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# 11

## Lesson Planning, Assessment and Learning

#### Bick-har Lam

This chapter discusses lesson planning, learning and assessment and the impact of educational reforms on classroom teaching and learning. As the central theme of this book is the importance of recognizing the diversity of learners, the chapter therefore focuses on helping teachers to meet society's expectations as they support the development of students' potentials.

After completing this chapter, readers will be able to understand:

- conceptual theories that guide classroom teaching;
- the planning phase of lessons, including the different levels of planning, goals
  of instruction, domains of development, models of organization and assessment;
- the implementation phase of lessons, which includes teaching and assessment strategies; and
- the impact of educational reforms on classroom teaching and learning.

## **Purpose of Lesson Planning**

What is the purpose of lesson planning? Primarily, lesson planning guides teaching. It is included in teacher education courses so that prospective and novice teachers may be more adept at handling complex classroom situations where various problems emerge. A fully detailed lesson plan, which outlines the major teaching points, sequence of activities, and materials to be used, reminds new teachers of the progress of lessons and ensures their smooth delivery. Lesson schedules in schools can be rather full. In Hong Kong, for example, primary school teachers teach for more than 30 periods a week, and secondary school teachers for not less than 25 periods. Developing a habit of systematic lesson planning is therefore essential for the smooth flow of lessons; and, based on a semester and broader scheme of work, lesson planning helps to target certain stages in the learners' progress.

Lesson plans also serve to evaluate teaching. Teachers can use the plans to record their reflections on lessons and to list their recommendations for improving their teaching. For experienced teachers, the procedural content of lesson plans

is certainly less elaborate. They commonly use them to refine their teaching approaches and organize teaching content. According to Lam (2008), lesson plans

- help teachers to focus on the nature of planning, thereby enhancing the quality of teaching plans;
- guide classroom teaching;
- allow teachers to see problems they may encounter in their lessons and prevent them from occurring;
- develop teachers' confidence the moment they enter their classrooms;
- prepare them for explaining difficult topics, such as more abstract concepts and ideas:
- provide a framework for understanding or assessing learning outcomes;
- make students understand the meaning and purpose of what they are learning;
   and
- document student feedback and teacher reflections to evaluate lessons.

Lesson plans are teaching plans. They carry teaching rationales that regulate the behaviour of teachers, acting as blueprints for executing lessons to ensure they are implemented as planned. Today, teachers are viewed as important agents of change and are expected to play a key role in reforming schools and classrooms. In lesson planning, the personal theories, orientations and knowledge of teachers determine the content of learning, how such content will be learned, and how learners will be assessed or evaluated.

In lesson planning (i.e. micro-level teaching in the classroom), teachers can refer to various teaching guides which may derive from curriculum reform ideas which focus on young people's development—an aspect which has been highlighted in this book, especially in Chapters 1 and 2. This does not mean that teachers need to follow such guidelines blindly; rather, they should acquire knowledge of teaching philosophies, trends and teaching models from the education literature. They should be critical in differentiating teaching ideas and methods to reach a consolidated orientation towards teaching that is beneficial for all learners. To do this, however, teachers should possess the ability to contextualize teaching. Before they can develop lesson plans that fit learners' needs, a clear teaching rationale is essential for enhancing teaching quality and effectiveness. Figure 11.1 presents a consolidated teaching rationale that can guide teachers as they plan their lessons.

Table 11.1 (p. 294) contrasts the new orientation towards learning with the traditional orientation. The present teaching philosophy has changed from a teacher-centred to a student-oriented approach. In the 1990s, Prawat (1992) claimed that education was experiencing a paradigm shift. He commented that traditional education predetermines the future of students to certain prescribed ends. Accordingly, teachers teach using a 'transmission approach', and students learn through an 'absorption approach', approaches which are not beneficial because

they view learning simply as an inactive event for learners. As Elliot (1990) argued, teaching should not be thought of as a product-oriented design, and teachers should develop themselves by engaging in the process of enquiry (i.e. professional development) to determine the best way to support student learning. This change of beliefs in teaching towards a learner-centred model was also encouraged by extensive developments in psychological theory, especially the emergence of the constructivist family of learning theories that challenged the epistemological assumptions of absolutism (the details of constructivist learning were covered in Chapter 2).

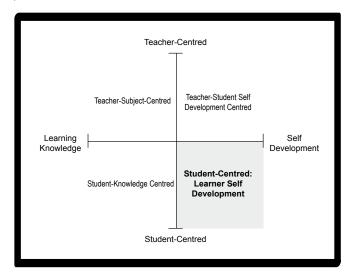


Figure 11.1: Consolidated Teaching Rationale for Lesson Planning Teaching rationales can be conceptualized as differentiating between two dimensions: (1) to what extent teaching is focused on learners' development or knowledge acquisition and (2) to what extent teaching is teacher- or student-centred.

Theories that suggest learning through cognitive processing, social interaction, problem solving and discovery have elevated learning from an externally controlled event which modifies behaviour to an internal cognitive activity that requires the active participation of learners. Learning has been reconceptualized as a highly cognitive social process, and rote learning and memorization are no longer encouraged. The emphasis in learning, as claimed in the education reforms in Hong Kong, is on learning by doingthat is learning through the active construction of knowledge by learners themselves. Hence, instead of spoon-feeding students, teachers should provide scaffolding facilitation and support which will enable them to acquire cognitive strategies and generic skills, allowing them to learn independently and to adapt flexibly to the globalized, fastchanging world. Similar reforms are currently taking place in many countries around the

world, particularly in the Asia-Pacific region (Cheng 2005; Spring 2008). Our discussion on lesson planning is guided by this new orientation to teaching, though it should be noted that more teacher-centred teaching approaches and learning theories still have a place in lesson planning and teaching. Depending on the nature of a lesson, ideas can be drawn from relevant theories (see Chapters 2 and 3). For example, behaviourism can be applied for the delivery of a specific instructional step, such as asking students to observe some rules and basic steps in order to handle a science experiment, and when teachers require students to practise by asking them directly for answers or doing exercises to reinforce the knowledge gained from more student-centred methods.

	Traditional Teaching Orientation	New Teaching Orientation
Focus	Teacher-directed and teacher-centred	Student-oriented and student-centred
Pedagogical features	Teacher exposition, direct instruction, presentation, delivery, transmission, measurable units	Active participation, exploration, discovery, learning by doing, investigation, development of generic skills
Aims of education	Knowledge acquisition	Holistic development and learning to learn
Areas of learning	Content-based, moral ethics, behavioural codes	Multiple intelligences, cognitive and metacognitive skills, values and attitudes

Table 11.1 Teaching rationale: Traditional vs. New Orientation

## **Planning at Different Levels**

## Educational aims guide curriculum planning

In lesson planning, in addition to having a clear teaching rationale, teachers should also bear in mind the government's educational expectations. Teaching and learning are enhanced when they are aligned with the philosophy and educational objectives of a national curriculum. In Hong Kong, the government has promulgated clear educational policies. As set by the Education Bureau (2010), the educational policy aims for primary and secondary education are to:

 provide nine years of free and universal primary and junior secondary education to all children attending public sector schools. Starting from the school year 2008–09, senior secondary education will be provided free through public sector schools; and the government will also provide full subvention for full-time courses run by the Vocational Training Council for Secondary 3 leavers, to offer an alternative free avenue for senior secondary students outside mainstream education;

- provide a balanced and diverse school education that meets the different needs of our students and helps them to acquire knowledge, values and skills for further study and personal growth;
- enhance students' biliterate and trilingual abilities;
- enhance teaching quality and effectiveness in learning;
- improve the learning and teaching environment;
- help newly arrived children from the Mainland to integrate into the local school system as soon as possible; and
- enhance the quality, flexibility and accountability of school administration.

The educational policy aims for Hong Kong spell out concerns over talent development in the globalized world (Curriculum Development Council 2001; Education Commission 2000). As noted above, there is an emphasis on free education, a heightened concern for the diversity of learners, and strong support for children from the Mainland through their early integration into the local school system. The need to enhance language abilities continues to be a major item on the government's agenda, and it also expects schools to provide a curriculum that caters for the needs of learners, supporting them in moving towards holistic development. To ensure that these aims are met, a high-quality school environment needs to be built, with the hiring of highly qualified teachers and the creation of pleasant learning environments. Schools are therefore expected to develop good administration systems, which include self-assessment and evaluation, to put the educational agenda into practice. These policy aims serve as basic guides for teachers. They may not give teachers specific rules for planning their lessons, but they offer broad guidance on classroom teaching.

## The curriculum framework guides lesson planning

The curriculum is generally described as a programme of study, which includes course content, planned learning experiences, school experiences, a structured series of intended learning outcomes and a written plan of action (Kelly 2009; Morris 1996). The term 'curriculum' comes from the Greek word curre that means 'the course of a chariot race', which can be interpreted metaphorically as a journey towards learning, growing and becoming (Schubert 2000). Today, the curriculum is a document that lays down the plan for the education of learners. In lesson planning, the first concrete source to consult is the relevant curriculum document, which is published either by the government or by the education office of a region. For example, Hong Kong has developed a standard curriculum blueprint, officially released to schools and the public. Entitled 'Learning to Learn', it specifies the total learning experiences, where learning does not focus only on discipline knowledge

(Figure 10.1, see p. 267). As was seen in Chapter 10, the curriculum blueprint keeps the subject disciplines as basic knowledge domains called 'Key Learning Areas' (KLAs), and students are also supposed to develop nine generic skills identified as essential in learning and living, and personal and social values that guide decision making and positive personality development. In addition, as they acquire the skills of learning, with support from the curriculum, students are expected to become lifelong learners. The curriculum is aligned with a learner-centred approach, and it recommends progressive methodologies that relate largely to the constructivist model of learning (see Figure 10.1 in Chapter 10 for a summary of the curriculum framework, which is an official educational guide for Primary 1 to Secondary 3).

The general curriculum framework specifies the areas of concern in school education. For lesson planning, teachers should refer to the subject curriculum framework to check the boundaries of specific KLAs. In Hong Kong, separate KLA curriculum documents are published to provide guides to lesson planning. In Figure 11.2, the curriculum framework for General Studies (GS) explains the learning experiences in six strands and also states clearly that the nine generic skills and values development are interwoven into these GS learning experiences. This means that while teaching GS topics (e.g. community and citizenship), teachers may also cultivate one or more of the generic skills, such as communication, creativity, critical thinking skills, collaborative skills, information technology skills, numeracy skills, problem-solving skills, self-management skills, and study skills. A diversified mode of teaching, learning and assessment is suggested.

## Planning with different types of curriculum organization

A 'diversified mode' of curriculum planning allows flexibility in organizing a curriculum, provided that such flexibility is oriented towards the achievement of the KLA learning objectives. In the literature, the common types of curriculum organization include textbook-oriented, topical, theme-based and integrative organization. Prior to the educational reforms, schools used to plan the curriculum based on topics. They either referred to topics arranged by textbooks or used broad themes in grouping and sequencing relevant topics. In this situation, curriculum planning is subject-based. Table 11.2 (p. 300) shows the thematic planning of a Primary 1 GS curriculum (entitled 'Learn with Me!'), indicating the relationships between chapters, strands and learning objectives.

