



Implementing environmental education for enhancing students' environmental literacy and cultivating their environmental awareness

Mr Leung Shong Tung, Kowloon True Light School



Geography Teachers' Professional Experience Sharing on Geography

Agenda

- Model of implementing environmental education via Geography curriculum and teaching
- Learn: Environmental education at curriculum level
- Act: Activities in relation to environmental education
- Lead: Senior forms students to lead environmental campaigns



About my serving school

- Characteristics of Geography Curriculum
 - S1: 1 lesson per week
 - S2: 2 lessons per week
 - S3: 2 lessons per week
 - S4-6: 5 lessons per week (with one group of students taking Geography)
- Limited teaching time and manpower



About the curriculum features

Kowloon True Light School (2022-2023)
Geography
Junior Secondary Curriculum Framework

Level	Issues (Regular teaching and learning)	Extended study (via RAC worksheet & SDL projects)	Geographical competencies & LAC strategies	Specific assessment items
S1	<u>Core 1</u> : Using urban space wisely 1. Land uses 2. Commercial, industrial & residential land uses 3. Urban problems & solutions	<u>Core 5</u> : Global shift of manufacturing industry RAC1: Where have our factories gone? <u>Extended Activity: Visit to T-Park/ O-Park</u> - Understand the land pollution problem in HK - Explore measures to treat waste sustainably	LAC Exercises: Sentence construction Map reading skills 1A 1. What is a map? What are the elements in a map? 2. Conventional signs 3. Grid references	a. <u>Identify</u> ... b. <u>Describe</u> ... c. <u>Explain</u> ... d. <u>Calculate</u> population density and percentage change e. <u>Quote</u> map evidence to describe and explain a geographical phenomenon f. <u>Compare</u> ... g. <u>Discuss</u> the reasons for and against
	<u>Elective 6</u> : Oceans in trouble 4. Marine ecosystem, its importance to us & overfishing	RAC2: Where are the major industrial regions in the world? How do they change over time?	4. Latitudes and longitudes 5. Major continents and oceans	
S2	<u>Core 3</u> : Food problems 1. Farming regions of China 2. Farming problems & solutions	<u>Elective 3</u> : Taming the sand RAC1: What is desertification? What are the causes of spreading sand?	Map reading skills 1B 6. Direction 7. Distance	a. <u>Account</u> for a geographical phenomenon b. <u>Discuss</u> the pros and cons/ merits and demerits
	<u>Core 4</u> : The trouble of water 3. Water cycle 4. The water problems: flooding & drought Problem solving: Flooding in China Values Education: Opportunities and challenges brought by natural hazards	RAC2: What is sandstorm? How does it affect us? <u>Extended Activity: Documentary watching</u> - How do we combat sandstorms and desertification in North China?	LAC Exercises: Paragraph writing	c. <u>Draw</u> a climatic graph of a city. d. <u>Interpret</u> a climatic graph to find out annual mean and range of temperatures and total rainfall

- From HK (S1) to China (S2) to the world (S3)
- Core & extended study
- Geographical competencies & LAC strategies



About the curriculum features

S3	Core 2: Living with natural hazards 1. Landslide 2. Typhoon, earthquake & choice Values Education: Opportunities and challenges brought by natural hazards	Extended Activity: Visit to Kadoorie Farm & Botanic Garden - Explore the vulnerability of and resilience towards natural hazards in HK	Map reading skills 2 1. Relief and maps 2. Cross-section & vertical exaggeration 3. Gradient 4. Identifying relief features	a. Discuss the effectiveness and limitations
	Elective 2: Changing climate, changing environments 3. Changes in our climates 4. Impact & responses to climate change	Core 6: Scramble for energy RAC1: What are the problems with current energy resources? - The use of fossil fuels and its related environmental problems RAC2: What alternatives do we have? - Nuclear power vs. HEP	LAC Exercises: Essay writing	b. Discuss whether (based on data source)

Extended Activity is not compulsory to all students. It is promoted through the use of subject-based Self-directed Learning Award Scheme.

Values Education/ Echoing with the theme of the year

Problem-solving learning/ Decision-making (with articulation)

- Various major concerns to be addressed, e.g. PARVway, SDL, values education
- Opportunities and Threats?

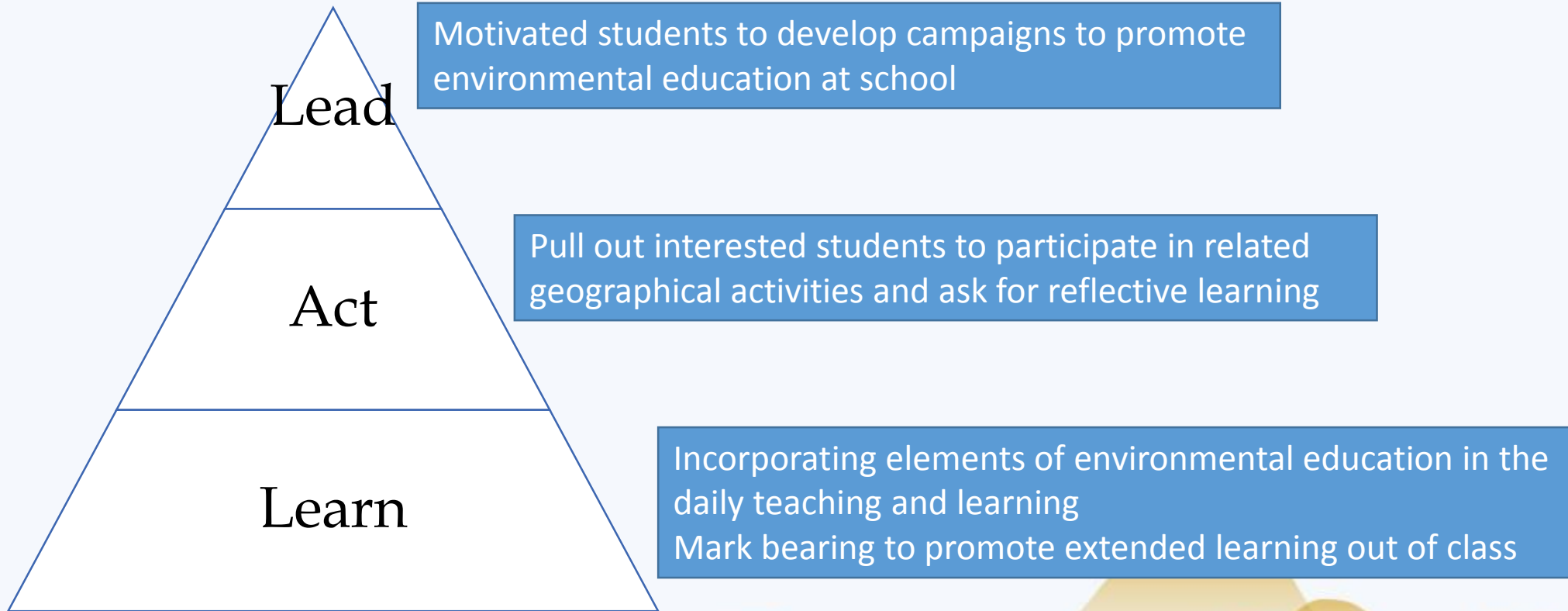


Model of implementing environmental education at school

- Inspired by The Nature Conservancy from the Ridge to Reef Project ...



Model of implementing environmental education at school



Learn: Environmental education at curriculum level

- Concepts and values related to environmental education infused into regular teaching and learning
- Ridge to Reef Programme
- Informal curriculum



Formal curriculum: Needs assessment

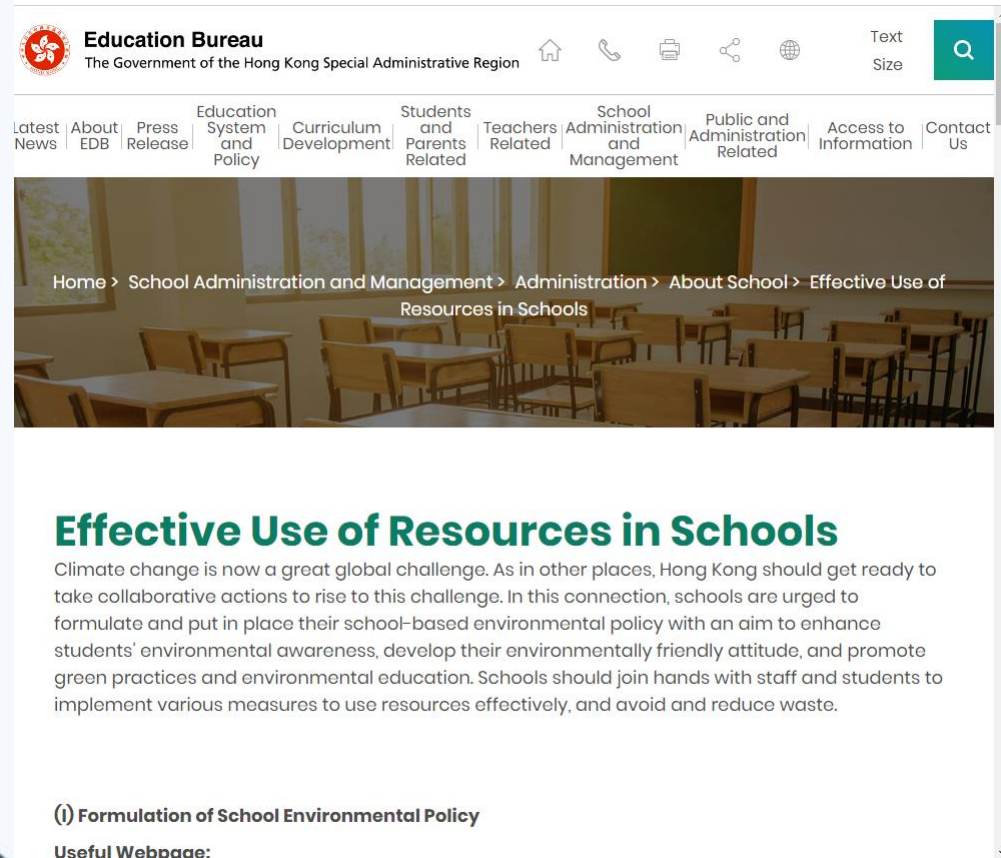
- Planning & needs assessment (CDC, 2011 & EDB, 2022)

1.3.3 Values and Attitudes

- (a) be commit to actions conducive to a better environment and to the sustainability of the world;
- (b) develop a sense of belonging to our society and nation, and be willing to take action for the betterment of our society and nation;
- (c) be aware of the increasing global interdependence and the importance of international cooperation in handling global issues;
- (d) show concern for the people who are less privileged and who are suffering from various types of problems; and
- (e) develop an understanding and respect for other people, their values, cultures and ways of life.

⬆ Values education vs. environmental education

Out of scope of Geography teachers ➤



The screenshot shows the Education Bureau website for the Hong Kong Special Administrative Region. The header includes the EDB logo and navigation links such as 'Latest News', 'About EDB', 'Press Release', 'Education System and Policy', 'Curriculum Development', 'Students and Parents Related', 'Teachers Related', 'School Administration and Management', 'Public and Administration Related', 'Access to Information', and 'Contact Us'. The main content area features a banner image of a classroom and the title 'Effective Use of Resources in Schools'. Below the banner, the text discusses the need for schools to take collaborative actions to address climate change, emphasizing the importance of formulating and implementing school-based environmental policies to enhance students' environmental awareness and promote green practices. The page also mentions the 'Formulation of School Environmental Policy' as a key step.

