

Areas of Study	Independent Enquiry Study (IES)
Self & Personal Development <ul style="list-style-type: none"> • Module 1: Personal Development & Interpersonal Relationships 	Students are required to conduct an IES making use of the knowledge and perspectives gained from the three Areas of Study and extending them to new issues or contexts. To help students develop their IES titles, the following themes are suggested:
Society & Culture <ul style="list-style-type: none"> • Module 2: Hong Kong Today • Module 3: Modern China • Module 4: Globalization 	<ul style="list-style-type: none"> • Media • Education • Religion • Sports • Art • Information and Communication Technology (ICT)
Science, Technology & the Environment <ul style="list-style-type: none"> • Module 5: Public Health • Module 6: Energy Technology & the Environment 	

Figure 2.1 Curriculum Framework for Liberal Studies

2.3 Linkages among the Areas of Study

As mentioned before, the three Areas of Study are not independent fields of knowledge or self-contained disciplines. They have inter-connections among them as shown in Figure 2.2. Students are encouraged to apply the understandings and perspectives developed in one area to the study of the others whenever appropriate.

Self & Personal Development ← → Society & Culture

Personal development involves a process of socialisation. An individual's self-understanding and identity cannot be developed in isolation from the social, cultural and historical context. The profile of a society reflects the way of life of its members from different sectors; and its future is determined by the members' preferences on different issues. As interpersonal and inter-regional interactions become more frequent and networking more common, the choices made by individuals are making greater impact on communities, local and foreign, even on the global society.

Self & Personal Development ← → Science, Technology & the Environment

Knowledge in science and technology helps individuals to understand many problems that they encounter, so that they can make informed decisions and appreciate their responsibilities to society, to the world and to the environment. On the one hand, the development of science and technology facilitates human exploration of the material world, and improves our lives. On the other, it affects our way of life, our mode of communication and even our ways of thinking. To make better use of science and technology in our lives has become a critical modern concern.

Society & Culture ← → Science, Technology & the Environment

The development of science and technology has helped to hasten social development, reduced the distance between regions, and brought a new impulse to cultural encounters and growth. For today's society, sustainable development requires a simultaneous consideration of factors related to science, technology and the environment. Given that social problems have become increasingly complex, the progress of science and technology needs to catch up with the speed of change in society – but any new technology will also bring new challenges and problems to society and the environment.

Figure 2.2 Linkages among the Three Areas of Study

The IES further integrates knowledge acquired from the three Areas of Study, and enhances the ability to synthesise knowledge in general through enquiry into issues of interest to individual students. It encourages students to appreciate the complexities of the modern world, develop critical thinking skills and make informed decisions. The subject does not aim to provide a given set of knowledge, and teachers are not encouraged to use an indoctrinating approach to promote a particular set of beliefs.

Area of Study: Self and Personal Development

Module 1: Personal Development and Interpersonal Relationships

Themes	Key Questions for Enquiry
1. Understanding oneself	What challenges and opportunities does a person have during adolescence?
2. Interpersonal relationships	What interpersonal factors facilitate adolescents to reflect upon and prepare for the transition to adulthood?

Area of Study: Society and Culture

Module 2: Hong Kong Today

Themes	Key Questions for Enquiry
1. Quality of life	Which directions might be chosen in maintaining and improving Hong Kong residents' quality of life?
2. Rule of law and socio-political participation	How do Hong Kong residents participate in political and social affairs and come to grips with rights and responsibilities with respect to the rule of law?
3. Identity	How are the identities of Hong Kong residents developed?

Module 3: Modern China

Themes	Key Questions for Enquiry
1. China's reform and opening-up	What impact has reform and opening-up had on the overall development of the country and on people's life?
2. Chinese culture and modern life	With respect to the evolution of concepts and functions of the family, what kind of relationship between traditional culture and modern life has been manifested? To what extent are traditional customs compatible with modern Chinese society?

Module 4: Globalization

Themes	Key Questions for Enquiry
1. Impact of globalization and related responses	Why do people from different parts of the world react differently to the opportunities and challenges brought by globalization?

Area of Study: Science, Technology and the Environment

Module 5: Public Health

Themes	Key Questions for Enquiry
1. Understanding of public health	How is people's understanding of disease and public health affected by different factors?
2. Science, technology and public health	To what extent does science and technology enhance the development of public health?

Module 6: Energy Technology and the Environment

Themes	Key Questions for Enquiry
1. The influences of energy technology	How do energy technology and environmental problems relate to each other?
2. The environment and sustainable development	Why has sustainable development become an important contemporary issue? What is the relationship between its occurrence and the development of science and technology?

The following is a detailed elaboration of the curriculum.

2.5 Area of Study: Self and Personal Development

Area Brief

Within an individual's lifespan there are a number of developmental challenges that have to be undertaken, e.g. the development of identity and the taking on of an increasing number of roles throughout adolescence and into adulthood. Society also presents young people with many situational challenges and opportunities that may affect their self-perceptions and their relationships with others.

As they develop, students have to be aware of various physiological, emotional and social factors which are relevant to their personal growth. They need to recognise the significance of self-esteem and self-management skills, so that they can handle their fears in the personal development process. Students also have to learn to communicate effectively and develop social skills in different contexts, e.g. in the family and in school. Community involvement may provide opportunities for adolescents to handle adversity. All these experiences enable students to develop a positive outlook on life and empathy, and become prepared for the challenges of living in a rapidly changing society.

Area Objectives

Learning experiences in this Area of Study will enable students to:

- (a) understand the factors which influence personal development, interpersonal relationships, values and beliefs;
- (b) develop self-understanding through an objective assessment of adolescent development;
- (c) be aware of the importance of life skills in handling challenges and opportunities during adolescence, and the complexities involved in their acquisition;
- (d) appreciate the identity, roles and changes in different relationships;
- (e) review their relationships in the family, peer groups and other social groups; and
- (f) appreciate the importance of community involvement.

2.5.1 Module 1: Personal Development and Interpersonal Relationships

Prologue

As adolescents develop and move into adulthood, they experience a number of physiological, social and psychological changes which may affect their self-esteem. At the same time, the ever-changing society presents them with many challenges and opportunities which are crucial to their personal growth. At this age, adolescents show a need to search for viable identities and roles, to become independent of their families and to broaden their circle of peers and foster their relationship with the community. Tensions and conflicts may well arise between adolescents and adults especially within the family. The onset of adolescence involves them in learning through experimentation in various situations and reflecting on their values. This may facilitate adolescents to achieve better personal development and enhance interpersonal relationships in preparation for the transition to adulthood.

In basic education, students have already acquired a basic understanding of personal growth and interpersonal relationships. This module focuses on significant issues which are open to conflicting views and values concerning personal development. Exploration of these issues enables students to achieve a deeper self-understanding and an awareness of the importance of self-management skills. Through exploring issues concerning interpersonal relationships in the context of the family, peers and society, students reflect on how they communicate and on the importance of establishing healthy relationships.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 1: Personal Development and Interpersonal Relationships:

(A) Theme 1: Understanding oneself

Factors influencing personal development include: physiological, emotional and social changes at puberty and ways to cope with them; the uniqueness of individuals; similarities and differences between the two sexes; personal identity and self-esteem; self-image and self-awareness; personal strengths and weaknesses; a healthy lifestyle; self-management in daily life situations; money management; coping with stress and frustration; coping with emotional experiences; dealing with unfamiliar situations; decision making in challenging situations, etc.

