

## WE ARE OCEAN LITERACY

# BOOK OF ABSTRACTS EMSEA Virtual Summit

7th - 8th October 2021





### **CONTENT**

#### **ORAL PRESENTATIONS**

Design, development and implementation of an educational tool for evaluating Mediterranean Sea Literacy of school students in the Mediterranean Sea region
The Blue Survey: a new instrument to measure the multiple dimensions of ocean literacy among adults
The stories-we-live-by: Marine literacy and its role in facilitating the sustainable governance of the Baltic Sea macro-region5
Exploring Ocean Connection in relation to social and cultural background - A case study of Britain's Ocean City
Analysis of methodologies for collecting evaluation from pre-service teachers engaged with ocean literacy content, and identification of trends in data relating to curriculum links
The Marine Diaries – Storytelling for ocean literacy8
Save the Sea Project – a bottom-up social initiative that worked
Latin America Marine Educators Network: a step further in the great marine educator's connection
21st Century Message in a Bottle: Connecting communities around the ocean
The role of sustainable tourism and first-hand experience in achieving Ocean Literacy:  EcoMarine Malta experience12
Gen Z and the sea – Digitally connecting young people with the ocean: Learnings from a youth-led digital festival13
Underwater archaeology as tool for increasing young people interest towards the sea 14
Think (of) Blue – popularization of STEAM through Ocean Literacy and vice versa15
AMOR - Active Youth for Sustainable Development16
Be Ocean Wise17
Sea and marine litter: everybody's and nobody's18
EU Life ReMEDIES - Save our Seabed in Schools19
Blue Schools in Europe: paving the way to collective action
POSTER PRESENTATIONS
A virtual Blue School Program. Making waves within the classroom & beyond. How the American Farm School became a blue school with distance learning2
"L'Oceà a casa" (The Ocean at Home): resources to learn from home during COVID-19 lockdown22
Three additional ways to increase a holistic approach to Ocean Literacy in Europe23

Are in-service elementary school teachers ocean literate? A case study from Greece	. 24
Beach School, providing professional development based on ocean literacy for early yea	
Bioilfms, Biodiversity, and Microplastics	26
Development and psychometric properties of the Seagrass Awareness Scale (SeAS)	27
Exploring creative approaches to virtually communicate remote sensing and its use for monitoring our ocean	
Greek prospective teachers' knowledge of seagrass science issues: Preliminary results	29
Having a 'Kraken' time creating Blended Learning Materials	. 30
How does ocean literacy research develop in a global scale?	31
I love BLUE	32
Ocean Literacy in the kindergarten – example of good practice from Croatia	33
Project "Percorsi nel Blu": Ocean Literacy & Citizen Science as a valid tool to monitor Marine Heterobranchia. The case study of the first records of the alien species <i>Favorinus</i> ghanensis and the Mediterranean <i>Okenia cf. longiductis</i> , as updating records for the Italian coasts	
Talking the Coast - an interdisciplinary journey	35
"Children hands about climate change" – the project in sign language	36

## Are in-service elementary school teachers ocean literate? A case study from Greece

Nikos Theodosiadis<sup>1</sup>, Athanasios Mogias<sup>2</sup>

<sup>1</sup>Elementary School; <sup>2</sup>Democritus University of Thrace, Department of Elementary Education, Division of Science & Mathematics

The ocean is the root of the creation and perseverance of life on Earth. However, human activities have had a disastrous impact on it across the years foreshadowing its future ominous. Today's students will be the ones who will need to make their best to reverse this situation. The task of raising awareness among young students, regarding the ocean, lies within the hands of their teachers, who of course need to first raise the level of their ocean literacy accordingly.

This study constitutes a first attempt to portray Greek elementary school in-service teachers' ocean literacy, according to the essential principles and fundamental concepts of the Ocean Literacy Framework, by combining quantitative and qualitative methodological approaches. The results revealed a limited level of ocean literacy and incomplete mental models with a slight lead of males over females, making the introduction of ocean-related subjects into their classes a hard task. Although teachers consider themselves to possess adequate pedagogical content knowledge, their ocean content knowledge on several issues is missing, especially when it comes to geomorphological features of the ocean bottom, ocean acidification and carbon cycle, productivity issues, and pollution sources such as microplastics. The study concludes with suggestions concerning the training of future teachers as well as in-service teachers on relevant issues, aiming at the best possible introduction of ocean sciences issues into formal education.