In 2000, Hong Kong's schools started to consider using other modes of curriculum planning. The most common one, especially in primary schools, was curriculum integration. The government suggested that teachers can vary the organization of teaching content, teaching strategies, pace of learning and modes of assessment according to the needs of students (Curriculum Development Council

2001). Fogarty (1991a, 1991b) suggested ten integrated curriculum organizational models, with the scale of integration ranging from large to small. Different principles of integration, including keeping the boundaries of subjects and planning according to general abilities instead of subjects, were also suggested.

To cope with the expanding content of the school curriculum and with possible overlaps between subjects, some subject curricula (e.g. GS in primary school, science, and social studies and humanities subjects) have undergone the process of integration since the 1970s (Curriculum Development Council 1993, 2001, 2002, 2009). The current new senior secondary school curriculum also encourages learning

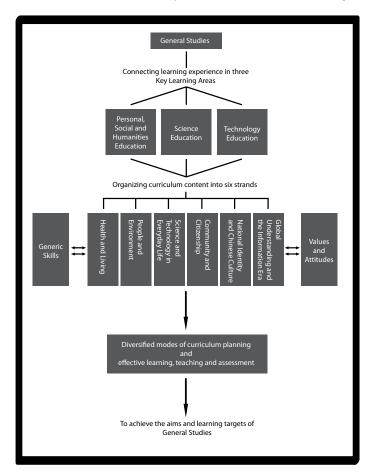


Figure 11.2: Curriculum Framework for GS

The curriculum framework for GS lays out how the subject fits into the overall learning experience of students. Adapted with permission from Curriculum Development Council (2002), General studies for primary schools curriculum guide (primary 1–6). Hong Kong: Curriculum Development Council.

through an integrated curriculum organization and has included Liberal Studies as a core subject because it is believed to be a tool for widening students' perspectives and increasing their motivation (Curriculum Development Council and Hong Kong Examinations and Assessment Authority 2007).

An integrated model of learning develops higher-order thinking skills and cognitive and metacognitive skills; and it helps learners to understand the real world (Shoemaker 1989). An integrated model refers largely to a learner-oriented approach, with an emphasis on real-world events and on learners' active enquiry. However, integrated models are also being challenged. According to their critics, they cause declines in academic knowledge and, hence, many schools are hesitant about adopting them (Lam 2009). Table 11.3 (p. 301) shows how an independent subject approach, a cultural history approach, and an integrated humanities approach are utilized in developing a Chinese History curriculum for a junior secondary school. It also illustrates the assumptions behind learning Chinese history from the perspectives of chronological development, the broader cultural environment and a reconstructed project theme.

Figure 11.3 presents a recent example of an integrated curriculum plan for a secondary school in Hong Kong. It shows a webbed model of integration across six subjects, which fits well into the current timetable of secondary schools. As an integrated curriculum involves the planning of a cohesive large-scale activity with close collaboration between subjects and with tight scheduling within and across subjects, it demands high cohesiveness among curriculum team members.

## Planning a scheme of work

A scheme of work is a yearly or semester plan that targets different key learning stages and guides daily lesson planning closely. Schemes of work may look different according to different curriculum designs (e.g. independent subject models and integrated models). Tables 11.4 (pp. 302–303) and 11.5 (pp. 304–305) show a basic scheme of work produced for the Secondary 2 integrated curriculum illustrated in Figure 11.3 (the curriculum integrates the following subjects: Business, Computing, Physical Education, Integrated Science, Liberal Studies and Visual Art). It stands in contrast to a typical scheme of work, as illustrated in Table 11.2 for Primary 1 GS.

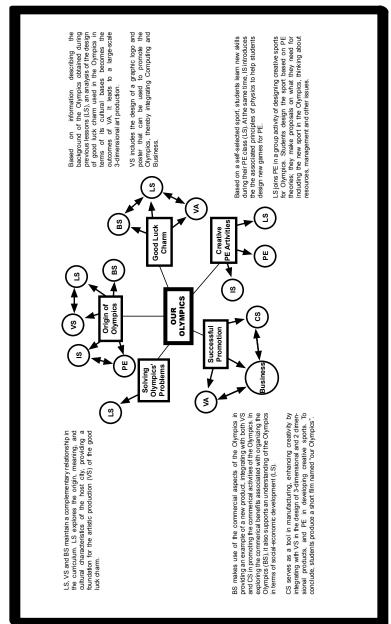


Figure 11.3: An example of curriculum integration

Table 11.2 A scheme of work for General Studies (primary level)

Scheme of Work for General	rk for (	Jeneral Studies (Prima	al Studies (Primary One) Title: Learn With Me!	Me!					
- dod		Chanter	Strong				Learning Objective		
Date		Chapter	Strand		Knowledge		Skills		Values and Attitudes
				The	Theme: I am getting older	Un	Unit: Things that I can do		
15–19/11	1.	My daily life	Health and living	•	To learn about the importance of discipline in life	•	To practise planning one's use of time	• To be p living	To be positive towards healthy living
22–26/11	7.	My feelings and needs	Health and living		To learn that people have different feelings and needs To learn different ways of expressing feelings and needs	•	To use appropriate verbal and nonverbal ways to express feelings and needs	• To c	To care for others when expressing one's feelings and needs
29/11–3/12	3.	Being helpful at home	Health and living	•	To learn about responsibility at home	•	To learn how to do housework	d oT •	To be willing to share responsibilities at home
				The	Theme: Home sweet home	Uni	Unit: My family		
6–10/12	4.	My family	Health and living		To know one's nuclear family members  To learn about relatives and how the family is interrelated	•	To know how to address family members and relatives	• To tr relat and	To treasure harmonious relationships with family members and relatives
13–15/12	5.	My roles and duties at home Test 2	Community and citizenship		To know different roles at home To learn about the responsibilities of sons/daughters and siblings To know that every family member has responsibilities at home	•	To learn how to perform one's duties and to fulfill one's role	• То и	To respect one's roles at home
16–21/12	9	Happy families	Health and living	•	To learn the key towards harmonious family relationships	•	To leam how to build harmonious relationships with family members and relatives	• To tr	To treasure harmonious relationships with family members
3–7/1	7.	I have fun with my family	Health and living	•	To learn how to build harmonious family relationships through different activities	•	To find ways to build harmonious family relationships	• To tr	To treasure harmonious family relationships
10–14/1	%	Every family is special	Community and citizenship	•	To learn that different families speak different languages and have different habits	•	To identify diverse customs, practices, and traditions in society	• Ток	To respect other people's habits
Adapted from T	Times 1	Editorial Board (2004),	, Learn with me! General St	tudie	Adapted from Times Editorial Board (2004), Learn with me! General Studies 1B Teacher's guide (Hong Kong: Times Publishing)	nes I	Aublishing).		

 Table 11.3 Three organization models for Chinese History (junior secondary level)

Chinese History as an Independent Subject	Culture and History	Integrated Humanities (Chinese History as Part of the Curriculum)
The development of different dynasties and project learning on cultural aspects	Learning Chinese and world history from the perspective of Chinese history	Using diverse and reconstructed contexts and perspectives to learn Chinese history as a whole
Curriculum outline	Example of school-based learning	Example of school-based learning
Form 1 From Xia Dynasty to Nan-Bei Dynasty (ancient Chinese culture and Chinese characters)	From 1 From China's prehistory to the Wei-Jin Dynasty From the world's prehistory to East-West schism	Form 1 History of Hong Kong
Form 2 From Sui Dynasty to Ming Dynasty (technology and transportation)	Form 2 From Sui Dynasty to the Republic of China vs. From middle ancient times to the twentieth century	Form 2 China The development China's ancient civilization Diverse cultures in China Landscapes, environments, and resources in China The era of Chinese empires Livelihoods of the Chinese Westernization in China Modern China Contemporary issues in China
Form 3 From Qing Dynasty to modern China (philosophy and religion )	Form 3 From the Republic of China to China's Reform Period vs. From World War I to the twentieth century	Form 3 Different contemporary issues, and global and Chinese influences

Translated into English by the author, from C. H. Lee (2008), Chinese History education keeps pace with the times (in Chinese). Retrieved 8 March 2010, from www.edb.gov.hk/index. aspx?langno=2&nodeID=6389.

largely to the theme of each of the four key learning stages. The topic of learning is shown in the horizontal arrangement; the main contents in each subject are The topic of this integrated curriculum is 'Our Olympics.' It covers four key stages over a period of seven weeks. The content design of each subject refers 
 Table 11.4: An integrated curriculum plan (horizontal arrangement) (adapted from Lam 2009)
 numbered. The same number in each subject indicates the connection as shown in Figure 11.3.

Topic: 'C	Topic: 'Our Olympics'	ics,						
•				Level:	Level: Secondary Level 2			
Stages	Weeks	Themes	VA	so	BS	IS	rs	PE
					1. Introduction t	1. Introduction to Project Learning		
	I	Understanding	2. The relationship between Olympic good luck charm and living culture		2a. The visible and invisible business revenues brought by the Olympics	3. The scientific principle of the Olympic Games	2. The origin, meaning, and spirit of the Olympics	3. Olympic Games competition
-	П	ne Orympus meaning	4. Information searching and conceptual development		2b. The process of designing and producing good luck charms	3. The scientific principle of the Olympic Games	5. Identification of athletes' characteristics in all previous sessions and all kinds of Olympic sports events 6. Olympic Quiz as the conclusion of the first stage	3. Olympic Games competition
	Ш	Organizing a	7. Design a good luck charm (ceramics)	8. The application of multimedia in promoting the Olympics	7a. Preparation of the new good luck charm (Product 1); consumers' behaviours and marketing investigation	9. Olympics on the moon	10. Create a completely new sports event (to show fairness, creativity, and feasibility)	10. Create a completely new sports event
7	VI	mini Olympics (I) image design and events	7. Design a good luck charm (cuddly toy)		7b. Preparation of the new good luck charm (Product 2); - statistical analysis		11. Which would you support, for the Olympics to be held in Hong Kong or in Beijing? Investigate the successful conditions for organizing the Olympics	

(continued on page 303)

le 11	Table 11.4 (continued,	nued)						
Stages	Weeks	Themes	VA	CS	BS	IS	rs	PE
3	>	Organizing a mini Olympics (2) logistics and	12. Promotion poster design	12. Create a short film to promote the Olympics	12a. The influence of common promotional media and advertisements	13. Design the food and drink menu for athletes 15. 'Solving Olymp Problems' project of the problems' prob	14. Introduction of problem-solving theory 15. 'Solving Olympics Problems' project learning	
	IA	publicity	16. Chinese print and create souvenirs		12b. Investigate effective methods of marketing promotion		15. 'Solving Olympics Problems' project learning and group presentation	
4	И	Mini Olympics opening and exhibition Opening ceremony, celebrating learning outcomes, and evaluation	17. Display of the four design (ceramics, cuddy toy, poster, and Chinese print)	17. Voting for the best promotion short film	18. Voting for the best product promotion proposal food and drink menu	19. Assessment of the designed food and drink menu	20. Proposal 21. Self-reflection and sharing of conclusions	

Table 11.5: An integrated curriculum plan (vertical development) (adapted from Lam 2009)

Topic: 'Our Olympics' Level: Secondary Level 2

#### Stage 1: Understanding Olympics (origin and meaning)

#### Main study themes

- (1) Identify the procedures and arrangement of this integrated topic 'Olympics hosted by Hong Kong'
- (2) Identify the origin, meaning, and spirit of the Olympics, as well as the athletes' characteristics in all previous sessions and all kinds of Olympic sports events (GS).
- (3) Identify the Chinese stamp, Beijing Olympic slogan, good luck charm (VA).
- (4) Identify categories and events in the Olympic games (PE).
- (5) Identify the visible and invisible business revenues brought by the Olympics (BS).
- (6) Identify the application of friction, gravity, and energy changes in sports through the Olympic games (IS).

