The Ocean Incubator Network (OIN)
Living Laboratory and Ocean Literacy Toolkit

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Septentrio Reports 1, 2024

Figure 1. Illustration of the Ocean Incubator Network (OIN) logo by Valentina Russo, 2023.
Summary

The report documents the experience and knowledge gained during the Ocean Incubator Network workshop on Ocean Literacy, led by Margherita Paola Poto and Laura Vita. The event was held at the Arctic House in Copenhagen and funded by UArctic UiT, The Arctic University of Norway, over May 2-4, 2024. The workshop was organized as a dynamic living laboratory facilitating active participation and contribution from the Ocean Incubator Network members. Structured over three days, the workshop's agenda followed two thematic pathways: connecting with each other and connecting with the ocean. This work resulted from the culmination of a series of preparatory meetings spanning from September 2023 (with a kick-off in Tromsø) to April 2024 (Monthly Coffee Meetings).

Under the guidance of Laura Vita and Margherita Poto, the team members collaboratively crafted creative projects centred around three foundational pillars: Positionality, Inter-cross-trans disciplinarity, and Co-creation. During the workshop, team members worked in groups to co-create activities based on the pillars captured in structured booklets. The co-created activities will be included in the final toolkit, which will be prefaced by a scientific introduction and accompanied by a dedicated book chapter (one per theme). The chapters will be co-authored by the team members and will detail the objectives, rationale, methodologies, and final results of the project. In addition to the booklets and the activities, the workshop produced footage for two video documentaries and generated various supporting materials such as illustrations, mindmaps, and infographics. Collaboration with multiple project networks, including ECOCARE (HKDIR UTF-2020/10084) and the Deep Network (Erasmus+), and the BridgET project was a hallmark of this endeavour. The outcomes of this workshop are expected to extend beyond the event itself, with a scientific publication planned for Autumn 2024 and the learning materials set to be utilized in outreach activities with schools in Colombia and Brazil, as well as in a new University course on Planetary Health offered through EUGLOH, at both UiT The Arctic University of Norway and the University of Hamburg.

Acknowledgments

We want to thank the UArctic Funding at UiT The Arctic University of Norway (OIN Project Number UArctic 580512124); Frank Sejersen for the warm hospitality at the Arctic House in Copenhagen; the Faculty of Law, UiT The Arctic University of Norway; the HKDIR Utforsk, for co-funding this initiative within the project ECO_CARE; the Program Erasmus+ for funding the Deep Network, the Thalassophile Project, and The Erasmus+ BridgET project; Valentina Russo for the illustrations; Igor Peftiyev and Artem Kryshkenko for the pictures and video footage and editing; Torje Jenssen for the support in the printing of the learning
materials from the Trykkeriet UiT; Ingvild Svestad for her unwavering support within UArctic UiT.

Figure 2. OIN members, from left: Murray, Poto, Peftieva, Vita, Quist, Hayden-Nygren, Heinrich, Kuhn, Prior, Montaña Monoga, Parry, Hernández Ant, Brigid. Photo: Igor Peftiyev, 2024.

**Aim of the workshop and content**

**Brief Introduction to the Ocean Incubator Network (OIN)**

The Ocean Incubator Network (hereinafter: OIN) Project,\(^1\) established for 2023-2025 and generously funded by UArctic Tromsø, represents a collaborative initiative to foster interdisciplinary engagement and innovation in ocean literacy and sustainability. Co-led by Margherita Paola Poto from the Faculty of Law and Giuliana Panieri from the Department of Geosciences and realized by project developer Laura Vita, the project engages a multitude of UArctic partners, including UiT The Arctic University of Norway, the Arctic Centre at the University of Lapland in Rovaniemi, Finland, the James Hutton Institute and the University of Edinburgh in Scotland, the Centre for the Ocean and Society at Kiel University, Women of the Arctic in Finland, and the Marine & Environmental Law Institute at the Schulich School of Law, Dalhousie University. Additionally, it brings together a diverse group of researchers, students, and experts in global health, youth participation and climate justice, environmental law, food justice, and ecolinguistics (Cork

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\(^1\) OIN official website: [https://en.uit.no/project/oceanincubator](https://en.uit.no/project/oceanincubator) last access May, 2024.
University College, The University of Exeter, The Thalassophile Project, the University of Turin, Mariupol State University). The actions of the OIN project on developing Ocean Literacy initiatives are closely aligned with both the goals of the UN Ocean Decade and the broader Agenda 2030 SDGs. Through collaborative efforts and partnerships centring on women’s empowerment and fostering Ocean Literacy for All, the project addresses SDGs 4, 5 and 14. Additionally, the project highlights the interconnectedness of the SDGs and the multidisciplinary approach required to achieve them successfully.

