hong Kong (e.g. by sex, age group, occupation, industry) and point out the characteristics. (3) Case study: Construct an organization chart of a large company. Ask students to find out the different roles played by labour and entrepreneur in this organization.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
III Nature and functions	<p>(i) labour: factors affecting its quantity, productivity, mobility; different types of wage payment</p> <p>(ii) entrepreneurship: risk-bearing and decision-making</p> <p>(iii) land: supply and mobility</p> <p>(iv) capital: forms and depreciation</p> <p>(v) the features of (i) to (iv) in Hong Kong</p>	8	<p>(4) Activity: Make use of the exemplar 'Occupational Mobility of Labour' in "The Use of Graphic Organizers to Enhance Thinking Skills in the Learning of Economics" produced by the Education and Manpower Bureau for the planning of class activities.</p>
3.6 Production in the short-run and the long-run	<p>I Definition of short-run and long-run factors of production</p> <p>II Law of diminishing returns illustrated by total product, average product and marginal product schedules only</p>		<p>(1) Simulation game: Set a simple task like making paper dolls which can be completed in the classroom. Select five to twelve students from the class. Give them a set of apparatus (e.g. scissors) that can neither be increased nor decreased throughout the game. Give a fixed period of time to five students to work on the task. Write down the total output on the blackboard. Add one more student to the group and give the same amount of time to these six students to work on the same task. Write down the total output and the marginal output of the additional student. Repeat the procedure. Assign some students as judges to ensure that the rules of the game are observed.</p>

Syllabus Content	Guidance Notes	Periods	Suggested Activities
III Economies and diseconomies of scale	<p>(i) economies of scale: technical, managerial, financial, marketing, risk diversification, and research and development (N.B. Sources of technical economies of scale NOT required)</p> <p>(ii) diseconomies of scale: managerial, financial and marketing</p>		<p>(2) Discussion: Ask students to find out the economies and diseconomies of scale following the expansion of output of a large firm like a telecommunication company.</p>

TOPIC 4: UNITS OF PRODUCTION (THE FIRM)

Introduction

In economics, a 'firm' is a unit that makes decisions regarding the employment of factors of production and the production of goods and services. There are public and private ownerships. The main forms of private business organizations are sole proprietorships, partnerships, and (limited) companies. Firms integrate to increase their market shares and reduce competition among themselves.

Specific Objectives

After studying the topic, students should be able to:

- (i) give examples of organizations or institutions in Hong Kong operating under public ownership;
- (ii) understand the features, advantages and disadvantages of different forms of business units operating under private ownership; and
- (iii) identify the types and motives of integration with reference to examples in Hong Kong.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
4. UNITS OF PRODUCTION (THE FIRM)	A unit that makes decisions regarding the employment of factors of production and the production of goods and services.	1	
4.1 Definition of a firm	(i) public ownership as ownership by government or its agencies with the right to own, control, use and dispose of property - to be illustrated by examples only	11	Provide a list of organizations/institutions and ask students to identify those which operate under public ownership.
4.2 Forms of control and ownership	(ii) private ownership		

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
4.3 Integration: types and motives	<ul style="list-style-type: none"> - sole proprietorship } their features, advantages and disadvantages } and - partnership } disadvantages - company - types of shares and bonds <p>(N.B. A comparison of the advantages and disadvantages of public and private ownership NOT required. Documentation involved in setting up business units NOT required)</p> <p>(iii) separation of ownership from control in a limited company</p>	6	<ol style="list-style-type: none"> (1) Activity: Make use of the exemplars 'Types of firms' and 'Private and Public Limited Companies' in 'The Use of Graphic Organizers to Enhance Thinking Skills in the Learning of Economics' produced by the Education and Manpower Bureau for the planning of class activities. (2) Cite cases of various business units to illustrate/discuss the advantages and disadvantages of the type of business ownership in which they operate. (3) Activity: Make use of the exemplar in 'The Use of Graphic Organizers to Enhance Thinking Skills in the Learning of Economics' produced by the Education and Manpower Bureau to illustrate the types of shares/ debentures that investors would prefer to buy under different situations. Teachers may ask students to browse the homepage of Securities and Futures Commission for information regarding investment. (Students may play the games provided by the Electronic Investor Resources Centre on the homepage of Securities and Futures Commission). <ol style="list-style-type: none"> (1) Activity: Make use of the exemplar in 'Integration of Firms' in "The Use of Graphic Organizers to Enhance Thinking Skills in the Learning of Economics' produced by the Education and Manpower Bureau for the planning of class activities. (2) Case study: Collect local cases of integration of large firms. Ask students to identify the types of integration and point out the possible advantages and disadvantages of such integration.

TOPIC 5: MARKET STRUCTURE

Introduction

Most industries lie somewhere between the extremes of perfect competition and monopoly. Firms in any kind of market structure face competition in one way or another, and they use different strategies to increase profit and market share.