#### Stage 2: Organizing a mini Olympics (1) (image design and events)

#### a. Main study themes

- Create a completely new sports event in groups (to show fairness, creativity, and feasibility) and extend ideas about the resources, setting, and conditions of organizing this sports event (PE/GS).
- (2) Understand the Olympics organized in Beijing and Hong Kong; assess the advantages, limitations, and potential of the two cities; objectively analyse the conditions for organizing the Olympics (GS).
- (3) In groups, design a completely new sports event good luck charm. The teacher helps choose the most meaningful product and makes further improvements on it (VA).
- (4) In an authentic way, understand how to design products, the way to meet market needs, and the production process. Create the new good luck charm products. Present the products and conduct peer assessment (BS).
- (5) In groups and with the use of a completely new designed sports event, understand how the moon environment affects and limits sports events. Investigate the scientific principle behind (IS).
- (6) Identify the concepts of multimedia, the ideas of handling digital multimedia elements, and the differences among all multimedia file formats. Understand how multimedia software and hardware are created. Finally, combine the knowledge learned in business studies to understand the business application of multimedia in promoting the Olympics (CS).

#### b. Parade show and opening match

- Each class creates a unique way of entering the stadium. Each class shows the audience their newly designed sports event name, logo, and good luck charms.
- (2) The principal helps the Olympics Committee present the newly designed sports event certificates to each class.

#### Stage 3: Organizing a mini Olympics (2) (logistics and publicity)

#### a. Main study themes

- Students identify the difficulties in organizing the Olympic games. They revise the levels of difficulties, suggest several feasible solutions, and assess the value and influence of these revisions and suggestions (GS).
- (2) Choose a project title in groups. Search and analyse information for the selected topic. Provide consultation time in groups during the lesson. Each group is first encouraged to present solutions for its own research topic. Subsequently, the teacher and students will assess and give feedback based on the school-based 'Oral Presentation Assessment Form'. After receiving feedback, each group has to write a 'Problem-solving Proposal' (GS).
- (3) Design a promotion poster, create Chinese print, and souvenirs (VA).
- (4) Design an effective marketing method to present the new good luck charm products during the closing ceremony (BS).
- (5) Identify the main ingredients and functions of a balanced diet. Design an economical, whole-day, and well-balanced menu for athletes (IS)
- $(6) \quad \text{Create and design the promotion short film 'Our Olympics' (CS)}.$

#### b. Rehearse opening match

(1) Each class designs and rehearses the manner of entering the stadium during the closing ceremony.

(continued on page 305)

#### Table 11.5 (continued)

Stage 4: Mini Olympics Opening and Exhibition (opening ceremony, celebrating)

#### a. Opening ceremony match

- (1) Group students from different classes. Encourage them to design their own styles when entering the stadium, including the way of presenting their slogans, good luck charms, and logos with the use of
- (2) Each group uses the school-based assessment tools in conducting peer assessments even for different classes (by videotaping the most wonderful part).
- (3) Invite Secondary 1 students and the parents of Secondary 1 and 2 students to attend the closing ceremony. This will be a good venue for cultural exchange.

#### b. Exhibits Show: Art work and projects through the four stages

#### Assessment contents

- (1) In the exhibition, show the 'problem-solving proposal' of each group. Subject teachers assess and give feedback on the proposal of each group (GS).
- (2) Vote for the best proposal 'Cover Design'. All students have the right to vote, but every student gets only one chance. The participation of parents can also be included (GS).
- (3) Self-reflection article: After the exhibition, all students have to write a piece of self-reflection to summarize what they have learned and how they felt throughout the project learning process (GS).
- (4) Display the four designs (i.e. ceramics, cuddly toy, poster, and Chinese print) (VA).
- (5) Vote for the best product promotion proposal (BS).
- (6) Assess the scientific design of the newly created sports event, as well as the food and drink menu (IS).
- (7) Vote for the best promotion short film (CS).

Note: The assessment of oral presentation has been carried out in the classroom at the third stage. It is regarded as the formative assessment because students can obtain feedback from the oral presentation to make further improvements when writing the proposal (GS).

The basic information necessary in a scheme of work includes the period, class level, subject(s) or KLAs, central theme of the period, and key topics or content coverage. Teachers may also list the resources and the basic text for the study period. The scheme of work should be clear, showing the main learning target content over a period of time, such as a semester. A scheme of work is therefore a guiding map for the learning journey of students. As such, it should provide a meaningful and interconnected sequence of learning experiences, an issue which is explored later in this chapter in discussing planning at the level of lessons.

As suggested above, an integrated model of learning can enhance the motivation of learners, an aspect which is in accordance with the curriculum reform orientation. However, this advantage can also be achieved by traditional independent subject planning if school teachers appreciate the sequence and connection of learning experiences. There are still many ways to encourage active learning (e.g. through teaching methods and strategies), which are again discussed later in the chapter.

## **Lesson Planning**

The primary purpose of lesson planning was discussed earlier in this chapter. This section focuses on what teachers should consider in planning lessons (e.g. the diversity and holistic development of learners) and how they should organize lessons to highlight the growth and involvement of learners.

The format of lesson plans is flexible, subject to individual preferences. However, a standard lesson plan includes the subject/KLA, class level, class time, number of period/s, topic, learning objectives in the three domains, teaching steps and corresponding main points, time allocation, teaching activities and teaching materials and resources (refer to Appendix 11.1). In planning a lesson, teachers should think from the perspective of learners. The following steps outline the process of lesson planning: (a) identify the areas of learning; (b) determine the learning goals and objectives; (c) based on the identified objectives, design tasks that can engage learners and enhance their interests and abilities; (d) select the evidence for learning outcomes (i.e. set the criteria) and make a judgement about the extent to which these criteria have been met; and (e) throughout the process, provide students with input and feedback.

## Identifying learning content and learning goals

In planning lessons, teachers should consider

- learning objectives and content focuses;
- the prior knowledge of learners;
- learning activities; and
- teaching materials, aids and resources.

The GS lesson plan in Appendix 11.1 suggests the thinking process in lesson planning. The lesson content is in accordance with the GS curriculum framework (Figure 11.2) and, more specifically, it is within the 'People and environment' strand. The topic is 'Entering the Civilization', which denotes an abstract concept related to culture and the development of society.

In lesson planning, the first thing teachers need to do is to identify clearly the content areas from which the goals of the lesson will be derived. In the case of the lesson plan presented in Appendix 11.1, the teacher began typically with the discipline framework and the academic goals of the subject. After developing the focus of the lesson, the teacher reviewed the previous knowledge foundation of students (e.g. students' knowledge of China's history from the Stone Age and the Bronze Age to the Tang and Qing Dynasties). The teacher also assumed that from their day-to-day living, students have a basic understanding of Hong Kong and China. The intention was to get the students to conceptualize 'civilization' from their own background knowledge and life experiences.

The teacher then further delineated the learning areas under 'civilization', addressing subtle details, segregating the concepts and refining the learning objectives, which helped to delimit the content and clarify the major teaching points. For example, 'civilization' was defined in the context of the 'living culture of Hong

Kong' within a timeframe of 'a hundred years' in which some identifiable changes from past to present could be found. The areas of change were also defined (viz. clothing, eating, living and transportation), which would normally be understood by primary students and would be of interest to them. The learning area—the living culture of Hong Kong—has an affective purpose: students can develop their sense of belongingness and increase their awareness of changes in their environment.

Appendix 11.2 shows a project learning plan which includes a series of lessons which are designed for learners for English language learning. It relates to the curriculum framework of English language, such as reading, listening and speaking, and it also tries to build into the academic study some generic skills development such as collaboration, creativity and study skills, as well as developing confidence and respect for others that are related to the affective and social aspects. The design of this project learning lesson plan is discussed in a later part of the chapter which considers assessment.

## Learning domains

While the content and objectives of lessons are initially set, teachers may further check on the nature of learning to consider which types of learning are appropriate for learners and how they can benefit from them. Bloom's taxonomy (1956) classified learning into three domains, namely, cognitive, affective and psychomotor, and created a framework for classifying learning objectives. This taxonomy can be a good guide for ensuring the design of a balanced curriculum, which covers different domains of learning.

The cognitive domain includes six categories of cognitive skills. The six categories—knowledge, comprehension, application, analysis, synthesis, and evaluation—represent hierarchically different cognitive processes in learning. The categories are ordered according to their levels of cognitive complexity. For example, being able to recall specific facts about an event, a skill falling into the category of knowledge, requires less complex cognitive skills than being able to interpret the significance of an event which is in the comprehension category. This taxonomy was revised in 2001 by a group of educators and psychologists (Anderson et al. 2001) who, instead of categorizing the cognitive processes unidimensionally, added an extra dimension (knowledge). The knowledge dimension divides knowledge into four main categories: factual, conceptual, procedural and metacognitive. Both the old and the revised taxonomy can help teachers to classify curricular objectives and verify whether the objectives can engage students' complex cognitive skills to a sufficient extent. A common mistake is placing too much emphasis on recalling information and overlooking more complex skills, such as analysing and evaluating (Krathwohl 2002).

The affective domain is primarily concerned with the development of attitudes and values. It deals with feelings, likes and dislikes. Affective development is important for school students because it may influence how they approach school, their studies and their future lives.

The psychomotor domain is concerned with physical movement and with developing co-ordination and motor skills. Its importance has often been underestimated by many teachers. Motor skills must be developed and applied in many learning situations, such as in using a computer mouse and in operating a drilling machine.

The three domains can guide teachers in defining the nature of learning objectives. In planning lessons, teachers should avoid placing too much emphasis on only one domain, and a balanced student development should be considered. In the example in Appendix 11.1, for instance, the objectives mainly cover the cognitive and affective domains. Students do not only learn facts (i.e. changes in Hong Kong and the factors which caused them) but also appreciate cultural changes. As citizens of Hong Kong, they will develop positive and respectful attitudes towards their culture, although they may not welcome some old habits embedded in it; and their skills in communication and collaboration are also honed as students work in groups and make presentations on what they have learned. In this way, the lesson largely reflects the spirit of the curriculum suggested by the Curriculum Development Council (2001). Possessing positive attitudes and values, and being able to think critically and to analyse and justify one's actions, are clearly important aspects of the 'learning to learn' agenda.

## Learning objectives

The ability to write learning objectives is an important issue in lesson planning. Learning objectives guide the integrative and cohesive development of lessons, as well as the choice of appropriate teaching strategies. Objectives are expected to be specific in nature, written in terms of what students will know and be able to do, and the behaviours they are expected to exhibit as reflections of the learning outcomes. Behavioural objectives were commonly adopted by teachers in the last century, when the school curriculum was product-oriented (i.e. the curriculum predetermines what learners should achieve by the end of lessons). Usually, behavioural objectives:

- state the intended learning outcomes in terms of observable behaviours;
- state the conditions under which these observable behaviours are to be demonstrated; and
- state the standards of performance (i.e. how well learners are expected to perform).

