

ERASMUS +: BlueS_Med project

2020-1-FR01-KA201-080531

*Supporting the development of socially inclusive
Blue Challenges in schools in the Mediterranean Sea basin*

Training event C2 GREECE Summary report

Date: 5th-8th May 2022

Country: Greece

Venue: HCMR premises in Crete



DESCRIPTION OF EVENT

Overview

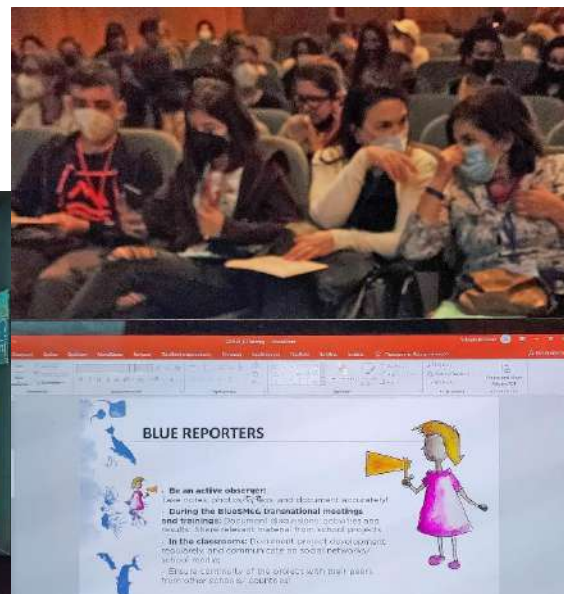
The second training event (C2) was organized at the premises of the Hellenic Centre for Marine Research (HCMR) in Crete (Greece) between 5th and 8th of May 2022.

Objectives

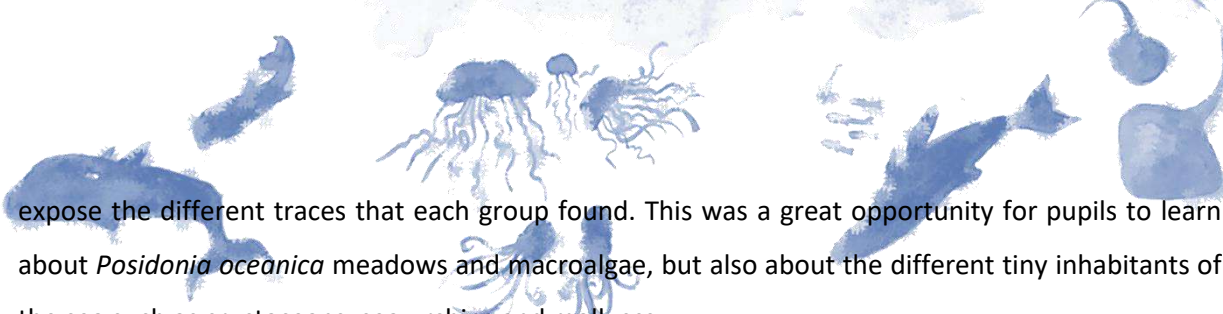
The four days combined a diversity of educational activities such as workshops, labs and field work organized by the Educational Teams of HCMR (HCMR-Crete, HCMR-Athens, Cretaquarium) for the teachers and pupils of the project, but also partners-teachers exchanges and social events.

Activities

5th May: On the first day, a general introduction and welcome session helped break the ice between participants from the different countries, and the pupils from different age groups. A general overview of roles and responsibilities was made, particularly on the pupils' roles as "blue ambassadors" and "blue reporters". This session was followed by a guided tour at the Cretaquarium.



6th May: The second day two educational activities were planned: The first one was outdoors on different types of beach (e.g., sand and pebbles) and aimed at teaching pupils about marine life whereby the pupils, teachers and partners were divided into small groups and collected as many "traces of life" as possible, filling in each their list with their findings. They all gathered in the end to



expose the different traces that each group found. This was a great opportunity for pupils to learn about *Posidonia oceanica* meadows and macroalgae, but also about the different tiny inhabitants of the sea such as crustaceans, sea urchins and molluscs.

The second educational activity took place indoors in the laboratory of the Cretaquarium: Explaining in a simple and fun way the movement of the Ocean's currents, starting by telling the story of the famous yellow ducks shipment lost in the ocean. To begin with, with a simple balloon experiment, explaining how hot masses of water travel upwards in the ocean and create upwellings. Then, to visualize better what happens in the oceans, a series of colourful/tasty experiments that highlighted how hot, cold and salty water masses move in the oceans of experiments were done with the assistance of the pupils.

- A water and cinnamon dish, some air and sketching tools help explain the surface currents
- A hot and cold bowl placed under a large water recipient to explain the impact of water temperature on current circulation
- A green salty water to explain the salinity of the sea/ocean
- Hot (red) cold (blue) and salty (green) water poured in a large water recipient explain the movement of these different water masses.

The last session was the first part of project presentations. A combination of videos, animations, presentations and games allowed the teachers/ pupils to present their different blue challenges.