Figure 3. Infographic created by Laura Vita encompassing the OIN mission.

The workshop: A Living Laboratory to Connect with Each Other and Connect with the Ocean

The workshop organized by the Ocean Incubator Network (OIN) in May was grounded in the scientific principles outlined in the "Introduction to the Learning Toolkit," developed by Laura Vita and Margherita Paola Poto and shared with the group on the Ocean Incubator Network folder on Teams (draft of the forthcoming publication). This toolkit investigates the core concepts of ocean literacy and environmental education, emphasizing two primary pathways: "Connecting with each other" and "Connecting with the ocean." The workshop delved into the relational aspects of climate and ocean health and the interactive dynamics between humans and the ocean through the lens of critical reflection and interdisciplinary inquiry. The seminar aimed to illuminate how these pathways can shape effective educational frameworks and environmental actions by focusing on the key thematic pillars: Positionality, Inter-cross-trans disciplinarity, and Co-creation. Our activities were structured into three distinct parts.
Day 1: Getting to know each other in person

After introducing the overall event schedule to OIN members at our April Monthly Coffee Meeting, Margherita and Laura invited the attendees to join them for dinner on May 2nd at Bistro Verde in Copenhagen. Dinner allowed everyone to eat together and engage in initial introductions. Sharing a meal is a meaningful way to begin our journey, emphasizing the importance of conscious eating as we connect and collaborate.
Figure 7. Laura Vita realized the cover of our booklets.

**Day 2: The Living Laboratory on Ocean Literacy**

**Morning: The Arctic House, the workshop introduction, the auditory experience**

Day 2 of the workshop on May 3 was a truly enriching experience. The day began with some participants dipping in the ocean in front of the Arctic House, setting a perfect tone for the day's theme of connecting with each other and the ocean.

The formal program started at 9:00 am with opening remarks by Margherita and an insightful introduction to the Arctic House by Prof. Frank Sejersen from the University of Copenhagen.
Following this, Margherita introduced the Arctic work with a Sámi story, told by Aila Biret Henriksen Selfors and narrated by Harald Gaski in “Indigenous Elders’ Perspective and Position”. The story is centred on the need to listen to and listen for (guldalit, in Sámi language) the Earth’s heartbeat and, therefore, to and for our hearts. It helped us connect to the work previously done (with Cora and the Aurora and the Story About Knowledge) and to express our gratitude to the Sámi land and sea where our project is hosted.
The participants were encouraged to connect with the Arctic story by listening to the heartbeat from our “sea heart” in the animation created by Artem Krykhtenko and illustrated by Valentina Russo: https://youtu.be/TOAY88Znx-8.

After their first sound-immersive experience, Laura and Margherita introduced themselves, sharing their inspirations for the project. They elaborated on the project's aims, expected outcomes, and the foundational pillars of 'connecting with each other' and 'connecting with the ocean.'

Laura Vita then set the stage for the day's group work and outlined the schedule, including the working and feedback sessions. For half an hour, participants were treated to an auditory experience featuring two inspiring recordings. The first was a soundtrack composed by Giuliano Bertolotto Bianc from the University of Turin, celebrating the discovery of the volcano Borealis during the Akma Expedition in 2023 by Giuliana Panieri. The premiere of the recording was featured on the occasion of the Ocean Incubator Network kick-off meeting in September 2023. See here the first video of the concert (up to minute 4:30). The second auditory and visual experience consisted of watching the documentary "Blue Mind", showcasing Rada Pandeva's profound connection with the ocean.

Figure 9. Cora and the Aurora, a project result from Follow Your Heart and Emily Murray's embedded original 'The Story of Cora’—illustration by Valentina Russo, 2023.
ocean. Rada is also a OIN Team member and a passionate thalassophile (a lover and friend of the Ocean). She coordinates the Thalassophile Project – an initiative, dedicated to universal accessibility in ocean science and 'Blue Education'. Pandeva's supplementary insights (read by Laura Vita), regarding the documentary's focus on her relationship with the ocean and others, highlighted the unity between her work and the themes discussed in the workshop.

**Workgroup on the three themes**

Participants gathered into groups after this immersive sound experience to begin the morning session from 10:00 to 11:30 am. The task was to develop a creative project or activity that connects the assigned concept of positionality, cross-interdisciplinarity, or co-creation to ocean literacy, tailored to a specific audience. Groups also started drafting summaries of their projects during this session.