A rigidly stated behavioural objective contains strictly defined conditions. For example, 'Given a diagram showing the several parts of a flower, students will be able to label each part and to state its functions in a sentence to a criterion of 90% correct' (Cole and Chan 1994). This objective may not fit well with a learneroriented approach, which is more concerned with the process of learning and with how the process can produce learning outcomes. It is therefore undesirable to write learning objectives in strictly behavioural terms, and it is also unnecessary for teachers to exercise strong control over all learning objectives. Moreover, in view of the educational reforms, many of today's objectives are by nature nonbehavioural, such as those related to the development of attitudes. Teachers should consider that the realization of objectives in the affective domain takes time as the objectives must first be internalized before they are reflected in individual behaviour. While rigid behavioural objectives should be avoided in exercising strong control over students in a mixed-ability classroom, teachers should be able to make a careful analysis of the content of learning. They should define specific learning objectives, which can serve as useful organizers in directing classroom learning. Moreover, these objectives can also guide meaningful assessment activities. (This topic is revisited in the later section on the nature of assessment.) Based on the delineated areas of learning (i.e. living culture), the teacher in Appendix 10.1 (pp. 288–290) further refined the learning objectives of the lesson to include different learning domains. The objectives are expressed in specific but not rigid terms, as follows:

- Identify changes in Hong Kong's living culture (on clothing, eating, living and transportation) over the past hundred years.
- 2. Identify the factors that caused changes in Hong Kong's living culture (on clothing, eating, living and transportation) over the past hundred years.
- 3. Identify similarities and differences in Hong Kong's living culture (on clothing, eating, living and transportation) over the past hundred years.
- Understand and respect different generations of living culture. 4.
- 5. Increase one's sense of belongingness to Hong Kong.

In framing learning objectives, proper action verbs that clarify learning outcomes should be used. In doing so, teachers can also clarify the learning domains targeted by the content of lessons. Table 11.6 presents a taxonomy of verbs used to denote different learning domains, which is a good guide in lesson planning.

## Sequencing

Once the learning objectives are set, teachers should also consider the learning sequence, that is how teaching and learning events should be ordered. Although there is no strict rule for arranging the sequence of learning, a good sequence

Table 11.6 Action verbs: Cognitive, affective, and psychomotor domains

		Cognitive	e Domain		
Know	ledge	Compre	hension	Appli	cation
acquire count define draw identify label list match name outline point	quote read recall recite recognize record repeat state tabulate trace write	associate classify compare compute contrast describe differentiate discuss	distinguish estimate explain extrapolate interpret interpolate predict require translate	apply calculate change classify complete demonstrate employ examine illustrate	manipulate operate practice prepare produce relate solve use utilize
Ana	lysis	Synt	hesis	Evalu	ation
analyse construct detect diagram differentiate	explain infer outline separate subdivide summarize	arrange categorize combine construct create design develop explain formulate generate generalize	integrate organize plan prepare prescribe produce propose rearrange reconstruct specify summarize	appraise assess compare critique determine evaluate grade judge	justify measure rank rate select support test recommend
		Affective	Domain		
Rece	iving	Respo	onding	Valu	uing
accept accumulate ask choose combine control differentiate	follow listen (for) reply select separate set apart share	answer approve commend comply conform discuss	ollow help play practice read volunteer	argue assist debate deny help increase measured proficiency	increase numbers in join protest read relinquish select support specify
	Organization		Characterization		
abstrac adhen alter arrang balanc combin compa	e G fo e ir e o ne F	define liscuss rmulate ategrate rganize orepare heorize	act avoid chang comple displa manag perfori qualit	e r ete y ge m sup y sub	require resist resolve revise serve solve eriors, or coordinate verify

(continued on page 311)

Table 11.6 (continued)

		Psychomot	or Domain		
apply assemble build change clear calibrate compose connect construct correct cut	demonstrate design desire to respond discover dismantle draw fabricate fasten feel follow	form hear imitate install knowledge of procedure layout locate maintain make make-up	manipulate manufacture measure mix operate organize perform plan position put together	remove restore see select sense service sharpen stimulate small touch	trace troubleshoot try recognize use visualize willingness to respond

Adapted from J. Ritz (2006), Taxonomy table. Retrieved 4 March 2010, from http://www.odu. edu/~jritz/oted885/taxonomy.shtml.

enhances learning effectiveness. Usually, a logical sequence can be established in the following ways: by linking the whole to parts; by learning concrete facts prior to abstract concepts; by maintaining a 'spiral' sequence that enables learners to revisit some content ideas more deeply in a cyclical manner; by making horizontal and vertical arrangements that consider the expected breadth and depth of the learning content; and by integrating relevant parts across different topics or subjects. As shown in Appendix 11.1 (pp. 325–328), the sequence of the lesson is carefully organized. 'Cultural living' is an abstract term, and the lesson expects students to observe changes in it and to analyse the reasons for such changes. The plan therefore uses a story, which indicates generational differences between a grandfather and grandson. The story shows the difference between the two characters in terms of their expectations and perceptions about daily events that touch on clothing, eating, living and transportation. Students are placed within a context where they can observe major cultural differences in Hong Kong over the specified period of time. In addition, the lesson pushes students to analyse the causes of such differences in the following ways. First, there is a question-and-answer activity participated in by the whole class, addressing the four general areas of change; second, there are group discussions on one of the four areas; and finally, a consolidating worksheet is used to gather lesson feedback and to initiate further investigation on the topic. A spiral sequence is used to maintain each KLA. For instance, the concept of living culture is learned by addressing changes in the society, such as modern discoveries in science and technology, and through studying customs and traditional values. The spiral sequence deepens the knowledge of students.

## **Teaching Strategies and Assessment**

### Active learning and developing learning strategies

After the teaching plan is set, teachers then work on the creative process of designing teaching and learning activities, taking into account the diverse abilities and interests of their students. In Chapter 2 of this book, various methods were recommended, such as co-operative learning, investigative project learning, scaffolding teaching strategies, contextualized experiences, discussion and enquiry learning. Also, as pointed out in Chapter 1, it is important for learners to be able to develop various different learning strategies to achieve learning. Memorization, silent reading and individual work should not be regarded as useless but they should be combined with more active approaches such as project learning, experiments and discussion. However, the teacher's role in the planning of a lesson is vital in considering the learning aims and outcomes, and how to support learners by introducing appropriate strategies to achieve the learning outcomes in both the cognitive and metacognitive domains. Since teachers should be responsive to learners needs, ability and interests, the differences in these aspects may also be used in deciding on the learning activities and strategies to support learners.

The term 'active learning' can be used to describe the ideal situation in the learning process. To be actively engaged in learning, students must do more than just listen; they must read, write, discuss and be engaged in solving problems. Also, as argued by many authors (e.g. Bloom 1956; Lowman 1984; Ramsden 1992), students must engage in higher-order thinking tasks, such as analysis, synthesis and evaluation, to be actively involved, though it should be noted that memorization and other lower-level intellectual skills are not excluded in the learning process. Active engagement should also not be confined to the classroom, but should be extended to other locations and times. If teachers are able to create a variety of learning opportunities for their students, this is more likely to result in their active involvement and develop their interest in learning. In the process of learning, teacher facilitation, and peer interaction and sharing in groups, are important instructional strategies because they continuously reinforce learning while pushing learners towards their zones of proximal development.

#### Assessment

Assessment is also a useful strategy for teaching and plays an important role in learning. In this section, assessment is discussed with the purpose of highlighting the current trend of using it to support student learning, and the concepts discussed here are

especially important for teachers in planning lessons. (For a more comprehensive discussion of assessment, readers may refer to Assessment for learning in the Hong Kong Teacher Education Series.)

The word 'assessment' comes from the Latin verb assidere, which means 'to sit beside' (Musial et al. 2009). It implies the process by which people get together to evaluate educational experiences and the ways to make such experiences more meaningful. Broadly defined, assessment is the process of documenting outcomes (i.e. knowledge, skills, attitudes, and beliefs), usually in measurable terms.

Assessment may either be summative or formative. The former aims at measurable outcomes of achievement, whereas the latter supports the achievement of outcomes by offering feedback. Formative assessment also serves as a scaffolding tool that supports improvements in learning. In current educational practice, a high value is placed on formative assessment.

Teachers should think about the assessment when they start to plan lessons. When launching the new curriculum, the government emphasized the importance of maintaining effective links among learning, teaching and assessment. In a learneroriented learning and teaching environment, formative assessment is embedded in the teaching-learning process and it provides crucial feedback to students about what they have, and have not, learned well. In this way, assessment is not only an end-ofclass exercise but a part of teaching and instruction. This part of the chapter focuses on designing types of formative assessment.

In formative assessment, students' work may be marked (but not graded) as its primary purpose is to improve learning; and so students should not feel threatened by it. It is both a process that informs teachers about how they should proceed and it helps learners to be clear about their progress and develop a sense of responsibility for learning. Formative assessment has the following characteristics:

- Feedback is given on the spot. It is direct and immediate.
- It takes different forms, provided that structured information can be collected for teachers to plan and improve instruction and for students to improve and further develop themselves.
- It is a tool for evaluating teaching.

Formative assessment is promoted to eliminate the negative effect of the heavy emphasis on summative assessment, which aims at grading students.

Based on the lesson plan in Appendix 11.2 (pp. 328-331), Appendices 11.2a-11.2i (pp. 332-340) show snapshots of an English teaching project organized in a thematic lesson plan entitled 'Endangered Animals'. The teacher used 'project learning' (10 lesson projects) as a pedagogical strategy to build different formative assessment tasks into learning activities. Project learning, as a teaching and learning strategy, originated in the child-centred education stream. It typically involves a process of enquiry through gathering and evaluating data, putting forward and testing hypotheses, reaching appropriate conclusions and presenting findings effectively. In this project on 'Endangered Animals', students were guided to explore and learn by including assessment as a teaching strategy to support their learning.

First, students were told a real story about the dodos of Mauritius. The birds became endangered because they were caught for food by Europeans who migrated and settled there. Next, the students learned about some other endangered animals from the worksheet provided by the teacher, and they were provided with websites where they could find information about these animals (Appendix 11.2a). Following this, students researched and were oriented about endangered animals through the project tasks, and were involved in group discussions (Appendix 11.2b) and individual comprehension tasks (Appendix 11.2c). The students were then taught to use a mind-map to organize information and to develop a writing plan for their selected endangered animals (Appendix 11.2d). They also learned to tabulate the information they had gathered from their own investigations (Appendix 11.2e) and followed a set of guidelines for the completion of a short report on the endangered animals they had chosen (Appendix 11.2f). Finally, all students were required to make a presentation about their selected endangered animals.

During this project study, students were involved in a variety of learner-centred activities. They also developed their knowledge about endangered animals, and learned some cognitive skills, such as mind-mapping, gathering information and organizing information. During the class period, they also wrote, read, spoke and listened (in English) to acquire knowledge of the subject-matter. In the process, they were involved in group work, presentations and consultation with teachers, who offered them scaffolding to help them to advance in their studies.