(B) Theme 2: Interpersonal relationships

Factors influencing attitudes towards sexuality, interpersonal relationships, values and beliefs; identity and social approval; roles, rights and responsibilities in the family and other social groups; peer groups and their influence; gender roles and relationships; relationships with the opposite sex; conformity and independence; simple conflict-resolution skills in daily life situations; enhancing interpersonal relationships and social skills; respect for others who hold different values and lifestyles; communicating and getting along with others in the community; the importance of participation in local affairs, etc.

Framework of the Module

Theme 1: Understanding oneself

Questions for enquiry	Related values and attitudes
<p>What challenges and opportunities does a person have during adolescence?</p> <ul style="list-style-type: none">• What factors influence the self-esteem of adolescents? How is it related to adolescents' behaviour and aspirations for the future?• Why are adolescents often given certain rights and responsibilities?• How do messages and values from the media influence adolescents?• What are the current salient trends that pose particular challenges and opportunities to adolescents in Hong Kong and how do they respond to these trends? Why is the acquisition of life skills important for adolescents?	adaptability to change, responsibility, self-esteem, self-reflection, rationality, self-discipline, independence

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Relationship among self-esteem, adolescents' behaviour and aspirations for the future
 - an understanding of developmental challenges such as physiological changes, emotional upheavals and social needs during adolescence and ways to cope with them
 - factors which may affect self-esteem such as gender differences, physical appearance, family support, peer acceptance, socio-economic status (SES), cultural influences, etc
 - comparison of self-esteem, behaviour and aspirations among adolescents with different socio-economic backgrounds, academic achievements, or parents of different child-rearing styles
 - acceptance of one's own limitations and developing one's potential
 - importance of objective and accurate self-perception
- Rights and responsibilities of adolescents
 - adolescents' rights and responsibilities that are not shared by other age-groups in different contexts, e.g. universal education is only available to people below a certain age, adolescents are not punished in the same manner as other groups when they commit a crime

- unique expectations (e.g. adolescents' need to formulate their own set of values) and pressures on adolescents (e.g. conformity in dress and appearance, language and dating behaviour)
 - discussion on why some people in Hong Kong want to give adolescents more rights and responsibilities, whereas others are less inclined to do so
- The influences of the messages and values from the media on adolescents' development, e.g. gender stereotyping, civic awareness
 - Current trends related to Hong Kong adolescents
 - understanding of trends that pose particular challenges and opportunities to adolescents in Hong Kong such as consumer behaviour, drug abuse, extensive extra-curricular activities, online activities, community involvement, etc., and analysis of the causes and patterns of these trends
 - analysing the particularity of these trends which pose challenges and opportunities to adolescents in Hong Kong
 - strategies commonly adopted by Hong Kong adolescents to cope with these trends
 - discussion on the importance of the acquisition of life skills for adolescents to make good use of opportunities and meet challenges

Theme 2: Interpersonal relationships

Questions for enquiry	Related values and attitudes
<p>What interpersonal factors facilitate adolescents to reflect upon and prepare for the transition to adulthood?</p> <ul style="list-style-type: none"> • What kinds of relationships are commonly available to and most significant for Hong Kong adolescents? What are the unique and shared characteristics of these relationships? • How are adolescents' identities developed and roles embedded within different relationships? • Why are there often changes in adolescents' relationships with family members, teachers, peers and dating partners? • How do adolescents in Hong Kong reflect upon their interpersonal conflicts and develop relationships with others? • How does communication technology influence adolescents' relationships with others? 	cooperation, gender equity, empathy, integrity, self-reflection, self-determination, respect for self, respect for others, social harmony, sense of responsibility, interdependence

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Relationships available to Hong Kong adolescents
 - different types of relationships for the typical Hong Kong adolescents, both formal (e.g. school clubs) and informal (e.g. peers)
 - the unique and shared characteristics of these relationships, e.g. gender-stereotyped beliefs and behaviour, and peer group pressure
- Identity developed and roles embedded within different relationships
 - factors affecting adolescents' identity development within different relationships, e.g. gender stereotypes, peer influence, parenting styles, and ethnicity
 - adolescents' role expectations and behaviours within different relationships
- Changes in adolescents' relationships with family members, teachers, peers and dating partners such as
 - the quest for autonomy during adolescence, pressure towards conformity and the need for social acceptance
 - differences in the values and life philosophies between Hong Kong adolescents and their parents and strategies to narrow the gap
 - closer peer interactions, less intense sibling rivalries and closer contacts between teachers and students

- analysing changing patterns of dating behaviour (e.g. displaying intimacy in public) and whether current trends are desirable and would affect the sustainability of an intimate relationship
- Reflection on interpersonal conflicts
 - possible causes and consequences of manifest interpersonal conflicts, (e.g. parent-child conflict and sibling rivalry)
 - strategies typically used by adolescents to deal with conflicts and the extent to which these strategies are effective
 - reflection on various examples of conflicts and ways to minimise harm
 - adopting positive attitudes towards conflicts and striking a balance between the need to avoid and resolve conflicts and the need to preserve personal integrity and beliefs
- Developing relationships with others
 - developing skills for starting and maintaining a relationship, e.g. being aware of one's own needs, privileges and responsibilities and those of others; and strategies for adolescents to survive in groups
 - self-defence mechanisms against unpleasant situations such as ostracism
 - possible trade-offs between social harmony and individual freedom
 - the importance of developing a sense of belonging, self-respect and respect for others in different relationships
- The influences of communication technology on adolescents' ways of communication and interpersonal relationships, e.g.
 - widening social network
 - cyber bullying

2.6 Area of Study: Society and Culture

Area Brief

Culture is a shared creation of members of a community with a shared lifestyle. It manifests itself in every part and every level of society. While society is made up of individuals, different environments give rise to diverse cultures in societies. Social progress and cultural development go hand-in-hand.

Post-reunification Hong Kong continues to develop as a cosmopolitan city based on the original foundation of economic development and an established way of life, while exploring its new role as a special administrative region of China. At the same time, through reform and opening-up, China's development has created unprecedented opportunities and challenges in the new millennium. Having joined the World Trade Organization (WTO), China can no longer cut itself off from the trends and influences of globalization. The surging Chinese economy and traditional Chinese culture are now interacting with the rest of the world in various ways. In living through such times of dynamic change, Hong Kong students need to develop both the capacity to reflect on their own culture and adopt a broad worldview that transcends spatial boundaries.

This Area of Study includes the following modules: Hong Kong Today, Modern China and Globalization. Because each of these modules has a different focus, their enquiry paths have different progression and depth. The entities with which Hong Kong students are personally involved form the focus of Hong Kong Today and Modern China. In contrast, globalization is a controversial concept which manifests itself in several different ways, so students need to explore the different meanings of the concept and be exposed to the controversies which surround it. They can investigate its impact on different regions and the diverse reactions from people living in different parts of the world.