Effective Use of Resources in Schools

Climate change is now a great global challenge. As in other places, Hong Kong should get ready to take collaborative actions to rise to this challenge. In this connection, schools are urged to formulate and put in place their school-based environmental policy with an aim to enhance students' environmental awareness, develop their environmentally friendly attitude, and promote green practices and environmental education. Schools should join hands with staff and students to implement various measures to use resources effectively, and avoid and reduce waste.

(i) Formulation of School Environmental Policy

Useful Webpage:



Formal curriculum: Needs assessment

- Planning & needs assessment (The Environmental Campaign Committee, 2022)

個別活動評估 Activity Assessment

知識、態度和行為評估模式
Knowledge - Attitude - Behaviour (KAB) Model

- 量度項目為參加者帶來**行為改變方面的長遠效益和影響**
To measure the long-term effectiveness and impacts of the project on behavioural changes of the participants

知識傳遞 KNOWLEDGE transfer	<ul style="list-style-type: none">• 對有關主題主要資訊的認識• The awareness of key information about a topic
態度轉變 ATTITUDE shift	<ul style="list-style-type: none">• 對事情的願望、興趣、動機、方向或感覺• The desire, interest, motivation, orientation or perception towards something
行為改變 BEHAVIOURAL change	<ul style="list-style-type: none">• 完成活動的規律性• The regularity with completing an activity

- Knowledge transfer
- Attitude shift
- Behavioural change
- Examples: Pollution, natural hazards & human responses, climate change



Formal curriculum: Needs assessment

- Planning & needs assessment (Environmental Protection Department, 2022)



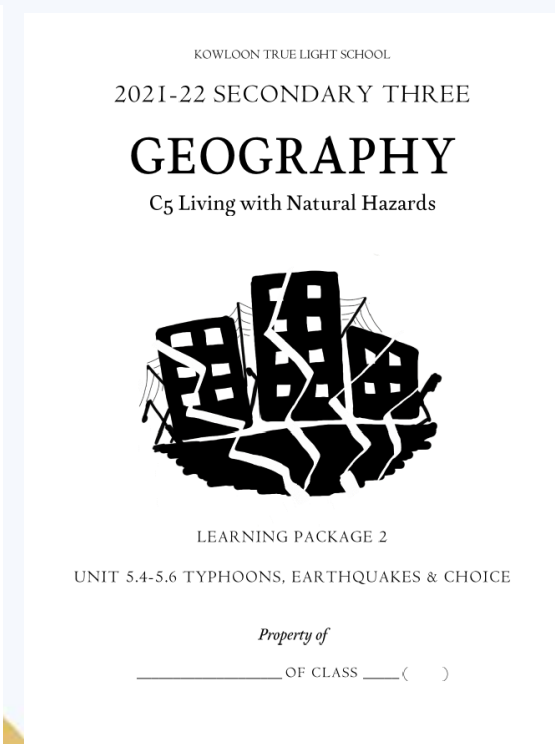
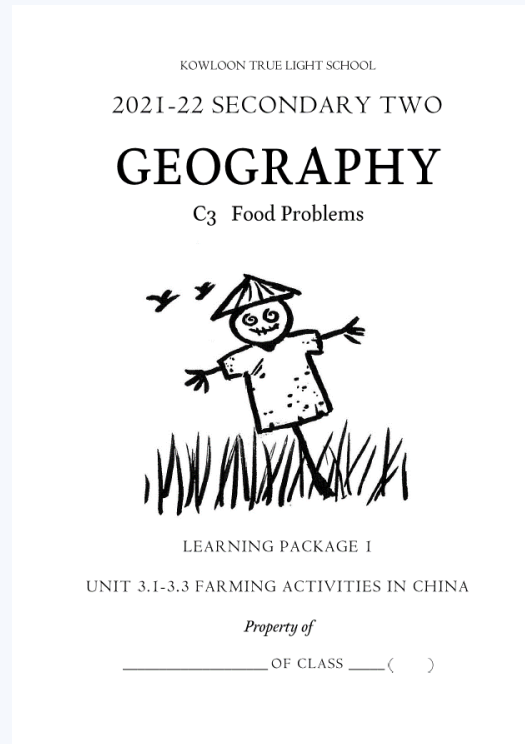
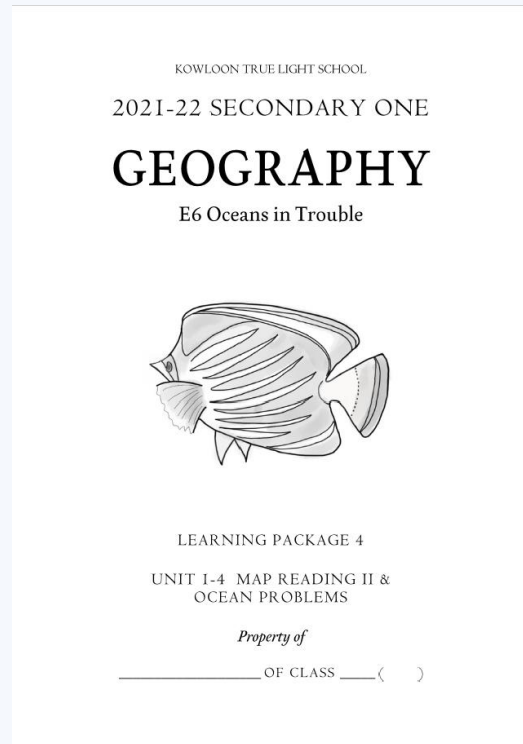
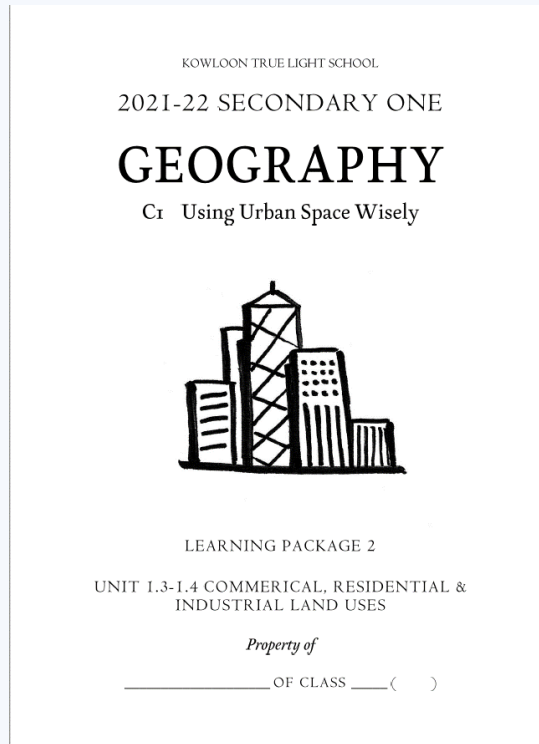
Formal curriculum: Needs assessment

Themes of environmental education	S1 City & Ocean	S2 Food	S2 Water	S3 Hazard	S3 Climate change
Environmental protection (e.g. air, noise, water and solid waste, biodiversity)	✓		✓		
Energy					✓
Climate change					✓
Sustainable development	✓	✓	✓		

Discussion on the man-land relationship



Development of school-based learning packages



Pre-lesson (module) task: linking themselves to the curriculum

Documentary watching & in-class show and tell sharing

The Trouble of Water - Too much or too little

Pre-Lesson Task 3: Water footprint

1. Almost everything we use, eat or drink needs water for the production process.

(a) How much water do you use directly and indirectly every day? Explain briefly.

>2L
Direct: _____
Indirect: _____

(b) Go to the following website or scan the QR code on the right to calculate your water usage every day.
(<https://www.socsc.hku.hk/jcwise/videos/?lang=zh-hant>)

Clothing: 6348 kg
Food: 1809 kg
Household: 3648 kg
Transport: X
Total: 11,805 kg

(c) The water we use directly and indirectly is known as **water footprint**. Do you think you have a great water footprint? Why or why not? Watch the following video and explain your major water footprint.
(<https://www.youtube.com/watch?v=6idjZgO5yq4>)

I don't agree that I have a great water footprint. I keep using much water today. My major water footprint is clothing. Most of my clothes are made of cotton which used a large usage of water footprint.

Oceans in Trouble

Pre-Lesson Task 3: Oceans and us

1. Oceans have accounted for 70% of our earth's territory. They are important to us.

COASTAL SEAS

Watch the introduction of the above documentary about Coastal Seas
<https://www.youtube.com/watch?v=r9PeYPHdpNo> (0:00 - 3:23)

(a) Bring along a favourite item that is the product from oceans and seas to class. Tell your classmates about the following:

- What is it?
- Where can you buy (obtain) it?
- How do you obtain it?

Your presentation note card

PEARL

- hard
- glistening object
- smooth
- rare
- valuable
- jewelry stores
- from shelled mollusk

FAV.

- secret of nature
- natural
- wide

Oceans in Trouble

Attach a photo/ draw/ _____

(b) Hong Kong is a coastal city. Figure 1 shows the southern part of China.

Figure 1

(i) Label Hong Kong on Figure 1.

(ii) Identify the sea surrounding Hong Kong and South China. Nan Hai / South China Sea

(iii) We have been living in the coastal area. Imagine one day you migrate to an inland city. How will your life change without the oceans and seas? Explain briefly.

1. There may be a loss of recreational activities, e.g. water sports.
2. We may have a greater difficulty to obtain fresh seafood.
seafood / sea products will be more expensive. We can't have much entertaining activities on the sea. Environment will also be drier than coastal area since there is less moisture around the land.

Water footprint calculator

Questionings to reflect on environmental issues and awareness

(b) Hong Kong is a coastal city. Figure 1 shows the southern part of China.

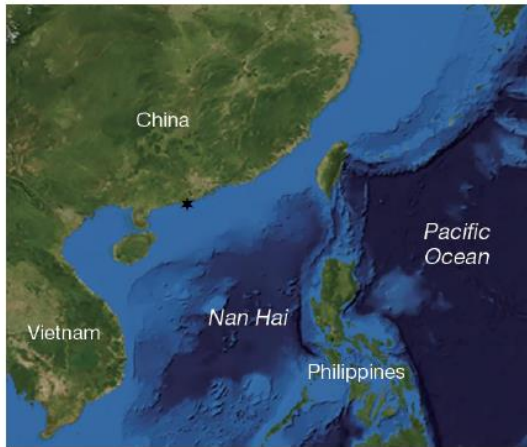


Figure 1

- (i) Label Hong Kong on Figure 1.
- (ii) Identify the sea surrounding Hong Kong and South China. South China Sea
- (iii) We have been living in the coastal area. Imagine one day you migrate to an inland city. How will your life change without the oceans and seas? Explain briefly.

Appreciating the interdependence between human beings and natural environment

Importance of the oceans

Dry skin; I could not eat very fresh food.
There may be a loss of recreational activities e.g. water sports. Also
we may have a greater difficulty to obtain fresh seafood.