Specific Objectives

After studying the topic, students should be able to:

- (i) describe the features of markets under perfect competition and imperfect competition;
- (ii) understand the different ways in which a monopoly can be formed;
- (iii) apply the concepts of perfect competition and imperfect competition to analyze the market structure of different goods and services in HK; and
- (iv) recognize that the four market structures are theoretical constructs only, and that actual examples may only be approximations of these constructs.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
5. MARKET STRUCTURE			
5.1 Definition of market		1	
5.2 Perfect competition; imperfect competition: monopoly, oligopoly and monopolistic competition	(i) general features <ul style="list-style-type: none">- number of sellers- number of buyers- nature of product- ease of entry- availability of information (ii) different ways in which a monopoly can be formed	10	<ul style="list-style-type: none">(1) Discussion: Give examples of different types of products and services commonly found in students' daily lives. Ask them to identify the types of market structures and give reasons for making such classification. Ask them to point out how far the theoretical constructs of perfect competition and imperfect competition can fit in with the authentic examples.(2) Simulation game: Divide the class into several groups, each representing a chain of supermarkets in Hong Kong. Ask them to suggest modes of non-price competition which can raise the volume of sales.(3) Debate: Select an example in which a market has been monopolized. Ask students to debate on the pros and cons of having the market monopolized.

TOPIC 6: NATIONAL INCOME

Introduction

National income statistics reflect aggregate economic activities. Changes in national levels of spending, production and income can have profound effects on employment and the general price level. Statistics as GDP, implicit price deflator of GDP, CPI and unemployment rate are key information used for analyzing the economic activities of an economy.

Specific Objectives

After studying the topic, students should be able to:

- (i) understand the relationship among production, income and expenditure;
- (ii) measure GDP using production approach (value-added approach), income approach and expenditure approach;
- (iii) understand GDP, GNP and per capita GDP;
- (iv) measure GDP at current market prices, at constant market prices and at factor cost;
- (v) interpret national income statistics and recognize their uses and limitations;
- (vi) describe the demand side and supply side factors affecting national income;
- (vii) describe the phenomena of different phases of a business cycle;
- (viii) understand and measure unemployment and recognize its cost; and
- (ix) define and measure inflation and deflation and recognize their effects.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
6. NATIONAL INCOME			
6.1 Meaning of national income	National income as a general term for aggregates like Gross Domestic Product (GDP) and Gross National Product (GNP)	1	Discussion: Select a commodity commonly found in students' daily lives (e.g. bread). Ask students to identify the factor inputs and stages of production involved in producing the commodity. Assign values to each factor input. Ask students to find out the value added at each stage of production, the price of the final product and the total income of the factors. Help them to observe the relationship among output, expenditure and income.
6.2 Circular flow of economic activities	The relationship among production, income and expenditure.	1	

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
6.3 Gross Domestic Product (GDP)	<p>(i) The three approaches to measure GDP: production approach (value-added approach), income approach, expenditure approach (N.B. Components of GDP compiled under the income approach NOT required)</p> <p>(ii) GDP at current and constant market prices</p> <p>(iii) GDP at factor cost</p> <p>(iv) GDP per capita; growth rate of GDP (N.B. Other measures related to GDP NOT required.)</p>	9	<p>(1) Activity: Explain the household and business sectors and draw the circular flow on a worksheet. Distribute the worksheet and ask students to describe the flows between the two by labeling the connecting arrows in the circular flow model. Show that GDP can be derived from the production, expenditure or income approach.</p> <p>(2) Ask students to browse the website of the Census & Statistics Department and find out the components of production-based GDP and expenditure-based GDP.</p> <p>(3) Data analysis: Ask students to find our data and draw the trend of GDP at current and constant market prices for the past few years. Find out the annual growth rate of per capita GDP in real terms and the factors which account for the changes of GDP. Ask students to suggest solutions to avert such trend.</p>
6.4 Gross National Product (GNP)	<p>GNP as GDP plus net income from abroad (N.B. Other measures related to GNP NOT required.)</p>	1	<p>Discussion: Divide the class into several groups, give each group a few examples of expenditure or income earned and explain whether these would be included in Hong Kong's GDP and/or GNP.</p>
6.5 Uses and limitations of national income statistics as an indicator of economic welfare and for international comparison		2	<p>Data analysis: Collect GDP figures of two countries which students are familiar with. Ask them to analyse the breakdown of these data and point out factors which may account for the different living standards in these two countries. Ask them to explain why the well-being of people in countries with low/high GDPs may be underestimated/overestimated and consequently which indicator (GDP/GDP per capita) is more relevant in indicating the economic well-being of people in different places.</p>

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
6.6 Factors affecting national income	<p>(i) demand side: consumption, investment, government expenditure, exports and imports</p> <p>(ii) supply side: capital, labour entrepreneurship, land and technology (N.B. Multiplier and determination of national income NOT required. Graphical analysis NOT required)</p>	6	<p>(1) Data analysis: Collect HK GDP figures for the past few years and ask students what demand side factors account for the change in GDP.</p> <p>(2) Discussion: Ask students to suggest measures affecting the supply side factors for increasing GDP in Hong Kong.</p>
6.7 Business cycles, unemployment and changes in the general price level	<p>(i) business cycles: a description of the recurrent fluctuations in GDP around a secular trend (N.B. Theories of business cycles NOT required)</p>	9	<p>(1) Data analysis: Collect statistical figures on GDP, unemployment rates and changes in the general price level over the past years from various government publications. Ask students to (i) graph the GDP, unemployment rates and change in general price levels (ii) identify and explain the different phases of business cycle during those years.</p>

