



Programme & Book of Abstracts

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A new challenge to research projects is their impact on the young generation, the promotion of ocean literacy and the active engagement of society. Attempting to overcome this challenge, the PERSEUS research project selected five students from Mediterranean and the Black Sea countries to act as '**Clean Seas 2020**' Ambassadors, representing their schools, countries and the future generation to address the emerging environmental threats studied and highlighted by PERSEUS in their own way.

PERSEUS's international environmental education network 'My School Voyages with PERSEUS', introduced the 'Clean Seas Ambassadors' concept, giving students the opportunity to become ambassadors for their school, through a competition. Ambassadors received regular training from their PERSEUS mentors in order to address the major environmental problems faced by their countries, namely Eutrophication, Non-Indigenous Species, Marine Litter, Fisheries and Jellyfish. They studied, proposed solutions and made recommendations to ensure their right to **Clean Seas**.

Their message was voiced in a special event at the European Parliament in Brussels (Dec. 2015), chaired by MEP Mr. Ricardo Serrao Santos, organized during the closing Conference of PERSEUS. MEPs, several of the Commission's DG senior officers, high level stakeholders and scientists attended the meeting where the 'Ambassadors' presented their recommendations and delivered their statement which was enthusiastically received by the participants.

Oceans, an international educational project for students aged 12-16. Introducing ocean literacy from the students' experience

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Oceans is an international educational Project for students aged 12 - 16. It is organised by the Spanish environmental association S'Agulla in collaboration with iEARN Pangea (the Spanish representative of the non-profit international educational association iEARN). The objective is to make students (and teachers) realise that the sea is not the same around the world by discovering the marine environment from the point of view of oceanography, geology and biology. This knowledge is achieved through their own observations and sharing their results with those of other participating schools. Communication will be done using Information and Communication Technologies (ICTs). The aim is to give value to the local knowledge to get an insight about how the Planet works globally, being a first approach to some of the concepts of ocean literacy. Especial emphasis is done to make it an emotional experience through a series of cross-disciplinary activities. S'Agulla considers that the best way to awaken environmental awareness is by making the first approach to the marine environment a touching experience.

The Mediterranean Sea Literacy: a collaborative and innovative effort to promote sustainable development in the region

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Building on the EMSEA experience, a group of researchers and educators from the Mediterranean Region, EMSEA-MED, started a collaborative and innovative effort to promote the ocean literacy principles in the region, and to adapt them to the specificities of the *Mare Nostrum*.

The Mediterranean Sea is not only considered the cradle of civilization, but it has also great environmental, social and economic importance. With this work we aim at making the Mediterranean citizens, as well as all those having a stake in it, more aware of its potential and role for sustainable blue economy. The Mediterranean Sea is also changing fast in response to both natural and anthropogenic pressures. Climate change, growing maritime traffic and marine litter pollution, overexploitation of fish stocks and invasions of alien species are among the main threats placing the Mediterranean region at risk. At the same time, the Mediterranean's unique features, such as the exceptional Mediterranean biodiversity and the unique and mild Mediterranean climate positively influence human activities such as agriculture, mariculture, and tourism.

This presentation will focus on the EMSEA MED group method of work, and on the first draft Mediterranean Sea Literacy principles and concepts. The main objective is to have a first peer-review of what has been done so far, and to gather support from other colleagues willing to join this effort.

B. OL Principle 6: Oceans and Human health – What will be our legacy?

Measuring ocean literacy: What teens understand about the ocean using the survey of ocean literacy and engagement (SOLE)

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The present study analyzed underlying factors and patterns contributing to ocean literacy and reasoning within the context of an ocean education program, the Oceanography Camp for Girls. The OCG is designed to advance ocean conceptual understanding and decision making by engagement in a series of experiential learning and stewardship activities from authentic research settings in the field and lab. The research measured a) what understanding teens currently hold about the ocean (content), b) how teens feel toward the ocean environment (environmental attitudes and morality), and c) how understanding and feelings are organized when reasoning about ocean socioscientific issues (e.g. climate change, over fishing, energy). Findings provide empirical evidence that connects field studies with ocean literacy. Current guidelines for ocean literacy address cognitive understanding but lack multimodality. The need for ocean literacy that goes beyond content to include reasoning and actions is relevant towards preparing students, teachers and citizens to regularly contribute to decisions about ocean issues and pursue actions as consumer, citizen or steward. This research supports the use of socioscientific issues and stewardship to advance 'functional' ocean literacy.

Global Ocean Science Education: Results from the Second International Workshop

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Building on the first Global Ocean Science Education Workshop, the second workshop (held June 13-15, 2016 at UNESCO Headquarters in Paris) provided an exciting opportunity for ocean scientists, education professionals, policymakers, and business leaders to explore ocean science education issues. The participants from 17 nations EMSEA 2016 Programme V3