Area Objectives

Learning experiences in this Area of Study will enable students to:

- (a) understand important issues facing their own society, country and the world;
- (b) assess qualities, phenomena, changes, trends and impacts in relation to various aspects of society and culture;
- (c) apply critical thinking skills and adopt multiple perspectives in making decisions and judgments regarding social issues and problems;

- (d) identify the interdependence among societies, countries and the world, and their mutual influences upon one another;
- (e) appreciate the views and values of people from different social and cultural backgrounds; and
- (f) reflect on and develop their multiple identities, responsibilities and commitments as citizens in their community, country and the world.

2.6.1 Module 2: Hong Kong Today

Prologue

Hong Kong is a Chinese society with centuries of cultural heritage. Economically, it is already an international financial and commercial centre, and for years it has been a major world metropolis. Before 1997, it underwent the process of modernisation under British rule, and the meeting of East and West has produced a unique culture and ethos. After reunification with the motherland under “one country, two systems”, a new set of opportunities and challenges has affected public life and is shaping the development of Hong Kong.

In basic education, students have already acquired some understanding of these developments. In this module, they will explore further issues of concern, such as: the remarkable quality of life in Hong Kong, rights and responsibilities with respect to the rule of law, socio-political participation, and the identities of Hong Kong residents.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 2: Hong Kong Today:

(A) Theme 1: Quality of life

The needs and problems of Hong Kong society; the historical and current development of the Hong Kong economy; the functions of the government and the services provided by it; the physical and human characteristics of the environment of Hong Kong (e.g. relief, climate, population); the rights and responsibilities of consumers; current environmental issues in Hong Kong, etc.

(B) Theme 2: Rule of law and socio-political participation

Historical and current development of politics and society in Hong Kong; the relationship between the Central Authorities and the Hong Kong Special Administrative Region (HKSAR); the importance of the Constitution of the People’s Republic of China and the Basic Law of the HKSAR of the People’s Republic of China to Hong Kong residents; the sources of law in the HKSAR; the governance of the HKSAR; the functions of the government of the HKSAR and its relationship with Hong Kong residents; the identities, rights and duties of Hong Kong residents; the participation in social and political affairs of Hong Kong residents, etc.

(C) Theme 3: Identity

Roles and identities of the individual as a member of a group; the identities of individuals as Hong Kong residents and Chinese citizens; awareness and concern for local, national and global communities; the emergence of a global identity in an interdependent world, etc.

Framework of the Module

Theme 1: Quality of life

Questions for enquiry	Related values and attitudes
<p>Which directions might be chosen in maintaining and improving Hong Kong residents' quality of life?</p> <ul style="list-style-type: none">• What are the different opinions of Hong Kong residents on the priorities which constitute the quality of life?• Which aspects of the quality of life are seen to be more important? Which are seen to be immediate needs? Who might make the decisions? Why?• How can individuals or organisations contribute to the maintenance and improvement of the quality of life? What are the obstacles to their efforts? Which groups of people are most affected if these obstacles are not removed?	respect for quality and excellence; sustainability; rationality; sensitivity; care and concern

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Possible perspectives from which to measure the quality of life according to objective criteria or subjective judgment might include:
 - The economic perspective (e.g. unemployment rate, per capita gross domestic product, real wages, disparity between the rich and poor)
 - The social perspective (e.g. the level of medical and health care, access to education and its level, equal opportunities)
 - The cultural perspective (e.g. diversity, heritage)
 - The political perspective (e.g. human rights and rule of law, freedom of the press, the government's performance)
 - The environmental perspective (e.g. level of pollution, development of environmental protection and conservation)
- People's opinions about the quality of life may vary according to short and long-term costs and benefits to individuals, social groups and government
- Hurdles with respect to maintaining and improving the quality of life, e.g. mobilisation of resources, technological level, social cohesion, perceptions of social justice, regional and international factors

- Valuation of the quality of life may vary according to:
 - different configurations of people / social strata / interest groups
 - majority vs. minority
 - vocal vs. silent
 - active vs. passive
 - abundance vs. scarcity
 - judgment of urgency: consideration of personal, group and public interests

Theme 2: Rule of law and socio-political participation

Questions for enquiry	Related values and attitudes
<p>How do Hong Kong residents participate in political and social affairs and come to grips with rights and responsibilities with respect to the rule of law?</p> <ul style="list-style-type: none"> ● What factors determine the level and form of socio-political participation by Hong Kong residents? What is the significance of their participation? Why do they have different demands? What is the impact of their demands? ● In what ways does the rule of law protect rights and promote the observance of responsibilities among Hong Kong residents? ● How does the government respond to the demands of different social groups? What is the impact of the responses on the governance of Hong Kong, the safeguarding of the rule of law and the promotion of socio-political participation among Hong Kong residents? Why? 	respect for the rule of law; participation; human rights and responsibilities; democracy; justice

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Participation in socio-political affairs
 - factors affecting the level and form of socio-political participation, e.g.
 - expected cost and probable outcome
 - personal, e.g. identity, a sense of responsibility, altruism, self-actualisation
 - social structure, e.g. social cohesion and sense of belonging, differences based on ethnicity, gender, social strata, and age
 - political, e.g. the power to vote and the right to stand for election at different levels, the credibility of the government, political culture
 - educational, e.g. educational level, curricula
 - the media, e.g. timeliness, coverage and reliability of news and information, the degree of freedom of the press and information, the level of involvement and the stance of the media on different events
 - degree of significance to individuals, social groups, the government and society as a whole
- Rights and responsibilities with respect to the rule of law
 - relationship between the rule of law and observing the law, e.g.
 - is observing the law equivalent to respect for and safeguarding the rule of

law?

- how can a clash between an individual code or article of law and the rule of law be settled?
- who should bear the responsibility for paying respect to and safeguarding the rule of law?
- the significance and the implementation of the rule of law in different dimensions, e.g. equality before the law, judicial independence, fair and open trial and the right to appeal, legal protection of individual rights, legal restrictions on governmental power
- functions and limitations of the rule of law in protecting rights and promoting the observance of responsibilities, e.g. the protection of minority rights; the restraint on arbitrary power; the promotion of social justice; the maintenance of a free, open and stable society; dynamic balance among different interests
- Government and the requests of different interest groups
 - the demands from people, organisations and interest groups with different characteristics, backgrounds, ideals and endowments, e.g. political groups, non-governmental organisations (NGOs), the disadvantaged, professional bodies, industry and business, the middle class, adolescents, people of different gender, ethnicity and religion
 - evaluating different interests
 - institutionalised and non-institutionalised responses, swiftness of responses, and their validity and effectiveness
 - impact of related responses on governance, e.g. decisions on priorities in resource allocation; the relationship between the government and Hong Kong residents; the legitimacy of government; the effectiveness and efficiency of policy implementation
 - impact of related responses on safeguarding the rule of law and the promotion of socio-political participation among Hong Kong residents, e.g.
 - the level of understanding of, concern about, and support for the rule of law
 - the opportunities, levels and modes of participation, and their related strategies
 - changes in civic awareness and the local sense of belonging

