

EGU General Assembly 2022

The Trilogy of Ocean, Climate and Coast: The Urgency and Exigency of Literacy, EGU22-12144
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Crookall, D., Promduangsri, P., & Promduangsri, P.



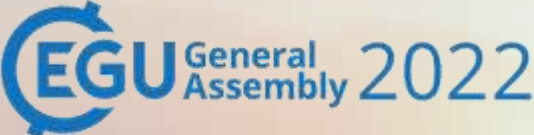
**The Trilogy of Ocean, Climate and Coast:
The Urgency and Exigency of Literacy**

EGU General Assembly, EGU22-12144

16h26-16h32, 25 May, 2022

<https://doi.org/10.5194/egusphere-egu22-12144>

Thanks to Chris Skinner et al for organising this session





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Global temperature anomalies

Coal Gas Oil

HadCRUT5.0
Baseline: 1850-1900





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In a nutshell

“The Trilogy of Ocean, Climate and Coast:
The Urgency and Exigency of Literacy”

Online, participatory simulation

Topic: Ocean, climate & coast education

Duration: 3.5 days / 3 weeks

Official event of the Intergovernmental Oceanographic Commission (IOC) of
UNESCO, as part of the UN Decade of Ocean Science for Sustainable Development





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Technology

Internet

- Fast connections required: ADSL, Fibre
- Webcams

Platforms, applications

- Discord (free, flexible/versatile, 24hrs)
- Google docs (real-time, collaborative writing)
- Google forms
- Framadate
- Zoom, etc



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Learning goals ≠ Simulation objective

Learning goals:

- Help participants:
 - To understand the ocean-climate nexus
 - To become better ocean-climate-literate stakeholders

≠

Simulation objective:

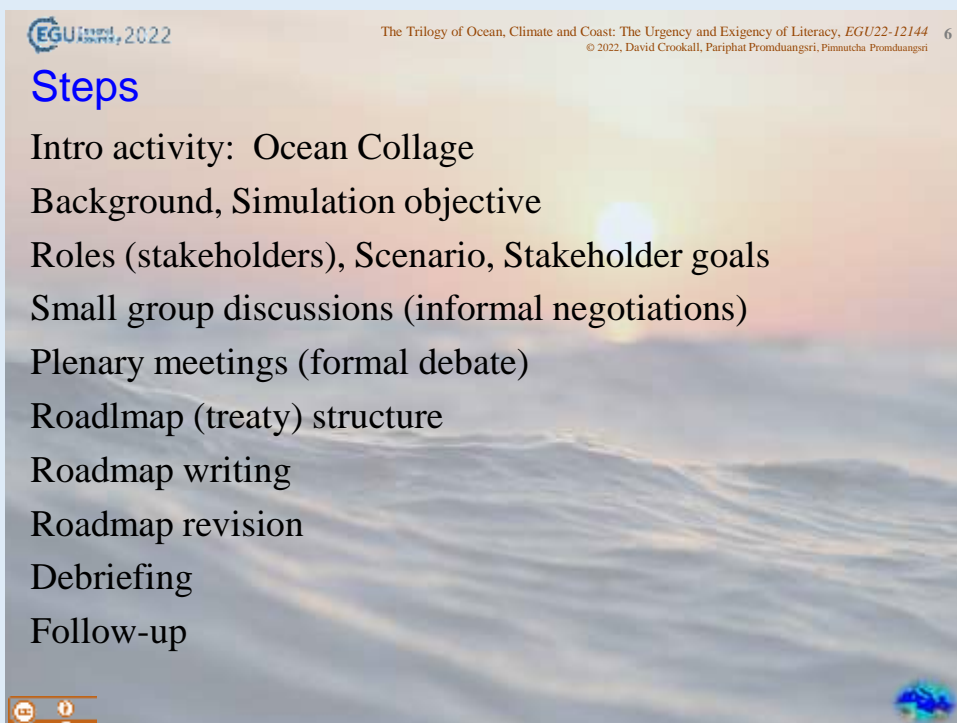
- Construct a roadmap for a climate-ocean-literacy policy



