GEI4004: The Ocean Story

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Medium of Instruction : English

Course Intended Learning Outcomes (CILO$_s$)

- *Upon completion of this course, students will be able to:*

CILO$_1$ EXAMINE ocean principles;

CILO$_2$ critically ANALYZE the literature about ocean and APPRECIATE the ocean;

CILO$_3$ PROMOTE ocean literacy to all levels of students in a school context or to the publics through meaningful and creative activities.

CILO$_4$ DEVELOP a global perspective of the ocean through interdisciplinary discussions and activities

Mode of integration
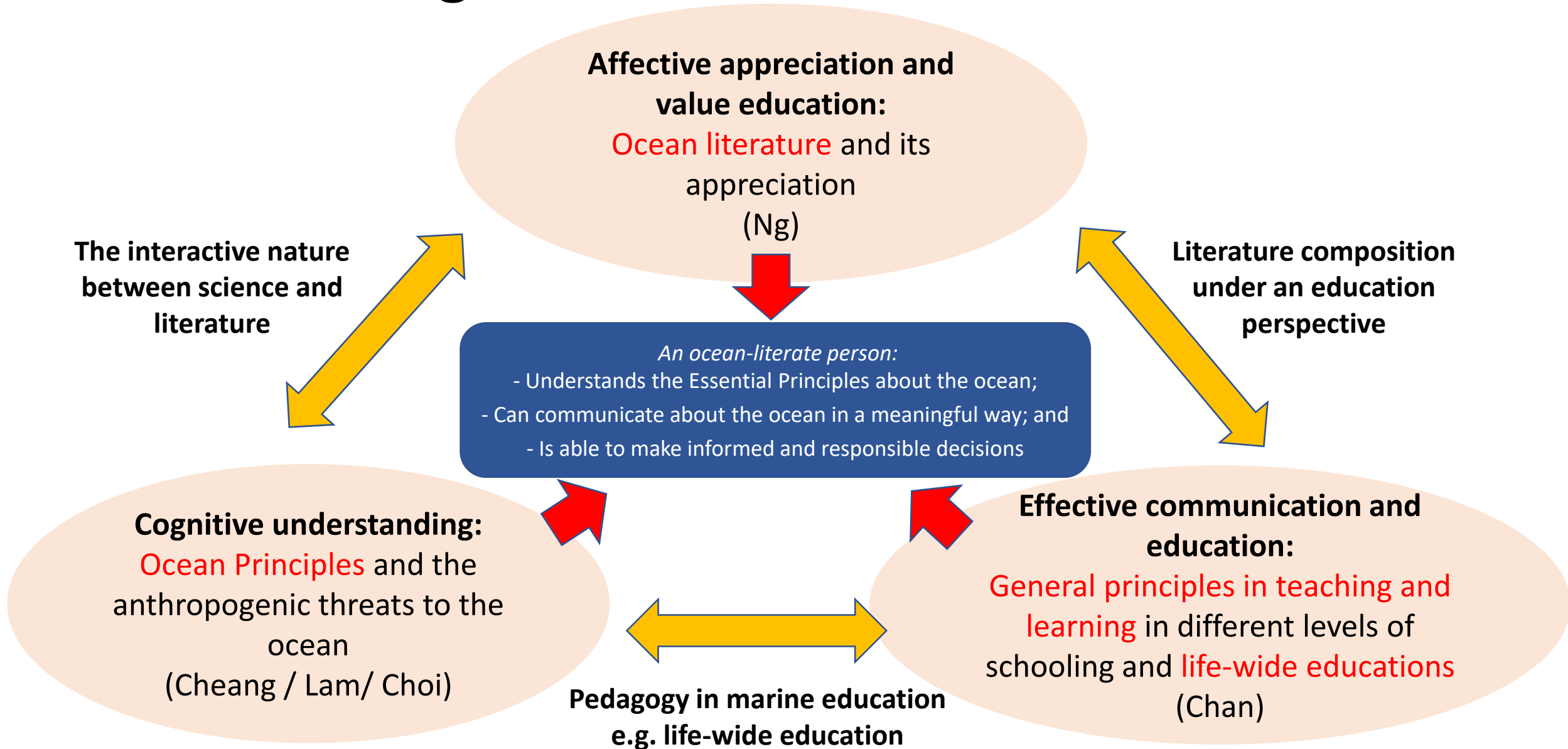
Enable integration/ synthesis of disciplines

- Providing students with opportunities to apply what they have learnt, through the completion of final group project.