When I migrate to an inland city, it won't always rain and maybe the
sea food won't be so popular in inland city. Also, it will be so dry there.

1. There may be a loss of recreational activities e.g. water sports.
2. We may have a greater difficulty to obtain fresh sea food.

I will be eating less fresh seafood. It is because living in the coastal area now, I
can eat many fresh seafood with a lower price. The price of seafood will be
higher in the inland city, thus, I would not eat seafood as frequent as now.
- There may be a loss of recreational activities e.g. water sports
- We may have a greater difficulty to obtain fresh seafood.



Development of environmental education knowledge

- Annotations
- Photograph interpretation
- Enquiry approach
- Extended learning

Farming problems in China

Food Problems - Can we feed ourselves?

(iii) Soil erosion and desertification

6. Figure 6a shows the marginal land in China. Figure 6b shows the process of soil erosion. Figure 6c shows the farmland of different productivity in China.



Figure 6a

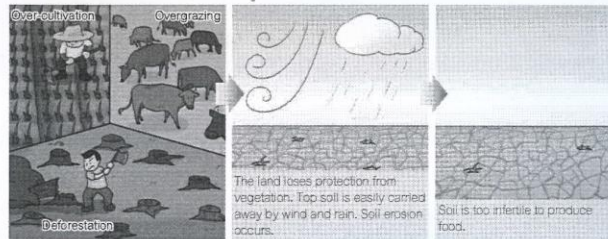


Figure 6b

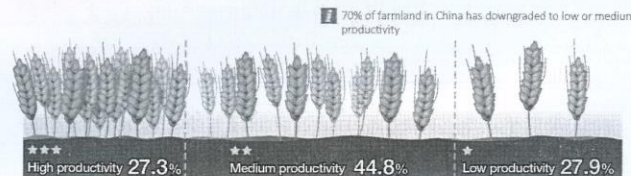


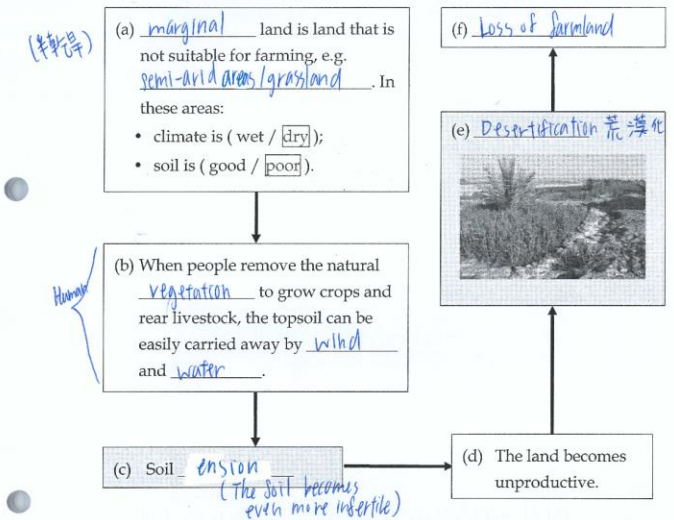
Figure 6c

Food Problems - Can we feed ourselves?

Complete the following flow chart by answering the questions below.

(a) Why is the land in Figure 6a not suitable for farming?

(b) - (f) What happens when people try to farm in these regions?



Know more: About over-cultivation and overgrazing

Over-cultivation: Excessive crops are grown on the farmland. Therefore, soil nutrients are used up and the productivity of land is reduced.

Overgrazing: Excessive livestock is reared on the land. Therefore, soil fertility cannot replenish, and pasture fails to grow again.

Socio-economic impact of marine pollution

Development of environmental education knowledge

- Reading to learn & extended writing

(b) Figure 15b shows a passage on consuming Bluefin tuna in the recent decades. Figure 15c shows how toxicity increases up the food chain.

The Times

The right place. The right Times.

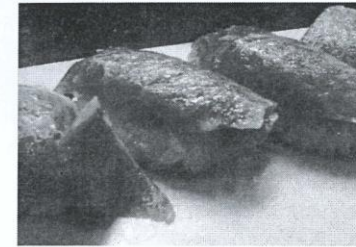
High Mercury Levels Are Found in Tuna Sushi

Recent laboratory tests found so much mercury in tuna sushi from 20 Manhattan stores and restaurants that at most of them, a regular diet of six pieces a week would exceed the levels considered acceptable by the Environmental Protection Agency.

In the Times survey, 10 of the 13 restaurants said at least one of the two tuna samples bought was bluefin. By contrast, other species, like yellowfin and albacore, generally have much less mercury.

In 2004 the Food and Drug Administration joined with the Environmental Protection Agency to warn women who might become pregnant and children to limit their consumption of certain varieties of canned tuna because the mercury it contained might damage the developing nervous system. Fresh tuna was not included in the advisory. Most of the bluefin tuna sushi in the Times samples contained far more mercury than is typically found in canned tuna.

Over the past several years, studies have suggested that mercury may also cause health problems for adults, including an increased risk of cardiovascular disease and neurological symptoms.



The Times

Figure 15b

What are the health problems of consuming too much bluefin tuna? Explain briefly.

High overfishing, bluefin tuna is on the road to extinction. According
① problems nowadays: they have absorbed a lot of toxins and heavy metals
due to marine pollution - heavy metals and toxins are discharged to the oceans.
② smaller fishes absorb the toxins in their body. When the tuna consume them, the toxins will
② problems if humans consuming too much: these bluefin tuna contain a build up
lot of toxins and heavy metals - when humans consume these contaminated
chain.
Badly affected (health) items, we will be poisoned and having higher risk of
Algal marine plants → ○ → ○ → ○ cardiovascular disease and
neurological symptoms



Development of environmental education knowledge

• Video watching & brief reflection

The Trouble of Water - Too much or too little

B. What is the relationship between the relief of China and the direction of flow of major rivers?

9. Figure 9 shows the relief of China.

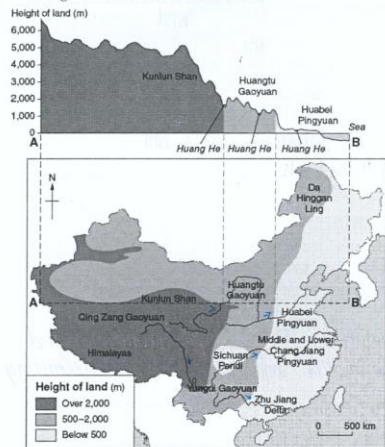


Figure 9

(a) Refer to Figure 9. Name an example for each of the following features, and the river basins in which they are found.

Feature	Example	Location
Plateau (Gaoyuan)	Huangtu Gaoyuan Qinghai Gaoyuan Yong ping Gaoyuan	Huang He Basin Zangpo river basin Zhu Jiang basin
Basin (Pendi)	Sichuan Pendi	Chang Jiang Basin
Plain (Pingyuan)	Hubei Pingyuan Middle and lower Chang Jiang Pingyuan	Huang He Basin Chang Jiang Basin

The Trouble of Water - Too much or too little

(b) Mark the direction of the flow of the three important rivers with red arrows in Figure 9. Describe and explain the direction of the flow of the major rivers of China.

The major rivers of China flow from the west (direction) to east (direction) into the sea.

Most of the highlands in China are located in the west while most of the lowlands in China are located in the east. Furthermore, the height of land in China decreases from west to east. Since water flows from high levels to low levels, the major rivers in China flow from the west to east.

(c) Watch the video "What is China?" (<https://www.youtube.com/watch?v=RmA4IrzFgd0>).

How has the mother nature brought benefits to Chinese people?

I think the mother nature let Chinese people become more good
The mother nature have been improved because of technology
and artificial.

(d) Identify the characteristics of the three major rivers in China. Put a ✓ in the correct box.

	Huang He (Yellow River)	Chang Jiang (Yangtze River)	Zhu Jiang (Pearl River)
1. It is the longest river in China.		✓	
2. It provides freshwater to the people in Hong Kong.			✓
3. It is the river with the richest sand content in the world.	✓		
4. Its river discharge (i.e. volume of water) is the largest in China.		✓	
5. As it flows through the Huangtu Gaoyuan, a large amount of sand is brought into the river and the river water becomes muddy.	✓		

Man-land relationship: Case study of relief of China

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Development of environmental education knowledge

- Case study

B. Socio-economic impact: Reduction in employment and income

5. Figure 5 shows the information about the collapse of cod fishing on the Grand Banks in Atlantic Ocean.

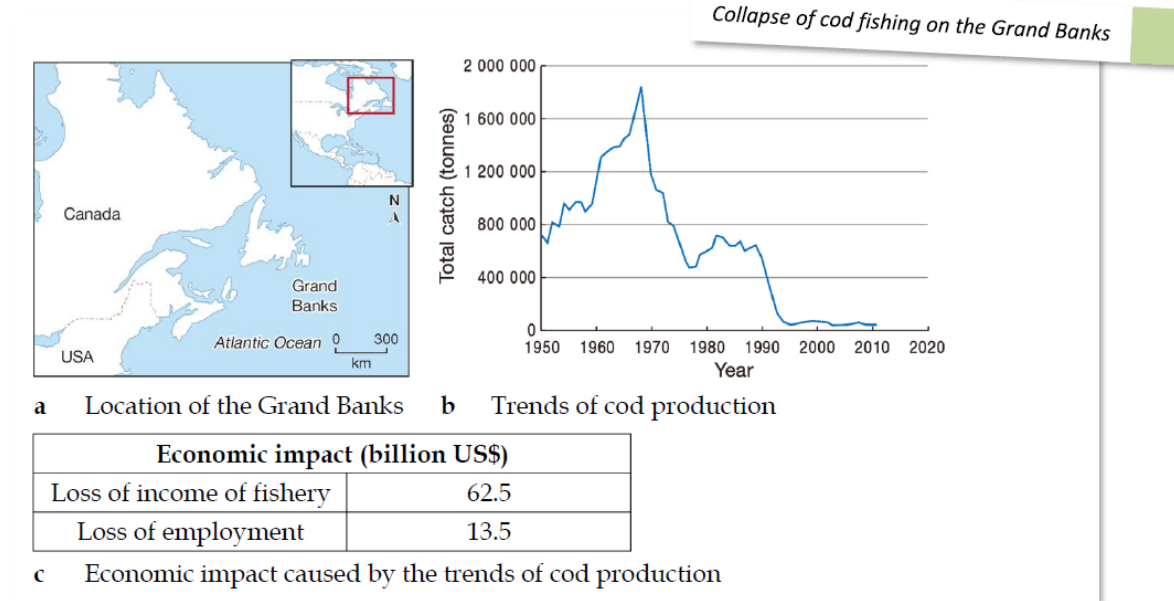


Figure 5

Negative impact of overfishing



Development of environmental education knowledge & attitude

- Varied way to discuss the problem and reflect

Negative impact of overfishing

(a) (i) Describe the changes of cod production at the Grand Banks from 1950 to 2010.

in general

The changes of cod production decreases rapidly. From 1950 to 1970, it increased.

rapidly, from 700 000 to 1 000 000. From 1970 to 2010, it decreased sharply from

1 800 000 to 100 000. Therefore, in general, the cod production at the Grand Banks decreased.