Syllabus Content	Guidance Notes	Periods	Suggested Activities
(ii) unemployment	<ul style="list-style-type: none"> • meaning of unemployment • unemployment rate as measured in terms of the percentage of unemployed persons in the labour force • brief introduction to underemployment • cost of unemployment <p>(N.B. Various types of unemployment NOT required)</p>	<p>(2) Discussion: Ask students to (i) describe and give reasons that account for the trend of the unemployment rate for the past few years (ii) account for the difference in unemployment rate among groups of individuals and production sectors (iii) propose measures for overcoming the unemployment problems.</p> <p>(3) Case study: Trace the prices of economics textbook over the past few years. Compare the year-on-year rates of increase/decrease of the prices of such textbook with the rates of change of the CPI in the corresponding time periods. Discuss with students whether rates of change in the prices of economics textbook fully reflect the rates of change in the CPI.</p> <p>(4) Discuss the effects of inflation and deflation on people whose money income decreases/remains unchanged/increases at different rates.</p> <p>(iii) changes in the general price level</p> <ul style="list-style-type: none"> • definitions of inflation and deflation • measurement by Consumer Price Index and implicit price deflator of GDP • redistributive effects <p>(N.B. Construction of CPI and implicit price deflator of GDP NOT required)</p>	

TOPIC 7: MONEY AND BANKING

Introduction

Money facilitates exchanges and makes it easier to borrow, save, invest and compare the values of goods and services. With the use of money, specialization is made easier and as a result, the economy's overall levels of production and consumption are raised. Nowadays, banks not only serve as a financial intermediary but also have an important role to play in financial markets. With favourable geographical position, excellent communication networks and sound regulatory regime, Hong Kong has developed into an important international financial centre.

Specific Objectives

After studying the topic, students should be able to:

- (i) identify the nature and functions of money;
- (ii) describe the functions and services of banks in Hong Kong;
- (iii) define money supply in Hong Kong with reference to credit creation; and
- (iv) analyze factors contributing to the development of Hong Kong as a financial centre.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
7. MONEY AND BANKING			
7.1 Nature and functions of money	(i) definition (ii) different forms of money <ul style="list-style-type: none">- commodity money- paper money: convertible and non-convertible- deposit money	5	(1) Simulation game: Divide the class into several groups. Each group has a different product to trade. Start with a simple situation. Group A wishes to sell its product to Group B and Group B wishes to buy from Group A. Complications could be built into the game to help students discover the problems of barter economy and how the use of money can overcome these problems. (2) Activity: Browse the on-line version of the 'Money in Hong Kong' Exhibition on the Hong Kong Monetary Authority (HKMA) homepage. Ask students i) how money has changed over time; ii) explain why some types of money are no longer used and iii) discuss the features of money used nowadays.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
7.2 Banks: functions and services	<p>(i) commercial banks and central bank</p> <p>(ii) licensed banks and deposit-taking companies in Hong Kong</p> <p>(iii) how central banking functions are performed in Hong Kong</p> <p>(N.B. Tools of monetary policy NOT required)</p>	6	<p>(1) Activity: Ask students to visit a bank and find out the services offered by commercial banks. Give a report in class.</p> <p>(2) Activity: Ask students to visit the HKMA homepage and find out the central banking functions of HKMA.</p>
7.3 Money supply	<p>(i) definitions of money supply in Hong Kong</p> <p>(ii) credit creation and the banking multiplier</p>	6	<p>(1) Activity: Ask students to visit the HKMA homepage and write down the various definitions of money supply in Hong Kong.</p> <p>(2) Simulation game: Ask four students to act as four different banks. One student acts as a depositor with an initial deposit. The other students act as borrowers who for some reasons deposit all the money borrowed from one bank into other banks. Assume all banks observe the minimum reserve ratio and keep no excess reserves. The whole class then adds up the total amount of money being created.</p> <p>(3) With the aid of spreadsheet software, simulate the credit creation process and illustrate the 'banking multiplier' concept.</p>

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
7.4 Hong Kong as a financial centre	<p>(i) factors contributing to its development as a financial centre</p> <p>(ii) effects on the Hong Kong economy</p>	2	<p>Discussion: Ask students to discuss the favourable factors leading to the development of Hong Kong as a financial centre and the challenges that Hong Kong faces in its attempt to maintain its status as a key international financial centre.</p> <p>Reference:</p> <ul style="list-style-type: none"> (1) The websites of the Hong Kong Trade Development Council (http://www.tdctrade.com/ifc/) and Hong Kong Monetary Authority (http://www.hkma.gov.hk). (2) Guide to Hong Kong Monetary and Banking Terms (2nd Edition)

TOPIC 8: PUBLIC FINANCE

Introduction

Through taxation and government expenditure, the government attempts to influence income distribution, create incentives and provide goods and services which cannot be efficiently produced under free market conditions. Different combinations of government spending and taxation may have different impact on the economy, and hence government's budgetary decisions are of great concern to citizens.

Specific Objectives

After studying the topic, students should be able to:

