

### **DEVELOPING STUDENTS' THINKING SKILLS**

through the non-language arts elective modules



## **Icebreaker**



### How do you promote thinking skills in your classes?

Basic Skills	Thinking Skills	Personal & Social Skills		
Communication Skills	Critical Thinking Skills	Self-management Skills		
Mathematical Skills*	Creativity	Self-learning Skills*		
Information Technology Skills	Problem Solving Skills	Collaboration Skills		





## **Aims**

- To understand the concept of higher order thinking skills and how to promote these in the non-language arts classroom.
- To consider ways of approaching the teaching of generic skills in an integrated way.
- To take part in and reflect on lesson demonstrations that promote an integrative use of generic skills.



# **Facilities**





# Workshop Schedule



- Introduction
- Practical Demonstration 1 Plastic Ocean
- Break 15 minutes
- Practical Demonstration 2 Sport in Hong Kong
- Designing Tasks to Promote Holistic Thinking



#### **Non-Language Arts**

**Learning English through Sports Communication** 

**Learning English through Debating** 

**Learning English through Social Issues** 

**Learning English through Workplace Communication** 

- Provide learners with opportunities to apply subject knowledge and skills (i.e. the four skills, grammar, communicative functions, vocabulary and text types) through following a particular approach or exploring a particular topic which may or may not be covered in the Compulsory Part.
- Enhance the further development of generic skills such as communication, critical thinking, creativity and collaboration.





#### **Non-Language Arts - Integrating Elective Modules**

#### Examples

- •Explore a social issue then debate the issue
- •Sport as a social issue writing an article/doing a survey/surveyreport
- •Issues in the workplace debate the issue
- •Researching an organisation focused on a specific issue (e.g. NGOs, charities)





**Critical Thinking Skills** 

**Creativity** 

**Problem Solving Skills** 







When planning the whole-school curriculum and KLA curricula, schools are advised to **provide meaningful contexts** for the development of these skills in **a holistic manner** whereby the grouping/cluster of skills would be suitably and effectively **applied and developed** through classroom activities and learning experiences.

Ongoing Renewal of the School Curriculum – Focusing, Deepening and Sustaining Updating the English Language Education Key Learning Area Curriculum (Primary 1 to Secondary 6)



HOTS

**LOTS** 

**Creating** 

**Evaluating** 

**Analysing** 

**Understanding** 

Remembering





#### **HOTS vs LOTS**

#### Higher order thinking skills and lower order thinking skills.

- 1.When did the characters meet? LOT (remembering)
- 2. Where did the characters decide to go? LOT (remembering)
- 3.Can you remember three things they did there? LOT (remembering)
- 4. Why do you think the characters went to this place? HOT (analysing)
- 5. What do you think will happen next? LOT (understanding)
- 6. What are the strengths and weaknesses of the story? HOT (evaluating)
- 7.Can you think of a better ending? What and Why? HOT (creating)



# **Lesson Demonstrations**



### PD1 – Environmental Issues (Plastic Ocean)

A blend of Social Issues and Debating NLAs

### PD2 – Sport in Hong Kong

A blend of Sports Communication and Social Issues NLAs



#### Aims:

- To understand the issue of plastic waste.
- To explore the issue through research and propose some ideas/solutions.
- To express personal opinions.
- To take part in a mini debate around the issue.







### Approach:

#### Critical-thinking skills (enquiry phase)

Asking questions, exploring issues, identifying main ideas and clarifying information.

#### **Creativity**

Brainstorming, generating ideas and fine tuning decisions.

#### **Critical-thinking and Problem Solving Skills**

Comparing options and solutions, considering from multiple perspectives, developing a plan of action, evaluating and reflecting on the completed task.



Which products made of plastic do you use?

How do you dispose of the plastic?

What happens to the plastic you throw away? Do you know?





### Key Vocabulary

Match the vocabulary with the correct definition and write a-h next to the numbers 1-8.

1							
					а		
	٠.						

- 2..... to degrade
- 3...... a landfill site
- 4..... to dump
- 5..... to endure
- 6...... a free diver
- 7...... a fraction of something
- 8..... pristine

- a. an area where waste is buried under the ground
- b. a small part of something
- c. a difficult or dangerous situation that needs urgent attention
- d. a diver who holds their breath under water
- e. in perfect condition
- f. to get rid of something quickly without worrying about it
- g. to suffer
- h. to break down into smaller substances





First Viewing – Comprehension Task

What is the significance of these numbers?

8 million

276





Second Viewing – Language

How are opinions stated in the video?

We have to make our life better for our kids' children.

We need a wave of change.