(ii) Describe the socio-economic problem that overfishing may cause.

collapse of fishing industry → unemployment → economic decline

1. *Overfishing cause many fishermen lose their jobs. (the increasing unemployment rate)*

2. *Overfishing also affects tourism industry. (seafood pricing will increase)*

3. *Overfishing may cause decrease of food income.*

(b) How does overfishing lead to the decline of tourism activity?

Overfishing damage marine life / habitat (e.g. coral reef)

Since in some areas where coral reefs are damaged by overfishing, fewer tourists

or divers will visit there. The related tourism services such as hotels, shops and restaurants will be affected. People will suffer from the loss of jobs and income which lead to the decline of tourism activity.



Development of environmental education knowledge & attitude

- Varied way to discuss the problem and reflect

Negative impact of overfishing

Leung Shong Tung (LST) + 23 • 2mo

Lesson learnt from overfishing in Grand Banks

What is the lesson learnt in the overfishing of cods in Grand Banks? To what extent, should we care about our environment?

padlet

Leung Shong Tung (LST) + 23 • 2mo

Lesson learnt from overfishing in Grand Banks

What is the lesson learnt in the overfishing of cods in Grand Banks? To what extent, should we care about our environment?

Anonymous 2mo

Angel Lau

What is the lesson learnt in the overfishing of cods in Grand Banks?

Overfishing leads to all sorts of destruction. From damaged ecosystems, natural habitats and species, to economic losses such as less seafood production and affected tourism industry. Overfishing of one kind of species does not only affect that specific species but instead the whole ecosystem. The disappearance of one kind can lead to a dramatic change to the whole situation.

To what extent, should we care about our environment? The impacts brought by overfishing does not only affect the natural but also the human world by a lot. We are the ones who need nature, not nature depending on us. To the very extreme, overfishing could lead to deadly problems. Missing one species from the ecosystem, the marine life in the ocean will soon die out and lead to no food production and no oxygen supply (50%-80% of oxygen in the world is produced by the photosynthetic plankton in the ocean). These are only one of many problems brought by overfishing. The idea also applies to the environment

Anonymous 2mo

Chan Sze Tung Kelly 3D03

Fishing is one of the most significant drivers of declines in ocean wildlife populations. Catching fish is not inherently bad for the ocean, except for when vessels catch fish faster than stocks can replenish, something called overfishing. I have learnt that the increasing population of human have a major effect on the overfishing problem. The increasing demand for food, resulting to large amount of fish caught, decreasing in fish stocks and lastly turning the fish resources depleted. And like the Cod in the Grand Bank, the problem has worsen as time passed. There are a variety of hypotheses regarding the reason behind the stock's failure to recover including changing temperatures, increased predation pressure on cod, decreased prey abundance, and increased competition. The damage done by overfishing goes beyond the marine environment. Billions of people rely on fish for protein, and fishing is the principal livelihood for millions of people around the world. Many people who make a living catching, selling, and buying fish are working to improve how the world manages and conserves

Anonymous 2mo

What did I learn in the overfishing of cods in Grand Bank

I learnt about the seriousness of overfishing and the methods that we should do for easing the problem. Human's demand of fish stocks has been increasing since then. On Therefore, we cause the problem. This problem will break the food chains and reduces the biodiversity. Some fishing methods are even destructive to the environment. Furthermore, when fish resources in an area are depleted, many fishermen will lose their jobs. It also affects tourism industry. Fewer tourists or divers will visit the area where coral reefs are damaged by overfishing. Honestly, we cause this worse situation by our own behaviour. Consequently, I thought about this issue and I want to ease this issue with my own hand too. I learnt that fish is not unlimited and it's the gift that is given from natural environment. We should cherish it and have a great management of it.

Add comment

Anonymous 2mo

Carrie Tang 3D22

I learns that overfishing will decrease the production of fish and affect marine environment and ecology. To totally extent, we should care about our environment. It is because the turbidity of sea water caused by marine pollution seriously affects the photosynthesis of marine plants, thereby affecting the productivity of the sea area and also harmful to fish. Also, it will lead to the decline of tourism activities.

Add comment

Anonymous 2mo

Jenna Lo

What is the lesson learnt in the overfishing of cods in Grand Banks?

I have learnt that overfishing causes many bad effects not only to the environment, but also people and living things. Firstly, overfishing may cause extinction of fishes. Secondly, this may affect the food chain and thus reducing the numbers of other species. Also, bottom trawling is destructive that will increase the unemployment and the tourism as the fish stock decreases. To what extent, should we care about our environment?

Anonymous 2mo

Afreen Amir 3D01

WHAT IS THE LESSON LEARNT IN THE OVERFISHING OF CODS IN GRAND BANKS?

I have learnt that Grand Banks is the one of the four important fishing grounds of the world. Other than the increasing population, a significant factor contributing to the depletion of the cod stocks off Grand Banks was the introduction of equipment and technology that increased landed fish volume. The cod catch fell from 810,000 tonnes in 1968 to 150,000 tonnes by 1977. From the environmental views, overfishing will reduce the amount of marine life in the ocean, It breaks the food chain and reduces the biodiversity. By using the destructive fishing methods may caused some species extinction and disrupt the marine ecosystems eventually. From the socio-economic views, overfishing will caused fish resources in an area depleted, many fishermen will lose their jobs. Overfishing damaged the coral reefs and biodiversity, then it affects tourism industry.

TO WHAT EXTENT, SHOULD WE CARE ABOUT OUR ENVIRONMENT?

Anonymous 2mo

Eunice Chow

What is the lesson learnt in the overfishing of cods in Grand Banks?

After the lesson, I have learnt that overfishing problems will bring many serious effects to the marine ecosystem and also will affects our economic. Firstly, overfishing can impact the entire marine ecosystem. As people are taking of wildlife from the sea at a very high rate, the rate is too high for fished species to replace themselves. Eventually, it will lead to the extinction of one species. The extinction of that species may affect other marine life that depend on them. Besides, overfishing may also capture some plant-eating fish which keep the marine ecosystem in balance by eating algae, keeping the coral clean and healthy so that coral reefs can grow. Killing these fish will weaken reefs and make them easily die due to climate change. Some fishing methods can also destroy the coral reefs directly. Secondly, overfishing will lead to decreasing food, reduction in employment and income. As demand of marine species continues to increase, that means most of the people rely on fishing for living. When there are fewer fish for fishermen to catch, the

Wong Yoko [3D27] 黃結蓮 2mo

Yoko Wong

- What is the lesson learnt in the overfishing of cods in Grand Banks?

After learning the overfishing of cods in Grand Banks, I have learnt that the harmful effects of overfishing. Overfishing causes disruption of marine ecosystems. It reduces the amount of marine life in the oceans. The reduction or extinction of one species may affect other species of marine life that depend on them. This breaks the food chains and reduces the biodiversity.

There are also some destructive fishing methods such as Blast Fishing and Bottom trawling. Blast fishing uses explosives to catch fish. Not only it kills many non-target species at the same time, resulting in a large amount of bycatch but also damage the coral reef which are important habitats of many marine life. Bottom trawling uses fishing boats to drag a huge net on the seabed. Unwanted species are caught by the net, resulting a lot of bycatch. Dragging of the net stirs up sand and mud. After that, water becomes turbid. Marine plants cannot make food through photosynthesis and die. Seabed

Evelyn Cheung

What is the lesson learnt in the overfishing of cods in Grand Banks?

1. The lesson learnt from the overfishing of cods in Grand Banks is that overfishing not only affects the fishing industry, it can also lead to affecting the food economy and other industries that may be involved in marine life or scenery, resulting in a negative effect on employment rates and the daily life of people who depend on those industries.

human life is closely related to the marine ecosystem. We eat fish and we need water. If the marine ecosystem is destroyed, it would affect our environment, our earth, other species, and our living.

Add comment

Anonymous 2mo

Evelyn Cheung

What is the lesson learnt in the overfishing of cods in Grand Banks?

1. The lesson learnt from the overfishing of cods in Grand Banks is that overfishing not only affects the fishing industry, it can also lead to affecting the food economy and other industries that may be involved in marine life or scenery, resulting in a negative effect on employment rates and the daily life of people who depend on those industries.

To what extent, should we care about our environment?

Giving a thought of caring about the environment to the extent of balancing out the harmony between the negative effects that human activities have caused on the environment and protecting the environment for the way of life of not only human survival but also the survival of other species.

Add comment

what is the reason result in the overfishing of cods in Grand Banks?

After the overfishing of cods in Grand Banks, it caused a collapse in the fishing industry, that overfishing not only causes irreversible impacts on the marine habitat but also results in social and economic impacts. For example, overfishing causes the loss of jobs for fishermen or a decline in tourism activity. Moreover, some kinds of marine species have been facing extinction due to overfishing. The extinction of fish species could affect the food industry as well, causing economic impacts. To what extent should we care about our environment? Human activities have been the main cause of what environmental problems we are facing right now. Therefore, in order to improve the environment and reduce environmental problems caused by human activities, we should keep the number of human activities in balance with the environment. Human activities should be controlled to an appropriate extent. For example, setting limits on the fishery. Caring for the environment is not only imperative for our own quality of life but also for that future generation and other life forms on the planet. Hence, we should devote ourselves to the environment and start caring for it.

Add comment

Anonymous 2mo

Jodie Leung

What is the lesson learnt in the overfishing of cods in Grand Bank?

I have learnt three lessons in the overfishing of cods in Grand Bank. Firstly, the overfishing of cods has deeply affected the marine ecosystem. When too many fish are taken out of the ocean, it creates an imbalance that can erode the food web and lead to a loss of other important marine life, including vulnerable species like sea turtles and corals. Not only that, as the demand for seafood continues to grow, the fishing methods have also improved with the demand, more harsh methods are created, and more marine animals because of that. Secondly, I learned that overfishing and the economy are closely connected. Due to the rising population and the increasing demand for seafood, the fishery industry was becoming more and more prevalent. But due to the awareness of overfishing of cod, the government had no choice but to stop the fishery in Grand Bank to avoid further damage. However, this action raged the fishery industry and the economy was affected.

To what extent, should we care about our environment?

After the unbelievable ruination we had done to mother earth, we

they even just stay untrusting to care it but not trying to destroy damage. There are a lot of things that are able to recover quickly, but there are also things that need months or years to recover, some may not even able to be recovered anymore. Therefore, not only we need to cut the roots of the problem, but also restore the impacted areas to normal. We should also have some prevention plans like laws and policies to prevent the same thing happen again.

Add comment

about our environment?

-Yes. In addition to overfishing, deforestation, and the wasting of the earth's energy...all make species gradually extinct and destroy our earth. Therefore, we should actively promote sustainable development and strive to achieve environmental protection. Starting from changing simple living habits, we can also try not to overspend.

Add comment

marine environment collapse and far more bigger than we thought.

For example, we won't have the chance to eat seafood anymore. More critically, the collapse of marine environment may cause the whole environment of our world destroy as our environment rely on the marine too. As a result, it is necessary for us to care about the environment.

Add comment

Anonymous 2mo

Cherry Lam

What is the lesson learned in the overfishing of cods in Grand Banks?

