

Stewards Pooi Kei College

Lesson Plan

A. Basic information			
1. Date	28/3/2019	4. Teacher	Lam Tsz Wai, Peggy
2. Time	12:45-13:25	5. Subject	S.2 IH (2F)
3. Duration	40 minutes	6. Room	502

B. Teaching and learning area	
1. Topic	➤ Water problems in China – Flooding
2. Study field	➤ The impacts/ effects of flooding in China
3. Objectives	➤ Analyzing the different effects of flooding
	➤ Applying the concepts and knowledge to the situations in China
	➤ (For elite class) Classifying/ Categorizing the impacts of flooding (e.g. positive VS negative; environmental/ social/ individual, etc.)

C. Macro-teaching and learning cycle		
Process	Content	Duration
1. Setting the context	= Q & A: Checking the prior knowledge : The “6-wh” Questions: e.g. What is flooding? Where does flooding usually occur in China (map) ? Why does it happen? When does it commonly occur? (mind-map) - Stating the lesson objectives e.g. Enquiry question: Is flooding only a bad thing?	5 min
MINI-CYCLE 1		
2. Setting the context	= Q & A: Using everyday life & experience in Hong Kong e.g. Is flooding common in Hong Kong? Where & When does flooding usually occur in HK? How does flooding affect you/ HK?	2 min
	= Think-pair-share: Asking students to share a piece of news about flooding with peers (pre-assigned task)	
	= Compare & Contrast: Using photos/ videos to compare the effects of flooding (before VS after) (e.g. using typhoon Mangkhut)	2 min

Comment [ΓΠ11]: I think this should be the last question because this is specific to a location whereas the other questions are generic. Maybe you could guide the students by giving them the number of causes, eg “What are 3 causes of flooding?” (or whatever the number is)

Comment [ΓΠ12]: You’re going to answer this at the end of the lesson, aren’t you, or now at the beginning? **This is a good question – I wish you could spend several lessons on just this topic!** For example, in Australia this year there has been incredible flooding in the north of the country – those who are in the flooded area (both farmers and town people) complained bitterly but those whose farming lands are not directly affected are happy because the floodwaters are filling up the underground water in the huge aquifers that exist and also because the floodwaters are providing the flow for the many intermittent rivers to start flowing again, bringing marine and bird life etc back to desert areas.

Comment [ΓΠ13]: I like this as Setting the Context but 5 mins is nothing – I’m not sure you will be able to achieve all of this in the time. Could you direct students to watch/look at the photos and videos you want them to look at – give them the URLs – as part of the pre-assigned task so that this 5 mins is more the students reporting what they have found according to a series of questions you have given them. So, no think-pair-share – it’s more a focus on comparing and contrasting what they have already seen.

Comment [ΓΠ14]: Good question.

Comment [ΓΠ15]: This is a good task to set beforehand because it is possible for any student to achieve it successfully – see my comments above.

		1 min
3. Modelling and deconstruction	<ul style="list-style-type: none"> = Discussion: Identify the different effects of flooding (Using photos/ text/ news article) e.g. Case study 1: Bad effects + Asking sub-questions e.g. Case study 2: Good effects + Asking sub-questions 	5 min
4. Guided Construction	<ul style="list-style-type: none"> = Practice: Discussing one question together - "Flooding causes great damages, but also brings benefits. Why?" = Introduce the structure of an answer (Describing the situations and explaining the outcomes) = Nominalization 	5 min
5. Independent Construction	<ul style="list-style-type: none"> = Q & A: Asking students to identify the effects of flooding in China (Case study 3) = Task force: Ask students to write down the answer on the WS = Checking answers 	5 min
MINI-CYCLE 2		
6. Setting the context	<ul style="list-style-type: none"> = Task force 1: Collaborative learning: Classify and explain the effects of flooding (using table) = Q & A: Checking students' understanding 	2 min
		3 min
7. Modelling and deconstruction and Guided Construction	<ul style="list-style-type: none"> = Task force 2: Direct teaching: Teaching students how to explain the answers, as well as classifying effects into different aspects = Q & A: Asking small questions to help students finish the task 	3 min
8. Independent Construction	<ul style="list-style-type: none"> = Task force 2: Practice exercise: Allowing students to analyze the effects of flooding (Case 3) = Feedback: Using projector to show a few students' answers and giving feedback for students 	5 min
9. Summary	<ul style="list-style-type: none"> - Summarizing the various effects of flooding. - Using popplet: Asking students to draw a mind-map to consolidate their learning outcome. 	2 min