In successive events, the students naturally and continuously went through formative assessment, from the elementary study of endangered animals—through comprehension exercises, mind-map drawing, consultation with teachers and exercises on organizing information—to the final writing of presentations. At different stages, they received feedback from teachers or from the tasks they were completing. The exercises in the project actually played the role of formative assessment: they provided formative feedback to ensure effective teaching, diagnosed student learning, consolidated the knowledge of students before they moved to further steps, and developed students' responsibility for learning.

## Design principles for formative assessment

In the past, class exercises and homework used to focus just on academic aspects and, unfortunately, they were used to develop in students a habit of recitation because they only repeated what had been taught. Today, designing exercises and homework demands more ideas from teachers. Such exercises have more important

functions: they support student learning and motivation, and enhance academic and generic abilities. A well-designed assessment can make a difference as it cultivates students' sense of responsibility for study and can allow them to experience success in learning, thereby strengthening their motivation to learn. Noted below is a checklist that guides the design of exercises.

- Do they support higher-order thinking?
- Do they provide variety?
- Are they interesting?
- Are they authentic and close to students' life experience?
- Are they motivating?
- Do they accommodate learner diversity?
- Do they accommodate different learning styles?
- Do they encourage different forms of expression?
- Do they enhance the general ability of students, such as reading text, reading diagrams, comprehension and literacy?

The project learning design in Appendix 11.2 provides variety to suit the perceptual modalities of young children. The content covers different domains of learning; the students not only learn about some animals, but also learn the skill of independent learning; and, in addition, the topic studied promotes a strong affective objective—an attitude of environmental protection.

Appendix 11.3 (p. 341) is an example of a class exercise designed mainly for the purpose of formative assessment. It demonstrates how a mathematical theory can be discovered by students. Through exploration and presentation of measurement findings, the formulas for calculating the circumference and diameter of circles are discovered. The activities arouse students' interest and help them to develop logical thinking and mathematical concepts.

## Criterion-referenced assessment

Ideally, all student work should be assessed either by teachers or by students themselves. As noted earlier, feedback on assessment is valuable to teachers as it provides useful information for them to evaluate their teaching, plan for the next instructional step and create long-term lesson plans. It is equally important to learners as it allows them to gauge their own learning outcomes and understand their performance (i.e. how much they have achieved, what their strengths are, and what areas need improvement). There are different approaches to assessing student work. Criterion-referenced assessment (CRA) is used to assess whether a student has met particular task requirements, whether he/she has achieved the pre-set learning objectives, and how well he/she has achieved them. It operates within the assessment for learning model. CRA differs from the norm-referenced assessment (NRA) used in summative assessment, which involves ranking for the purpose of grading and selection (e.g. examinations at the end of an academic year).

CRA is qualitative in nature. Unlike a quantitative-oriented model that is concerned with the accumulation of knowledge, CRA focuses on the application and analysis of knowledge. It regards teaching as designed to facilitate student learning, not simply to transmit knowledge; and it therefore assumes a holistic understanding of knowledge and concepts instead of broken units of knowledge. Instead of being de-contextualized, CRA is situated. The assessment tasks focus on the application of functional knowledge in the real world. By comparison, NRA is decontextualized, with the assessment focusing on declarative knowledge about artificial activities which may be detached from the real world. In addition, CRA provides evidence that reflects students' achievement of certain standards. (A driving test is a good illustrative example.) NRA, in contrast, refers to a measurement model that focuses on measuring stable characteristics (e.g. as in an IQ test).

CRA is related to performance assessment, with learning outcomes being observed through performance in various forms, including action. Rubrics are usually designed for this kind of assessment, which provide a rating system by which teachers can determine a student's level of proficiency in performing a task or displaying knowledge of a concept.

The 'Endangered Animal Project' in Appendix 11.2 shows the powerful impact of CRA as a formative assessment tool. For example, in the final presentation exercise, students learned to evaluate their own speech through a rubric. The teacher asked students to conduct a self-evaluation of their performance based on a set of criteria (Appendix 11.2g) and also assess their peers. Through these assessments, students learned the requirements of the tasks, and tried to check these requirements in the work of their peers. As a teaching strategy, the peer assessment exercise also enhanced the concentration of students in listening to the others' presentations (Appendix 11.2h). Furthermore, the selection of the best presenter in the peer assessment form increased the motivation of students to do peer assessments and, more important, it created a sense of community among learners in the class. The teacher assessed the essays and presentations, and provided individual comments so that the whole project was completed with formative support from both peers and the teacher (Appendix 11.2i).

Student activity number 4 shows a task that requires CRA as a performance assessment. The students were required to work on a GS project, which involved integrated real-world knowledge. They had to report on the project in a verbal presentation and, hence, the assessment of this task requires specific GS knowledge and presentation skills. To assess this task, teachers need a rubric. Table 11.7 (p. 317) shows a rubric that was specifically designed for the task, containing rating domains on subject-matter content, coherence and organization, creativity, materials, speaking skills, audience response, the length of the presentation and the level of proficiency against different domains.

Table 11.7 Rubric for assessing project presentations (General Studies)

	Exceptional	Admirable	Acceptable	Amateur
Content	An abundance of material clearly related to the thesis; points are clearly made and all evidence supports thesis; varied use of materials	Sufficient information related to the thesis; many good points information not clearly made, but there is an uneven balance; there is little variation	There is a great deal of information not clearly connected to the thesis	Thesis is not clear; included information does not support thesis in any way
Coherence and organization	Thesis is clearly stated and developed; specific examples are appropriate and clearly develop the thesis; conclusion is clear; shows control; flows together well; good transitions; succinct but not choppy; well organized	Most information presented in logical sequence; generally very well organized, but better transitions from idea to idea and medium to medium are needed	Concept and ideas are loosely connected; lacks clear transitions; flow and organization are choppy	Presentation is choppy and disjointed; does not flow; development of thesis is vague; no apparent logical order of presentation
Creativity	Very original presentation of material; uses the unexpected to full advantage; captures audience's attention	Some originality is apparent; good variety and blending of materials/media	Little or no variation; material presented with little originality or interpretation	Repetitive with little or no variety; insufficient use of multimedia
Materials	Balanced use of multimedia materials; properly used to develop thesis; use of media is varied and appropriate	Use of multimedia not as varied and not as well connected to the thesis	Choppy use of multimedia materials; lacks smooth transition from one medium to another; multimedia not clearly connected to the thesis	Little or no multimedia used or ineffective use of multimedia; imbalance in the use of materials—too much of one, not enough of another
Speaking skills	Poised, clear articulation; proper volume; steady rate; good posture and eye contact; enthusiasm; confidence	Clear articulation but not as polished	Some mumbling; little eye contact; uneven rate; little or no expression	Inaudible or too loud; no eye contact; rate too slow/fast; speaker seemed uninterested and monotonous
Audience response	Involved the audience in the presentation; points made in creative way; held the audience's attention throughout	Presented facts with some interesting 'twists'; held the audience's attention most of the time	Some related facts but went off topic and lost the audience; mostly presented facts with little or no imagination	Incoherent; audience lost interest and could not determine the point of the presentation
Length of presentation	Within two minutes of allotted time +/-	Within four minutes of allotted   Within six minutes of allotted time +/-		Too long or too short; 10 or more minutes above or below the allotted time

In the new curriculum, authentic tasks, events and activities are recommended, and students are often required to develop cognitive abilities and generic skills (Curriculum Development Council 2001, 2002). Therefore, teachers need to design rubrics that can inform learners clearly about how much and how well they have achieved. It is also important that students are informed about these rubrics earlier or participate in rubric-based peer or self-assessment. This collaborative process makes student learning more meaningful and, if used effectively, such assessment can play a significant role in encouraging learning. Table 11.8 provides a comprehensive rubric for assessing various cognitive abilities and generic skills promoted in Hong Kong's school curriculum, and it can be modified for daily formative assessments in the classroom.

# **Educational Reforms, Learning and Teaching: The Way Forward**

In discussing lesson planning and assessment, this chapter has outlined the new teaching orientation promoted in the current educational reforms. This new orientation is presented in the belief that the next generation of teachers will become reformers who will improve education. In fact, educational reforms in this century are catalysts for change all over the world. In summarizing the key elements of the present goals of education, this last section draws to a considerable extent on material covered in some earlier chapters.

Education in this century is oriented towards the needs, interests and diverse abilities of learners; and students therefore expect that more support will be given to them. The school curriculum should interact with learners to support their development, not constrain it. With the establishment of its new academic structure, Hong Kong has already moved towards this goal, providing opportunities for school-leavers. Comprehensive compulsory education offers school-leavers a more integrative path to life and work, and a good preparation for the future. Under this new system, students are also expected to play an active role in learning, develop lifelong learning attitudes, and become well-rounded persons who possess a range of talents and abilities to face future challenges. Also, as explained in this chapter, an integrated use of learning strategies should help in promoting students' learning.

Teachers are expected to become reflective practitioners, and they are encouraged to ground their teaching on a model that emphasizes the active role of the learner in a variety of contexts and learning activities, which should encourage the development of their intellectual ability and the adoption of appropriate learning strategies. Also, the spirit of the constructivist learning model and the promotion of student-teacher interaction should be integrated into more traditional learning

Table 11.8 Rubric for assessing student performance

			Proficiency Level	cy Level	
Areas	Domains	A Excellent (4 pts)	B Good (3 pts)	C Acceptable (2 pts)	D Improvement needed (1 pt)
Content of     knowledge and	1.1. Content of knowledge	Very suitable for the subject     Several important main points     Demonstrate analytical thinking     Demonstrate creativity     Pactually correct	Generally suitable for the subject     Several important main points     Demonstrate some analytical thinking and personal opinions     Contains some minor errors	Somewhat suitable for the subject     Only one or two main points     Limited analytical thinking     Lacking in creativity     Some correct information but with significant errors	Not suitable for the subject     Unclear main points     Lacking in analytical discussion     Lacking in creativity     Factually incorrect or ambiguous
language ability	1.2 Language ability	Effective use of language     Very few grammatical and phonological mistakes	Generally effective use of language     Some grammatical and phonological mistakes	Language use is sometimes inappropriate or ineffective     Grammatical and phonological mistakes affect the transmission of information	Language use is generally inappropriate     Crammatical and phonological mistakes substantially affect the transmission of information
Grading criteria	Domains	A Excellent (4 marks)	B Good (3 marks)	C Satisfactory (2 marks)	D Unsatisfactory (1 mark)
	2.1 Collaboration	Always listen, share, and support group members     Always motivate and help group members to complete the task together	Often listen, share, and support group members     Sometimes motivate and help group members to complete the task together	Seldom listen, share, and     support group members     Sometimes require others'     reminders to complete the task	Do not listen and support group members     Require others' assistance or get someone else to complete the task
2. Generic skills	2.2 Communication	Excellent use of language for either expression or presentation to get the attention of the audience     Good intonation     Grammatically correct     Effective use of introduction	Effective use of language for either expression or presentation to get the attention of the audience     Clear pronunciation     Generally grammatically correct	Often show ability for clear expression     Unclear pronunciation     Grammar is often correct     Fair use of introduction and conclusion     Show impatience when	Do not show ability to use the language for both expression and presentation in an effective way     Do not show ability to speak properly     Grammar is seldom correct
		and conclusion  Show respect for others	Appropriate use of introduction and conclusion     Show respect for others	listening to others	Do not have any introduction or conclusion     Do not pay attention to others