I've learned that the relationship between overfishing and the economy is interconnected. With the increasing population, food is demanding. Humans are willing to catch a large number of fish including both big and small ones, these actions cause an enormous

problem to the environment and disrupt the marine ecosystem. Nonetheless, these also lead to distinct decrease in fish stocks, subsequently, fisheries lost their

enough for living. We should raise awareness on the the about our environment?

We should care about our with damaged by humans such activities. This does not only affect

our daily life. We should care about our daily life. We should care about our daily life.

our daily life. We should care about our daily life. We should care about our daily life.

Jodie Leung



What is the lesson learnt in the overfishing of cods in Grand Banks?

To what extent, should we care about our environment?

After the unbelievable ruination we had done to mother earth, we should and must take up full responsibility for the destruction, from the problem of overfishing to the dilemma of climate change. If we don't act now, who knows what the future holds or whether there is a future is a question itself? What we can do now to stop this nightmare to present itself is to trace back to our origin, to renature, to build what we once had ravaged, to bring back the wildlife, and stop our pernicious human activities. As a so-called "little citizen with no power", we hold greater power than we expected. From sorting out recycled materials to shopping at environmentally-friendly stores, we can make a change! Through time, the wildlife will be restored and both nature and us can live in peaceful harmony. Let me end the paragraph with a quote, "Look after the land and the land will look after you, destroy the land and it will destroy you."

Development of environmental education knowledge & attitude

- Yearly project for students to choose from one of the three tasks to assess their learning of relevant concepts and attitudes

 **S3 Yearly-project** 

Leung Shong Tung (LST) • Mar 1 (Edited Mar 1)

100 points Due May 9, 11:59 PM

Introduction

- This is a yearly project for S3 students to explore Geography issues related to Oceans in Trouble.
- **Choose any one of the following three tasks**
- Deadline of submission: After the special holiday (Hard copy if class resumes)

1. Poster design

- Create a poster to describe the cause and impact of overfishing.
- Also suggest ways to reduce the problem of overfishing.

2. Speech writing (around 400 words)

- Imagine you are representing HK to join an international forum, give a speech on the topic of marine pollution. In the speech, you may include the causes and impact of marine pollution and persuade to the members in the forum how urgent is the situation.
- Please also suggest to the members of international parties about how we can reduce our impact of marine pollution.

Reference:
Sir David Attenborough - Greatest Speech Ever | Creators for Nature (<https://www.youtube.com/watch?v=7WknYmUQ5DY>)

3. Comic drawing

- Draw a four-box comic about the issue of overfishing OR marine pollution.
- You may consider the life under the sea. How do they feel when the problem occurs?



Development of environmental education knowledge & attitude

Four box comic



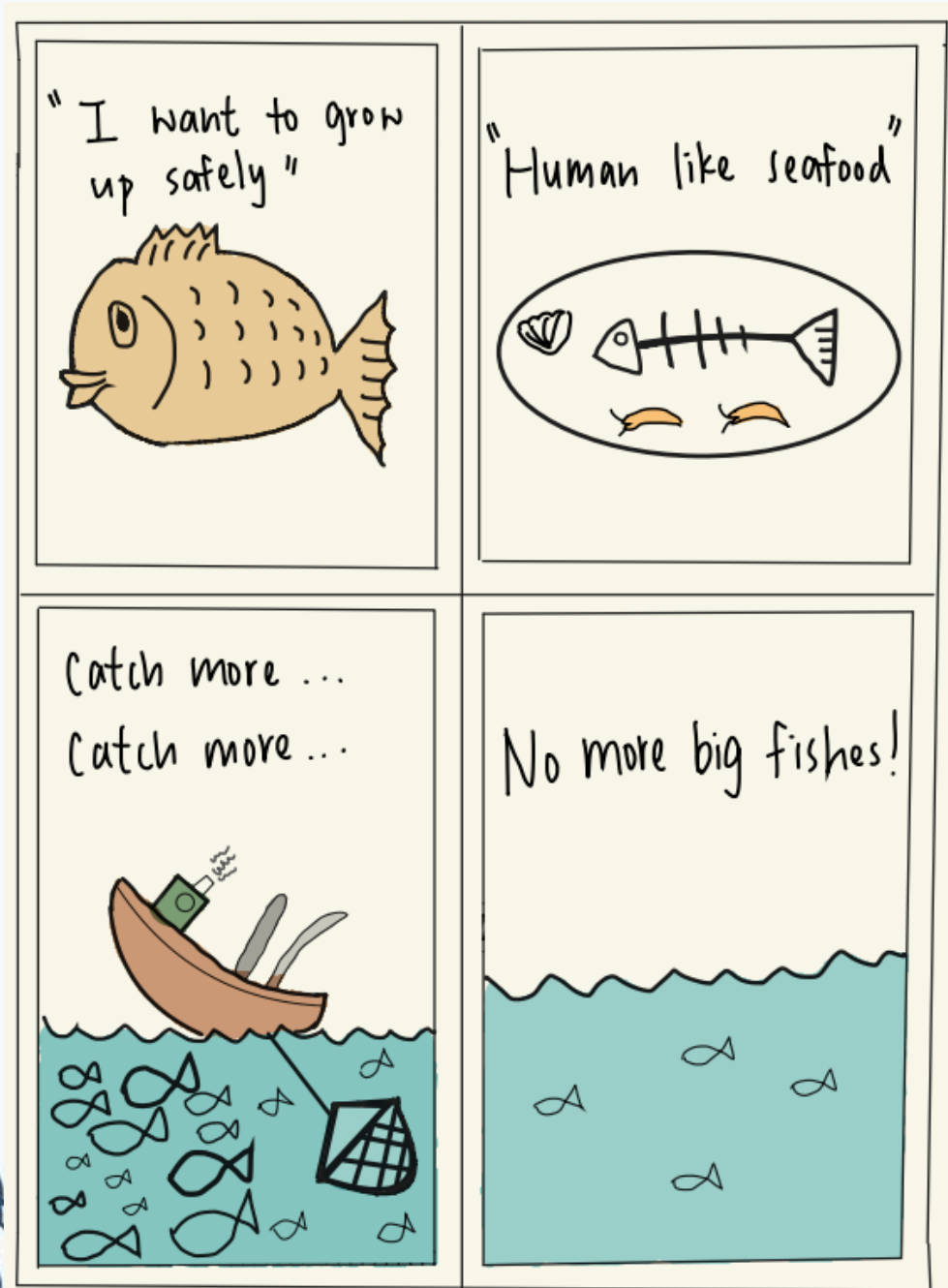
Poster design



✔ Poster design



✔ Four box comic



Development of environmental education knowledge & attitude

- Situated task to write a speech

S3 Yearly Project

Jodie Leung S3D 16

Good morning ladies and gentlemen, I am Jodie Leung, student from Kowloon True light School and representing Hong Kong to give my speech for today's international forum.

I remembered it was a Tuesday morning and I turned on the television, did my morning ritual and started to watch the documentary playing. I still remembered vividly in my mind, through the screen of my television, I saw the beauty of the marine world that was undescrivable and heavenly, marine animals of different kind swimming under the pattern formed by the combination of the clear waters and sunlight. Now looking back to the innocent me, I would want to tell her one thing only, "Protect it before it is destroyed, protect it!"

Throughout the years of my growth, I met new friends and experienced a lot. At the same time, the marine ecosystem did too. Meeting new fisherman everyday and seeing them come with new 'fishing weapons' such as blast fishing and bottom trawling. Fishing every single seafood it has, ending up reducing the biodiversity and destroying the food chain in the process; Watching how the crisp green lands turned into grand skyscrapers and lavish cities and how as the human activities continues to expand and improve, it starts to badly affect the marine life itself. Like polluting the oceans with their waste and releasing a lot of carbon dioxide. Soon as I have grown into my teenage years, the time of youth and teenage dreams, the marine ecosystem was in the verge of dying and the once pulchritudinous marine life I had witnessed that Tuesday morning has turned into a lifeless, deadly, polluted state.

As one of the witness of the past of the marine life's beautiful era, I would like to use the

2. Speech writing

Good morning everyone, I am Tina Lee. On behalf of representing Hong Kong, I am going to introduce the causes and impact of marine pollution in this forum. I would also like to take this opportunity to share with you guys how urgent this situation is and suggest some ways to reduce the impact of marine pollution.

To begin with, I would like to talk about the causes of marine pollution. Ocean pollution is the spread of harmful substances such as oil, plastic, industrial and agricultural waste, and chemical particles into the ocean. One of the causes of marine pollution is sewage pollution. Pollution can enter the ocean directly into the ocean. This is how minerals and substances find their way into the ocean. The release of other chemical nutrients into the ocean's ecosystem leads the reduction in oxygen levels, the decay of plant life and decline in the quality of seawater. The toxic chemicals from industries also cause the marine pollution. Industrial and agricultural waste are directly discharged into the oceans which affects the marine life, and they raise the temperature of the ocean. Lastly, large scale oil spills lead to marine pollution. Ship pollution is a huge source of ocean pollution. It is extremely difficult to clean it up. Since oceans provide home to wide variety of marine animals and plants, it is responsibility of every citizen to play his or her part in making these oceans clean so that marine species can thrive for long period of time.

Documentary watching – A life on our planet

3D 20

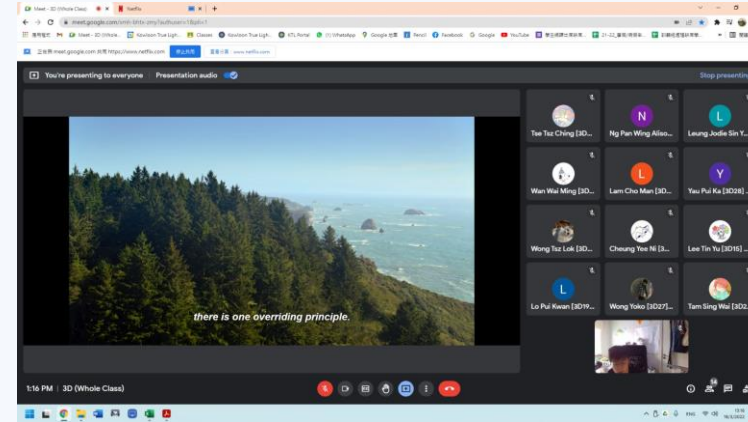
Reflection piece

Have you ever imagine a planet which is full of beautiful scenery and fresh air? I believe so. However, this kind of image is hard to discover nowadays due to the environmental change. Therefore, in order to solve the problem of environmental change, we should first find out what kinds of activities lead to the change.

First of all, there are a myriad of reasons lead to climate change, including overpopulation, burning fossil fuel and deforestation. Since medicine has improved and mortality rate has decreased, population rate all over the world has increased rapidly. If the population keep increase in the future, there will be a high demand of resources such as oil, gas or other fuels. This strongly affects the ecosystem. On the other hand, the burning of fossil fuels and deforestation release a tremendous amount of carbon dioxide and greenhouse gases into air. As a result, the ecosystem is threatened. However, almost all the reasons which lead to climate change are caused by human activities but not nature. Therefore, we should find solutions to solve these human-included problems.

Some citizens may think it's not that urgent to reduce the environmental problems. Yet, I believe that it's extremely urgent to tackle the problem since the biodiversity population is reducing rapidly. Temperature has also increased because of global warming. If deforestation and the burning of fossil fuels continue in the future, forest can no longer produce enough moisture and this strongly affects the biodiversity and the global water cycle. Furthermore, global food population will be threatened and the number of animals will be reduced and may even become endangered if the problem of overpopulation isn't solved.