Comment [ΓΠ6]: Remember that if this is M&D then you are "in charge" and you are showing them how to analyse the geographical data so I am not sure "discussion" is appropriate.

Comment [ΓΠ7]: I see you are asking this question now. If this is the inquiry question then it makes the other question about the bad effects not focused on inquiring. It feels as if "bad effects" is assumed and boring while "good effects" is not assumed and exciting. I'm not sure that is a good teaching strategy – I think each case study should give the students the expectation and possibility of inquiring – as a good geographer would do.

Comment [ΓΠ8]: If you do the M&D as I mentioned above, then this would be successfully achieved by the students, with you starting this by asking eg: How should I answer this question? What is the first thing I should do (or ask or think about)?

Comment [ΓΠ9]: This writing activity is new. This hasn't been modelled yet so I think you should put it back in the M&D part. Then in this GC part, you can answer that question and also ask the students how to write the answer.

Comment [ΓΠ10]: Good. If they have done the M&D and GC with you, then this should be able to be answered by the students.

Comment [ΓΠ12]: Pls see my comment for this table.

Comment [ΓΠ11]: I feel this is building up the students' knowledge with no input (until the discussion part, I expect) from the teacher.

Comment [ΓΠ13]: Yep, you have combined M&D and GC in a couple of small activities – that is absolutely fine the way you have organised. "Direct teaching" is always M&D – "asking small questions" is always GC.

Comment [ΓΠ14]: Good. And I like the feedback BUT you won't do it all in 5 mins.

Name: _____ Class: _____ () Date: _____

Teachers'
version

Enquiry question: Is flooding only a bad thing?

Case study 1: A news article about typhoon Hato in Hong Kong (edited)



Powerful typhoon Hato caused great storm surges that hit Hong Kong badly, August 2017.

Severe Typhoon Hato destroyed Hong Kong leaving flights grounded and trade at a temporary standstill. Hurricane-force winds flooded some coastal or low-lying areas and left a trail of trash that ruined the city streets. **3**

The severe storm triggered the territory's first Typhoon Signal No. 10 in five years. Hato brought maximum sustained winds of up to 107 mph and gusts of up to 139 mph, according to the observatory. **6**

Hato brought heavy rain, strong winds and serious flooding. At least three people were killed and two others remain missing. Electricity has reportedly been knocked out across the territory and there are concerns **9** that water supply might also be cut, affecting people's daily life. Besides, hundreds of flights have been canceled or delayed.