Theme 3: Identity

Questions for enquiry	Related values and attitudes
<p>How are the identities of Hong Kong residents developed?</p> <ul style="list-style-type: none"> ● To what extent do Hong Kong residents regard themselves as local, national and global citizens? How are their identities shaped? In what ways have their different identities affected their daily lives? ● What is the interrelationship of the multiple identities in the local, national and global context? ● What is the significance of multiple identities to Hong Kong residents? Why? 	sense of belonging; plurality; open-mindedness; individuality; interdependence

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Characteristics of Hong Kong residents' identity
 - multiplicity of identities of Hong Kong residents (e.g. influenced by globalization and cultures, residents' mobility)
 - different kinds of Hong Kong residents: permanent and non-permanent residents; permanent residents who are Chinese citizens and permanent residents who are not of Chinese nationality, etc.
 - interrelationships among Hong Kong residents' local sense of belonging and identity, national identity and identity as global citizens (e.g. Hong Kong residents' identity with respect to issues involving local, national and global interests; the responses of Hong Kong residents to local, national and global events that trigger empathy and mutual assistance)
- Factors affecting the sense of belonging and identity may include historical developments; developments in political, economic, social and cultural life; agents of socialisation; traditional culture; popular culture; the input of the government and NGOs; education
- Identity and the sense of belonging may be shown by:
 - feelings and responses towards local (HKSAR flag and emblem) and national symbols (national flag, national emblem and national anthem), national historical events, culture and landscape
 - feelings and responses to major local, national and global events
 - participation in and contribution to local, national and global affairs
 - responses to international competitions (e.g. sport, music, film)
 - responses and reflections, as shown in polls and surveys on the issue of identity

- Significance of multiple identities of Hong Kong residents may include
 - cultural reflection and innovation
 - diversity and multiple voices in society
 - increasing thresholds of freedom and adaptability

2.6.2 Module 3: Modern China

Prologue

After the People's Republic of China was founded in 1949, large-scale socialist construction began. But during the "Cultural Revolution" from 1966 to 1976, the country suffered serious setbacks. The task of reconstructing the economy and society had to start afresh. By the end of 1978, China launched a reform and opening-up drive with the convening of the Third Plenary Session of the Eleventh Central Committee of the Communist Party of China. Ever since, the country has thereafter set itself on the road of socialism with Chinese characteristics through economic and political restructuring.

The modernisation process has often meant changes in traditional Chinese culture. Certain cultural practices have been lost, and some have continued to be a vital part of the daily life of different ethnic groups. Chinese culture has a long history. It can generally be approached from three dimensions: namely the material (such as architecture and historical sites), the institutional (such as folk customs and rituals) and the spiritual (such as philosophy, ethics and morality). These three interrelated dimensions together give rise to the rich and diversified nature of Chinese culture. However, because all cultures are dynamic, further development in Chinese culture is expected. In this module, students study the material dimension of Chinese culture and are encouraged to look at the impact of reform and opening-up on the conservation of cultural heritage. In addition, they will explore how traditional concepts of the family and customs interact with modern life. This will lead them into the spiritual and institutional dimensions of Chinese culture, and how they have been influenced by changes in society.

During the years of basic education, students have already developed some understanding of China's domestic policies and foreign relations, as well as its cultural developments. In this module, they will explore the present opportunities and challenges and the interrelationship between Chinese culture and modern life.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 3: Modern China:

(A) Theme 1: China's reform and opening-up

Major historical periods and events of the country in the last 100 years; a brief understanding of the domestic policies and foreign relations of the People's Republic of

China; the importance of the Constitution of the People's Republic of China; important governmental organisations; the characteristics of places and regions, and the reasons for the specific distribution patterns of major natural and human features of the country; economic and environmental issues of the country, etc.

(B) Theme 2: Chinese culture and modern life

The origins of Chinese culture and its major characteristics; similarities and differences in customs and practices of people within the same or from different geographical, cultural, religious and ethnic backgrounds; how cultures have adapted to their changing environments; the preservation and conservation of culture and heritage, etc.

Framework of the Module

Theme 1: China's reform and opening-up

Questions for enquiry	Related values and attitudes
<p>What impact has reform and opening-up had on the overall development of the country and on people's life?</p> <ul style="list-style-type: none"> • How have the changes in living standards and the way of life been viewed across the whole country? • What are the challenges and opportunities to environmental conservation and cultural conservation in such a rapidly developing country? • In what ways has China's participation in international affairs affected the overall development of the country? • How has the Central People's Government dealt with the effects of reform and opening-up? • To what extent have the reform and opening-up affected the overall national strength of the country? 	<p>solidarity; patriotism; sustainability; human rights and responsibilities; care and concern; justice</p>

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Highlights of reform and opening-up, e.g. the issue of *sannong* (agriculture, rural area and farmer), urbanisation and city reforms, the issue of migrant workers, the reform of state-owned enterprises, the roles of enterprises of the non-public sector
- Indicators of living standards and ways of life, and related changes and responses
 - living standards can be measured by economic, educational and health indicators
 - different living standards and ways of life, e.g. uneven development in villages, towns and cities; differences in development between regions such as inland and coastal areas or north-south, east-west; differences among social strata and interest groups
 - Responses from individuals with different backgrounds and responses from different groups and organisations, e.g. rural-urban migration, farmers' looking for work in cities, bringing up children, changes in consumer behaviour
- The challenges and opportunities to environmental conservation and cultural conservation
 - challenges brought by reform and opening-up to environmental conservation and cultural conservation, e.g. economic considerations vs. considerations on the environment, intergenerational equity, cultural heritage, etc.; individual interests

- vs. collective interests; government policies, laws and regulations and whether they are implemented in alignment with the national and international standards
 - opportunities brought about by reform and opening-up for environmental conservation and cultural conservation, e.g. promotion of and education on conservation ideas; environmental protection industry and cultural tourism; people's conservation awareness and actions
- Impact of participation in international affairs on the country's overall development, e.g.
 - effects on our country's overall development with regard to its role and participation in intergovernmental and non-intergovernmental international organisations and conferences, as well as the ratification and implementation of international treaties
 - effects on our country's overall development with regard to the bilateral and multilateral ties with major countries and regions
 - our country's overall development with regard to its roles and influence in regional affairs
- Dimensions of governance and the impact of reform and opening-up, e.g. decisions on priorities in resource allocation; the functions of government and administrative efficiency; the formulation and implementation of policies, rules and regulations; internal supervision; information management and transparency; responding to the needs of citizens, social groups and organisations; the legitimacy of government; the relationship between the government and the people, and between the Central People's Government and local people's governments
- Examples of the Central People's Government's responses to reform and opening-up
 - social policies relating to the household registration system, e.g. social security, medical care, education
 - building of the legal system
 - institutionalisation of more democratic practices
 - regional development planning
- Discussion on overall national strength may include:
 - indicators in the economy, military strength, science and technology, resources, governance, diplomacy and social development level
 - changes in different dimensions of national strength under reform and opening-up

Theme 2: Chinese culture and modern life

Questions for enquiry	Related values and attitudes
<p>With respect to the evolution of concepts and functions of the family, what kind of relationship between traditional culture and modern life has been manifested?</p> <ul style="list-style-type: none"> • How have the traditional concepts and functions of the family been challenged in modern life? • To what extent have the traditional concepts and functions of the family been maintained in modern Chinese life? Why? 	culture and civilisation heritage; respect for different ways of life, beliefs and opinions; plurality; sensitivity; appreciation
<p>To what extent are traditional customs compatible with modern Chinese society?</p> <ul style="list-style-type: none"> • Why do some traditional customs sustain and flourish in modern Chinese society while others do not? • To what extent are these traditional customs of significance to modern Chinese society? 	