- Proposal + Final Presentation on implementation

Assessment Tasks	Weighting (%)	CILO
- Submission of an individual reflection on the whole course, composing student's own "ocean story"; the content may include, but not limited to, evaluating the field visit, if any, based on the oceans' principles, reflecting the experience gained in the ocean-literacy-promoting activity etc.. (750 words)	25	$CILO_{1,3,4}$
- Individual assignment of an interdisciplinary review on literature about ocean (not less than 750 words)	25	$CILO_{1,2,4}$
- Assessment on the planning and implementing, if any, a holistic interdisciplinary ocean-literacy-promoting activity, conducted in groups Group formed before 23 Feb	50	$CILO_{1,2,3}$

Today's Guests

An Interview: the Adaptation of the Little Mermaid

01. Adaptation Writer – Rainy

02. Hans Christian Andersen (Original Writer) – Evie

03. Ariel from the Adaptation – Kate

04. Marine and Environmental Scientist – Suki

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Part 1 Ariel is very curious about the human world.

Ch.01

Far out in the sea, the water is as blue as the prettiest cornflower and as clear as crystal. Instead of bare yellow sand, the most singular flowers and plants grow there. The leaves and stems of which are so pliant, that the slightest agitation of the water causes them to stir as if they had life. Fishes, both large and small, glide between the coral. In the deepest spot of all, stands the castle of the Mer King. Its walls are built of coral, and the long, gothic windows are of the clearest amber. The roof is formed of shells that open and close as the water passes by. Their appearance is exceptionally beautiful, for in each lies a glittering pearl, which could be fit for the diadem of a queen. There, the Mer King lived with his mother and his four daughters, Aquata, Adella, Alana, and Ariel, each one born a year apart.

However, the youngest daughter of the mer king, the little mermaid Ariel, was not satisfied with beautiful fish, shells of various sizes and shapes of the wondrous sea. She loved the surface world and was eager to swim to the surface of the ocean to see the human world.

Ch.02

Ariel has a good relationship with her third sister Alana, who had already come to the surface.

Ariel always followed Alana and asked her, "Alana! What did you see in the human world? What does a human house look like? Is it the same as our palace? What do they usually do?"

Alana would smile and reply, " The flowers of the land are fragrant, different from those below the sea. The trees of the forest are green and the birds among the trees sing so sweetly that it is quite a pleasure to hear them. In the daytime,