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Areas	Domains		A Excellent (4 pts)		B Good (3 pts)		C Acceptable (2 pts)		D Improvement needed (1 pt)
	2.3 Creativity		Always use various ways to think Use various ways for Use various ways for interpretation and expression in performing the task. Show ability to organize knowledge and concepts Very interesting and attractive Always show willingness to try, with much creativity	• • • • • • • • • • • • • • • • • • • •	Often use various ways to think I you use various ways for thy to use various ways for interpretation and expression in performing the task. Show willingness to organize knowledge and concepts but with some mistakes Interesting and attractive Try to innovate, do some tasks with creativity	Substitution of the substi	Seldom use various ways to think Still use various ways for interpretation and expression in performing the task Show little ability to organize knowledge and concepts Fairly interesting and attractive Seldom show creativity		Never use various ways to think Do not use various ways for interpretation and expression in performing the task Do not show ability to organize knowledge and concepts Not interesting and attractive Do not show creativity
	2.4 Critical thinking		Investigate the issue from a wide variety of angles Use tight logical thinking and multi-proving methods Show ability to inquire through investigation and try to handle the investigation Obviously show ability Obviously show ability to criticize and to provide discussion and new ideas		Try to investigate the issue from different angles Use logical thinking and proving methods. Show ability to ask questions and express opinions through investigation Show ability to criticize and to provide new ideas	same same Try 1 investinves not v Do no ask c opin investinves	Investigate the issue from the same angle Try to use logical thinking to investigate questions but are not well-organized Do not show ability to ask questions and express opinions sensibly through investigation Do not show critical thinking skill		Investigate the issue from one angle only Do not have logical thinking, ideas, and examples for evidence Do not show ability to ask questions and to express opinions through investigation Lack of personal opinions and ideas
	2.5 Information technology		Effectively use various kinds of electronic media tools to search, organize, record, and present the task Effectively use multimedia; share and exchange ideas with classmates		Try to use various kinds of electronic media tools to search, organize, record, and present the task. Use multimedia; share and exchange ideas with classmates of various backgrounds	• Us rec win • Us	Use some of electronic media tools to search, organize, record, and present the task with fair effectiveness Use multimedia but are not effective		Do not use any electronic media tools to search, organize, record, and present the task Do not show ability to use multimedia and to share and exchange ideas
	2.6 Problem solving	•	Good at finding and suggesting problem-solving methods	•	Actively find and make further improvements on suggested problem-solving methods	• Or or produce of the office	Do not have suggestions or do not make further improvements on suggested problem-solving methods but show willingness to help others in problem solving	•	Do not try or help solve problems, rely on others to solve problems
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				Proficiency Level	cy Level		
Areas	Domains		A Excellent (4 pts)	B Good (3 pts)	C Acceptable (2 pts)	D Impro	D Improvement needed (1 pt)
	2.7 Numeracy		Effectively use mathematics (e.g., methods of calculation, chariting, statistics, etc.). Show accurate numeracy process in work Good at applying numeracy skills in daily activities	Can demonstrate the uses of mathematics (e.g., methods of calculation, charting, statistics, etc.)     Show clear numeracy process in work     Show ability to apply numeracy skills in daily activities	Try to use mathematics (e.g., methods of calculation, charting, statistics, etc.) Show numeracy process in work Try to apply numeracy skills in daily activities	bo not show abili basic math concep basic math concep methods of calcul charting. Satistice.     Do not show num process in work     Do not apply num in daily activities	Do not show ability to use basic math concepts (e.g., methods of calculation, charting, statistics, etc.) Do not show numeracy process in work Do not apply numeracy skills in daily activities
	2.8 Self-management: Control of presentation time	•	Show ability to fully express and effectively organize ideas within the designated time	Show little delay in     presentation within the designated time, but still fully express and effectively organize ideas within the designated time	Not able to fully express and organize ideas within a period of time	Without good time management, affect whole effectiveness presentation	Without good time management, affecting the whole effectiveness of the presentation
	Management of processing time	• •	Show good time management skills and habits; complete the task on time Can ensure the quality of the task and the whole schedule is not affected by individual delays	Often complete the task on time     Pay attention to the quality of the task, and the whole schedule is not affected by individual delays	Sometimes delay the task but still complete the task on time.     Do not pay attention to the quality of the task and to the collaboration among individuals, affecting the schedule of completing the task.	e Always ne group men else is calle task; have l manageme complete the Ignore the affecting th of complet hospitals.	Always need reminders from group members or someone else is called to complete the task; have problems in time management and unable to complete the task on time Ignore the quality of the task, affecting the whole schedule of completing the task
	2.9 Research		Search information through various ways and make use of them effectively Show ability to read extensively and to select information effectively Set clear and precise project title Show strong ability to think critically and to organize ideas	Gearch information in different ways     Read and select information based on the main topic.     Set objective topics to extend research and study     Show abilist to think critically and to organize ideas     Use life experience and social contacts for evidence, interpretation, and integration of ideas	Search information through limited ways     Show ability to select information while reading, but main ideas are lacking     Show ability to continuously set objectives and topics throughout the research and study process     Need further improvements in critical thinking and organization of ideas	Search information if one way     Do not read enough information     Do not show a good understanding and comprehension of the Lack of critical thinh and of skills in organ main ideas	Search information in only one way Do not read enough Information Do not show a good understanding and comprehension of the topic Lack of critical thinking skills and of skills in organizing main ideas
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Table 11.0 (communa)	ca)								
					Proficiency Level	ıcy L	Jevel		
Areas	Domains		A Excellent (4 pts)		B Good (3 pts)		C Acceptable (2 pts)		D Improvement needed (1 pt)
			Good at using life experiences for evidence, interpretation, and integration of ideas. Well-organized project design, attract readers' attention Completely use reference lists and citation formats correctly	• •	Attractive project design, easy to understand Mostly use reference lists and citation formats correctly		Try to use life experiences for evidence, interpretation, and integration of ideas Fair project design, still meet the requirements Show ability to use reference lists and citation formats mistakes		Do not show effective evidence, interpretation, and integration of ideas Incomplete assignment Do not show ability to use reference lists and citation formats correctly
3. Attitudes and values	3.1 Participation		Active participation in all learning activities learning Confident Confident Approach learning with a Approach learning with a positive, rational attitude		Active participation in most of the learning activities May help others in learning Demonstrate some self- confidence Approach learning positively		Somewhat passive in participating in learning activities activities Fulfill one's sown responsibility Able to face limited challenges challenges Approach learning somewhat positively		Approach learning in a passive and detached manner Unabbe to fulfill own responsibility Limited participation
	3.2 Sense of responsibility	•	Help team members achieve goals unselfishly	•	Some efforts in helping team members achieve goals	•	Limited efforts in helping team members	•	Do not meet team requirements, do not help team members
	3.3 Respect for others		Show respect for others in attitudes and behaviors habe to respect and accept differences arising from different social and cultural backgrounds		Show respect for others in overall attitudes and behaviors Able to understand and accept some some differences arising from different social and cultural backgrounds		Somewhat selfish, display limited respect for others Have complaints about differences arising from different social and cultural backgrounds		Disrespect other cultures in attitudes and behaviors Do not accept differences arising from different social and cultural backgrounds

methods to enhance the achievement of learning outcomes. During this period of transition, teachers are given greater flexibility to introduce innovations in pedagogical practices that suit learners' diverse needs. Teachers should appreciate this move towards greater professional autonomy and should accept the greater challenges in their work as this will benefit them as individuals and the teaching enterprise as a whole.

However, aspects of these new trends in education seem problematic in Hong Kong. While the literature has shown that Chinese learners, who use memorization and recitation more than those in the West, do gain from this process in terms of cognitive development, it has also been found that they have not developed a genuine interest in learning. Their motivation for studying is external as they see the school as a place that prepares them for earning money and establishing good careers (Lau and Yeung 1996). Some students even attribute their academic success to a stronger fear that educational failure will have very negative consequences. Students also think that effort is central to performing well (Chen, Lee and Stevenson 1996a). They trust book knowledge and have developed high respect for teachers, making them unable to question their authority (Ho 1996). Due to the impulse control exercised in Chinese classrooms (Hue 2007a), the new approach of active and investigative learning may not be developed effectively in Hong Kong.

Chinese teachers hold a 'cultivating conception of learning', which is unique to Confucianism. They share the view promoted in the educational reforms that learning should serve the holistic development of students, not only their cognitive development. Paradoxically, however, they still utilize 'teacher-centred' and 'contentbased' methods of teaching (Dahlin and Watkins 2000; Stevenson and Lee 1995), which stress the need for memorization and repeated practice in the learning process. Since the 1980s, 'chalk-and-talk' (Llewellyn 1982) and examination-related pedagogies have characterized teaching in Hong Kong (Chow and Pong 2002). In the 2000s, the government's school external review reports showed that many teachers fail to use higher-order questions to promote students' intellectual abilities, which echoes the findings of Llewellyn's external review committee in 1982. In addition, in managing classroom discipline, teachers exercise tight control over students (Hue 2007b). They are conscious of the 'stage-setting' routine that enables them to switch activities smoothly and make teaching efficient (Dahlin and Watkins 2000). Apart from any resistance to change for personal and political reasons (Lam and Nizar 2009), the practices of many teachers raise serious doubts about whether the new learning and teaching orientation can really be promoted in Hong Kong's classrooms.

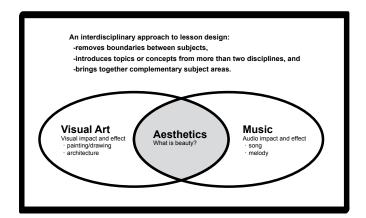
The central cause of the problem is that Hong Kong's educational system used to be highly academic, focusing mainly on inculcating knowledge in certain disciplines and on selecting the brightest students for entry to universities (Biggs 1998; Biggs and Watkins 2001)—a development which, as shown in Chapter 2, signified a degeneration

of the Chinese cultural values in school education. This influence is still so pervasive that the educational system may not be able to accommodate the new ideas in the current educational reforms. Among teachers, the system has resulted in 'grading on the curve' and 'teaching for examinations' (Biggs and Watkins 2001; Lam and Nizar 2009). This approach, with its adverse 'backwash effect', still governs learning in schools at present, and remains the learning goal of students. As a result, students face enormous pressure which can create problems which in some cases result in depression and even child and youth suicide (Lau, Siu and Chik 1998; Lee, Wong and Chow 2006; The Hong Kong Federation of Youth Groups 2001).

As mentioned above, in the early 1980s, the Llewellyn Committee made recommendations for changing Hong Kong's examination-oriented culture and for improving teaching methods, but after three decades there has been little improvement. We are now at a critical crossroad, with the educational reforms having given the green light for change. This reform project involves a re-culturing of schools and teachers, which inevitably takes time. Nevertheless, education professionals and teachers need to promote this change as it will benefit the future of the profession and society as a whole.

## **Learning Activities**

- 1. Assume that you are about to teach a lesson. What do you need to consider?
- 2. Define lesson planning. What are its functions?
- 3 Figure 11.4 shows an interdisciplinary model for teaching visual art and music in junior secondary schools. Comment on this model.



**Figure 11.4:** Interdisciplinary approach in planning art and music lessons
The interdisciplinary approach dissolves subject boundaries based on common topics or concepts. It usually involves discipline areas of a similar nature.