- (i) understand the principles of taxation and their application to Hong Kong;
- (ii) understand the sources of government revenue and their relative importance in Hong Kong;
- (iii) know the effects of taxation on individuals and firms;
- (iv) understand public expenditure and its trend;
- (v) identify the socio-economic implications of the government revenue and expenditure;
- (vi) understand the different kinds of budgets;
- (vii) describe and analyze the major proposals in the current budget speech; and
- (viii) recognize taxpayers' contribution to government revenue, and the responsibility of citizens to pay tax.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
8. PUBLIC FINANCE 8.1 Government revenue	(i) sources of government revenue in Hong Kong - direct tax - indirect tax - other revenue	11	(1) Ask students to give examples of taxes which they or their families have to pay and check these against a comprehensive list of taxes charged by the government.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
	<ul style="list-style-type: none"> (ii) principles of taxation (iii) classification of taxes according to various criteria (iv) effects of taxation on individuals and firms 		<ol style="list-style-type: none"> (2) Pick out examples of taxes from the list. Ask students to classify them under direct tax and indirect tax; progressive tax, regressive tax and proportional tax. Ask students to reflect upon citizens' obligations to pay taxes and what they would expect the government to do with the tax revenue. (3) Discuss with students the principles of taxation and importance of introducing different types of tax allowances with reference to civic values such as equality. (4) Calculation of salaries tax: Design case study of different people earning different salaries. Ask students to calculate the salaries tax these people need to pay and check their calculations against the answers generated from the Salaries Tax Computation Program on the Inland Revenue Department homepage. (http://www.info.gov.hk/ird/eng/se/stcfm.htm). (5) Discuss with students the implications of the changes of taxation policy (e.g. change in tax allowance, change in the progressivity of salaries tax, etc.) over the past few years and how these changes affect different income groups. (6) Ask students to discuss the characteristics of the salaries tax system in terms of: <ul style="list-style-type: none"> (a) progressivity; (b) simplicity and cost efficiency in administration; (c) relative importance in the government revenues; (d) impact on work incentive; and (e) income distribution. <p>(Teachers may infuse civic values as equality and social justice into the discussion.)</p> (7) Ask students to reflect upon <ul style="list-style-type: none"> (a) whether or not they will try to avoid tax or evade tax; and (b) the social consequences of tax avoidance and tax evasion.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
8.2 Public expenditure	<ul style="list-style-type: none"> (i) public expenditure as a proportion of GDP and its trend (ii) public expenditure by function and its trend (iii) socio-economic implications of such trends 	7	<ul style="list-style-type: none"> (1) Data-analysis: Collect numerical data and graphical representation of government revenue over the past few years. Ask students to study the composition and trend of growth of government revenue. Discuss the significance and implications of the relative shares of the sources of revenue and their changes over the years. (2) Role-play: Divide the class into several groups, each representing a government bureau. Each group collects information on its main items of expenditure and their trends and plans its expenditure for the coming year. Based on information collected, each group justifies its request for funding and presents the socio-economic implications of its expenditure plan. Acting as the Chief Executive/ Financial Secretary, the teacher guides the class to reflect upon social needs and priorities and helps the various groups reach a compromise on how public funds should be allocated.
8.3 Government budget	<ul style="list-style-type: none"> (i) definition of budget; surplus budget, deficit budget and balanced budget (ii) major proposals in the current budget speech 	6	<ul style="list-style-type: none"> (1) Discussion: Ask students to design personal budgets of their own and discuss with them the principles involved. Draw an analogy between the personal budget and the government budget to examine the implications of a balanced, surplus or deficit budget. (2) Case study: Compile summary information on the budget proposal of the current financial year. Ask students to identify the major items of public expenditure and government revenue. Discuss the effect of such budget proposal on the society. <p>(N.B. Mechanism of fiscal policy NOT required)</p>

TOPIC 9: INTERNATIONAL TRADE

Introduction

Voluntary exchange among individuals or countries occurs when participating parties gain from trading with each other. If people and countries specialize in producing the goods and services in which they have comparative advantage(s) and then trade among themselves, overall output increases and the trading parties would be better off. Despite the potential gain from trade, countries do set up trade barriers against foreign competitors; and for Hong Kong which is heavily reliant on trade, attempts have been made to overcome these barriers. With increasing globalization of economic activities, demand for statistics on external transactions has been rising. The balance of payments (BoP) account systematically summarizes, for a specific period, the economic transactions of an economy with the rest of the world.

Specific Objectives

After studying the topic, students should be able to:

- (i) understand the laws of absolute advantage and comparative advantage;
- (ii) perform calculations on absolute advantage and comparative advantage;
- (iii) apply the principle of comparative advantage to Hong Kong;
- (iv) describe the current account's main components and the capital and financial account under the balance of payments account;
- (v) know the meanings of balance of payments deficit and balance of payments surplus;
- (vi) know the effects of a change in the exchange rate on import price and export price;
- (vii) know the linked exchange rate system in Hong Kong;
- (viii) describe different types of trade barriers and their effects on price, output and employment;
- (ix) recognize the importance of trade to Hong Kong;
- (x) identify trade barriers faced by Hong Kong and how Hong Kong attempts to overcome these barriers; and
- (xi) acquire a basic understanding of trade issues and related controversies.

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
9. INTERNATIONAL TRADE			
9.1 Absolute advantage, comparative advantage and gains from trade		9	<p>Class activities: (i) Tell students that they are going to prepare for a class party. Ask them what criteria they would use to divide up the work given that they have limited time and they have to be quick and efficient. (ii) Divide the class into two groups with each group folding a paper star and paper hat respectively. Repeat the game with each group folding a different item. Record the number of hats and stars made by each group in each round. Work out which group possesses the comparative advantage in producing each item. Explain the meanings of absolute advantage and comparative advantage. (iii) Discuss with students why some countries prefer to trade even though they can produce the goods by themselves.</p>