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Steps

- Intro activity: Ocean Collage
- Background, Simulation objective
- Roles (stakeholders), Scenario, Stakeholder goals
- Small group discussions (informal negotiations)
- Plenary meetings (formal debate)
- Roadmap (treaty) structure
- Roadmap writing
- Roadmap revision
- Debriefing
- Follow-up



Participants

➤Origins:

- Latin America: Barbados, Brazil
- Europe: Belarus, France, Italy, Netherlands, Spain, UK
- Other: India, Iran, Tunisia, (Nigeria, Israel)

➤19 to 60 years

➤Multicultural, multinational & professional diversity

➤Gender balance

Org:

- Inter- Ocean-Climate School,
Université Internationale de la Mer, France



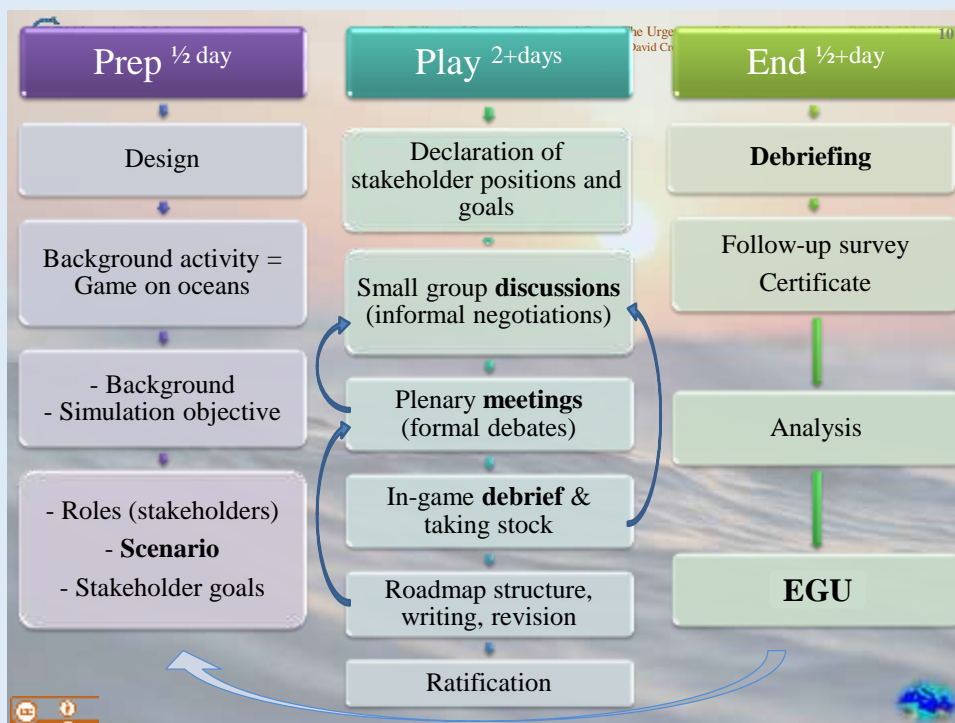
Learning goals (1/2)

- become more **ocean-climate-coast literate**
- learn about the **complexity** and **interactions** related to the **climate** impacts, human, biological and physical resources, sustainability, policy, governance, ethical dimensions, health issues and cultural diversity of the **ocean** and its **coasts** under the impact of severe, inevitable **global warming**, driving **climate change**;
- become **actors** in the definition, building and writing of **roadmaps** of policies and actions that need to be adopted and undertaken to adapt to and mitigate against **climate change**



Learning goals (2/2)

- become familiar with **methodologies**, such as data-driven, decision-focused, **participatory simulation**, that enable stakeholders to participate creatively, collectively and constructively to unravel the complex **web** of interrelated **issues** and to make **decisions** under conditions of **uncertainty**
- engage with and get to know (even make friends with) **fellow stakeholders** with a variety of views, problems to solve and solutions to offer
- break new ground in sharing, creating, learning about and promoting effective **ways to engage people and communities** to undertake **positive action** to mitigate and adapt to the ravages of climate change



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Success (comments from feedback questionnaire responses)

It was a wonderful experience.


