MARE goes to school: Connecting future generations and marine scientists

França Susana¹, Vera Sequeira¹, Sandra Amoroso Ferreira¹, Sá Erica¹, João Paulo Medeiros¹, Maria João Tavares¹, Inês Cardoso¹, Ana Amorim¹⁻² and Henrique Cabral¹⁻³

- MARE Marine and Environmental Sciences Centre, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal E-mail: sofranca@fc.ul.pt
- ² Departamento de Biologia Vegetal, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal
- ³ Departamento de Biologia Animal, Faculdade de Ciências, Universidade de Lisboa, Campo Grande, 1749-016 Lisboa, Portugal

The importance of science dissemination actions has grown constantly due to the increasing ecosystem degradation and collapse of the world's natural resources. Raising public awareness on these topics is crucial in order to promote its knowledge and engagement in ecological conservation and protection. It is now widely accepted that communicating scientific knowledge is a crucial step to establish these connections and to contribute to an informed society.

MARE - Marine and Environmental Sciences Centre is a research unit with an integrative and holistic approach concentrating a wide diversity of expertise, skills and capabilities. It is one of the largest research units in marine and environmental sciences in Portugal, with a nationwide terrestrial implementation. Having more than 500 researchers, MARE's role goes beyond seeking excellence in the study of aquatic ecosystems, being focused in disseminating this knowledge to society. Therefore, one of MARE's main goals is "to promote Ocean Literacy, contributing to a participative Blue Society". This has been accomplished, by promoting a constant dialogue between researchers, the general public and young students, which may lead to important achievements, namely motivating the next generation of science students and researchers regarding Ocean Literacy. Within this scope, MARE developed an official educational program, "MARE goes to school", which encompasses a range of different activities to strengthen the links between researchers, their work and the school community, stimulating knowledge on marine ecosystems, their relevance to society and identified threats.

In its educational program, MARE researchers leave their natural environment and take their knowledge to schools, by conducting different activities relating scientific knowledge originated in MARE and school programs. Activities are adapted to the different education stages, ranging from pre-school to high school classes. Several dynamic and recreational strategies are implemented in all the activities, which allow students to learn in a more practical, interactive, creative and informal way: hands-on activities, games or laboratory experiments are always conducted after a brief talk with the researcher. The available activities explore topics such as biology and ecology of marine species, sustainable development, conservation, exploration and integrated management of marine resources.

After the first year of the program implementation an important landmark was obtained: 350 activities were developed and more than 7,000 students were reached. An important percentage of activities was conducted in pre- and primary schools, showing that the program has filled an important gap of taking scientific knowledge to younger students. Project evaluation was assessed through questionnaires to the students and teachers providing feedback to researchers and improving future science communication projects.

The program has shown to constitute a truly important outreach tool, allowing researchers to become closer to future generations and raise their awareness regarding Ocean Literacy.