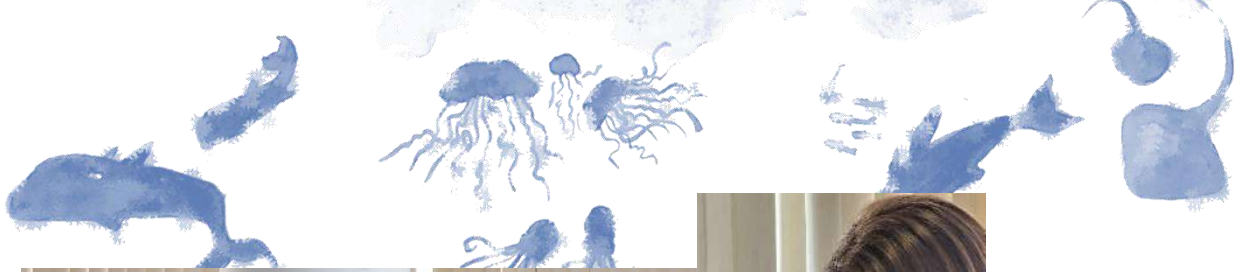




7th May: The third day, the activities started with a guided tour in the Archaeological Museum of Heraklion whereby all the marine related heritage and artwork was explained to highlight the strong links between the Greek (and Mediterranean) culture and the sea. From octopus art to nautilus symbols and ship depictions, the ancient Minoans were quite fond of the sea and its symbols. Presentation of the different blue challenges by the teachers/pupils by using videos, animations, presentations and games was then followed at HCMR premises.

In the afternoon, another set of educational activities took place in parallel: One more beach activity, and another laboratory session. On the beach, this time the pupils were requested to find traces of human activity, to search and categorize marine litter. The proper safety measures were taken, and pupils were astonished by how much easier it was to find marine litter as opposed to traces of marine life. In the end, the pupils gathered to create a small art work with the items they found, namely resembling a sea turtle. As for the laboratory activity, it was time to learn about plankton. The pupils got all excited about watching these tiny creatures through the microscopes.

In parallel the marine biologist from Cretaquarium was showing informational slides on the different types of phyto- and zoo- plankton and explained the importance of these microscopic animals for the food web, and thus for humans.



8th May: On the last day, the pupils were left to work together on their projects, exchange and learn, whereas teachers and project partners discussed for the first time in person to lingering issues related to management and communication. Important debates took place, but also crucial decisions were made. The collaborative work accomplished helped to define tools and the process for monitoring and evaluation of the blue challenges.





Participants

Approximately **43 teachers and pupils** of the four partner countries participated in C2. **10 partners** participated in person, too. For safety concerns (linked to the conflict between Russia-Ukraine), French and Maltese pupils did not attend the event. However, a hybrid solution was provided for the ones who could not be present in person.

RESULTS OF THE EVENT

Feedback

During the event, pupils, teachers and partners had the opportunity to work together, exchange and learn and discuss for the first time in person.

Challenges

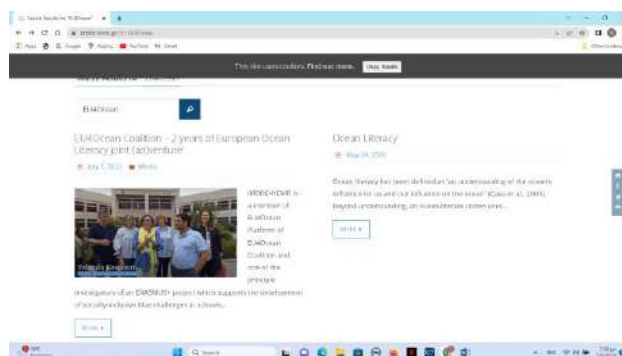
For safety concerns, French and Maltese pupils did not attend the event. However, a hybrid solution was provided for the ones who could not be present in person. Language was a barrier especially for the pupils. However, different activities that took place during the event helped pupils to overpass this barrier and find common ground to work together, exchange and learn.

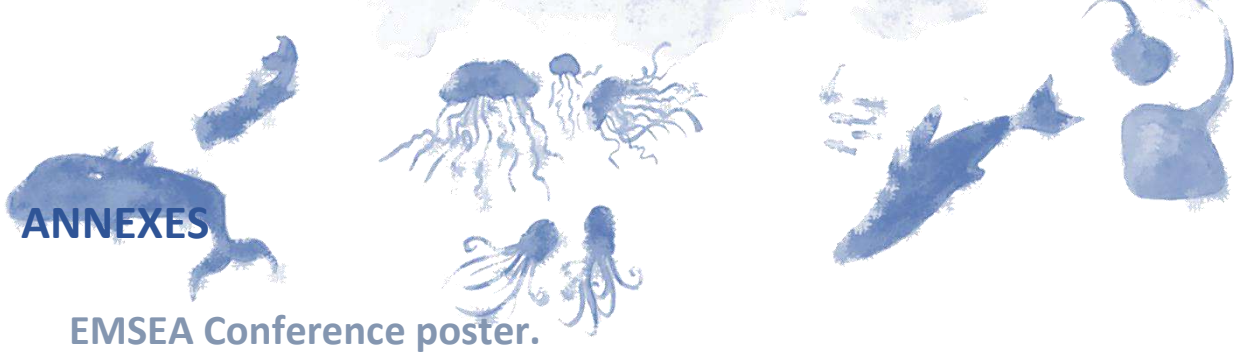
Key messages

Sharing experiences and practices among partners, teachers and pupils of different countries as well as the feedback from the pupils gave new insights for the required actions and steps forward concerning the project.