1. Name any TWO terms (conditions) related to typhoon.

Storm surges, heavy rain, strong winds, hurricane-force winds

2. Which area(s) are affected?

Coastal areas, low-lying areas

3. How does flooding affect people's life?

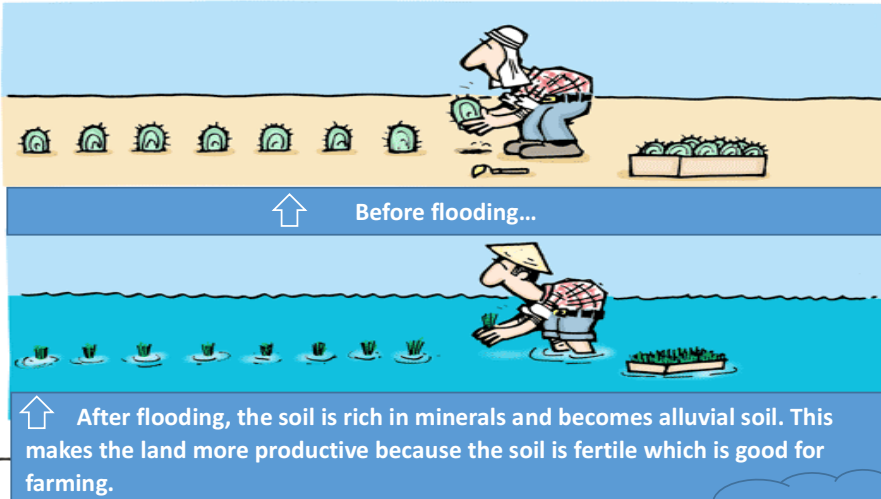
Flights are canceled or delayed, electricity or water supply is cut off, people are killed or injured, trade is standstill, etc.

4. List at least TWO words that are negative in meaning.

Badly, destroyed, ruins

Points awarded: _____ /4

Case study 2: A cartoon



Question: "Flooding causes great damages, but also brings benefits. Why?"

Which sentence/line is the clue?

Guided answer:

(Case 1) The reason for flooding can be related to strong winds and storm surges that lead to great destruction. Some coastal or low-lying areas will be flooded that left the city streets in ruins. Flooding may result in the loss of life and property. There is a possibility of the suspension of electricity and water supply that causes inconvenience for people. Besides, some serious floods also lead to the disruption of transportation (the cancellation or delay of flights).

Example:

Which one are we point to? (Pointer) / How many or how much? (Numerative)	What's it like? (Describer)	What are we talking about? (Thing)	Which one in particular?
Some	serious	floods	(also lead to) the disruption of transportation

Nominalization: (for example: change the words into "noun")

1. Destroyed → destruction
2. Caused → (the reason for/ the cause of)
3. Might → (possibility/ risk/ chance)
4. Cut/ cut off → (suspension)
5. Cancelled → (cancellation)

How to do the nominalization?

(Case 2) However, flooding has brought benefits as well. Rich alluvial soil is brought after flooding which contains rich minerals. The fertile soil can _____ ** (2 points) (increase the productivity) of land which is good for farming.

Points awarded: /7

**Which paragraph may not be helpful for you to answer the question?

Case study 3: A news article about flooding in China (edited)



A bridge destroyed by floods in southwestern China's Sichuan province, July 2018.

Authorities in the southwestern Chinese province of Sichuan have declared a state of emergency after a mountainous region was hit by floods and landslides following days of heavy rain. Water levels on a number of major rivers in the region are higher than before which reach the warning line.

Thousands of travelers were detained after landslides and floods blocked major highways and the severe floods badly affected flights at Chengdu International Airport.

The government has issued a red alert for landslides and other "geological disasters," and a top-level emergency response for flooding in the region, official media reported.

Some 900,000 local residents have been affected, with more than 100,000 forced to evacuate from their flooded homes. Meanwhile, 12 people have died in the far western province of Gansu, where authorities evacuated some 27,000 people after the region was also hit by floods and rainstorms.

"The damage on agriculture around Mianyang has been enormous," Zhou said. "Farms, equipment and homes have all been flooded." "We haven't seen flooding this severe for 50, maybe even 100 years," he said.

Points awarded: /4

1. Name the TWO hazards in the news.

Landslides, floods

2. What causes floods and landslide?

Heavy rain

3. Which area(s) are affected?

Mountainous region, southwestern part

4. List at least TWO words that are negative in meaning.

Destroyed, warning line, damage, disaster, etc.

What are the effects of flooding in China?