With a series of people and scientists who really wanted to do something for the climate and the ocean.

I felt very good with all the participants. ... all the discussion rooms and all the meetings were very useful to me.

I think this school should be continuous and every few months all the participants come together again and express their new experiences in the role they played.

Very useful information was said and a very valuable treasure was shared on Google Drive.

You can read the shared material for months after school, ask ... about your problems, and discuss with the people in the class.



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Success (cont.)

I really liked the content and presentation of this simulation. It allowed me to learn more about computer tools.

the knowledge exchange between the members was very interesting and enthusiastic.

I liked the small group discussion aspect.


What excited me was when we exchanged our different point of views. To have ... been able to exchange with them [people around the world] is a very good memory.

I feel excited by the School and the environment between all of us.

When I describe the experience to friends I always say that it was something really useful for my personal and professional growth.

I hope that next year the School will be in presence.

My key words are: "Curiosity, listening, sharing"



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Stakeholders (roles)

Initial list: 30+ stakeholders

Final list:

1. Ocean & coastal planning
2. Climate change: IPCC, orgs, XR, Paris,
3. Science (& science journals)
4. Education, learning & training
5. Agriculture, Fisheries
6. Tourism
7. Energy
8. Natural resources
9. Industry, Telecoms, Builders
10. Youth, Activists

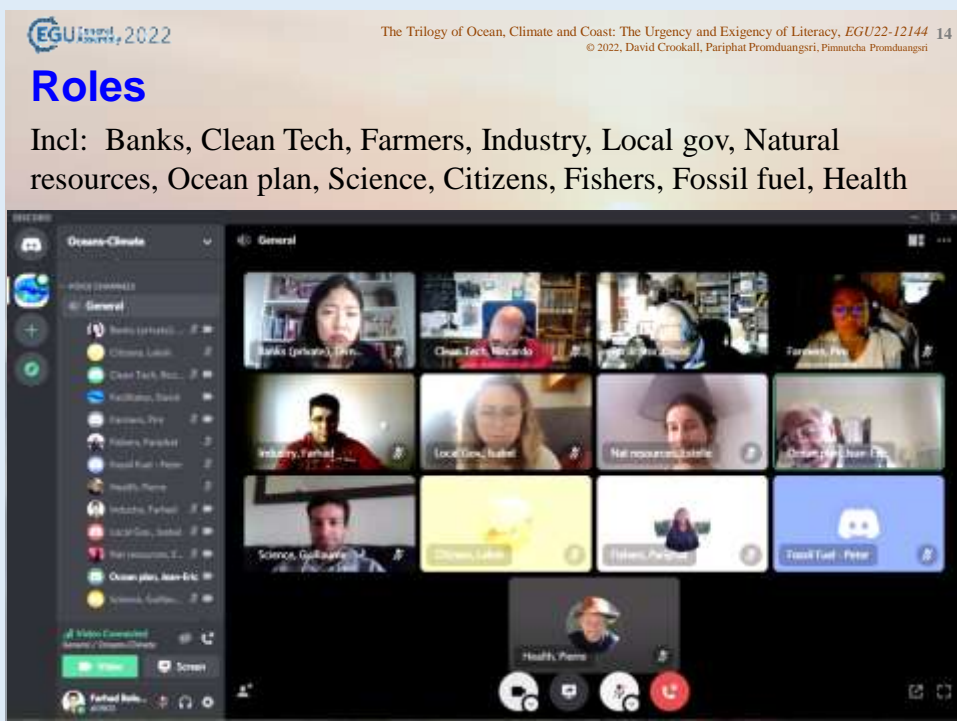


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Roles

Incl: Banks, Clean Tech, Farmers, Industry, Local gov, Natural resources, Ocean plan, Science, Citizens, Fishers, Fossil fuel, Health





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Successful

“It was a **wonderful** experience.”