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Characteristics and functions of the traditional concepts of the family
 - characteristics of traditional concepts of the family, e.g. an emphasis on father-son relationships; paying attention to the dignity and prestige of lineage and clan; formation of lineage and clan; the advocacy of ancestor worship; family ownership of property
 - functions of traditional families, e.g. economic function, continuity of lineage and clan, socialisation, security, inheritance of status, welfare, leisure, religious function
- Challenges to the traditional concepts and functions of the family from modern life, e.g. deviating from the traditional situation owing to social, economic and cultural developments; family members placing a greater emphasis on individualism and egalitarianism; function of socialisation gradually being replaced by non-familial agents; weakened family bonding due to an increase in the mobility of family members; changes amidst modern life in the concepts and functions which used to go well with traditional families, such as those about marriage, childbearing and maintaining the elderly; impact of government's public policy
- Continuity of the traditional concepts and functions of the family in modern life, e.g. mutual care and emotional support among family members; raising children to provide

for old age; a differential mode of association in ethical relations; interdependence in intergenerational relationships; inheritance of property / status; educational functions; male domination

- Factors which influence whether the traditional customs can be preserved or developed, e.g. commercial and market values; adaptability and transformability; cultural and moral values; symbols of identity; emotional and psychological factors; the degree of complexity of customs and rituals; challenges from foreign cultures; government's cultural policies; the demands of communal / cultural groups
- Different views on the roles of traditional customs in modern society, e.g. accumulation of cultural capital; cultural integration and adaptation; social memories and cultural cohesion; socialisation; materials for native education and communal history; identity; the development of the culture industry; the balancing and neutralising function for localisation / local culture against the challenges of globalization

2.6.3 Module 4: Globalization

Prologue

“Globalization” has become a buzzword, but it remains controversial as a concept and developmental trend. Some people even strongly argue for “anti-globalization”. There is without doubt an increase in cross-border activity, real and virtual. Physical distance no longer restricts the interflow and mutual influences of people. Students’ daily lives are linked with globalization: they are constantly exposed to international events through live electronic transmission; they consume goods and services of global brands; and they habitually surf the electronic world. As the mainland is engaging in reform and opening-up, and Hong Kong is an international financial and logistics centre, the opportunities and challenges of globalization are obvious. However, across the world, people’s experience of globalization varies from one country to another and within countries.

Students have gained some background information about global development in their basic education. In this module, they will review the trends in the controversial concept of globalization. They will explore and analyse its impact and the responses of peoples and groups.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 4: Globalization:

Theme: Impact of globalization and related responses

How science and technology are changing people’s interactions and relationships throughout the world; the importance of exchanging goods and services; the ways that people are linked; the influence of the physical environment and social conditions on cultural developments in different parts of the world; the ways that people of different cultures interact in the global system and how such interaction has developed over time; international events; East-West encounters; international conflicts and threats to peace; international cooperation and efforts towards peace; scientific and technological development; industrial relocation; population distribution and its problems; resources and development; development and interdependence; the causes and consequences of wars, etc.

Framework of the Module

Theme: Impact of globalization and related responses

Questions for enquiry	Related values and attitudes
<p>Why do people from different parts of the world react differently to the opportunities and challenges brought by globalization?</p> <ul style="list-style-type: none">• What are the characteristics and trends in the development of globalization in the economic and cultural aspects?• Does globalization provide benefits to all countries or lead to exploitation of developing countries by developed countries and international capital?• Does globalization promote homogeneity or diversity in culture and values? Does it bring mutual rejection or integration and evolution?• Is the impact of globalization similar or different between countries and within countries?• How do people from different parts of the world react to globalization? Why?	interdependence; justice; cooperation; culture and civilization heritage; plurality; adapting to changes; open-mindedness; empathy; participation; mutuality

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- Discourses on globalization, e.g. shrinking space, shrinking time and disappearing borders; the speedy flow of capital, people, goods, images, and ideas across the world; extensive interactions between distant cultures and societies; the criss-crossing of interconnecting networks across the world; the emergence of formal and informal institutional arrangements for the operation of globalized networks
- Manifestation of globalization in the economic and cultural aspects
 - economic aspect, e.g. the extent of the global economy determined by world market forces and international competition; levels of interdependence and integration among economies; the extent of deregulation of trade, investment and capital movements; the degree of flexibility in labour processes, labour markets, products, and patterns of consumption
 - cultural aspect, e.g. whether a “global culture” exists; changes in the ties between culture and place; the blending of culture products in different locations; tensions between cultural homogeneity and cultural diversity

- Impact of globalization
 - economic aspects, e.g. wealth creation and (re)distribution; access to foreign capital, markets, technology and products; employment and unemployment; interdependence and integration among economies
 - homogeneity or diversity in culture and values, e.g. the extent of the dissemination and domination of certain cultures over others in terms of music, dress, eating habits, languages, ideas, and cultural values; the possibility of interpretation and customisation by the non-Western world according to local conditions; the extent of cultural flows within the non-Western world and from the non-Western world to the Western world; vanishing cultures vs. new cultural forms
 - factors which influence the spread and evenness of the impact of globalization within and across borders
 - availability and accessibility of ICT
 - mobility / restrictions on the mobility of capital and people
 - degree of openness of different cultures and values
 - differing views within and across borders, e.g. differences in sex, age, religion, and ethnicity; people with capital, entrepreneurial ability, education and skills
- Different reactions, e.g.
 - think globally, act locally; think locally, act globally; think globally, act globally; think locally, act locally; anti-globalization; self-sufficiency
 - responses of international organisations and NGOs from a global perspective, individual responses in the daily lives

2.7 Area of Study: Science, Technology and the Environment

Area Brief

We have a genuine need to understand nature and the environment around us. We continually have to find solutions to practical problems now and in the future. Our life has been greatly improved by advances in science and technology, which are gradually being regarded as a proper way to solve problems, but such advances have also raised critical issues, many of which have adverse effects on our lives, particularly in the area of health and the environment.

Two relevant modules have been chosen for enquiry. Module 5 is Public Health. In this module, students examine the spread of diseases and health problems in the population, and their determining factors. The module also discusses the major health problems that have had the greatest impact on our community and their causes; and the place of science and technology in dealing with related problems. The roles of the individual and society in maintaining good public health and handling possible public health crises are also explored.

Module 6 is Energy Technology and the Environment. It seeks to analyse how we use energy, and discuss how this has a significant impact on our lives and environment, and how the development of energy technology relates to sustainable development. The module aims to develop a comprehensive understanding of the implications of the use of energy on society and the environment and an awareness of how science and technology affects our lives.