Points awarded: /5

Task force 1: Collaborative work-Classification of the effects of flooding into different aspects

Daily life	Economy	Society	Environment	Government
Houses are flooded, homeless, forced to evacuate,	Economic loss, crop failure/ damage on agriculture	Disruption of traffic (the blockage of roads or suspension of flights), *spread	Landslides, *Pollution, *messy streets	*Heavy burden (emergency aids/ reconstruction), *negative image

Comment [III]: Economic damage isn't just agricultural, is it? What about towns and villages and the cost of rebuilding not only personal belongings, homes and commercial properties but infrastructure, too, eg vehicles are damaged, the interiors of properties are ruined (it's not just that they have to move or can't stay in their homes (which you have in the daily life column) but they have to find the money to replace everything and start anew (and insurance rarely covers floods (a so-called act of God), bridges, railways are roads washed away.

Injuries or deaths of disease *own knowledge (ineffective relief)

Task force 2: Write one paragraph on your own about the effects of flooding in China. (At least ONE)

Guided answer: Flooding brings environmental impacts as heavy rain causes the rise in water levels of major rivers, which results in/ leads to floods and, in some mountainous regions, landslides as well.

Comment [112]: Good that you have given them a model.

Sample answer: (Paragraphs 1 and 2)

One social damage caused is the disruption of transport (like railway). Landslides and floods result in the detainment of tourists (or residents) due to the blockage of major highways (or roads). Some severe floods cause the negative effects on air traffic (that increases the chance to chaos or instability).

Sample answer: (Paragraph 5)

Economically, flooding leads to the enormous damage on agriculture because of the flooded farms and equipment.

Challenge task: Besides the rich alluvial soil, can you think of another positive effect of flooding?

(Hint: How is it related to the water cycle? Will the ecosystems or living organisms benefit from floods?)

1. Flood waters absorb into the ground and infiltrate into the rock can recharge these underground aquifers, which supply natural springs, wells, rivers and lakes with fresh water.
2. Floods contribute to the health of ecologically important wetland areas. Healthy wetlands promote healthy water supplies and even affect air quality. Floods also carry and deposit nutrient-rich sediments that support both plant and animal life in wetlands.

Self-check:

*Understanding

*Accuracy

*Task completion



Total points: /20

Follow-ups:

Mind-map (Popplet)

Extended task

Extended task and references:

1.

https://www.youtube.com/watch?v=JRz_8NgS1Zk

China's Extreme Flooding: See Dramatic Scenes of Rescue and Ruin | National Geographic



2.

<https://www.scmp.com/video/china/2162528/12-million-people-affected-severe-flooding-chinas-guangdong-province>