Evidence – example of students' assignment

Evidence - Comment from students in SET (one of the classes)
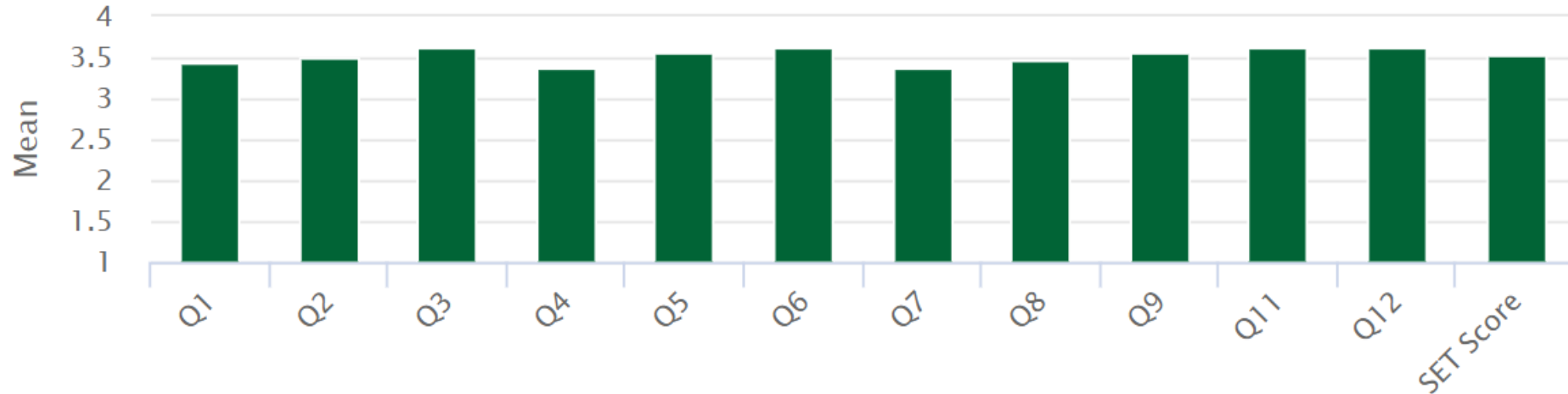
- *"We could really learn ocean from different perspectives. There are interdisciplinary ways to approach when we learn about the ocean, like in the way of science and also literature."*

- *"The course helps me understand the ocean from different perspectives, such as in science and literature. Through the working on the group project, we could think about how to incorporate the pedagogical, scientific, and literal theory into the promotion of the ocean."*

Enhance the effectiveness of co-teaching & Co-assess interdisciplinary learning

- Instructors know each other's expertise and having a clear role in the team.

- Good communication among instructors through Email, WhatsApp

- Each instructor provides students with support from different angles.

- Formative assessment during consultations and in-class interaction

- Establish an online spreadsheet for more effective marking and recording. (Constructed by Dr Choi), so that instructors can share their marks and comments in real-time, facilitating a holistic and instructor-informed comments to students

Evidence – example of students' assignment

Budget Plan

	Quantity	Resources	Total Amount
Promoting Car (including driver, TV, electricity, lighting, wifi)	X 1	E-banner https://hk.e-banner.com/promotion-truck-rental-service-package.html	$12,000 per day
Table & Chair	Table X1 Chairs X4	self-prepare	$0
Ball pool and marine toys	X1	Online purchase	$100
Colour paper	X60 (A4 size)	Stationery shop	$150
Scissor, glue	X 10	Stationery shop	$100
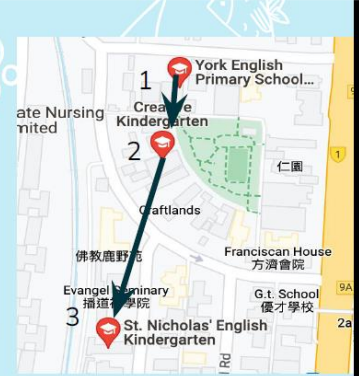
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Deliver online teaching and learning under the pandemic situation

- Tightened pandemic measures that at some point students might get fined for meeting each other just for the sake of completing group projects → we specifically instructed students (at least when they raised similar concerns during the 3rd consultation) on how they could explicitly address the difficulties they encountered in the preparation process (especially during the stage between the proposal and the implementation).

- The assessment of this project thus merits also the efforts in problem solving. Students overall have found this rewarding, with remarkable sense of accomplishment in completing the group project in different stages

- A virtual field trip to Great Barrier Reef in the last semester (Prepared by Dr Choi). Dr Choi asked students to capture the colors and creatures they saw, and then gave a short presentation in class.