In order to solve the problem mentioned above, first of all, the global population has to be stabilized. People have to be raised out of poverty and to have a better healthcare so as to slow down the rise of population. In addition, renewable energy should also widely used to replace fossil fuels. Last but not least, deforestation should also be end in order not to harm the ecosystem.



Ridge to Reef Environmental Education Programme



The Ridge to Reef (R2R) concept shows that what happens on land affects what happens in the water. With Hong Kong being a coastal city, healthy and well-managed waterways, coasts and oceans are vital to all of us. To create lasting change, the Hong Kong Jockey Club (HKJC) R2R focuses on students' environmental literacy, teachers' curriculum and schools' policies and procedures by:

- supporting all levels of the educational structure within schools
- developing localized, free online curriculum to teachers
- deploying curriculum through educator training workshops
- engaging students in hands-on citizen science conservation fieldwork, and
- offering students internship opportunities at our TNC Hong Kong/Asia Pacific regional office.



Ridge to Reef Environmental Education Programme

- Learn phase
 - free online nature education curriculum that will be available to all Hong Kong teachers
 - materials available on this new “learning hub” will include animations, lesson plans, virtual field trips and classroom activities for teachers to use in expanding their students’ environmental awareness
 - Relevant modules: Oceans in trouble & trouble with water



<https://www.tnc.org.hk/en-hk/what-we-do/hong-kong-projects/ridge-to-reef/>



Ridge to Reef Environmental Education Programme



The Jockey Club "Ridge to Reef" Environmental Education Programme Geography (Junior Secondary) lesson plan – Ocean and sustainable development

- (1) Topic: Unit 8 Oceans in Trouble
- (2) Duration: 4 lessons (40 mins per lesson)
- (3) Venue: normal classroom setting



(4) Teaching Procedures:

	Lesson 1	Lesson 2	Lesson 3	Lesson 4
Sub-topic:	Oyster Reef, mudflat environment	Functions of oyster and oyster reefs towards environment and human being	Distribution of and threats to oyster reefs	Make oyster farming in Hong Kong sustainable
Core question:	A. What is an oyster reef? What is the living habitat of an oyster reef?	B. Why are oyster reefs important? How do oysters benefit the environment and human beings?	C. What challenges do oyster reefs face?	D. Sustainable development
Prior knowledge:	Students acquired some basic knowledge about the marine ecosystem and the ocean benefits.	Students have acquired basic knowledge about the ecosystem in mudflat, the living habitat of oysters and the formation of oyster reefs.	Students have acquired knowledge about features and functions of oyster reefs.	Students have acquired basic knowledge about sustainable development.
Key Concepts:	A1 Characteristics of oyster reefs A2 Formation of oyster reefs A3 Mudflat ecosystem and characteristics	B1 Oyster reef B2 Ecosystem B3 Ecosystem services B4 Sustainable development	C1 Water pollution C2 Agricultural activities/ farming C3 Industrial activities C4 Reclamation C5 Overharvesting C6 Environmental and	D1 Sustainable development D2 Oyster farming



- Development and adoption of R2R materials
 - Teaching plans
 - Powerpoint
 - Lesson worksheets

Ridge to Reef Environmental Education Programme



Lesson 1

Time	Teacher's activities	Student's activities	Remarks/ T&L materials
Setting			
5min	The teacher recalls students' memories about the functions and benefits of the ocean, as well as their experience with oysters through questioning. Q. What are the functions and benefits of the ocean? Q. Have you tried oysters before? Do you like oyster The teacher introduces the lesson theme: An important ocean resource in Hong Kong – Oyster	Students are invited to identify the functions and benefits of the ocean and respond to the teacher's questions. Students are invited to share their previous experience of oysters.	<ul style="list-style-type: none"> PPT
Development			
15min	1.1 Oyster Reef The teacher introduces some basic knowledge of oyster reefs, including their characteristics, formation process and living habitat. Q. What is an oyster? Q. What is an oyster reef? Q. Where are oyster reefs found? Q. How do oyster reefs form?	Students refer to the PPT, learning materials and teacher's explanation to complete the worksheet p.	<ul style="list-style-type: none"> PPT Video about formation of oyster reef Worksheet p.
15min	1.2 Living Habitat of Oyster Reef The teacher introduces the characteristics of the living habitat of oyster reefs (the mudflat) and explains the favorable factors of the mudflat for the growth of oyster reefs. Q. What are some commonly found living organisms in mudflat? Q. How do they form the ecosystem in mudflat? Q. Why is mudflat a suitable place for nurturing oyster reefs?	Students refer to the PPT and learning materials to respond to the teacher's questions. Students refer to the PPT, learning materials and teacher's explanation to complete the worksheet p	<ul style="list-style-type: none"> PPT Worksheet p.
Conclusion			
5min	The teacher summarizes the characteristics, formation process and living habitat of oyster reefs. The teacher asks students to complete a short quiz to ensure their understanding of lesson contents.	Students complete the short quiz to conclude what they have learnt in the lesson	<ul style="list-style-type: none"> PPT Short quiz*

(* https://docs.google.com/forms/d/1WPgj8_b0OmTbveQ8j2pR-vukm7MuKmkVprUE924wqrA/edit)

Lesson 1 - Understanding Oyster Reef and Its Living Habitat

Q. What is an oyster reef? What is the living habitat of oyster reef?

Lesson objectives:

- To understand the features of oyster reef
- To acknowledge and understand the mudflat as the living habitat of oyster
- To understand the ecosystem in mudflat
- To understand the process and favorable conditions of oyster reef formation

Key concept:

Characteristics of oyster reefs; Formation of oyster reefs; Mudflat ecosystem and characteristics

1.1

Oyster Reef

Oyster reef is an important species to the ecosystem. Photo 1 shows an oyster reef. Answer question 1-3.



Photo 1

Q1. What is an oyster?

- Oyster is a **bivalves mollusks** (雙殼類軟體動物).
- Oyster shell (**opens** / closes) during high tide to filter out plankton (浮游生物) and would (open / **close**) during low tide to minimize water evaporate from its body.

Q2. Photo 1 shows an oyster reef. Refer to Photo 1, describe the characteristics of an oyster reef.

There is a large number of oysters aggregated together in an oyster reef. These oysters are usually grown on stones or debris as shown in Photo 1. Also, they usually appear in a large oyster community.

Q3. Describe the formation process of an oyster reef.

An oyster reef refers to a cluster of oysters. The oysters cluster on hard, submerged surfaces, and fuse together when they grow. Oysters grows on their older generations and form oyster reefs.

Q4. Where do oyster reefs grow?

- Oyster reefs grow in **brackish** (鹹淡水交界) habitats. **Mudflat** is the habitat where oyster reefs grow.



Ridge to Reef Environmental Education Programme

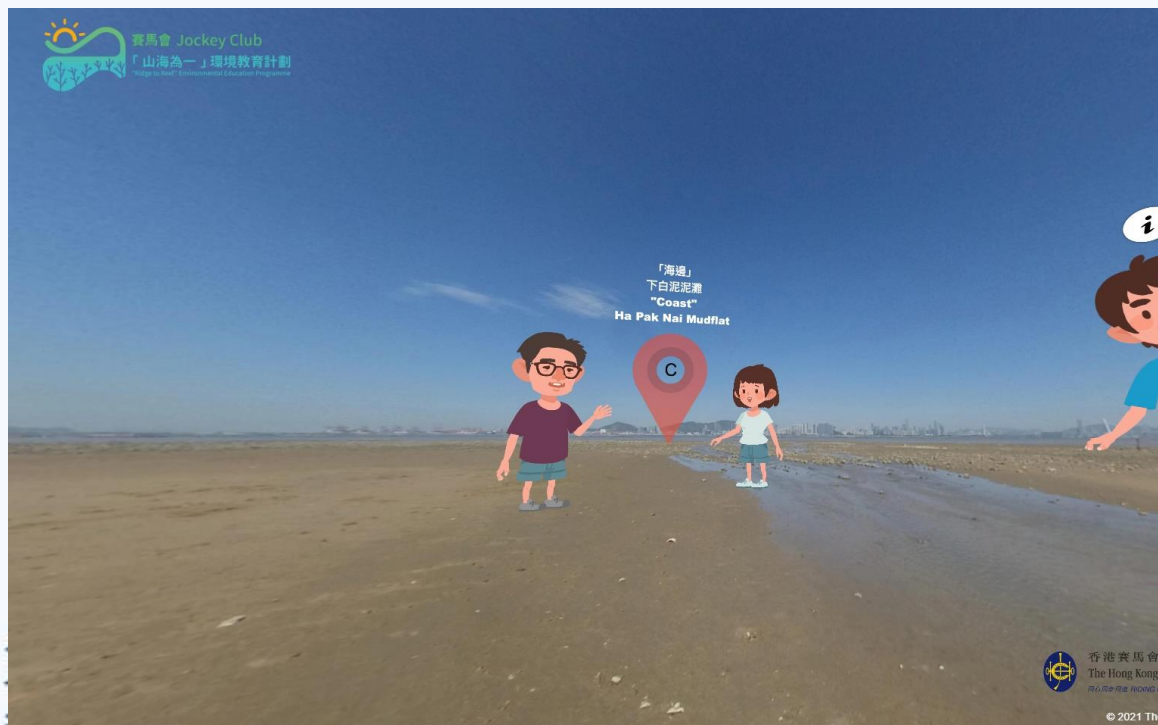


Ridge to Reef Environmental Education Programme

- Virtual field trip for spatial enquiry



<https://storage.net-fs.com/hosting/7105061/5/>



Ridge to Reef Environmental Education Programme

- Lesson study in Nov 2020



Figure 1.1. Students listening to the tryout teacher in a Geography tryout lesson in the Program.

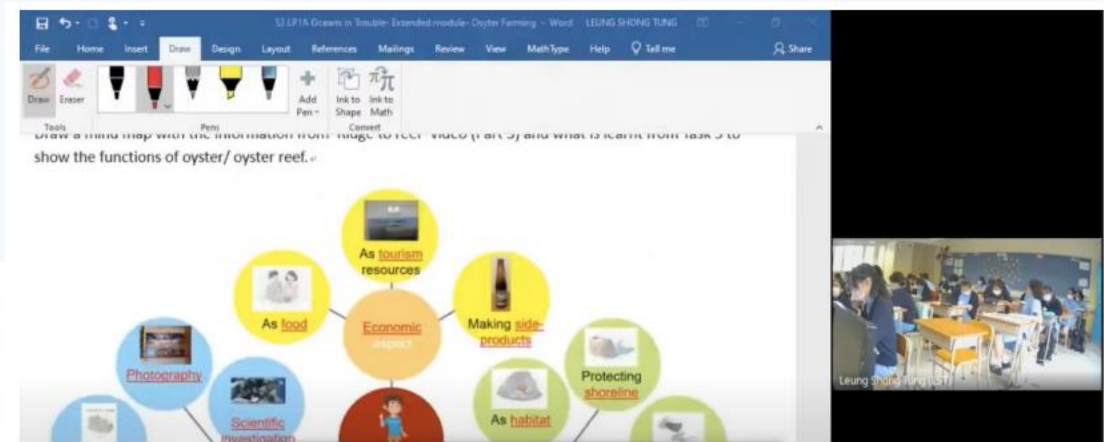


Figure 1.2. Students engaged in a mind map learning activity in a Geography tryout lesson in the Program.