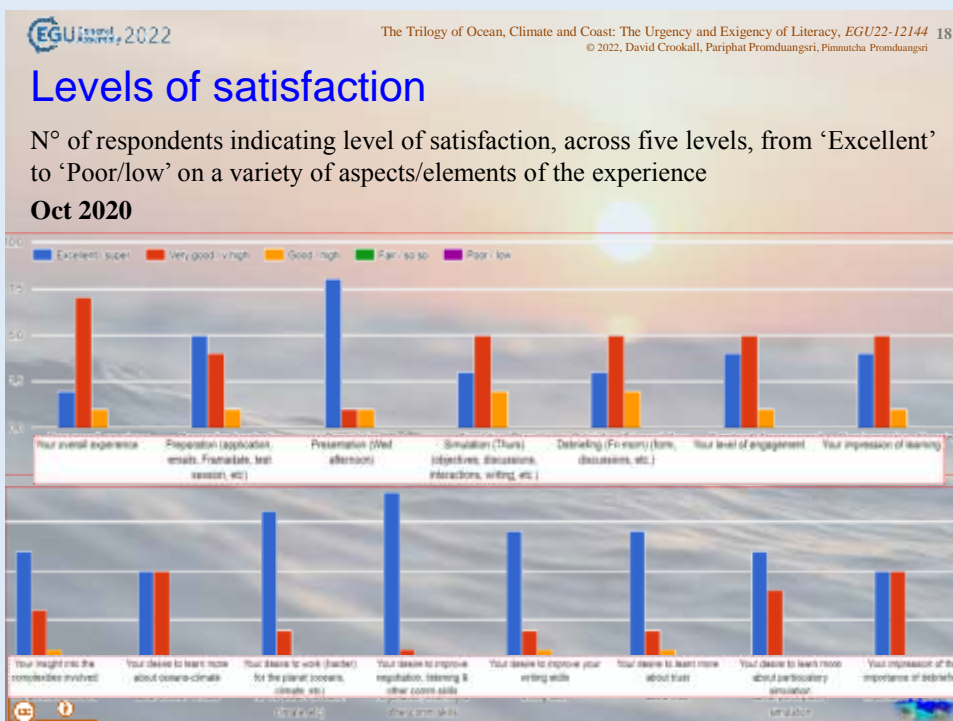
“I **felt very good** with all the participants.”

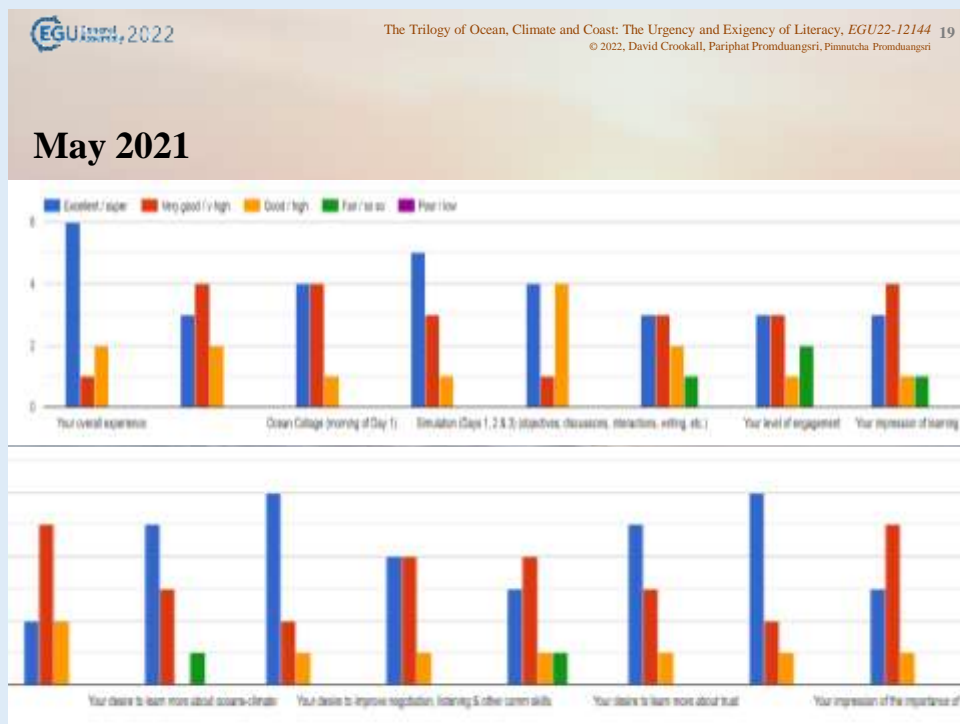
“it was something really **useful** for my personal and **professional** growth.”