- https://sites.google.com/s.eduhk.hk/gei4004-21-22s101e/home
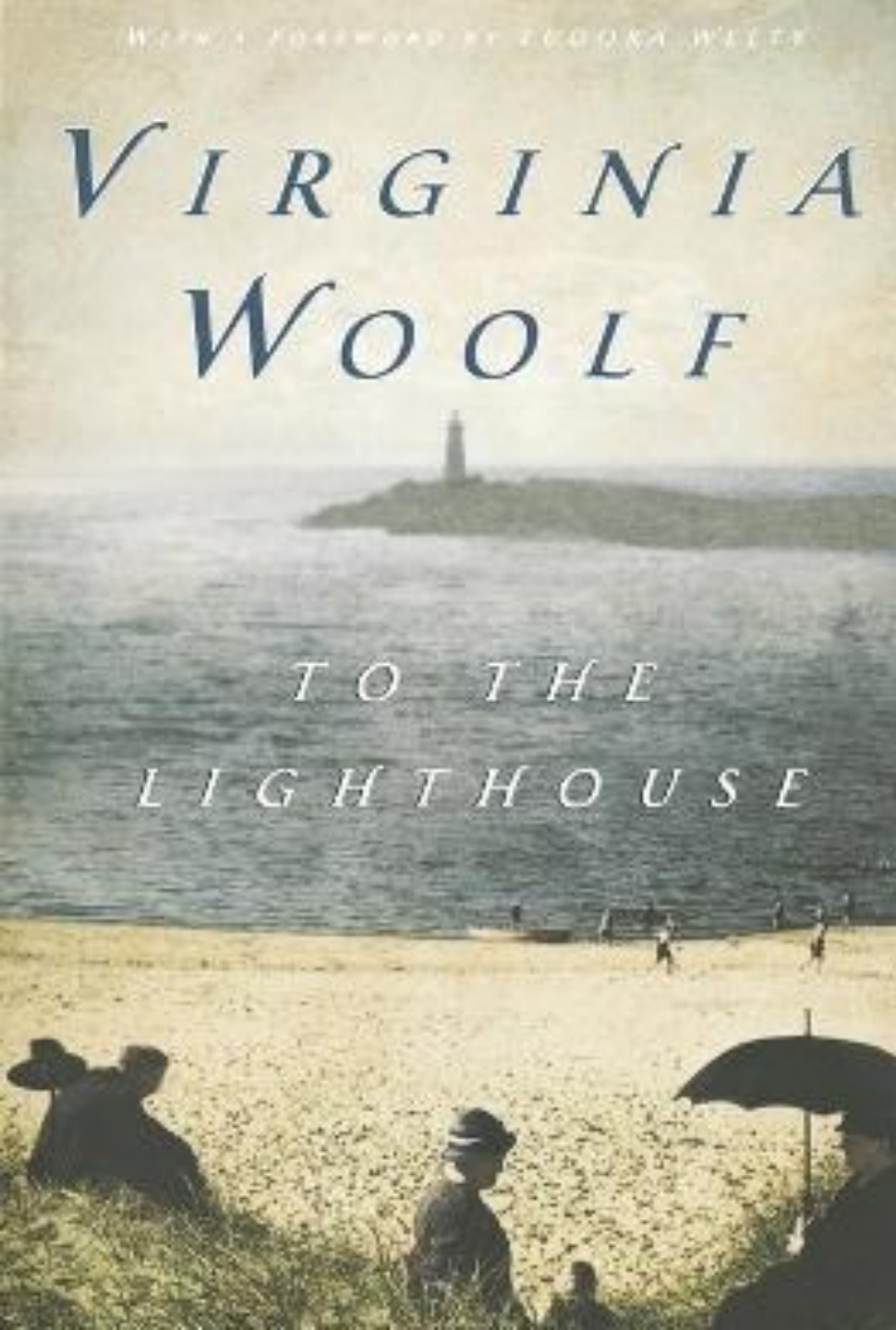
A particular example –
Virginia Woolf's "To the Lighthouse"

- Dr Ng selected an excerpt in which we can focus on two teenager characters, James and Cam, and especially on their attitudes in the face of uncertainties that lie ahead of them, just like the ocean.

- In the excerpt, they are on a boat trip towards a lighthouse. Here the sea symbolizes the uncertainties that we must confront and cross in order to move forward, to head into future, the sea could be post-WWI Britain as can be the case in the novel.