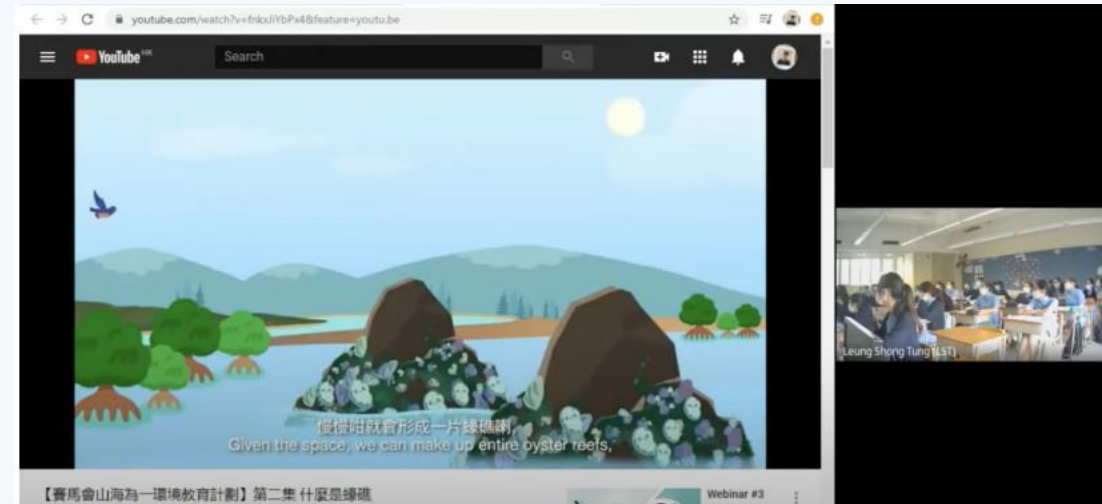


Figure 1.3. Students engaged in a video-watching activity in a Geography tryout lesson in the Program.



Ridge to Reef Environmental Education Programme

Table 3.1. Comparison of students' environmental attitudes in Survey One (pre-test) and Survey Two (post-test).

	Pre-test (N=32)		Post-test (N=18)		± (%)
	M	S.D.	M	S.D.	
Overall environmental attitudes (<i>N of items = 13</i>) (Pre-test Cronbach's alpha = .893) (Post-test Cronbach's alpha = .845)	3.75	0.81	4.13	.57	↑10.13
Attitudes towards oyster reef ecology (<i>N of items = 8</i>) (Pre-test Cronbach's alpha = .769) (Post-test Cronbach's alpha = .679)	3.60	0.74	3.85	.54	↑6.94
5.1 I am aware of the ecosystem of mudflat.	3.28	0.92	3.78	.65	↑15.24
5.2 I am interested in oyster restoration work in Hong Kong.	3.25	1.08	3.50	.71	↑7.69
5.3 I am eager to know more about the ecosystem of mudflat.	3.94	1.11	4.17	.62	↑5.84
5.4 I think oyster restoration is effective in protecting the ecosystem of mudflat.	3.84	0.95	4.39	.92	↑14.32
5.5 Field trip or Virtual Reality can raise my curiosity in knowing more about the mudflat.	4.09	1.42	3.78	1.73	↓7.58
5.6 Oysters are closely related to human beings.	3.87	1.12	4.33	.69	↑11.89
5.7 In the long run, the decline in oyster reef does not affect human beings.	3.13	1.21	3.00	1.08	↓4.15
5.9 I am interested in knowing more about "Ridge to Reef (R2R)" conservation in Hong Kong.	3.50	1.24	3.83	.86	↑9.43
Attitudes towards sustainable development (<i>N of items = 5</i>) (Pre-test Cronbach's alpha = .894) (Post-test Cronbach's alpha = .916)	3.90	1.00	4.42	.75	↑13.33
5.8 Sustainable development is crucial in human life.	3.66	1.07	4.22	.81	↑15.30
5.10 I am aware of sustainable management and efficient use of natural resources.	3.59	1.24	4.17	.86	↑16.16
5.11 I have the relevant information about sustainable development and lifestyles in harmony with nature.	3.94	1.39	4.39	.85	↑11.42
5.12 I am aware of the importance of monitoring sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.	3.97	1.03	4.56	.78	↑14.86
5.13 I am aware of sustainable development and lifestyles in harmony with nature.	4.34	1.18	4.78	1.00	↑10.14

Remarks. The survey is based on 6-point Likert scale, whereas not true at all (1), not true (2), not so true (3), fairly true (4), true (5), very true (6).

老師同學經驗分享



梁桑童老師早前參加試教計劃，他表示最大效果是令同學喜歡地理科，其中譚曉欣（右）及于昭明（左）都因此而在中四選修地理。

九龍真光中學

為了編製初中教案，TNC曾向不同學校收集意見，九龍真光中學便是其中一所。該校地理科主任梁桑童老師（Michael）除了向TNC分享校情，前線老師的教學需要外，亦為教材套提供意見。因他認為初中地理課程欠缺了有關香港的課題，而TNC這個計劃正好將課程內容與香港生態環境議題結合。除主題以外，多元教材的設計——如影片、VR及動畫等——可讓同學更投入這個課題。梁老師發現，試教令不少同學都喜歡地理科，學懂欣賞大自然，甚至令不少學生在升讀中四時亦選修了地理科。

參加試教計劃的于昭明同學和譚曉欣同學也表示，參加這項試教計劃之後，更認識香港地理環境，如學到蠔礁的生態功能，也了解到上游污染對下游有一定影響等。同時，因透過此計劃，使他們認識到原來香港擁有如此特別的地理環境，因此令兩人於中四時決定選讀地理科。



Ridge to Reef Environmental Education Programme

- Reflection and the way forward
 - Adoption of school-based curriculum in S1
 - Trimmed Oceans in Trouble to teach only 'socio-economic functions of oceans' and 'marine pollution'
 - Replacing the specific case by 'oyster reef in Hong Kong'



Act: Activities in relation to environmental education

- Self-directed learning bonus mark system
- Activities falling behind the scheme
- Reflection upon activities joined



Concept of self-directed learning scheme

1

Kowloon True Light School

School Annual Plan 2021-2022

Major Concern 1: To equip students with deeper thinking skills and to further enhance students' mindset and strategies for self-directed learning

Targets	Strategies	Success Criteria	Methods of Evaluation	Time Scale	Persons in Charge	Resources
1.1 To introduce the idea of deeper thinking skills (PARV), with Pragmatic Learners: problem-solving and decision-making skills as the focus	i. A school assembly is conducted by LTC introducing the idea of deeper thinking skills framework 'PARV' (Pragmatic learner: problem-solving and decision-making; Articulate learner: explaining and persuading; Reflective learner: constructive critical thinking; Visionary learner: innovation and breakthrough) and the subskills and essential elements in problem-solving and decision-making	At least 1 assembly with the target theme is conducted.	School documents LTC documents Department documents Committee documents Observation Feedback from	All year round	LTC RPC School Library Campus TV Chinese Department English Department	ADC SAC Online materials

Implementation of the concept of self-directed learning bonus mark scheme in all subjects

- Subject-based
- e.g. bonus marks for completing extra questions, etc.



Self-directed learning log for junior secondary Geography

SDL log for Junior Geography

- The entry of SDL log will be counted as the bonus points for daily marks
- Encourage you to go beyond what we provide to you
- It can be a museum walk, guided tour or a talk that may inspire you

Kewlson True Light School
2021-2022 Junior Secondary Geography Self-directed Learning (SDL) Log

Self-directed learning (SDL) log - Geography Score: ____/5

Class:	Class no.:	Name:	Date of activity:
Name of activity:		Teacher-in-charge of the activity:	
Reflection: (Please note that complete sentences and paragraphs are preferred.)			
Attachment (if any):			

Please adhere the photos, pamphlet, brochure or information sheet of the activity here.
(P.S. Simple footnotes are welcome.)

Activities that fall in the category for SDL bonus mark

- Optional field visits, talks and activities/competitions
- 1-2 marks per entry
- Max. 4-6 marks per term, on top of 100 marks



Examples of entries collected

Kowloon True Light School
2021-2022 Junior Secondary Geography Self-directed Learning (SDL) Log

Self-directed learning (SDL) log - Geography

Score: 11/15

Class: 3D	Class no.: 15	Name: [REDACTED]	Date of activity:
Name of activity: Watching Our Planet I (Coastal Seas)		Teacher-in-charge of the activity:	
Reflection: (Please note that complete sentences and paragraphs are preferred.)			
<p>After watching this video, I knew that the ocean is very amazing, from these shrimps, small fishes to whales and dolphins. The ocean contains many types of animals and this video also shows their living habitats and lifestyles. I also saw different types of sea animals and many sea animals that I have never seen but this video has shown their living environment. Also, this video has shown the planet's natural and many cute sea otters, southern California sea otters, the humpback whales. I have learnt different types of sea animals and seen many stunning sea views in the video.</p> <p>Moreover, I realized that the pollution problem of oceans and climate change in the world may affect the sea animals. We should protect the marine creatures. Recently, many plastic wastes have flown into the ocean. However, dirty sea water may affect the marine creatures. Sea waters support</p> <p>Attachment (if any): many fish species and provide habitat for many other organisms such as marine mammals, corals, sea turtles. Climate change increases in sea surface temperatures and rising sea level. Therefore, I understand we should protect our planet and ocean. The ocean is important. Please attach the photos, pamphlet, brochure or information sheet of the activity here.</p> <p>(P.S. Simple footnotes are welcome.)</p> <p>because it is a very large part of our planet. In fact, it covers 70% of Earth's surface. The ocean is a home and food source for countless fish, mammals, plants, birds and more. It plays an indispensable role in the world.</p>			

Kowloon True Light School
2021-2022 Junior Secondary Geography Self-directed Learning (SDL) Log

Self-directed learning (SDL) log - Geography

Score: 11/15

Class: 3D	Class no.: 12	Name: [REDACTED]	Date of activity: 10/9/2021
Name of activity: 全城投入「鴿」級任務		Teacher-in-charge of the activity: Mr. Leung SS	
Reflection: (Please note that complete sentences and paragraphs are preferred.)			
<p>In the mission of P talk, I've learnt knowledge of birds in Hong Kong.</p> <p>Despite the missions of protecting birds, there was information about distinguishing their breeds by using their sounds and features in outlook. First, the host introduced that birds mostly live between buildings and in reservoirs. Therefore, we can find birds around in our daily life. Second, he mentioned projects from the government of building comfortable places for birds, this can let the chance of extinction decrease.</p> <p>In conclusion, I think it's a special activity full of interaction. We should keep a clean nature and live with animals peacefully.</p> <p>Attachment (if any):</p>			

漁農自然護理署
Agriculture, Fisheries and
Conservation Department



全城投入「鴿」級任務!