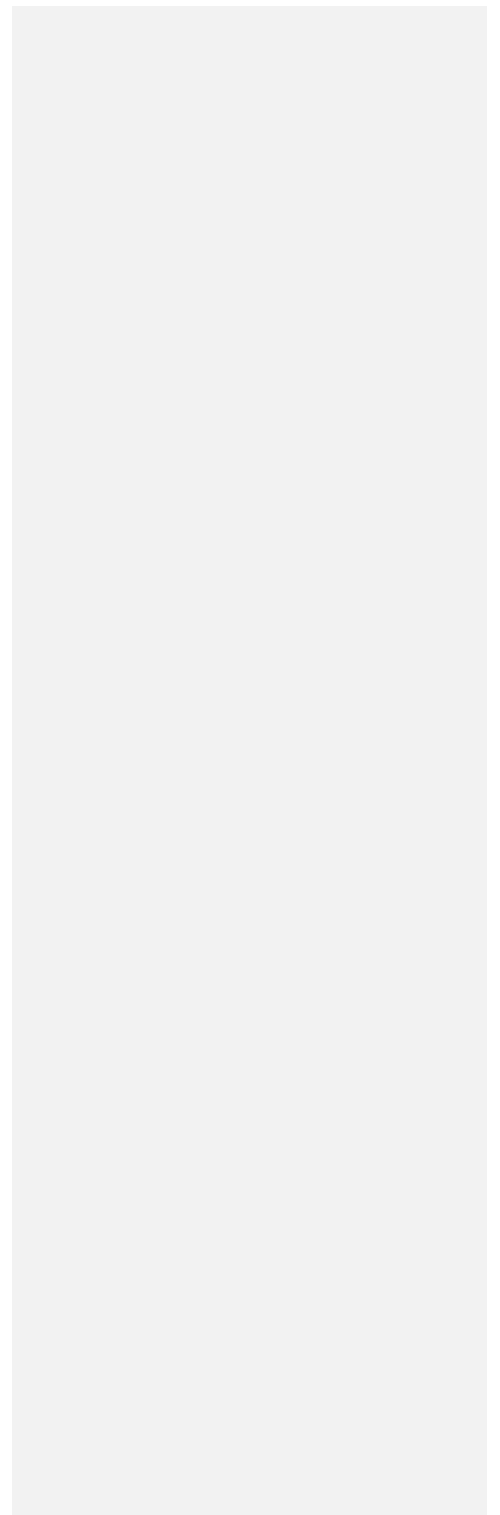
Extreme weather in China



3.

<https://www.rfa.org/english/news/china/millions-hit-by-severe-flooding-in-chinas-sichuan-gansu-provinces-07132018113550.html>

Millions Hit by Severe Flooding in China's Sichuan, Gansu Provinces 2018.7.13



Enquiry question: Is flooding only a bad thing?

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The severe storm triggered the territory's first Typhoon Signal No. 10 in five years. Hato brought maximum sustained winds of up to 107 mph and gusts of up to 139 mph, according to the observatory. **6**

Hato brought heavy rain, strong winds and serious flooding. At least three people were killed and two others remain missing. Electricity has reportedly been knocked out across the territory and there are concerns **9** that water supply might also be cut, affecting people's daily life. Besides, hundreds of flights have been canceled or delayed.

1. Name any TWO terms (conditions) related to typhoons.

Blank space for answer to question 1.

2. Which area(s) are affected?

Blank space for answer to question 2.

3. How does flooding affect people's lives?

Blank space for answer to question 3.

Comment [T13]: Do they understand this? Why not use "average"?

4. List at least TWO words that are negative in meaning.

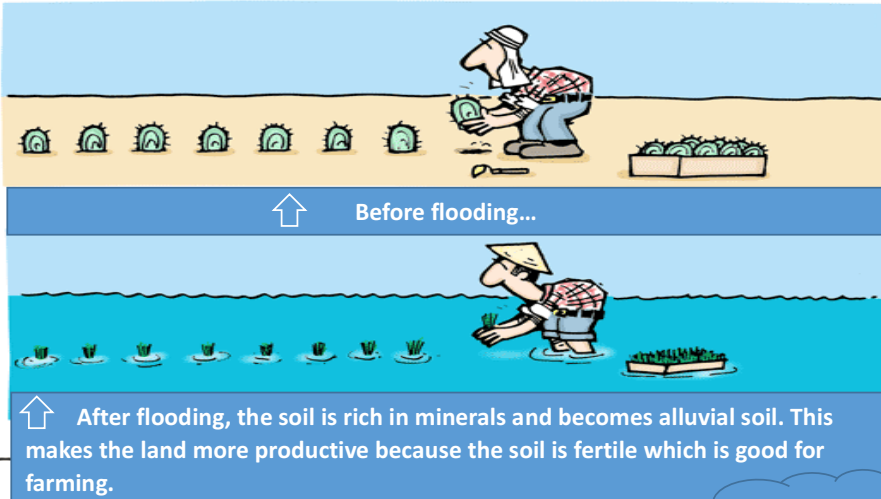
Blank space for answer to question 4.

Comment [T14]: Are they still missing?

Comment [T15]: See my comment below re the use of "besides".

Points awarded: _____ /4

Case study 2: A cartoon



Question: "Flooding causes great damage, but also brings benefits. Why?"