4. Mr. Lau is a Primary 6 teacher who teaches Chinese and integrated humanities. Recently, the class visited an elderly care centre and completed a project about Hong Kong's elderly. Mr. Lau believes in issue-based learning and curriculum for integrated humanities and thinks that oral presentations benefit students' holistic development by enabling to learn the subject-matter and handle presentation and related skills. He therefore asks the students to make an oral presentation on the theme 'Issues for the Elderly in Hong Kong'. The students are asked to include some important findings gathered from their studies and also need to exhibit their oral presentation skills. Consider this task and prepare an instrument that Mr. Lau can use to assess student learning.

## **Appendix 11.1 A General Studies Lesson Plan (Primary 6)**

Topic of the lesson: Entering into the Civilization

Subject: General Studies

Class: Primary 6

No. of Lessons: 1 (50 minutes)

#### Lesson Objectives

By the end of the lesson, students are able to

- identify changes in Hong Kong's living culture (on clothing, eating, living, and transportation) from the past hundred years to the present;
- 2. identify factors that cause changes in Hong Kong's living culture (on clothing, eating, living, and transportation) from the past hundred years to the present;
- 3. identify similarities and differences in Hong Kong's living culture (on clothing, eating, living, and transportation) from the past hundred years to the present;
- understand and respect different generations of living culture; and 4.
- 5. increase one's sense of belongingness to Hong Kong.

#### Previous Knowledge

#### Students have

- basic knowledge about important dynasties in China (e.g., Tang Dynasty, Song Dynasty, Yuan Dynasty, Ming Dynasty, and Qing Dynasty);
- 2. basic knowledge about living situations during the Stone Age and Bronze Age;
- basic concepts about the history of Hong Kong and China through some daily activities;
- 4. grouping skills; and
- 5. discussion and presentation skills.

## Teaching Procedures

Time allocation	Teaching Steps	Teaching Purposes	Teaching Activities	Materials Used
7 min	1. Lead in	To investigate living conditions (i.e., food, clothing, housing, and transportation) in Hong Kong a hundred years ago     To lead students into the story of Siu Cheung	Distribute Worksheet 1.     This allows students to draw by imagination and knowledge how food, clothing, housing, and transportation are like in Hong Kong a hundred years ago.     Selects two students to share their drawings in front of the class.     'Does anyone want to share what he/she has drawn on the worksheet? If yes, please raise your hands.'     'Today, we are going to see what kind of activities Siu Cheung will do on Sunday. Please pay attention to the contents when you are watching the movie to see if there are things that are similar to what you have drawn.'     Show the film.	PowerPoint     Movie     Worksheet 1
15 min	2. Storytelling	To identify changes in living culture during the process of civilization and the factors behind such changes     To allow students to become actively involved through the use of real materials (e.g. gunny and silk)	1. The PowerPoint is shown. This is the story: One Sunday, Siu Cheung and his Grandpa went out together. Siu Cheung is a Primary 6 student. Grandpa decided to visit his best friend, who is a tailor. He asked Siu Cheung to accompany him. Siu Cheung's aunt is going to get married soon. They set off from home to Kowloon City. They went to the tailor's shop by bus and tram. The tailor then kindly explained to Siu Cheung how clothes are changing. In the afternoon, Grandpa and Siu Cheung had an argument about where to have lunch. Finally, they went to a traditional Chinese restaurant. After lunch, they went for a walk on Hong Kong Island and viewed the buildings on their way. When night came, they went home together.  2. Students are given the opportunity to feel the past and present clothing materials. They are asked to feel different types of fabric.	PowerPoint     Different     kinds of     fabric

Time allocation	Teaching Steps	Teaching Purposes	Teaching Activities	Materials Used
7 min	3. Lead to the discussion	Conclude changes in living culture (clothes) from the past hundred years to the present day.     Discuss factors that cause changes in living culture.	Use questions to conclude changes in Hong Kong's living culture from the past hundred years to the present. 'According to the movie, can you tell the difference between the living conditions that Grandpa experienced in the past and Siu Cheung's life at present?'  With reference to the answers to the question above, try to investigate the factors that cause changes in living culture.  Discuss the topic together with a PowerPoint presentation.	1. PowerPoint
16 min	4. Group discussion and presentation	Students are allowed to take a look at the living conditions in Hong Kong and the reasons of their changes through discussions.     Students give reasons on their own and develop their thinking skills.     Develop students' generic skills.	1. Divide the class into 4 groups. There are 5-6 students in a group. 2. Ask the groups to discuss the following topics:  • What are the differences in the eating habits of Siu Cheung and Grandpa? What are the reasons behind them?  • Uncle Kwok said that people during his time would wear traditional Chinese clothes, whereas people nowadays always wear T-shirts and jeans. Why?  • The buildings nowadays are very different from those in the past. Why?  • What kinds of transportation are there in Hong Kong? Why are these kinds of transportation in place?  3. Encourage representatives from each group to present the results of their respective discussions.  4. Conclude what the students have reported.  5. Elaborate on the key points mentioned by students (i.e., economic, political, technological, and cultural aspects of change). Talk about the reasons behind the changes in Hong Kong's living culture.  6. Start the topic 'Entering into the Civilization'. This topic has already been discussed by students in the previous activities.	1. PowerPoint 2. Pens 3. Magnets 4. Art Papers

Time allocation	Teaching Steps	Teaching Purposes	Teaching Activities	Materials Used
5 min	5. Conclusion	Conclude changes in living culture and the factors behind such changes.     Talk about the assignment.     Extend the activity.	Briefly introduce the contents of Worksheet 2.     Extended activity: Visit the Hong Kong History Museum.	PowerPoint     Worksheet 2

The story included in this lesson plan is adapted from Chau Yim Man, Chau, Hiu Kan, Cheung, Lok Man, Choi Cheung, Kam Chi Ho, and Kwok Yu Tai (2007), Bachelor of Education Primary Programme (2005–09).

## **Appendix 11.2 Project Learning Lesson Plan**

# Theme-based English Project: Endangered Animals Project Lesson Planning

Planning		
Level: Primary Two		

Lesson Pla

# General English

### Overall objectives:

Duration: 4 Weeks

- Students acquire the skill to do a research on a topic and present the work through a written information report and an oral presentation.
- Students enjoy exploring knowledge.
- Students learn to organize information systematically.
- Students experience cooperative learning through group discussion and appreciation.
- Students develop critical thinking by identifying a problem and working out solutions.

## Language skills

#### Listening

- Listen to different stories and media about the topic
- Listen to others' ideas

#### Speaking

- Voice out self-opinion through group discussion and group presentation.
- Individual presentation: Learn the technique of public speaking through presentation.

## Reading

- Read a series of articles related to the topic.
- Read different non-fiction books and online reading materials throughout the research process.

### Writing

- Writing step by step: From vocabulary, sentences, mind maps, report tables to the final information report.
- Gather and share information, ideas and language by using strategies such as mind map and listed information table.
- Make changes to incorrect spelling, punctuation and grammar, and add details if necessary.

## Generic skills

**Collaboration:** Group discussion and sharing **Creativity:** Students select their own researched targets and design their presentation.

**Numeracy skill:** Students learn to use numbers to describe the size of an animal.

**Problem-solving:** Students identify problems concerning endangered animals and brain-storm solutions.

**Study Skill:** Students acquire the technique to do a research through the help of the Internet, encyclopedia and books.

- Students learn to organize information under different category.
- Students learn to organize ideas through a mind map and a listed table.

**Confidence:** To build up confidence through group and self-presentation

Lesson	Objectives	Materials	Teaching steps	Homework/ Remarks
1	To acknowledge the students the concept of endangered animals and the animals which are extinct     To arouse the interest of the students in the topic	Power point stories of the 'dodo' and Yangtze river dolphin	- Teacher tells the stories of two extinct animals through power point Introduce the term 'endangered' and 'extinct'. Points to think and discuss:  1. Teacher checks the understanding of the students by asking questions about the stories.  2. Teacher stimulates the thinking of the students by asking general questions about endangered animals. e.g. Do you care whether or not an animal becomes extinct? Why or why not? e.g. Think about ways that people can help endangered animals. Is there anything you can do?	
2	To introduce different sources in carrying out a research.	<ul> <li>Internet</li> <li>Books about animals</li> <li>An animal encyclopedia</li> </ul>	- Teacher gives out the theme-based English project (TBEP) booklet and explains briefly the purpose and timetable for the project.  - Introduce different means to find information about the topic. (Display some books, an animal encyclopedia and demonstrate the usage of Internet)  - Browse through the recommended websites. http://www.kidcyber.com.au/http://animal.discovery.com/guides/endangered/endangered-manimalstab-02.html  - Teacher explains TBEP P. 1  - Teacher goes to the below website and discuss the list of endangered animals. http://www.enchantedlearning.com/coloring/endangered.shtml  - Teacher guides students to complete Task 3	- Students choose their targeted endangered animals and complete Task 1 and Task 2
3	To study an endangered animal in depth through an article     To enhance exchange of ideas and cooperative learning through group discussion	- Paper for writing notes	- Task 4: Read the article of 'Miracle Birds' on TBEP P.3  1. 1st time: silent-reading by students 2. 2nd time: reading aloud by teacher Teacher explains some difficult vocabulary 3. 3rd time: students follow teacher to read aloud the article.  Teacher explains the questions. (Teacher encourages students to think under the heading of 'appearance', 'habitat', 'problem', 'ideas to help'.  Task 5: Teacher arranges the students into 5 groups. Each group has 6 students with one as (1) the leader and one as (2) the writer.  Each member of the group has to discuss all the questions raised in the article.  The leader has to coordinate and assign each member to present each question.  Teacher picks some students to present for the groups.  Teacher has to choose the best presenting group and the most cooperative group.  Teacher comments on the new ideas suggested by the students.	Students read aloud the article 'Miracle Birds' at home to their parents.