Area Objectives

Learning experiences in this Area of Study will enable students to

- (a) understand the impact of science and technology on public health and the environment, and the implications of this;
- (b) apply knowledge of science, technology and the environment to issues which affect modern society;
- (c) develop the ability to think scientifically, critically, and creatively, and independently so that they can construct knowledge and solve problems;
- (d) develop the ability to understand and communicate ideas and views in the fields of science, technology and the environment;

- (e) be aware of the social, cultural and moral issues related to science, technology and the environment; and be able to make judgments and informed decisions on them; and
- (f) respect nature and all living things, and make a commitment to protect society and the environment as a responsible citizen.

2.7.1 Module 5: Public Health

Prologue

Public health is an ongoing concern. The outbreak of new infectious diseases poses a real threat to us. Public health issues are not only matters of health and lifestyle, but also touch on how public resources are allocated. Our understanding of public health and disease has been enhanced in many ways by advances in science and technology, and has also been influenced by various cultural factors. Advancement in biotechnology and medicine has improved diagnosis, disease prevention and control, but it has also raised economic, moral and legal concerns about, for example, the patenting and economic efficiency of new drugs, moral considerations about genetic screening, and the regulation of research in embryonic stem cell technology.

This module seeks to develop students' ability to evaluate public health issues from different perspectives, taking into account scientific, historical, moral, social and cultural factors. Students consider the impact of biotechnological and medical advances on disease control and prevention, and the moral, social and cultural issues arising from them. It also aims to promote the ability to make informed decisions.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 5: Public Health:

(A) Theme 1: Understanding of public health

Major human body parts and systems, and their main functions; main factors affecting health and how to keep healthy; a healthy lifestyle including personal hygiene, a balanced diet, exercise and rest; the causes and effects of substance abuse; common diseases in Hong Kong, causes and prevention; positive and / or negative consequences of personal conduct; the importance of community health etc.

(B) Theme 2: Science, technology and public health

Structure and function of cells; process of human reproduction; use of our sense organs to perceive environmental stimuli; the use of scientific concepts to explain phenomena, and importance of experimental evidence; the use of technology in different cultures; the limitations of science and the evolutionary nature of scientific knowledge; local issues related to AIDS and cancer education; the influence of technology on daily life; limited resources in meeting the needs of the whole community; culture as a factor in the use of

science and technology; the work of some world organisations, etc.

Framework of the Module

Theme 1: Understanding of public health

Questions for enquiry	Related values and attitudes
<p>How is people's understanding of disease and public health affected by different factors?</p> <ul style="list-style-type: none">• How did people understand the causes of diseases? Was their understanding scientific?• How is people's understanding of health affected by economic, social and other factors?• How is people's understanding of public health affected by the development of science and technology?• In what ways is people's understanding of public health affected by health information, social expectations, personal values and beliefs in different cultures?	valuing the suggestions of others; respect for evidence; respect for different ways of life, beliefs and opinions; cultural heritage

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- The influences of outbreaks of epidemic diseases (such as Severe Acute Respiratory Syndrome (SARS), Acquired Immunodeficiency Syndrome (AIDS)) on the understanding of disease and public health, and public responses, e.g.
 - public alertness about hygiene
 - public awareness of international collaboration in preventing infectious diseases
 - allocation of resources in the prevention and control of diseases
- The influences of the evolution of scientific knowledge on the understanding of disease and public health, e.g.
 - how different cultures and the acquisition of scientific knowledge influence people's judgment on causes and prevention of diseases
 - knowledge of mental health, causes of chronic diseases or lifestyle diseases, to increase awareness of the importance of a healthy lifestyle
- The influences of modern technology on people's understanding of disease and public health, e.g.
 - the invention of instruments for diagnosis and treatments of diseases
 - differences and similarities between Western and Chinese medicine in explaining the causes of diseases
 - problems and dangers associated with the development of modern technology
- Changes in the way health is conceptualised, e.g.
 - the influence of science and technology

- the influence of religions
 - health concepts in different cultures
 - the World Health Organization's (WHO) understanding of health
- Factors that influence our views and informed decision on health and public health issues, e.g.
 - social and personal background
 - system (such as the government's role, community health services, health care financing) and cultures
 - availability and accessibility of public health information
 - risks and benefits of developing medical technology
 - the role of scientific evidence

Theme 2: Science, technology and public health

Questions for enquiry	Related values and attitudes
<p>To what extent does science and technology enhance the development of public health?</p> <ul style="list-style-type: none"> • Can science and technology provide effective solutions in the prevention and control of diseases? • In the area of public health, how is the development of science and technology affected by various factors, and what issues are triggered by this development? • What challenges do different sectors of society, the government and international organisations have in maintaining and promoting public health? 	betterment of humankind; human rights and responsibilities; cooperation; moral considerations

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- The application of science and technology in medical research and development (such as research and development on new vaccines and drugs), e.g.
 - tests of effectiveness by scientific methods
 - objective, valid and reliable methods of measurement
 - accurate and efficient measuring instruments
- Incentives for the development of medical technology, such as financial benefit, political reasons, the quality of life and social development
- Issues arising from development in science and technology, e.g.
 - patenting of drugs
 - regulations on the development of biotechnology and moral considerations
- Individual's rights and responsibilities, such as good habits in public places and healthy lifestyles, and the demands and influences of different stakeholders on public health services
- Relationship between public health and social development, e.g.
 - resources availability and resources allocation for public health services
 - cultural, institutional and economic influences on lifestyle
 - influence of education on public health
- International and across boundaries collaborations, e.g.
 - the functions and roles of the WHO
 - cross-border notification mechanisms between the mainland and Hong Kong
 - international collaboration in research on infectious diseases

2.7.2 Module 6: Energy Technology and the Environment

Prologue

Energy technology enhances the efficiency of energy utilisation, and this inevitably invites us to use more energy. Our dependency on energy affects scientific and technological development. Such interaction also has an impact on social development: the use of energy affects the environment and the changes in our environment alter our views on the use of energy. Therefore, the use of energy, social development, and scientific and technological development are mutually interdependent. They pose a challenge to the balance of the ecosystem and our living environment. Sustainability has become a crucial goal in dealing with environmental development.

In this module, students will be asked to evaluate issues concerning energy technology and the environment from a variety of perspectives, informed by scientific, technological, environmental, historical, social and cultural data. They will develop an awareness of the complex interrelationships and interdependencies involved. It is hoped that recognition of the impact of science and technology on our lives will lead to empathy for living things, a love of the environment, an understanding of the need for sustainable development for our society, country and the world, and the nurturing of responsible global citizenship.

Relevant learning experiences in basic education

In basic education, students should have already taken part in the following learning experiences with respect to Module 6: Energy Technology and the Environment:

(A) Theme 1: The influences of energy technology

Forms of energy, energy changes, generation of electricity and energy sources; the composition of air, balance of carbon dioxide and oxygen in nature; air pollution, acid rain, global warming, the greenhouse effect; the pros and cons of nuclear power; the impact of science and technology in different cultures; the invention of explosives, etc.

(B) Theme 2: The environment and sustainable development

The role of individuals in environmental protection; the impact of smoking and polluted air on our respiratory system; water supply, water treatment, water conservation and pollution; environmental problems associated with the disposal of used metals and plastics; the interdependence of living things and their environment; concepts of planning and managing resources; choice and cost in the use of scarce resources; the use of scientific knowledge to

explain and interpret familiar phenomena; development in and interdependence between less developed and more developed countries, etc.