Guided answer:

(Case 1) The reason for flooding can be related to strong winds and storm surges that lead to great destruction. Some coastal or low-lying areas will be flooded and this leaves the city streets in ruins. Flooding may result in the loss of life and property. There is a possibility of the suspension of electricity and water supply, which causes inconvenience for people. Besides, some serious floods also lead to the disruption of transportation (the cancellation or delay of flights).

Example:

Which one are we point to? (Pointer) / How many or how much? (Numerative)	What's it like? (Describer)	What are we talking about? (Thing)	Which one in particular?
Some	serious	floods	(also lead to) the disruption of transportation

Nominalization: (for example: change the words into "noun")

1. Destroyed → _____
2. Caused → _____
3. Might → _____
4. Cut/ cut off → _____
5. Cancelled → _____

(Case 2) However, flooding has brought benefits as well. Rich alluvial soil, which contains minerals, is brought with the flooding. The fertile soil can _____ *(2 points) (increase the productivity) of land which is good for farming.

Points awarded: /7

Which sentence/ line is the clue?

Comment [T116]: In this example, "damage" is not countable. If it were countable, then you wouldn't use great, you'd use many or a word like thatr.

Comment [T117]: "that" is used for defining relative clauses, "which" can be used for both defining and non-defining. In this example, you are not defining anything, you are elaborating.

Comment [T118]: Please don't use this word – it is used incorrectly almost 1005 of the time in HK. Rather than explain it here, just take my advice and do NOT use it at all (anyway, it is used less in formal writing and more in speaking). Use instead (if you want a conjunction): Also, In addition, or Furthermore.

How do we nominalize these words?

Comment [T119]: Remember that the relative pronoun should be adjacent to the thing it relates to – here, "which" relates to "soil" not "flooding".

**Which paragraph may not be helpful for you to answer the question?

Case study 3: A news article about flooding in China (edited)



A bridge destroyed by floods in southwestern China's Sichuan province, July 2018.

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Thousands of travelers were detained after landslides and floods blocked major highways and the severe floods badly affected flights at Chengdu International Airport.

The government has issued a red alert for landslides and other "geological disasters," and a top-level emergency response for flooding in the region, official media reported.

Some 900,000 local residents have been affected, with more than 100,000 forced to evacuate from their flooded homes. Meanwhile, 12 people have died in the far western province of Gansu, where authorities evacuated some 27,000 people after the region was also hit by floods and rainstorms.

"The damage on agriculture around Mianyang has been enormous," Zhou said. "Farms, equipment and homes have all been flooded." "We haven't seen flooding this severe for 50, maybe even 100 years," he said.

Points awarded: /4

1. Name the TWO hazards in the news.

2. What causes floods and landslide?

3. Which area(s) are affected?

4. List at least TWO words that are negative in meaning.

What are the effects of flooding in China?

Points awarded: /5

Task force 1: Collaborative work-Classification of the effects of flooding into different aspects

Daily life	Economy	Society	Environment	Government

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Task force 2: Write one paragraph on your own about the effects of flooding in China. (At least ONE)

Guided answer: Flooding brings environmental impacts as heavy rain causes the rise in water levels of major rivers which results in/ leads to floods and landslides in some mountainous regions.

Challenge task: Besides the rich alluvial soil, can you think of another positive effect of flooding?

(Hint: How is it related to the water cycle? Will the ecosystems or living organisms benefit from floods?)

Self-check:

*Understanding

*Accuracy

*Task completion



Total points: /20

Follow-ups:

Mind-map (Popplet)

Extended task

Extended task and references:

- https://www.youtube.com/watch?v=JRz_8NqS1Zk



China's Extreme Flooding: See Dramatic Scenes of Rescue and Ruin

- <https://www.scmp.com/video/china/2162528/12-million-people-affected-severe-flooding-chinas-guangdong-province>



Extreme weather in China

- <https://www.rfa.org/english/news/china/millions-hit-by-severe-flooding-in-chinas-sichuan-gansu-provinces-07132018113550.html>