齊來認識「鴿」里鄰舍，共創美好「鴿」級生活

日期: 8/20/21 下學期
時間: 8 講座約30-40分鐘
形式: 網上視像/校內實體講座
查詢: joinmission@gmail.com
5648 9225

講座內容:
「鴿」生存，保護專需要性!
「鴿」與環境，不離不打離!
「鴿」與共存，我們的「鴿」更豐富!


Other examples of activities


 **S1-S3 Geography Special Vacation SDL Activity** 


Leung Shong Tung (LST) • Mar 25





Please watch the following Netflix video and complete the following Google Form by 20 April 2022 to earn a maximum of 2 points of the Geography SDL mark.

Our Planet | One Planet | FULL EPISODE | Netflix

 **Google Forms: Sign-in**
<https://forms.gle/ecgKPt2hfRd8x2>

 **Our Planet | One Planet | FULL EPISODE**
YouTube video 49 minutes

 **Class comments**

 **S1-S3 Geography Special Vacation SDL Activity**   

Questions

Responses **170**

Settings

Total points: 20

170 responses

Accepting responses 

Summary

Question

Individual

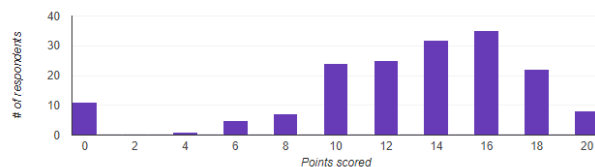
 Insights

Average
12.91 / 20 points

Median
14 / 20 points

Range
0 - 20 points

Total points distribution



✓ Which of the following landscapes have been described in the documentary? * 10 / 10

- ☒ Desert ✓
- ☒ Savanna/ Grassland ✓
- ☒ Tundra/ Frozen world ✓
- ☒ Tropical rainforest ✓
- ☒ Oceans/ High seas ✓
- ☐ Moon

✗ What challenges are faced by the nature? Explain briefly. * 6 / 10

The nature are facing the climate change.In this video,the vast salt pan in Africa is waterless and oven-hot.It's hostile to the living things in there.They are also facing the extreme whether. ✗

Add individual feedback

Bonus: How do you feel after watching this video? Do you think we need to do anything to help the earth? What can we do? 0 / 0

It's surprise that I can watch the marvellous nature in this programme.However this beautiful environment are altering due to the climate change.We should do something to help our earth.More recycling in our daily life can help the earth.Also,reuse the plastic bag or plastic bottle can produce less junk in our daily life and then benefit to the environment.

Add individual feedback

Submitted 4/21/22, 1:04 AM



Humanities week (Oct 2021)



- KLA Collaboration to organise an theme-based event
 - L&S, CS & LS
 - History
 - Chinese History
 - Economics
 - Tourism & Hospitality Study
 - Geography
- War and Peace



Humanities week (Oct 2021)

- Booth exhibition at the playground

✔ Geographical causes of war and conflict



Humanities week (Oct 2021)

- Booth exhibition at the playground and school hall



Other subject departments' booth exhibition

Humanities week (Oct 2021)

- True Light True Night/ Running Man
 - Planning of the route making use of Geographical skills

A. 賽制

是次活動以分數為決定勝負的方法，每隊在每間房間獲取的最高分數相同，最快完成六間房間的任務並返回起點房間會有加分，分數安排如下：

項目	分數
1. 隊伍成員組成 (隊伍由初中和高中同學組成)	100 分
2. 每間房間得分 (各學科負責老師按活動內容自決，在遊戲結束後請把每隊成績交給大會計算)	最高 500 分
3. 最快完成六間房間並返回起始房間額外得分	第一隊: 200 分 第二隊: 150 分 第三隊: 100 分 第四隊: 50 分
4. 隊伍未能按提示卡找到房間通行證而向大會求助	每次求助減 100 分

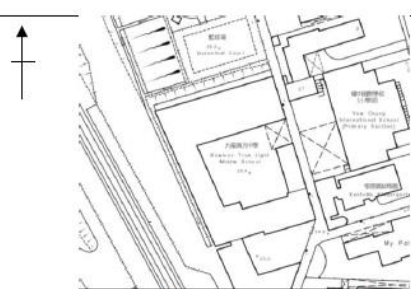

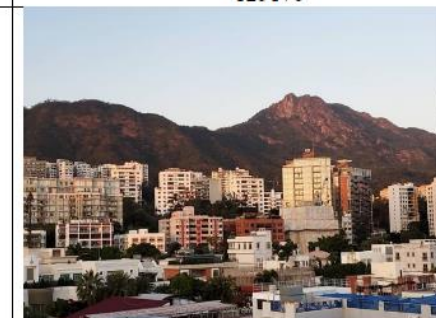


Humanities week (Oct 2021)

B. 房間安排

參賽隊伍會在起始房間先收到提示卡，同學應先按提示卡找到下一關房間通行證，才到相應房間參與遊戲，而每組同學只能取回相應隊伍的通行證，房間安排如下：

房間	所屬學科	負責同學	職責
304	大會		按隊伍編號派發提示卡為比賽提供支援及計分
001	中史科		派發提示卡 (往歷史科房間)
004	經濟科		派發提示卡 (往旅款科房間)
102	地理科		派發提示卡 (往經濟科房間)
108	旅款科		派發提示卡 (往通識科房間)
204	歷史科		派發提示卡 (往地理科房間)
208	通識科		派發提示卡 (往中史科房間)

Destination Room	Hint in the card	Location of the access card
Chinese History (001)	 <p>N 50° E from the spot height 25.9</p>	Room 109
History (204)	 <p>125176</p>	Library
Geography (102)		4/F near the lift



Humanities week (Oct 2021)



- Hint card given to each group of students to find the access card
- Using the access card to play the games in each subject room



Humanities week (Oct 2021)



Pigeon hole of our School Minister

- Hint card given to each group of students to find the access card
- Using the access card to play the games in each subject room



Humanities week (Oct 2021)

- True Light True Night: Games in the room



Humanities Week (Oct 2021)

Loner

Instructions

1. Answer the following question first:
Which of the following wars is related to resource competition?
A. Gulf war
B. Vietnam War
C. Cuba Missile Crisis
D. Anglo-French Wars (1562-1598)
2. Use a marble to knock down the pencil with the correct letter.

Breakfast Scramble

Instructions

1. Reassemble the map
2. Describe the location of where major wars and conflicts are found.

Get Forked

Instructions

1. Answer the following question first:
Which of the competition of the following items may result in a war?
(1) Water resources
(2) The canal as a transport resource
(3) Oil reserves
A. (1) and (2) only
B. (1) and (3) only
C. (2) and (3) only
D. (1), (2) and (3)
2. Roll a coin into fork with the correct letter of the answer.



Humanities week (Oct 2021)



SS Geography students
as the helpers



Health Day (Oct 2021)

- In collaboration with the Environment and Health Education Committee



Lead: Senior forms students to lead environmental campaigns

- Young Environmental Ambassador
- Eat for Green Campaign



Young Environmental Ambassador

- A year long campaign for school to nominate a few students to join a series of activities and visit
- Decide a campaign/ community project to promote an environmental issue



Young Environmental Ambassador

- A series of visits
- Develop a community-based project
- Assisted by Geography Department

Needs assessment via completing questionnaire



Bonus task: Completing a questionnaire (2)

Due Oct 22, 2021, 11:59 PM

Posted Oct 20, 2021

1. Please fill in the questionnaire (**second one**)
2. Take photo of the last page of the questionnaire (the Thank You page) after finishing the questionnaire.
3. Upload the photo to prove that you have completed the questionnaire here to award bonus mark.

43
Turned in

77
Assigned



飲食習慣問卷調查

<https://docs.google.com/forms>

[View assignment](#)



Bonus task: Completing a questionnaire (1)

Due Oct 22, 2021, 11:59 PM

Young Environmental Ambassador & Eat for Green Competition

- A series of visits
- Develop a community-based project
- Assisted by Geography Department

Eat For Green Activity



舉辦宗旨 aim :

為減低碳排放，增加同學對環保的意識，以及對素食餐飲的了解

詳情 Requirement :

1. 走牛、豬、雞、羊，必須為素食餐飲 (素肉、海鮮、奶、芝士、蛋、堅果、豆類製類均可接受)
2. 一餐當作一次計算
3. 在家中進食請上傳照片
4. 在餐廳進食請上傳單據或照片
5. 可自選餐廳或素食菜式，不局限於所推薦的餐廳
6. 同學繳交一次Google Form可計算地理科的自主學習分 (需完成反思)，之後每級最多參與次數的頭三名可獲精美禮品一分(第二次及其後填寫的Google Form，不需完成反思)。
7. 活動舉辦時間：22/11-17/12



Eat for Green Competition

- YEA:
 - Obtained the number of entries
- Geography teachers:
 - Collect their reflection & Calculate SDL mark

[illegible]

Eat for Green Competition



- YEA:
 - Obtained the number of entries
- Geography teachers:
 - Collect their reflection
 - Calculate daily marks (SDL bonus mark)



Eat for Green Competition

- Prize presentation to school participants



Young Environmental Ambassador

• Evaluation of the community project

Eat For Green Activity Feedback

Eat For Green Activity 完滿結束，活動期間我地收到好多同學的回覆，在此多謝各位同學踴躍支持。希望同學係依次活動之後，能對素食有更深的瞭解，以及能繼續支持素食。以下係次活動的意見回饋，謝謝。

 stleung@ktls.edu.hk (not shared) [Switch account](#) 

* Required

姓名

班別

學號

1. 你有否參與是次素食活動？
2. 沒有參加是次活動的原因：
3. 你認為是次活動能增加你對素食的認識嗎？
4. 你同意素食能享應環保，減少碳排放量嗎？
5. 是次活動結束後，你會...意繼續/嘗試實踐素食？
6. 你願意如何繼續/嘗試實踐素食？
7. 不願意繼續實踐素食的原因：
8. 如果學校小食部推出素食餐單你會支持嗎？
9. 你喜歡是次活動嗎？
10. 對於是次活動的意見

203 responses

This activity is so inspiring for me and my family ,we tried to eat vegetable and my dad has lose his weight for 20 kg .

1 response

能夠增加學生對素食的認知，是一次有意義的活動

1 response

加多推廣，描述細節

1 response

個人對素食不太感興趣，雖然對環境有幫助，我並不太感興趣

1 response

希望能夠多推廣素食的好處

1 response




Young Environmental Ambassador: Project presentation

November
Eat For Green Competition

- **Aim :**
 1. reduce meat consumption to alleviate carbon emissions issues
 2. raise students' awareness about carbon emission issue
 3. raise students' awareness of environmental protection
 4. enrich their understanding of vegetarian food
 5. promote plant-based diet
- **Requirement :**
 1. ZERO meat diet (vegetarian meat, milk, cheese, egg, nuts, and beans are acceptable)
 2. upload photos of vegetarian dishes
- **Awards :**
 1. self-directed learning credits for Geography
 2. top 3 students with the most participation from each form will be awarded with vegetarian snacks




Eat For Green
Plant-based diet
Group 5



Feedback from the participants

82% of participants agree that the event helps them learn more about vegan diet	63% of participants are willing to try/ practice vegan diet
73% of participants enjoyed the campaign	75% of participants support the school for having a vegan menu



Concluding remarks

- Learn, Act, Lead
- Making good use of various resources
- 