Research Phase – Critical Thinking

#### **Headlines**

Hong Kong searches for a culprit as garbage piles high on beaches

What a mess: Hong Kong to discuss rubbish deluge with Guangdong authorities

Trash from China swamps Hong Kong beaches!

Hong Kong school children urge McDonalds to stop serving drinks in plastic bags



Research Phase – Critical Thinking

Recent video from Sky news (January 31st 2017):

https://www.youtube.com/watch?v=aNd1Nh\_IFUc





### What's your opinion?

Scan the QR code and type your opinion on the padlet wall.

We need to.... Why don't we.....

We have to.... We should....

We ought to.... We could.....





#### Rank the solutions.



Which do you think will be most effective?

- Collect the plastic and make artworks out of it.
- Urge companies to use recycled plastic e.g. Watsons water.
- Coordinated government action between Hong Kong and China.
- Set up a special 'Trash Police' that can fine on the spot.
- Start a campaign to limit single use plastic items.



### **Different perspectives**

How might the following react if the solutions are implemented/not implemented?

- The Police
- Fishermen
- Restaurant owners
- The Plastics Industry
- The Government





### **Presenting your ideas**

What are the best actions to take?

**Solution** 

Reason

**Impact** 





### **Presenting your ideas**

You may want to give your students the option to present their ideas using apps/media.

Let's watch this example using sonicpics.





#### **Debate**

This house believes that most trash on beaches is a result of irresponsible members of the public and they should clean it up.

### For or Against

Let's debate!







Problem Solving and Critical Thinking: student evaluation and reflection

- Task accomplishment quality of outcomes.
- Invite and evaluate feedback from peers.
- Process the feedback to improve the solutions presented.





#### **Reflection Questions**

1. Which language skills did the lesson develop?

2. How did this lesson develop holistic thinking skills?

3. What other impacts on learning does the lesson have?







#### Reflection Questions – Feedback

- 1.Learners are engaged in purposeful tasks requiring their integrative use of different language skills (e.g. listening, reading, speaking, and writing).
- 2. Learners apply generic skills in an integrative manner and develop holistic thinking skills through: exploring a complex social issue; synthesising ideas from different sources of information; brainstorming possible solutions, considering new possibilities and unconventional ideas; analysing and comparing the cost and benefit of different solutions anticipating stakeholders' responses; and fine-tuning the suggested solutions.
- 3. Learners make effective use of IT skills to locate, evaluate, extract, organise and present information.



# **BREAK**

### 15 minutes





#### Aims:

- To develop a better understanding of the place of sport in the community.
- To understand the process of conducting a survey.
- To analyse, organize and present the survey results in a report/article.





### Approach:

#### **Critical-thinking skills (enquiry phase)**

•Asking questions, exploring issues, identifying main ideas and clarifying information, considering from multiple perspectives.

#### **Creativity**

Brainstorming, generating ideas and fine tuning decisions.

#### **Critical Thinking and Problem Solving Skills**

•Developing a plan of action, evaluating data and reflecting on the completed task.



#### **Discussion**

How important is sport:

- In your school?
- In your community?
- In your city?





#### In the 2016 Rio Olympics Team GB won 67 medals.

2016 Summer Olympics medal table

Rank ¢	NOC ÷	Gold ≑	Silver +	Bronze \$	Total <b>≑</b>
1	United States (USA)	46	37	38	121
2	Great Britain (GBR)	27	23	17	67
3	China (CHN)	26	18	26	70
4	Russia (RUS)	19	17	19	55
5	Germany (GER)	17	10	15	42



#### This sparked a lot of comment here in Hong Kong:

'Chief Executive Leung Chun-ying wants to nurture young potential Olympians in schools modeled after the winning Team Great Britain......

Leung said Hong Kong can learn from the UK, which surpassed China and was ranked second in the gold medal tally with 27, in terms of how the government can cooperate with schools to promote sports.'

http://www.thestandard.com.hk/section-news.php?id=173209

Flora Chung Aug 24, 2016





### Different perspectives

'...however, while promotion at schools has been a factor, it would be misleading to overplay this factor. The major component was funding.

.....is he prepared to fork out HK\$51 million for each Olympic medal - which is Britain's estimated cost for these Games?