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
9.3 Exchange rate	<p>(i) Meaning of exchange rate (N.B. Graphical illustration NOT required)</p> <p>(ii) Effect of a change in the exchange rate on import prices and export prices</p> <p>(iii) Brief introduction to the linked exchange rate system in Hong Kong (N.B. Mechanism of maintaining the linked exchange rate NOT required)</p>	2	<p>(1) Discussion: Discuss with students that they are about to travel overseas (e.g. to Australia) and to prepare for the trip, they need to buy some foreign currencies. Show them a 'foreign currency vs HKD Notes Exchange Rate' table downloaded from the homepage of a local bank. Ask them to interpret the meaning of the exchange rate of the foreign currency they wish to buy (e.g. Australian dollar). Tell students to work out how much of the foreign currency they can buy given a certain amount of Hong Kong dollar.</p> <p>(2) Discussion: Discuss with students the effects of a change in the exchange rate of the currency of a small open economy (e.g. Hong Kong).</p> <p>(3) Ask students to collect information on the exchange rate of US dollar against other currencies (e.g. Australian dollars, Euro) over the past few weeks and check whether the movement of the exchange rate of HK dollar is linked to US dollar.</p> <p>(4) Reference: HKMA Background Brief No.1 --- Hong Kong's Linked Exchange Rate System.</p>
9.4 Trade barriers	<p>I Types</p> <p>II Effects on price, output and employment</p>	5	<p>Case Study: Ask students to collect press cuttings on trade barriers imposed on Hong Kong. Ask them to write some short paragraphs on the effects of such trade barriers.</p>

Syllabus Content	Guidance Notes	Suggested Periods	Suggested Activities
9.5 Hong Kong's international trade		4	(1) Activity: Ask students to collect data on the types and destinations/origins/suppliers of Hong Kong's exports, imports and re-exports. Use the pattern of trade to illustrate the principle of comparative advantage.
I Principle of comparative advantage as applied to Hong Kong	using the pattern of trade in Hong Kong to illustrate the principle of one method adopted by Hong Kong to overcome trade barriers.		(2) Report writing: Divide the class into several groups. Ask each group to write a short report on the effectiveness of one method adopted by Hong Kong to overcome trade barriers.
II Importance of trade to Hong Kong's economy			
III Trade barriers faced by Hong Kong and attempts to overcome them	(i) trade promotion (ii) the role of the HKSAR Government		

(V) SUGGESTED TIME ALLOCATION

1. Four periods (40 minutes each) per week are recommended. Assuming that there are 30 working weeks from September to June in an academic year, time allocation for the subject should be calculated as follows :

$$\text{S4 (September-June)} \quad 4 \times 30 = 120 \text{ periods}$$

$$\text{S5 (September-March)} \quad 4 \times 18 = 72 \text{ periods}$$

$$\text{Total : } \underline{192} \text{ periods}$$

2. The number of periods for the teaching, revision, activities and assessment of each topic is suggested as follows:

Topic	No. of periods	Topic	No. of periods
(1) 1.1	1	(5) 5.1	1
1.2	2	5.2	<u>10</u> <u>11</u>
1.3	2		
1.4	<u>3</u> <u>8</u>	(6) 6.1	1
		6.2	1
(2) 2.1	7	6.3	9
2.2	1	6.4	1
2.3	5	6.5	2
2.4	7	6.6	6
2.5	1	6.7	<u>9</u> <u>29</u>
2.6	2		
2.7	6	(7) 7.1	5
2.8	<u>5</u> <u>34</u>	7.2	6
		7.3	6
(3) 3.1	1	7.4	<u>2</u> <u>19</u>
3.2	1		
3.3	1	(8) 8.1	11
3.4	3	8.2	7
3.5	10	8.3	<u>6</u> <u>24</u>
3.6	<u>8</u> <u>24</u>		
		(9) 9.1	9
(4) 4.1	1	9.2	5
4.2	11	9.3	2
4.3	<u>6</u> <u>18</u>	9.4	5
		9.5	<u>4</u> <u>25</u>
		Total :	<u>192</u>

3. To better coordinate classroom teaching with the planning of extra-curricular activities or other learning experiences and to better cater for students' needs and abilities, teachers may adjust the order in which these topics are covered.

(VI) LEARNING AND TEACHING

The goal of economic education is to foster in students the thinking skills and substantial economic knowledge necessary to become effective and participating citizens (Schug, 1985). Learning is enhanced with the creation of a motivating and supportive environment in school, at home and within the community. Teachers as facilitators of learning make plans for the learning experiences that students will enter into, taking into consideration students' prior knowledge, prerequisites for learning and what students will be able to learn next. In trying to fulfill the aims and objectives of the S4-5 Economics curriculum, there are various strategies or a combination of them that teachers can use to motivate students, involve them in their own learning processes, develop in them essential skills in the subject, and in the course of doing so, make learning pleasurable and ultimately sustain their interest in lifelong learning.

Because of the diversity (in needs, interests, abilities, motivation, socio-economic background etc.) existing among students, diversity in the teaching environment and teacher attributes (as personalities, experience etc) and that various topics in the economics syllabus may be more effectively learnt and taught using different strategies, there is no one single strategy/method that fits all situations. Following are a few approaches and strategies that S4-5 Economics teachers have used to varying degrees and described briefly for teachers' reference.

Lecturing

Structured and systematic presentation supplemented with questioning, whole-class discussion and resources as worksheets, textbooks, etc have been used by teachers when a large amount of knowledge is to be covered within a short period of time. Teachers associate such approach with better control over class discipline and pace of the lesson. They may also use it for introducing the basics of a new topic, explaining of theories and summing up of key points.

On the other hand, this method provides relatively fewer opportunities for cooperative learning. With lecturing, opportunities for using and development of skills in debate and in verbal presentation, and of enhancing aspects of understanding through discussion, are missed (Ryba, 1985).

