GEEP 2021 Asia Pacific EE Forum - The Power of Connection Strategies for Ocean Literacy

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Slide 1: What Part Does the Ocean Play in Education?

To understand the role of the ocean in education we first need to understand the importance of the ocean in all of our lives. Here are just 5 examples.

- The ocean covers over 70% of our planet's surface & defines everything about it.
- The ocean makes it possible for life to exist on our planet.
- Half of the oxygen in our atmosphere is produced in the ocean.
- The ocean regulates weather and climate.
- The ocean provides a vital food source for over 3 billion people and ocean related resources drive our economy.

Slide 2: And Yet!

Most of the world's population remain largely ignorant (and uncaring) of the importance of the ocean in their lives and in education:

- ocean topics were rarely included in science education or education for sustainability and were mostly ignored in formal K-12 education;
- most teachers were poorly equipped and reluctant to teach about the ocean, and;
- there was a lack of consensus on what was important to include in the classroom and there was no systematic teaching about the ocean.

Slide 3: So, What is Ocean Literacy?

In 2002, a group of USA ocean educators and scientists agreed to work towards developing a systematic national approach to ocean education. The process they adopted:

- was inclusive, democratic and transparent;
- created outcomes that built on and credited past efforts;
- mainly involved work done online; and
- avoided institutional ownership but institutional involvement lent authority and credibility.

Slide 4: The Outcomes from 2002 to 2012

- The concept of Ocean Literacy was defined.
- 7 Essential Principles were identified and supported by underlying Fundamental Concepts.
- Scope and Sequence Guides were prepared for the 7 Essential Principles across school year levels K – 12 in the USA.
- The Ocean Literacy Framework was aligned to the USA National Science Education Standards across year levels K to 12.
- Go to https://www.marine-ed.org/ocean-literacy/overview for full details.

Slide 5: Introducing Ocean Literacy

"Ocean Literacy is an understanding of the ocean's influence on you and your influence on the ocean." And so, an ocean literate person:

- understands the essential principles and fundamental concepts about the ocean;
- can communicate about the ocean in a meaningful way; and
- is able to make informed and responsible decisions regarding the ocean and its resources.

Slide 6: (Content and Links here taken from NMEA website)
The 7 Ocean Literacy principles remain a work in progress; they reflect efforts to date defining ocean literacy.
- [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.

Slide 7: Now, to Introduce the UN Ocean Decade https://oceandecade.org
- In 2017 the United Nations declared 2021 to 2030 as the Decade of Ocean Science for Sustainable Development with a vision to deliver "the science we need for the ocean we want".
- The UN Ocean Decade Action Framework does not set targets for nations, instead it provides a map and mechanisms for contributions from all ocean stakeholders to be counted towards a global effort.
- The UN Ocean Decade is an opportunity for organizations, communities, nations & regions to collaboratively supercharge action for a sustainable ocean future.

Slide 8: Ocean Literacy & the UN Ocean Decade
- Starting in 2010 Ocean Literacy was taken up globally – firstly in the Pacific then Europe, Canada, Asia, Africa and South America.
- As part of this global uptake, UNESCO adopted Ocean Literacy and linked it to the UN Sustainable Development Goals - [SDG 14](#).
- In 2017 UNESCO produced an [OL for All Toolkit](#) and [OL Portal](#).
- In 2019 UNECSO held an international workshop to establish Ocean Literacy as the foundation for an educational response to the UN Ocean Decade and produced [A Framework for Action](#).

Slide 9: Ocean Literacy within the UN Ocean Decade - [A Framework for Action](#)
The UNESCO Framework for Action (2021) lists 4 priority areas:
- Ocean Literacy in mainstream education policy formation.
- Enhancing formal education.
- Mobilizing corporate action.
- Increasing community engagement.

Slide 10: Ocean Literacy and UN Ocean Decade Targets
Each of the 4 priority area has 4 clearly articulated Targets to be achieved by UNESCO Member States. For example (just 4 out of 16).
- By 2015, 70% of Member States have a national Ocean Literacy Strategy and integrate Ocean Literacy in the curriculum.
- By 2025, there is increased recognition and incorporation of Indigenous and local knowledge in Ocean Literacy efforts.
- By 2030, 70% of all formal educators receive training and pedagogical tools to incorporate Ocean Literacy in the classroom.
- By 2030, 70% of students worldwide are educated on Ocean Literacy and are provided with opportunities to contribute to ocean sustainability.

Slide 11: A Call to Action

- On an individual level: become familiar with Ocean Literacy and the UN Decade of Ocean Science for Sustainable Development.
- At a local level: start to build and support local initiatives like those of the next two speakers – Alice Hong and Yew Aun Quek.
- At a national level: support work towards all 16 of the Targets in the UNESCO Framework for Action.
- On the international scene: actively engage internationally especially via organizations such as, IPMEN (Pacific) and AMEA (Asia) and the UNESCO Ocean Literacy With All (OLWA) group.