



Promoting Ocean Literacy by means of a partnership between two stakeholders from science education and maritime economy

Giulia Realdon (1,2), Giuliana Candussio (1), Sandra Fabris (1), and Martina M.P. Rossi (3)

(1) Associazione Scienza under 18 Isontina, Italy, (2) University of Camerino, UNICAMearth Group, Italy
(giulia.realdon@unicam.it), (3) MARE FVG - Maritime Technology Cluster FVG, Italy

As the famous marine biologist and explorer Sylvia Earle wrote, there is a recognized, global “need for increased ocean literacy to improve economic stability and national security, and to allow society to understand critical issues associated with important ocean-related topics spanning ecology, trade, energy exploration, climate change, biodiversity, the ocean and human health, and developing a sustainable future.” (Santoro et al., 2017)

Within this context, Scienza under 18 Isontina, an Italian NGO committed to science communication and environmental education for the schools of Friuli Venezia Giulia (FVG, Italy), is developing a novel activity aimed at promoting OL in collaboration with MARE FVG, a partner from the maritime economy sector.

MARE FVG - Maritime Technology Cluster FVG, is a regional public-private partnership in the maritime technologies domain (Blue Growth: shipbuilding, boatbuilding, offshore, transports, infrastructures, logistics, services for navigation and yachting), acting as implementing body of the regional smart specialisation strategy. Both partners are operating in North-Eastern Italy.

The project was born in 2016 to promote OL in a coastal area with historical important links with “Blue Economy”, due to the presence of shipyards, harbours, aquaculture plants, fisheries and coastal tourism.

The specific project objectives are:

- The diffusion of OL with special attention to the links between science, technology and blue economy
- The promotion of “Blue Careers” through orientation towards secondary vocational and tertiary education (technical schools, engineering faculties)

The first step for this endeavour was the proposal to join the two parties’ resources to celebrate the European Maritime Day 2017 involving primary and middle school students.

In order to achieve this goal we ran networking activities with schools - initially focusing on those located in Monfalcone, a small industrial town site of a world leading shipyard (Fincantieri), and then extending our reach to schools in the regional coastal area.

The partnership continued with the implementation of practical physics labs on topics relevant to ship building and sailing, e.g. Archimedes’ principle and hydrodynamics.

The labs, performed in collaboration with CNR-INSEAN (Consiglio Nazionale delle Ricerche - Istituto Nazionale Studi ed Esperienze di Architettura Navale), who provided both personnel and equipment, took place in 2107, during Maritime Day.

Activities will keep running in the first half of 2018, involving increasingly more schools as interest raises.

To assess the impact of the activities on OL, an investigation on students’ perception and knowledge of OL principles will be carried out before and after the practical labs.

We aim to investigate whether an activity focused on technical issues of maritime industry could improve OL without addressing it directly.

Waiting for these data, we underline the originality of the proposal: at the time of the writing, there is no literature outlining any previous experience involving OL and maritime industry in our country.

We hope that this kind of collaboration may be inspiring for widening the range of educational activities in the field of OL in Italy and abroad.