Project Learning

The project method is a powerful learning and teaching strategy to help students acquire and construct knowledge, and develop generic skills and attitudes through a variety of learning experiences. As students are assigned practical tasks and research and through self-directed inquiry, there is a shift in ownership from teacher to students. This method also creates opportunities for reading as students do research on the project and opportunities for demonstrating creativity.

Use of the project method would demand relatively more preparatory and guidance work but appeals to teachers who see the tremendous impact on learning when students are put through authentic learning experiences as running a stall in the Lunar New Year Fair.

Information Technology for Interactive Learning

Information technology has vastly improved the circumstances of learning and teaching, connecting learners to the world beyond the traditional confine of 'classrooms', providing resources to and facilitating the sharing of these resources among students and teachers. Web-based software facilitates communication and resource sharing and so promotes collaborative learning. Economics teachers can employ spreadsheet software in the design of interactive worksheets (e.g. in demand and supply analysis) and illustration of repetitive calculations (e.g. banking multiplier), and use the Internet as a rich source of learning and teaching resources etc. The use of IT is meant to improve, but not replace other forms of learning and teaching.

The development of interactive materials may be time consuming but, to some extent, forces teachers to better organize what they have to present and be more conscious of the need to anticipate students' response to interactive materials as these are being prepared. Consequently, teachers would become more aware of the effectiveness of the instructional process. With collaborative effort, the workload of using IT in teaching can be reduced.

Problem Solving

With this approach, students are given authentic data and situations to analyze, reflect on the possible causes of economic problems, devise possible solutions to the problems and evaluate on the likely outcomes of alternative solutions. Economic understanding is built up through induction from real-world data/case materials/situations (about

individuals, firms, industries, and economy etc) that may be traditionally used only as examples and illustrations of the topics covered.

Use of such approach, however, may be constrained by the availability of authentic data/materials that must be adequately structured by the teacher.

Role Play and Simulation

By playing roles as consumers, producers, government etc, students gain a deeper understanding of the motives and economic principles and problems underlying decisions made by various participants in economic activities. Simulation of real-life situations (e.g. barter) put students in dynamic situations of, for example, having to find someone who has the goods they want, negotiating with other market participants on the exchange ratio, and facing problems about the indivisibility and perishability of goods etc. Students' reflections on their own experiences in role-plays and simulations can become a starting point for follow-up discussions and analysis to help students 'discover' knowledge (e.g. problems faced by a barter economy).

In employing such an approach, teachers have to strike a delicate balance between having to simplify the 'roles' and 'real-life situations' on one hand and not missing out the essential determinants of the players' decisions/behaviour on the other.

Case Study

Simple cases (such as decline of the manufacturing sector, rising unemployment, deflation, integration of firms in various local industries) can be used for motivation, policy analysis and application of economic theories etc. The description of cases may be supported with numerical data, charts, graphs, newspaper articles and other materials from print or broadcast media etc. Students would be given some study questions to guide their preparation of the case for class discussion. These guiding questions would get students started with the analytical process that aims at the discovery of solutions to the problem posed by the case. This method provides opportunities for students to sieve through 'real' integrated information/data provided before constructing arguments, presenting their own points of view, listening to those of others, and applying economic concepts/theories in explaining, defending or challenging each of the viewpoints. With case study, while students are engaged in their own learning and responsible for it, it also lends itself to cooperative learning when students are working in groups. Appropriate teacher guidance is needed to help students distinguish the sound from unsound ideas.

Teachers using this method may find that it demands relatively more class time than alternative learning and teaching mode. Good cases would take time to develop.

Graphic Organizers

Graphic organizers are visual representation of knowledge that structures information by arranging important aspects of a concept or topic into a pattern using labels (Bromley, DeVitis & Modlo, 1999). Their main function is to help present information in concise ways that highlight the organization and relationships of concepts. Graphic organizers enable teachers to show and explain network of ideas -- relationships between content and sub-content and how they in turn relate to other content areas. On the other hand, through the use of the organizers, students can make more abstract comparisons, evaluations, and conclusions. Thinking skills as compiling information, generating, analyzing or evaluating ideas, and reflecting are enhanced with the use of graphic organizers.

Graphic organizers are more suitable for the learning and teaching of knowledge content and thinking skills, but less so for the cultivation of values/attitudes.

Closer collaboration with the teacher librarian can also facilitate economics teachers' planning of the instructional process, access and use of resources, support for project-based learning and above all, cultivation of a reading culture among students. In fact, when employing strategies as project method and case study etc, teachers can create a whole range of life-wide learning opportunities for their students. Collaboration among teachers (and students) within the same school or the same neighborhood facilitates the planning and organization of learning activities (both of intra and inter-disciplinary nature) and sharing of resources etc.

The aforementioned approaches are in no way exhaustive and teachers may use any approach that actively involves students in the discovery of knowledge, brings meaning and relevance to what they are learning, and develop in them skills central to the economics curriculum at this level.

Different students learn in different ways and more often than not, S4-5 Economics teachers find themselves using a combination of strategies from their repertoire of teaching methodology instead of relying on just one single method to cater for all occasions.

(VII) ASSESSMENT

Assessment is an integral part of learning and teaching. It is the systematic gathering of evidence about what students know and what they are able to do through the learning of the subject. It should be seen as a process to promote learning rather than a mere end-of-course judgement.