- Dr Ng invited students to imagine this sea to be such uncertainties into which this pandemic has thrown all of us.

- James and Cam embody two different attitudes in dealing with them, each of which corresponds to two interesting ocean-related verbs in the English language: to navigate and the harbour respectively.

- Dr Ng asked the students to reflect on the following question:
  - Do you feel more like James or Cam in comparable situation? is it possible to analogise our experiences in terms of theirs? What can be an alternative attitude in similar situation?
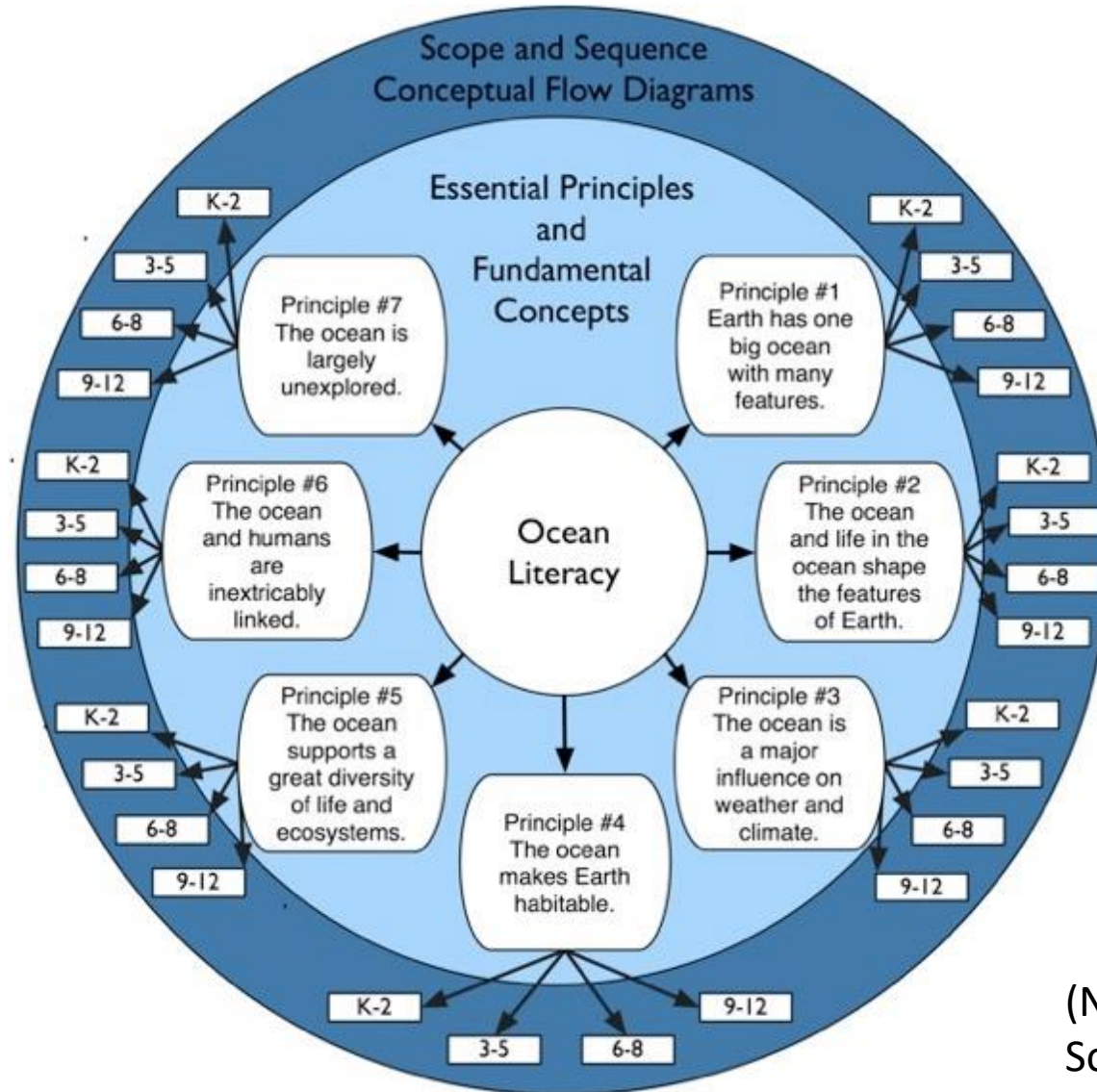
Evidence – student's assignment and instructor's comment