Sports development in Britain is funded by the national lottery, so that it's unaffected by budgetary changes. Today, 75 percent of Britain's Olympic funding is paid through the lottery. As it prepared for Rio, related funding had soared to HK\$3.6 billion.'

http://www.thestandard.com.hk/section-news.php?id=173244 Editorial Aug 25, 2016





### Different perspectives

'Hong Kong has to decide if it is serious about sport and follow a successful model like Great Britain's or continue in a fragmented and half-hearted way, leading sports administrator Mark Sutcliffe says.'

http://www.scmp.com/sport/hong-kong/article/2010245/borrow-uk-blueprint-urges-hong-kong-soccer-chief-mark-sutcliffe-he

Staff Reporter Sunday, 28 August, 2016





#### **Suggestions**

- Establish a Governmental Agency or NGO with specific responsibility for all sport across Hong Kong (like UK Sport).
- Prepare a Hong Kong Sports Strategy defining the priorities, objectives and targets. The plan should cover facilities, participation, events, structures, systems and resources.
- Set up specialist sports schools e.g. the Singapore Sports School that helped deliver its first gold medal in swimming in Rio.





### Research question

How can Hong Kong improve its' sporting performance at the Olympic Games?





## The Survey

Please try the survey created with 'survey monkey'

https://www.surveymonkey.com/r/698CHSV





### **Survey Questions – Analysis**

#### Are the questions:

- Closed questions with finite responses to generate statistical analysis?
- Open ended questions which allow the researcher to get a more in depth understanding?





#### Writing survey questions – Grouping Students

- Whole class brainstorm on research topic.
- Put the students into small groups to brainstorm and write questions each group writes one question.
- Swap the questions and refine in their groups.
- Collect all the questions and copy for all the groups.
- The groups order and design the questionnaire.





#### **Presentation of Data**

The survey monkey app/website allows you to present your data in charts straight from the website which you can export and add to your presentation and report.





### **Survey Report Structure**

- o Introduction.
- o Methodology.
- o Survey Results.
- o Analysis of Survey results.
- o Conclusion and recommendations.





#### **Language Focus: Analysing and Presenting Results**

Tenses used, e.g. the past tense to report survey process and the present tense to explain findings and conclusions. Passive voice – The survey was conducted in order to.....

#### Linking words:

- to contrast whereas, on the other hand, however;
- to add ideas additionally;
- to show consequences as a result, consequently, therefore;
- to sum up in conclusion, finally.

Numerical expressions e.g. percentages to describe data





#### **Reflection Questions**

1. What stages do students need to go through to produce a survey?

2. What generic skills were developed and how?

3. How would you adapt the procedures to fit your students?





#### **Reflection Questions - feedback**

1.

- •Describe the background for the need for research
- Develop a research question
- Write the survey questions
- Trial and edit
- Design and administer the survey
- Analyse
- •Report.

2.

A variety of generic skills can be developed in an integrative manner through research; the formulation of a research question; the writing of survey questions; the analysis of data and the subsequent report and recommendations.





#### Aims:

- To introduce a lesson framework for the planning and development of lessons promoting holistic thinking.
- To review collaboration in the classroom and consider some important factors.





#### **Key Actions**

#### **Creativity**

Generating new ideas and fine tuning decisions.

#### **Critical-thinking skills**

Asking questions, rating and selecting, comparing options.

#### **Problem-solving skills**

Finding solutions and developing a plan of action.





#### **Basic Framework**

Consider the example lesson plan 'Hunger'.

- 1. Order the activities.
- 2. Match the activities to the generic skills involved.





#### How would you approach the lesson(s)?

#### Let's look at the lesson(s) plan.

- 1. Think about the questions you would ask the students. What would you ask?
- 2. How would you need to scaffold certain parts of the lesson(s)?
- 3. What materials would you need to make?
- 4. What e-resources would you use? How would you use these?
- 5. How much time would you give the students to complete each section/lesson?



Feedback – Share your ideas.





### Feedback – provide opportunities to:

- Express views
- Analyse data
- Compare different sources
- Identify problems
- Explore alternatives
- Explain solutions



### Collaboration in the classroom

#### Collaboration in the classroom – some important factors.

- All members of the group must give input into decision making.
- Group members are responsible for the thinking, teaching, and monitoring of all members in the group.
- Each member makes an equal contribution to the whole work.
- Group members must identify and build on their individual strengths so that everyone makes a significant contribution to the task – everyone has a role.
- A variety of communication channels, e.g. Group discussion, chat on apps.



### References

#### Plastic Ocean

http://learnenglishteens.britishcouncil.org/study-break/video-zone/plastic-ocean

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http://www.scmp.com/news/hong-kong/health-environment/article/2052212/400-syringes-200-drug-phials-medical-waste

#### News Articles – Hong Kong Sport

http://www.scmp.com/comment/insight-opinion/article/2011100/sports-development-going-round-circles-hong-kong-chases

http://www.scmp.com/sport/hong-kong/article/2010245/borrow-uk-blueprint-urges-hong-kong-soccer-chief-mark-sutcliffe-he



# **Any questions?**





## **Feedback Forms**