**Positionality (Murray, Hernández Ant, Montaña Monoga, Panieri, Quist)**

Tasked with creating an activity for the ocean literacy toolkit on the theme of positionality, our group began brainstorming online one week before the workshop, sharing our experiences relating to ocean research and education. With backgrounds in marine geophysics, international human rights and environmental law, global health, and community building, each group member brought unique perspectives on both positionality and ocean literacy. To kick off the co-creation process, we framed positionality in relation to ocean literacy as self-awareness and reflection on how we come to know the ocean, and how the ocean comes to know us. Each group member shared their ideas for exploring these questions, ranging from using the senses to engage with the ocean, ourselves, and our communities (e.g., through soundscapes and texture) to movement games exploring ocean connectivity. During the OIN workshop, the group worked to bring these ideas together and co-create an activity that merged our knowledge and skills. We chose an intergenerational audience as the target group to bring different experiences and knowledges of the ocean together. One of our core aims was to capture how climate change has impacted these relations. This concluded in a positionality activity pack for ocean literacy with three main areas of focus: the self, the ocean, and the more-than-human community. The positionality group presented this activity pack to the other OIN participants during the feedback session to refine the activity to be as inclusive and participatory as possible. The main discussion point concerned the term “positionality” and the risks associated with sharing identities and personal reflection. This prompted a
deeper engagement with the meaning and significance of exploring positionality, which we integrated into the activity pack to make it both safe and meaningful for participants.

**An example of implementation of creative projects on positionality**

It is worth noting how some activities discussed in the group had already been implemented in schools in Colombia, thanks to the support of the AKMA project (that has specifically supported and inspired Ana Maria's contribution to the team). In particular, since November 2023, the Colegio Campestre Goyavier Floridablanca, Colombia) has been conducting a series of activities to teach preschool, primary and secondary school pupils, more about the environment of the Ocean, especially in the Arctic. The activities varied from playing with a plastic model of the molecule of methane to a school play performance in which the whole student body participated. This created a new learning experience for all teachers and students, where the ocean is the main character and everyone else are spectators, watching and learning more and more about the oceans and how they can protect them.

*Figure 10. The Positionality group at work. Photo: Igor Peftiyev.*
Inter-cross and trans-disciplinarity (Brown, Hayden-Nygren, Heinrich, Kuhn)

The inter-cross and transdisciplinarity group began by distinguishing and delineating the various implications of these domains. They then explored potential activities that could engage students, such as a board game where each role represents a specific approach and perspective. The discussion about the nuances of defining interdisciplinarity, cross-disciplinarity, and transdisciplinarity sparked a dialogue among team members about the importance of visualizing the outcomes of intersecting knowledge systems to enhance ocean literacy.

Co-creation (Parry, Peftieva, Prior, with illustrations by Brigid, ten years old)

The co-creation group collaboratively worked on defining the relevance of co-creation in ocean literacy and brainstormed a potential activity that could be executed as a video game featuring various personas in specific roles. After the feedback round, the group envisioned students collaboratively generating ideas to effectively develop the video game. This could potentially evolve into a student competition or moot court, where the most outstanding project would be recognized and rewarded. Subsequently, funding
could be pursued to implement the project effectively. Being inspired by the workshop, Lena will add an outreach chapter on "Ocean Literacy" to her teaching practice.

Figure 12. Discussing Co-creation. Photo: Igor Peftiyev.

**Afternoon session: presenting each other, the work, and working on creative feedback**

Post-lunch, from 12:30 to 2:00 pm, each group presented their activity, followed by a feedback session. Discussions were enriched with mind-mapping exercises, helping participants visually integrate and understand the presented projects.
The late afternoon session from 2:30 to 4:00 pm was dedicated to integrating the feedback received into the projects, and the day concluded with groups finalizing their projects' written summaries or abstracts from 4:00 to 5:00 pm. These abstracts included detailed sections such as the title, introduction, methodology, results, discussion, and conclusion, outlining how each project could enhance ocean literacy.

**The circle of gratitude**

The day concluded with the Circle of Gratitude, a practice introduced to Margherita and Tahnee by Val Napoleon and Rebecca Johnson (Indigenous Law Research Unit, University of Vitrosy, Canada) during the CAS workshop in Oslo in 2018. This closing exercise involves each participant taking turns standing in the center of a circle formed by the other members. Each person in the circle then offers gratitude—a word or a short phrase—to the individual in the center. Although this exercise can be challenging for those who are shy, it ultimately proves to be incredibly rewarding and fosters a strong sense of connection and appreciation among the participants. Overall, Day 2 was a dynamic blend of creative expression, collaborative learning, and deep engagement with the critical themes of ocean literacy.
Day 3: Reflective Practice