description of the author and her writing style, and then dis-

Quotes from the assignment of student

- "As the value of the journey far outweighs the value of achieving the goal, this is what he would likely focus on the process rather than the accomplishment."

- And on Cam, "she is changing her perspective on what is in front of her."

→ "a promising paper that responds to the image of the lighthouse and the sea surrounding it by way of your careful interpretation and close reading of the excerpt from Virginia Woolf's To the Lighthouse.".
Comment from Dr Ng

Q & A

Seven Principles (NOAA, 2013; Fauville et al. 2019)

- Principle #1: The Earth has one big ocean with many features.
- Principle #2: The ocean and life in the ocean shape the features of Earth.
- Principle #3: The ocean is a major influence on weather and climate.
- Principle #4: The ocean made the Earth habitable.
- Principle #5: The ocean supports a great diversity of life and ecosystems.
- Principle #6: The ocean and humans are inextricably interconnected.
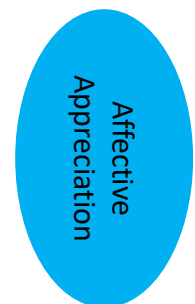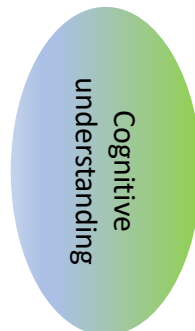- Principle #7: The ocean is largely unexplored.

Curriculum and learning progression

(NMEA, 2013)
Source: http://oceanliteracy.wp2.coexploration.org

Week	Proposed Lesson Content	CHEANG	CHAN	LI	
1	Introduction to Ocean and Ocean literacy	✓			
	Communication among co-lecturers on the learning outcomes of students	✓	✓	✓	Co-planning
2	Scientific background knowledge about the Ocean	✓			Co-teaching
3	Anthropogenic threat to the Ocean and the potential solutions	✓			Co-teaching
	Communication among co-lecturers on the learning outcomes of students	✓	✓	✓	Co-planning
4	Introduction of the literatures about Ocean			✓	Co-teaching
5	Skill in appreciation of literature and composition			✓	Co-teaching
	Communication among co-lecturers on the learning outcomes of students	✓	✓	✓	Co-planning
6	The principles of teaching and learning in all levels of schooling		✓		Co-teaching
7	The practice in life-wide education		✓		Co-teaching
8	Field visit related to the ocean, e.g. maritime museum, sea salt field	✓	✓	✓	Co-planning
9	Students' proposal presentation on an activity to promote ocean literacy: cross-disciplinary integration	✓	✓	✓	Co-assessing
	Discussion among co-lecturers on the guiding of students in the consultation period	✓	✓	✓	Co-assessing
10 -12	Students work in group to evaluate the activities planned/ Consultation with course instructors	✓	✓	✓	Co-guiding
13	Students' final project evaluative presentation: cross-disciplinary integration	✓	✓	✓	Co-assessing
	Discussion among co-lecturers before marking students' final reports	✓	✓	✓	Co-assessing

Lecturer

Cognitive understanding

Affective Appreciation

Effective communication & Education

References

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- National Marine Educators Association. (2010). Ocean Literacy Scope and Sequence for Grades K-12, Published in the National Marine Educators Association Special Report# 3. *The Ocean Literacy Campaign Featuring the Ocean Literacy Scope & Sequence for Grades K-12. NMEA*. Link: http://oceanliteracy.wp2.coexploration.org/ocean-literacy-framework/

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