“It was a very **enriching** experience for me to meet all these **people** with different training and knowledge, coming from different countries.”

“**Enriching** moments, so much more to discover.”

“What a **great experience!** I felt happy, engaged and surrounded by beautiful minds.”





Publications

Riccardo, P., 2020. **Come sarà il Mediterraneo nel 2050?**
Sapereambiente. <https://www.sapereambiente.it/primo-piano/come-sara-il-mediterraneo-nel-2050/>

Crookall, D., Caballero-Leiva, I., Sharma, L., Promduangsri, P., and Promduangsri, P.: **The Mediterranean and climate change: An online participatory simulation – Results from the front lines**, *EGU General Assembly 2021*, online, 19–30 Apr 2021, EGU21-1377, <https://doi.org/10.5194/egusphere-egu21-1377>, 2021. [this presentation]

Promduangsri, P., Promduangsri, P., Bolouri, F., Caballero Leiva, I. M., Khodja, L., Knecht, E., Matsuoka, F., Parigi, R., and Sharma, L.: **A smörgåsbord of climate literacy methods: Outlines & experiences**, *EGU General Assembly 2021*, online, 19–30 Apr 2021, EGU21-3041, <https://doi.org/10.5194/egusphere-egu21-3041>, 2021.



Ambassadors

Some past participants are volunteering to be Ambassadors. Their help is gratefully acknowledged.

Farhad Bolouri, MSc Envir Eng; Environmental Engineering, Tabriz University, Iran

Linda Khodja-Grebici, BS; Environmental Sciences (Ecology), Université de Lorraine, Metz, France

Fernanda Matsuoka, MBA, Co-founder & COO, Youth Climate Leaders (YCL), Brazil & France

Pariphat Promduangsri; Méditerranée 2000, Cannes, France & Geography, Université Côte d'azur, France.

Pimnutcha Promduangsri; Geography, Université Côte d'azur, France.



Next sessions

Autumn 2022 or Spring 2023

Special **island** edition being prepared

<https://oceansclimate.wixsite.com/oceansclimate/>

Email inquiries: **oceans.climate at gmail**



thank you - merci - Qs?

<https://oceansclimate.wixsite.com/oceansclimate>



EGU 2022 abstract submitted (1/2)

The Trilogy of Ocean, Climate and Coast:

The Urgency and Exigency of Literacy

<https://doi.org/10.5194/egusphere-egu22-12144>

Over the last decade, the use of simulation, games and role-play have been gaining ground in ocean and climate literacy. This session will describe and outline results from a particularly powerful, but underused, form of experiential learning format, called participatory simulation (PS). It contains (elements of) game, simulation, role-play, experience, human interaction, decision-making, negotiation, stakeholder engagement, etc. It is often large scale, open ended, goal and results oriented, free form and data driven. Debriefing is a crucial component.

EGU 2022 abstract submitted (2/2)

It is difficult to separate climate and ocean. Without the ocean, the Earth would be an unliveable hothouse. With no climate the ocean would hardly exist. Our overarching goal, therefore, was to help participants understand the oceans-climate nexus and to become better ocean-climate-literate stakeholders. The Inter- Oceans-Climate School (IOCS), France, has run two sessions so far (the last was three and a half days spread over three weeks, and the results are encouraging. We welcomed participants from Latin America, Africa, the Middle East, India and Europe. The IOCS is an official event of the Intergovernmental Oceanographic Commission (IOC) of UNESCO, as part of the UN Decade of Ocean Science for Sustainable Development.