On Day 3, Laura Vita organized a reflective walking tour along the waters of Copenhagen, helping the group to reconnect in a different setting (connecting with the ocean) and to contemplate the main points discussed during the workshop. As the group meandered and paused at various spots, they reflected on the previous day's activities and brainstormed future steps for the project. The group followed an outline of questions influenced by Gibbs Reflective Cycle (1988), which aims to provide structure to learning from experience. Ensuring members were given structured time to reflect on what they had learned from the workshop was important for consolidating their knowledge. Additionally, it allowed members to share their feedback to improve future work. The tour circled back to where it began, near the Arctic House, concluding with a familiar ritual—enjoying a good coffee reminiscent of our Morning Coffee Meetings. This brought a comforting sense of closure and accomplishment to the workshop's reflective practice.
Figures 15-16 The OIN team members, led by Laura Vita, walking and stopping by different water places in Christiania, reflecting on the work done. Photos: Igor Peftiyev.
Participants

The key participants in this event were students, teachers and researchers in the fields of Law, Ocean Governance, Global Health, Marine Geosciences, Climate Action and Youth, Indigenous Law, Anthropology, Political Sciences, Sustainability, Ecolinguistics, as well as experts in design, illustration, communication and media. To prepare for the workshop, Laura Vita and Margherita Poto developed an introductory presentation, three posters printed on fabric for our theme hubs and other learning materials and props to help the groups develop their Ocean Literacy co-created activities. Brigid (ten-year-old Sarah’s daughter) helped us with the Polaroid project and illustrations for the Co-creation group.

Workshop Outcomes

1. Participants expressed a strong commitment to incorporating ocean literacy into their research, educational, and outreach efforts.
2. A network of educators and advocates dedicated to ocean literacy was established, facilitating ongoing collaboration.
3. Recommendations for future research projects and educational resources were discussed.

4. Social media content created by Igor Peftieva, Laura Vita, Valentina Russo, Artem Krykhtenko, was shared during the event, increasing visibility for the different projects (OIN, Follow Your Heart, ECO_CARE, The Thalassaphile Project, the Deep Network, The BridgET project).


7. Comments and suggestions for improvements (elaborated during day 3): integrate more movement breaks and synesthetic practices into the workshop; give more emphasis and detail on the end goals, outcomes and what the group is going to work toward at the outset of the seminar; plan longer working periods and add an extra day to the workshop; add a section/chapter on our Ocean Incubator Network book on examples from each researcher (how our research connects to Ocean Literacy); develop a separate section for activities, to be published separately from the primary scientific outcome; include the pedagogical experience from ocean literacy experts, as well as knowledge from ocean scientists; try the practice of Delphi rounds to strengthen outcomes and encourage more robust applications for funding.

Ways forward and the next steps (publication, course on Planetary Health)

The commitment to strengthen our ties, apply for funding, and enhance our initiatives aligns our network with the UArctic values. These values —being inclusive, influential, open, circumpolar, respectful, and collaborative—guide our efforts and inspire us to build a more interconnected and impactful community on Ocean Literacy. By embracing these principles, we aim to further our collective goals and ensure the sustainability and growth of our network.

A list of future endeavours (in progress):

- Video-documentary (footage by Igor Peftiev and animation and editing by Artem Krykhtenko, expected in Summer 2024);
- Development of an Ocean Literacy activity (crossing education, research and outreach) in coordination with ECO_CARE and Akma 2, in Rio de Janeiro, June 2024, coordinated by Giulia Parola, Giuliana Panieri and led by Ana Maria Montaña Monoga, at the Aldeia Maracana;
- Co-authored open access book (Palgrave McMillan Pivot/Springer NAture, expected by end of 2024/start of 2025);
- Abstract submission to participate in the Oxford Real Farming Conference (Coordinator: Quist; participants Morel, Poto, Vita), January 2025;
- Participation in the EUGLOH Course on Planetary Health (Coordinated by Poto, Panieri, Bogusz; participants: OIN team members interested in teaching/tutoring on Ocean Literacy), Spring Semester 2025;
- Project proposal submission for a DAAD workshop organized by the University of Turin and the University of Bayreuth in September 2024 on Co-creation for Ocean and Human Rights (coordinators: Lohse, Poto; open to all OIN team members interested in it).

Figure 18. The infographic created by Laura Vita on the shared values between OIN and UArctic.
Reference list

Relevant literature


Websites

The Ocean Incubator Network
UArctic
Agenda 2030
The Ocean Decade
The ECO_CARE Project
The Akma Project
Department of Geosciences, UiT The Arctic University of Norway
Faculty of Law, UiT The Arctic University of Norway
Follow Your Heart
The Deep Network Project
The Thalassophile Project