The training event C2 of the BlueS-Med project was presented at the EMSEA Conference 2022: **Koulouri, P.**, Andriopoulou A, Fourgalakis M., Antoniadis D., Mogias A., Boubonari T., Alvisi F., Merlino S., Grossmith J., Copejans E., Mashkina O., Noon V., 2022. The ERASMUS+ BlueS_Med project: Experiences from the second Training Event (C2) in Crete, Greece. 9th *European Marine Science Educators Association*, 25-28 September 2022, Palma de Mallorca, Spain.

The video for “EU4Ocean Coalition – 2 years of European Ocean Literacy joint (ad)venture!” was produced during the training event C2 (<https://imbcc.hcmr.gr/2022/07/07/eu4ocean-coalition-2-years-of-european-ocean-literacy-joint-adventure/>).





ANNEXES

EMSEA Conference poster.

Poster for the EMSEA Conference 2022 held in Mallorca between 25th and 28th September 2022



THE ERASMUS+ BLUE SCHOOLS MED PROJECT: EXPERIENCES FROM THE 2nd TRAINING EVENT (C2)

CRETE, GREECE



Penayote Koulourfi¹, Argyro Andriopoulou¹, Michail Fourgielaklis¹, Danae Antoniadou¹, Athanasios Mogias¹, Theodora Boubonari², Francesca Alvisi³, Silvia Merlino⁴, Juliette Grossmith⁵, Evi Copejens⁶, Olga Moshkina⁷, Vera Noori⁸

¹ Institute of Marine Biology, Biotechnology & Aquaculture, ICRUE Center for Research & Innovation in Marine Biology, University of Ioannina, Ioannina, Greece; ² Institute of Marine Biology, Biotechnology & Aquaculture, ICRUE Center for Research & Innovation in Marine Biology, University of Ioannina, Ioannina, Greece; ³ European Centre for Environment & Human Health, University of Ferrara, Ferrara, Italy; ⁴ Department of Primary Education, Democritus University of Thrace (DUTH), Greece; ⁵ Institute of Marine Sciences, National Research Council (CNR), Italy; ⁶ Faculty of Education, University of Cologne, Cologne, Germany; ⁷ European Marine Education Association (EMEA), Greece; ⁸ Hellenic Government, Greece.

Aim of the BlueSmed project

"Supporting the development of socially-inclusive Blue Challenges in schools in the Mediterranean Sea basin", this project aims at developing, implementing, and evaluating innovative approaches to integrate marine science, issues and challenges in school curricula and educational activities. The project involves 14 primary/secondary schools in France, Italy, Greece and Malta (2020-2022).



Inclusivity



Sustainability



Interactivity



Co-learning

The project focuses on co-creating 'blue challenges' projects, of which development, implementation of activities alongside local stakeholders, and dissemination of results will target actions to protect the Mediterranean Sea. The project will deliver 5 key intellectual outputs: 3 teachers' pupils' teaching materials, 2 national maritime events and one regional maritime event which will showcase success stories, best practices and key findings.

The C2 training event - Crete, Greece

The second training event (C2) was organized for 40 teachers and pupils of 140 partner schools, with the participation of 10 partners. C2 took place at the premises of the Hellenic Centre for Marine Research (HCMR) in Crete (Greece) during May 2022. It consisted of different activities including site and field work organized by the Educational Teams of HCMR (HCMR-Crete, HCMR-Athens, Creteaquarium).

Day 1: 5th of May

A welcome session helped break the ice between participants while an overview of roles and responsibilities of each partner and pupils was made. It was followed by a guided tour at the Creteaquarium.



Day 2: 6th of May

Pupils, teachers and partners gathered on the beach to do fieldwork on marine life of beach (e.g., sand, pebbles, shells, whatever they collected). 'Boxes of life' are filled in a pre-defined list with their findings.



In parallel, activities in the Creteaquarium lab took place addressing sea currents: hydrodynamics and density stratification; identification of the forces acting on a rigid body in the ocean and on the role of the centre of buoyancy and the metacentre in the ocean.



Later, pupils and teachers presented the different 'blue challenges' developed in their schools by using videos, animations, presentations and games.



Day 3: 7th of May

In a visit to the Heraklion Archaeological Museum, a 1st marine related heritage and artefacts was explored, highlighting the strong links between Crete (and Mediterranean) culture and the sea.



Fieldwork focusing on marine litter found on the beach and its classification.



Lab activities focusing on plankton.



Day 4: 8th of May

The pupils worked together on their projects, exchanging and learning from each others' experiences.



The results of this collaborative work helped to define the tools and the process needed for monitoring and evaluation of the blue challenges in schools.





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Agenda

Attendance sheets