Among the various categorizations of assessment, formative assessment and summative assessment are most common. Formative assessment is a day-to-day on-going process to collect evidence to help assess the progress of students' understanding of subject knowledge, mastery of skills as well as development of positive values/attitudes. It also helps teachers identify students' weaknesses in the learning process so that plans for remedial actions can be formulated. On the other hand, summative assessment can be used to determine and compare students' levels of achievement. It provides information about what students have learned at the end of a chapter, a term or a year. Although formative assessment and summative assessment serve different purposes (Formative assessment is assessment for learning whereas summative assessment is assessment of learning), they are both important and are used together to form a comprehensive profile of student learning.

As assessment plays an indispensable role in the learning and teaching processes, teachers are advised to plan carefully in order to obtain valid and reliable information. Careful planning includes consideration in the following aspects:

1. Determining the purpose and objectives of assessment

Teachers have to decide whether the assessment is to assess students' readiness to learn (placement assessment), to provide feedback on learning progress (formative assessment), to identify causes of learning problems (diagnostic assessment), or to measure students' achievement at the end of the course (summative assessment). Teachers also have to decide whether the assessment is used to gain information about the extent to which the planned objectives have been achieved by a student (criterion-referenced assessment), or to provide a relative ranking of students in terms of achievement (norm-referenced assessment). After having determined the purpose of assessment, teachers can then identify the objectives of assessment in accordance with the instructional objectives.

2. Preparing tables of specification

A table of specification is a chart relating students' skills as expressed in the assessment objectives to the course content. It indicates the relative weight assigned to each of the various topics and skills. Of course, a table of specification can also be used to relate the course content to the types of questions being set or relate students' skills to the types of questions. (Please refer to the Appendix for an example of a table of specification relating students' skills to the course content).

3. Selecting appropriate assessment methods

Traditionally, written tests and examinations are used as major methods of assessment after the completion of a study period in schools. They can be used to assess the product of learning such as the understanding of basic economic terminologies and concepts at a fixed point of time. However, they are not effective tools to assess capabilities like collaboration skills. These capabilities are better reflected in the process of learning rather than at the end of a period of study. Teachers therefore are also encouraged to use alternative types of assessment suited to the purposes of learning.

Following are a few modes of assessment which S4-5 Economics teachers can use:

(i) Objective questions

Examples of objective questions are multiple-choice and short-answer questions. They are sometimes used for assessing students' abilities in memorization, comprehension, translation, application and analysis, but less efficient for assessing higher cognitive skills such as abilities in synthesis and evaluation. The use of objective questions to assess students' grasp of economic concepts demands precision of language in setting the questions because there will be no leeway in determining students' answers in the marking stage. In this regard, teachers are encouraged to go through all the questions to ensure that they are phrased unambiguously. When multiple-choice questions are employed, all distractors should be plausible so that correct answers cannot be obtained by wild guessing.

(ii) Essay-type questions

Free-response essay questions and structured essay questions are effective tools to give students practice in the arrangement and expression of ideas.

In answering essay-type questions, students are required to organize and present information and argument effectively. This sort of question can also be used to assess abilities in synthesis and evaluation. In setting essay-type questions, teachers should ensure that the question provides sufficient indication of the scope and expectation to students. Imprecise wording of essay-type questions leads to different interpretation by students, and consequently the assessment objectives not achieved.

(iii) Data-response questions

Data-response questions can be employed to assess students' capabilities of application and problem-solving. Materials containing either authentic or hypothetical information such as statistical tables, graphs, diagrams, pictures, photographs, newspaper reports and extracts from articles can be used in setting data-response questions so that students' application of knowledge and abilities in real-world situations can be assessed. In setting data-response questions, teachers are reminded to keep the scenario clear and precise. All irrelevant text and information should be removed to avoid unnecessary distraction to students.

(iv) Project work

Project work is a powerful tool to provide students with opportunities to develop skills in thinking, communication, cooperation, problem-solving, decision-making and presentation etc. It can also make students become agents of their own learning instead of mere recipients of information presented by their teachers. There should not be merely an assessment of students' learning and research effort culminating in a final project report, but also the process of learning.

A journal prepared by the students helps to keep record of what they had done, the methods used, how they felt about their own work, learning strategies used for solving problems encountered and addressing worries and concerns. Teachers can make use of the journal to assess the strengths and weaknesses of students so that immediate feedback can be provided for the improvement of their learning. Interim presentation and responding to fellow schoolmates' enquiries on these subjects facilitate students' reflection on their own work. The discussions that follow can provide the opportunity for teachers and students to talk about what students have learned, where they are in the process of learning, and what they need to explore further.

(v) Portfolio

Portfolio assessment is a systematic process of documenting students' learning and keeping record for demonstrating students' overall efforts, progress, and achievements. It is an assessment of students' reflective, critical and creative thinking and not a mere collection of their work. To make effective and meaningful use of portfolio in assessment, teachers can use some predetermined criteria to assess what students have done and to what extent the artifacts collected document their progress of learning. Moreover, regular sharing sessions can be organized for students to share their portfolios. Through these sharing sessions, regular feedback from teachers and other students can be provided for students' reflection and improvement.

Apart from the above recommended assessment methods, teachers should take every opportunity to observe and note aspects of students' learning (e.g. work habits and mastery of social and life skills such as communication and co-operation) whenever they are working individually or in groups. Teachers can share their observation with students, provide positive feedback and words of encouragement so as to motivate them further.