Framework of the Module

Theme 1: The influences of energy technology

Questions for enquiry	Related values and attitudes
<p>How do energy technology and environmental problems relate to each other?</p> <ul style="list-style-type: none"> • To what extent does the development of energy technology create or solve environmental problems? • What are the implications of environmental change on the development of energy technology? • How do energy problems affect international relationships, and the development of countries and societies? 	betterment of humankind; respect for evidence; interdependence

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- The driving forces on the use of energy, such as daily life needs, agriculture, industries and transportation
- Uses and influences of renewable and non-renewable energy, e.g.
 - uses and development of the two types of energy and their advantages, limitations and influence on the environment
 - reasons for switching to renewable energy and the feasibility issues
- The development of energy technology, and its influence on personal life, the development of society, the economy and the environment
- The possible impact on the environment of pollutants generated by the use of energy, e.g.
 - climate change
 - acid rain
 - smog
- The influences of environmental pollution and ecological imbalance on the development of energy technology, such as the direction of development in energy exploration, improving energy efficiency and controlling environmental pollution
- Essential elements of a balanced ecosystem and their importance
- The environmental disasters caused by the use of energy, and the different ways countries deal with them and their impact

- The influences of planning, managing and regulating energy resources on the use of energy and the environment
- The influences of the distribution of non-renewable energy resources on international relationships

Theme 2: The environment and sustainable development

Questions for enquiry	Related values and attitudes
<p>Why has sustainable development become an important contemporary issue? What is the relationship between its occurrence and the development of science and technology?</p> <ul style="list-style-type: none"> • How do science and technology match with sustainable development? What are the constraints? • How do the living styles of people and social development affect the environment and the use of energy? • What responses could be made by different sectors of the society, governments and international organisations regarding the future of sustainable development? 	responsibility; caring for the living and non-living environments; betterment of humankind; sustainability; simplicity

Explanatory notes

The explanatory notes below aim to help teachers and students understand related issues and suggest possible perspectives and directions in exploring these issues.

- The meaning and principle of sustainable development, e.g.
 - the United Nations' understanding on sustainable development
 - the three dimensions of sustainable development: environmental, economic and social
 - the dynamic balance among the three dimensions
 - the related value principles: peace and equity, conservation, etc.
 - intergenerational considerations
 - views of other organisations
- The factors in science and technology that affect sustainable development, e.g.
 - the development of science and technology
 - the large demand for energy
 - the living environment and facilities
 - resource allocation to scientific research
- Constraints in pursuing sustainable development in the aspects of science and technology, e.g.
 - constraints due to natural laws
 - technological constraints
 - constraints due to resources
 - moral considerations
 - socio-economic and political influences
- Factors that affect the environment, e.g.
 - personal lifestyle, such as the influence of materialism and consumerism
 - demands concerning the quality of life

- population growth
 - geographic locations and cultures
 - social development
- The consideration of personal quality of life, economic and social development, and environmental conservation
 - The experience of implementing sustainable development in Hong Kong and other places, e.g.
 - the development of mass transit system
 - municipal waste management
 - urban greening
 - The roles and responsibilities of different stakeholders, such as education and commercial sectors and NGOs, in promoting sustainable development and environmental conservation
 - Issues in international collaboration in promoting sustainable development, e.g.
 - the relationships between modes of energy use and economic development of different countries
 - the progress in environmental protection in different countries and international efforts
 - whether the implementation of sustainable development causes tensions among countries
 - the roles and influences of international summits and international collaboration on the threat of global environmental problems

2.8 Independent Enquiry Study (IES)

As an integral part of the curriculum of Liberal Studies, the IES contributes to the curriculum aims by:

- (a) providing an opportunity for students to learn to become self-directed learners responsible for their own learning;
- (b) enhancing students' ability to connect, integrate and apply knowledge, perspectives and skills developed through the three Areas of Study;
- (c) helping students develop higher-order thinking skills and communication skills through investigative exploration of issues; and
- (d) broadening students' horizons and catering for their interests and inclinations.

2.8.1 Objectives of IES

The learning experiences in the IES will help students to:

- (a) set goals, plan, implement the plans and solve problems;
- (b) reflect on and evaluate their learning progress;
- (c) collect data, evidence and information through means appropriate to their enquiry;
- (d) analyse and evaluate information in order to construct knowledge, propose solutions to real issues, and make decisions;
- (e) appreciate the complexities and cross-disciplinary nature of real issues, and identify the various perspectives applicable to the understanding of these issues;
- (f) communicate, articulate and present their thoughts and ideas effectively through appropriate means and media; and
- (g) become motivated and responsible learners.

2.8.2 Nature of IES

Self-directed learning experience

IES is a self-directed learning experience in which the student takes up the major responsibility for learning. In IES, students are “independent” and “self-directed” in the sense that, having consulted a range of references and opinions, they themselves choose their title, the scope, the methods of their investigative study, and the ways of presenting the findings and products of the study. They take the initiatives in raising questions, finding

answers, and evaluating the enquiry process, and they are responsible for their plans and decisions.

Learning facilitated by teachers

Teachers have an important facilitating role in helping students to become independent learners. As a facilitator, the teacher should vary the mode and level of support at different stages of the IES. The teacher is a resource person to help students develop connections across subject disciplines. When they help students to conduct the IES, teachers should respect the students' choices and judgments, and give them freedom to think imaginatively about their projects.

Group learning in IES

In IES, students do not necessarily have to work in isolation. Collaboration and sharing among peers should be encouraged and promoted. While each student is responsible for his / her own IES, sharing and exchanges among them can help them to benefit from each other's insights, experiences, achievements and mistakes. In fact, it is desirable to incorporate group learning in different phases of the learning process of IES.

Examples of how group learning activities contribute to the IES process

- Discussion in groups can help students to formulate ideas and deepen their understanding of a common theme or problem. The IES of individual students can be founded upon different issues raised in such discussion.
- Students may share the workload of collecting information and resources common to each other's IES. Students working on related titles can conduct field work or visits in groups to gather information.
- Individual students may also draw up their own learning plans from the experience of a community service conducted in a group.
- Students can give a presentation on the plan, the progress and the product of their IES to their group members and receive comments and feedback from each other.

However, it is essential that the IES includes elements of individual investigation, thus providing students with opportunities for self-directed learning and assessment of individual student work.

An integral part of the Liberal Studies curriculum

IES is an integral part of student learning in Liberal Studies. The learning in the six modules of the three Areas of Study provides the foundation and contexts from which students can formulate their own IES topic. In conducting the IES, students are expected to draw on their learning in the Areas of Study, and apply relevant knowledge, perspectives and skills to investigate a contemporary issue that is not covered directly in the six modules. Through the self-directed learning process, students will learn to make connections among different modules in the Liberal Studies curriculum, as well as among different subjects and learning opportunities they experience as senior secondary students. They will also have an opportunity to apply understanding and perspectives to authentic issues and problems and extend their learning to a new situation.