Lesson	Objectives	Materials	Teaching steps	Homework/ Remarks
4	To accumulate knowledge about the topic     To read and write sentences related to the topic	Picture and sentence cards	Task 6: Read the article of 'It takes a village' on TEBP P.4  (1) 1st time: silent-reading by students (2) 2nd time: reading aloud by teacher Teacher explains some difficult vocabulary  (3) 3rd time: students follow teacher to read aloud the article.  Teacher explains the questions. (Teacher encourages students to think under the heading of 'appearance', 'habitat', 'problem', 'help')  Teacher guides students to attempt some questions verbally.  Matching game:  Teacher writes the headings on the board as below.  Pictures – Problems – Results – Helps from people  Teacher places sentence cards randomly on the board.  Teacher places the picture cards under the column of pictures and asks students to match the pictures with the appropriate sentence cards.  Example:  Picture of air pollution: Air is polluted – Animals cannot have clean air to breathe – Please use less fossil fuel such as oil and coal.  Teacher highlights the sentence cards: Many animals are endangered.  Many animals are extinct as the final consequences.	Students complete Task 6 as homework.     Remind students to bring colouring pencils for the next lesson
5	To understand a mind map     To think and organize information systematically	<ul> <li>colouring pencils</li> </ul>	- Teacher introduces a mind map by drawing one on the board e.g. Teacher can use herself as the subject Describe teacher under the headings of a. appearance; b. favourite food; c. favourite activities; d. strength; e. weakness, etc Task 7: Teacher explains the mind map on TEBP P. 5 about the polar bear Teacher asks the students to colour the shapes according to the instructions. (Colouring can enhance the concept of classification) - Teacher asks questions about the information provided in the mind map to check students' understanding.	Task 9: Students complete the mind map of their chosen endangered animals at home following the example in Task 7.
6	To understand     a listed table     To think and     organize     information     systematically		Task 8: Teacher introduces a listed report table.     (Teacher highlights the questions under each heading.)     Teacher elaborates the list of problems faced by different endangered animals and the suggested helps from the people.     Teacher guides students to complete Task 8 by referring to the mind map on TEBP, p. 5.	Task 10: Students extract information from the mind map on p. 8 to complete the report table of their chosen animals

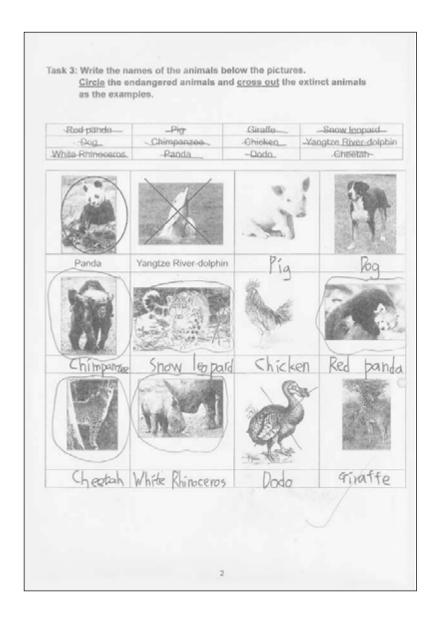
Lesson	Objectives	Materials	Teaching steps	Homework/ Remarks
7 & 8	To write an information report		- Task 11: Read the final report of the polar bear on TEBP P.11  (1) 1st time: silent-reading by students (2) 2nd time: reading aloud by teacher (3) 3rd time: reading after the teacher  Teacher emphasizes (a) the structure of an information report which basically follows the report table; (b) writing in paragraphs; (c) writing in complete sentences.  Task 12: Teacher explains task 12 and gives a piece of blank paper for the student to write the first draft of the report.	Task 12: Students complete Task 12 on the blank paper.
9	Prepare a speech		Task 13: Teacher gives the marked version of the report back to each student and asks him to write a neat copy for publishing.     Teacher explains Task 14 and 15 and arranges students for the one-minute speech in the next lessons.	Prepare the one- minute speech
10 & 11	Perform a speech	peer evaluation sheet     teacher's feedback form     a camera and a video-camera	Tasks 14 & 15:     Students take turn to perform the oneminute speech and complete Task 15     Teacher fills in a feedback sheet for each student.     (Take photo for each student and videoshoot each performance)     Students who are not performing have to fill in a peer evaluation form. (This can encourage students to listen to others and develop appreciation skills.)     Ask each student to calculate the total score they have given to each classmate and vote for the best-performing student     Teacher summarizes the factors for a good speech.	

Adapted from Pang Yuen Shan, Windsor, Ying Wa Primary School (2009).

# Appendices 11.2 a-i

Here are some snapshots of a Theme-based English Project entitled 'Endangered Animals', showing scaffolding instruction and formative assessment strategies (adapted from Pang Yuen Shan, Windsor, Ying Wa Primary School, 2009).

## Appendix 11.2a: Using pictures to arouse student interests



## Appendix 11.2b: Group discussion

Task 4: Read the story below and find out more about saving the endangered animals.

#### Saving the endangered animals (part 1)

#### Miracle Birds

Jane Goodall always loves animals. She spent many years studying them in the wild. Now she travels around the world, talking to people about ways to protect them. Goodall always carries a shiny black feather and tells her friends, "It is a symbol of hope!"

The feather is from a California condor. The black California condor has large wings. The wingspan can be as wide as 2.9 metres.

There used to be thousands of the birds in North America. But by 1982, there were only 22 left. The condors ate animals that had been shot with lead bullets. The lead poisoned the birds.

A group of scientists wanted to help. They brought all of the wild condors inside and looked after them. The number of condors grew.

Now there are more than 350 birds. About half have been returned to the wild. They are safer now because lead bullets are not allowed where condors live.



## Task 5: Group Discussion

- 1. What is a California condor? What does it look like?
- What was the problem for California condors in 1982?
- 3. What caused the problem?
- 4. What did some people do to solve the problem?
- 5. Do you think people are successful in solving the problem? Why?
- 6. Do you have any other ideas to help California condors?

3

## Appendix 11.2c: Individual comprehension



## Saving the endangered animals (part 2)

## It Takes a Village

In Colombia, monkeys called cotton-top tamarins are suffering.

Cotton-top tamarins are one of the smallest monkeys in the world. A

Cotton-top tamarin weighs less than one pound. It has long white hair flowing from its forehead to its shoulder.

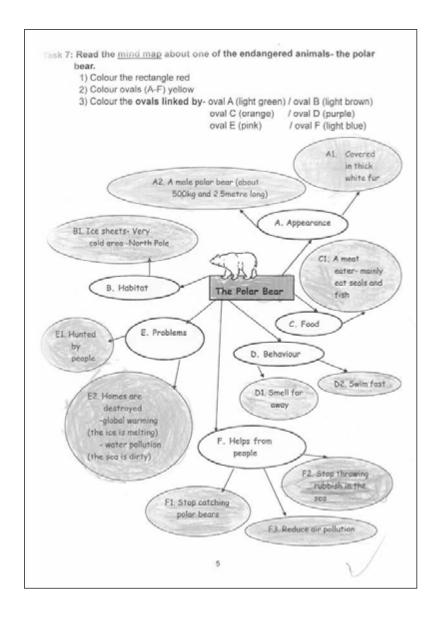
Cotton-top tamarins live in the forest. Rubbish left by people is polluting their habitat. The forest is also getting smaller because some people cut the trees to build houses and roads. A group of people is helping to clean up the forest. They collect the plastic bags that litter the ground.

Thanks to the people who save condors and tamarins. "These people and projects." says Goodall, "show that we can turn things around."

#### Task 6: Read the above story and answer the questions in complete sentences.

Write one fact about the appearance of a cotton-top tamarin.
It has long white hair flowing from its
2. What is the habitat of cotton-top tamarins? forehead to its shoulder.
Cotton-top tamaring habitat is in the forest
What is polluting the habitat of cotton-top tamarins?
4. What do some people do to help cotton-top tamarins? habit at.
4. What do some people do to help cotton-top tamarins?
They help to clean up the forest and to
5. Do you think only one person can save cotton top tamarins?  I den't think collect the plastic large that linter the ground.
Notione person can save cotton top tamarins.
Write your own suggestion to help cotton-top tamarins.
Put some rubbish bins in the forest

## Appendix 11.2d: Mind-maps for organizing reports



# Appendix 11.2e: Using an information table

Landango	ered Animal Report Table
Name of the animal	The Polar Bear
Appearance What does it look like?	- covered in thick white fur - A male polar bear weighs about 500kg and is 2.5metres long.
Habitat / Home Where does it live?	- in the North Pole - on the ice sheets
Food / Diet What does it eat?	- a nieat eater - eat fish and seals
Behaviour Examples: What can it do? What are its habits?	1) can smell far away 2) can swim fast
Problems What is causing this kind of animal to become endangered?	Put a tick in the bracket ( ) if it is one of the majo problems.  1. Their homes are destroyed. 2. They are hunted by people. 3. They are killed by some exotic species. 4. Their habitat is polluted. 5. Others (Please write it down)  Global warming - the melting of the ice sheets makes it difficult to find enough food to eat

## Appendix 11.2f: Reading and writing a report

#### Task 11: Read aloud the report about polar bears.

#### The Polar Bear

Polar bears live in the North Pole. It is the coldest area on the Earth. They play, eat and sleep on the very large ice sheets. In order to keep warm, the polar bear has thick white fur.

The polar bear is very big. A male polar bear weighs about 500kg and is 2.5 metres long. It is as heavy as 6 men! Although it is fat, it can swim fast and smell far away. It eats a lot of meat every day. It is good at catching seals and fish.

The polar bear is endangered. There are fewer polar bears in the world because people hunt them and destroy their habitats. The ice is melting and the sea is polluted. Polar bears cannot find enough food to eat.

People should stop killing polar bears and polluting their homes. Otherwise, polar bears would disappear one day!

### lask 12: Write a report about your chosen endangered animal.

Step 1: Write- Choose some information from your Endangered Animal Report Table to write a report on your chosen endangered animal on p.12.

(Start a new paragraph for each new idea.)

Step 2: Revise- Read it aloud. (Does it sound right?) Make changes.

Step 3: Check- Capitals / Punctuation / Spelling

Put a tick ( ) in the box if it is done.

Check the spelling.	_
<ol><li>Use correct punctuation.</li></ol>	-V
<ol><li>Use correct capitals.</li></ol>	~
Write in paragraphs.	V

lask 13: Publish- Make a neat copy of your report.

11

## Appendix 11.2g: Presentation task



# Appendix 11.2h: Peer evaluation form

	Theme	Wa Primary Scho 09-2010 (1 <sup>st</sup> Term Primary 2 ⊢based English P dangered Animals	roject	
	Public Speal	king- Peer Evalua	ation Form	
ame of student: ass : 2_	Steve Tang D (25)		Date: 10 De	ec, 09
sk: Listen to you	classmates' spe	eches and give	scores.	
Class number of the speaker	His speech was interesting.	He spoke with loud, clear	He made eye contact with the	Total score
	(1-3)	voice. (1-3)	audience. (1-3)	
28	2	2	2	6
13		3	2	6
- 4	1	3 2	2	7
3		2	1	5
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# Appendix 11.2i: Teacher's feedback form (a formative assessment)

	Theme-be	a Primary So 2010 (1st Te Primary 2 ased English	Project		
Name of student: Student: 2(25) Task: Research the topic of en	Tang			10 Dec	
	Asse:	Attempt	<b>Developing</b>	Achieved	Extending
The speech contained an interesting introduction, body	Evident	made			/
and conclusion Effective use of eye contact and body language					/
Spoke with a clear expressive voice (Appropriate volume, pauses and intonation)					/
Well prepared and rehearsed (Confident delivery)					/
Overall impression (Appeals to the audience)					V
Other comments: Aleve is He was so confide  Photo of the Students		delivering	ocaler in spa	this acti	vity. Excellent

## **Appendix 11.3: Investigating Circles**

In teaching the formula  $\pi$ =3.1416, teacher can ask students (in groups) to measure the circumference and diameter of several provided 'cakes', by using strings or paper strips. They are required to note down the measurements on a worksheet and to divide the circumference by the diameter. Students are asked to present the result in the whiteboard randomly by group, and compared with the teacher's prepared answer at the end. They then learn the formula and understand the principle of this formula in measuring circles. Below was result of this simulated exercise which presents the process of exploration of  $\pi$ =3.1416.

	Circumference	Diameter	Circumference / Diameter
Α	23.9	7.6	3.1
В	17.8	5.7	3.1
С	23.8	7.6	3.1
D	18.8	9.0	3.1
Е	23.9	7.6	3.1
F	17.8	5.7	3.1
G	31.2	9.9	3.1
Н	23.8	7.6	3.1