4. Marking and grading

A detailed marking scheme should be prepared for each assessment as far as possible so as to improve the quality of marking. However, as students may provide well-reasoned answers that teachers have not conceived, it is therefore necessary to make adjustment to the marking scheme once alternative answers are identified.

To conclude, whatever method is used to assess students, prompt and constructive feedback should be provided to help them learn from their mistakes and revise their future learning strategies. The assessment methods described in this section are by no means exhaustive. Teachers can explore other ways to best suit their instructional objectives.

(VIII) RESOURCE MATERIALS

Homepage of Curriculum Development Institute

The following materials and information have been uploaded to the homepage of Curriculum Development Institute (CDI), Personal, Social and Humanities Education Section (Econ/EPA/GPA) for teachers' information and reference:

- Syllabuses
- Useful Links
- Latest information regarding curriculum development, resource materials newly developed and seminars recently organized by CDI
- Resource materials and seminar handouts

Textbooks

Textbooks on the Recommended Textbook List are written in line with the syllabuses issued by the Curriculum Development Council. When selecting textbooks, schools can make reference to the List which is available on the Curriculum Development Council Homepage at <http://cd.emb.gov.hk/cdc-e.asp>, but the use of textbooks is not a compulsory requirement. Teachers are encouraged to update textbook materials in accordance with societal change and use textbooks flexibly in combination with other learning materials to achieve learning targets and enhance learning effectiveness. Schools are also encouraged to develop their own learning and teaching materials as alternatives to textbooks as well as adopt a wide variety of suitable learning and teaching materials to meet students' needs.

In-service Training Programmes

The CDI organizes in-service training seminars from time to time to keep Economics teachers abreast of the latest developments in subject knowledge and curriculum innovations. Teachers may visit the Training Calendar of the Education and Manpower Bureau Homepage(<http://www.emb.gov.hk/index.asp>) for information on the in-service training programmes.

Maintaining and Developing Resource Materials in School

A classified catalogue of resource materials may be built up through team effort. The resource pool may include newspaper cuttings, teacher-designed worksheets, information packs or even projects produced by students. With a systematic cataloguing system, various resource materials can be easily retrieved to support different teaching methods.

List of Resource Centres

CENTRE	LOCATION	ENQUIRIES	OPENING HOURS
Education and Manpower Bureau Curriculum Resource Centre	24 Tin Kwong Road, Kowloon.	2762 7549	Monday to Friday: 9:00 a.m. to 5:00 p.m. Saturday: 9:00 a.m. to 12:00 noon Sundays & Public Holidays: Closed
Professional Library	2/F, Hong Kong Teachers' Centre (Hong Kong) 4, Pak Fuk Road, North Point, Hong Kong.	2564 9608	Monday to Friday: 9:00 a.m. to 1:00 p.m. 2:00 p.m. to 9:00 p.m. Saturday: 9:00 a.m. to 1:00 p.m. 2:00 p.m. to 6:00 p.m. Sundays & Public Holidays: Closed
Professional Library	3/F, Hong Kong Teachers' Centre (Kowloon) 19, Hok Yuen Street, Kowloon.	2142 1333	Monday to Saturday: 9:00 a.m. to 1:00 p.m. 2:00 p.m. to 6:00 p.m. Sundays & Public Holidays: Closed
Media Production Services Unit	4/F, 19 Hok Yuen Street, Hung Hom, Kowloon	2366 0881	Tuesday to Saturday: 10:00 a.m. to 1:30 p.m. 2:30 p.m. to 6:30 p.m. Sundays, Mondays & Public Holidays: Closed
Hong Kong Monetary Authority Resource Centre	8/F, Citibank Tower, 3 Garden Road, Hong Kong.	2878 8222	Wednesday, Thursday, Friday: 12:30 p.m. to 6:00 p.m. Saturday: 9:00 a.m. to 12:00 noon Sundays & Public Holidays: Closed
Census & Statistics Department Library	21/F, Wan Chai Tower, Wan Chai, Hong Kong	2582 4812	Monday, Wednesday and Friday: 2:30 p.m. to 5:00 p.m. Sundays & Public Holidays: Closed

(IX) REFERENCE

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Comparative Advantage
<http://www.fee.org/education/lessons/9910/printlec.html>

Circular Flows – A Teaching Plan
<http://ecedweb.unomaha.edu/teach.htm>

Foundations for Teaching Economics
<http://www.fte.org>

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http://ericir.syr.edu/cgi-bin/printlessons.cgi/Virtual/Lessons/Social_Studies/Economics/ECO0006.html

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(X) APPENDIX

An example of a table of specification on microeconomics
for a final examination paper

Content	Skills Required	Memory	Translation	Interpretation	Application	Analysis	Synthesis	Evaluation	Total
1. The Basic Economic Problems				5%					10%
2. Demand, Supply and Price				10%	10%	10%		5%	35%
3. Production	5%	10%		5%				5%	25%
4. Units of Production (firm)	5%	5%		5%				5%	15%
5. Market Structure		5%		5%	5%				15%
Total	10%	20%	10%	25%	15%	10%	10%	10%	100%

N.B. (1) A table of specification can be prepared for a single topic like the factors affecting demand or for the entire syllabus.

(2) The percentages indicate the relative weight assigned to the various topics and skills. The figures in the table are for illustration only. Teachers are free to make adjustment according to the objectives of assessment and abilities of students.

(3) Teachers are free to adopt other classification of skills to prepare the table of specification.