2.8.3 The Titles for Students' IES

Connecting to the Areas of Study and extending to new issues

As indicated above, the title a student chooses for IES should be related to his / her learning in the Areas of Study and yet should extend to a new problem, issue or context not directly covered in the six modules. In short, the title chosen should bear linkages to one or more of the Areas of Study and extend to new themes or issues, so that IES can provide students with an opportunity to connect, to apply and to extend their learning in Liberal Studies.

Possible IES titles showing linkages to Areas of Study in Liberal Studies

The coverage of an IES title, in relation to the Areas of Study, can range from a focused study on a topic emphasised in one Area only (e.g. “The impact of exposure to violent messages in the media on style of interpersonal communication”), to a relatively holistic review of a topic with cross-area insights (e.g. “Sports participation in Hong Kong and its impact on personal and public health”).

Themes of Enquiry

A list of suitable Themes of Enquiry is suggested for the purpose of connecting, applying and extending concepts learnt from the six modules. The list of these themes is not intended to confine student choice. It is provided simply as a set of examples, and as a basis for student grouping, to exploit the advantages of group learning mentioned in earlier paragraphs.

The Themes suggested are as follows:

- Media
- Education
- Religion
- Sports
- Art
- Information and Communication Technology (ICT)

These Themes of Enquiry are proposed taking into account the following criteria:

- Their potential for inviting multiple perspectives and for broadening knowledge
- Their potential for connecting the three Areas of Study
- Their potential for generating interesting and manageable titles of IES

Multi-perspective nature of Themes

Though some of the suggested Themes share a similar name with an elective subject in the three-year senior secondary curriculum, it should be noted that their nature and orientation are very different. The Themes are to be understood in relation to the context of the three Areas of Study, and they are concerned with issues of contemporary significance. They should be explored from a range of perspectives across subject disciplines, and should not be studied in the way that academics or professionals in these specific fields would do this.

The difference between an IES in Liberal Studies and study in other subjects

A technical analysis of the forms and style of the music of Bach, though related to Art as one of the Themes, would not be accepted as an IES title, unless the study could in some way relate Bach's music to contemporary issues of significance to the human

world or the environment.

The Themes of Enquiry are elaborated in Appendix 1 on p.145. For each Theme there is an introduction and a list of enquiry questions on related contemporary issues in the context of the different Areas of Study. Please note that these enquiry questions outline the scope and direction for possible investigation, and should not be taken literally as recommended titles for IES. Students may use the suggested enquiry questions as a start, and work out step-by-step the title for their IES, its methodology, scope of research and the mode of enquiry under teacher supervision and guidance.

Why should some Themes be suggested?

One of the reasons why these Themes are proposed is that they may facilitate collaboration among students and peer learning in the conduct of individual studies. Teachers might encounter difficulties if they have to handle a group of students whose IES titles do not share any common themes.

However, grouping by Themes should not be seen as the only or most desirable way to organise students for the learning and teaching activities related to IES. Teachers are advised to vary their strategies according to the different characteristics of their students and the different IES stages.

The themes suggested will also provide the focus for the development of resources and teacher professional development. Adequate and focused support measures for IES are important as a large number of teachers will be involved in supervising students' IES, and the experiences of these teachers in such work varies considerably.

Titles outside the suggested Themes

These Themes of Enquiry are “non-mandatory” in the sense that students’ titles of IES should not be confined to the suggested Themes. Schools may offer other themes to help students develop their IES titles, or teachers may adopt their own strategies to help students develop their own IES titles. In other words, titles related to more than one of the suggested

Themes, or unrelated to any of them are all allowed, provided that they can connect to the Areas of Study and extend to contemporary issues not directly discussed in the six modules.

Drawing on support from other organisations in the community

Many organisations in Hong Kong launch study award schemes and inter-school project learning competitions to promote students' awareness and understanding of certain ideas, many of which can become a meaningful theme for IES. Some of these organisations also have experience in providing training programmes and resource materials for teachers to provide life-skill learning and project learning activities which are in line with the Liberal Studies curriculum. Also, the possibility of help from other organisations, such as NGOs, can be explored.

2.8.4 Specifications for the IES

The IES has to be investigative and involve the following three stages:

(a) Stage I

- Selection of study area / theme
- Collection of background information
- Confirmation of the question for enquiry
- Design of work plan and schedule

(b) Stage II

- Collection of data / other kinds of information
- Organisation of data / other kinds of information

(c) Stage III

- Analysis of data / information
- Evaluation of different points of view
- Presentation of IES results, amendments according to feedback
- Writing up of study report, adoption of suitable ways to show the results of the study

In IES, students' performance is evaluated in all stages of the process including the presentation of the final report or product. Students are allowed to use different formats or

modes to present the results of their studies, and these will be supplemented with records of their learning process and reflections on it. The assessment of IES will be explained in detail in Chapter 5.

2.8.5 Lesson time for IES

It is suggested that 82 hours of lesson time should be allotted to the support of students in the conduct of their IES. Teachers are advised to spend the time flexibly on:

- helping students to develop a general understanding of the themes of enquiry in the context of the three Areas of Study;
- helping students to decide on the topic, scope and focus;
- coaching students in the skills needed for conducting the IES;
- supervising student progress;
- organising activities in support of IES, e.g. visits, field trips, talks, etc.; and
- promoting exchanges and collaborative learning among students, and getting them to share their problems and progress, and present their findings and products.

Students are expected to use their own time, in addition to the designated lesson time, to conduct their IES.

2.9 Time Allocation

The total lesson time allocated to Liberal Studies in the senior secondary curriculum is 250 hours. It is proposed that about 168 hours are allocated to the six modules with 82 hours reserved for the IES, so that students will have enough time for developing ideas and enhancing their generic skills. This will also enable teachers to supervise and guide student progress.

The table shows the proposed overall time allocation:

Areas of Study	Modules	IES
Self & Personal Development	168 hours for all 6 modules	82 hours
Society & Culture		
Science, Technology & the Environment		
TOTAL: A minimum of 250 hours ² within the three years of senior secondary education		

² The lesson time for Liberal Studies and each elective subject is 250 hours (or 10% of the total allocation time) for planning purpose, and schools have the flexibility to allocate lesson time at their discretion in order to enhance learning and teaching effectiveness and cater for students' needs.

“250 hours” is the planning parameter for each elective subject to meet local curriculum needs as well as requirements of international benchmarking. In view of the need to cater for schools with students of various abilities and interests, particularly the lower achievers, “270 hours” was recommended to facilitate schools’ planning at the initial stage and to provide more time for teachers to attempt various teaching methods for the NSS curriculum. Based on the calculation of each elective subject taking up 10% of the total allocation time, 2500 hours is the basis for planning the 3-year senior secondary curriculum. This concurs with the reality check and feedback collected from schools in the short-term review, and a flexible range of 2400 ± 200 hours is recommended to further cater for school and learner diversity.

As always, the amount of time spent in learning and teaching is governed by a variety of factors, including whole-school curriculum planning, learners’ abilities and needs, students’ prior knowledge, teaching and assessment strategies, teaching styles and the number of subjects offered. Schools should exercise professional judgement and flexibility over time allocation to achieve specific curriculum aims and objectives as well as to suit students’ specific needs and the school context.