

“Sea, earth and energy: A challenge for our future” - An interdisciplinary project for marine science education in primary schools

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"Sea, Earth and Energy: a challenge for our future" is a marine science educational project which involved all the classes of a primary school of Marinella di Sarzana (La Spezia, Italy) for a whole year. The goal of the project is to introduce children to a world which is "physically" close to them but also poorly known: the sea, which fortunately, in the Gulf of La Spezia, is a reality for many schools, but not often used as educational resource. The work of the whole year was conceived and supported by the "Research Group in Communication and Education" of La Spezia [Locritani et al. 2013], composed of members from different research institutions dealing, in this area, with the sea by different points of view: ISMAR-CNR (physical oceanography/renewable resources), ENEA-UTMAR (marine biology), INGV (marine geophysics and volcanology), DLTM (marine technology), with a proven experience in the field of marine and environmental science education [Merlino et al. 2015, Mioni et al. 2016].

Moreover, thanks to the involvement of other associations and organizations working in the field of marine environment (such as ARPAL the Regional Agency for Environmental Protection and the Italian Coast Guard) and an artistic association ("Luoghi"), children were able to deepen their knowledge of the Ligurian marine habitat with a multidisciplinary approach, full of beach surveys, tactile and art workshops, interactive experiments, meetings with scientists, field trips and other surprises. All these activities stimulated curiosity and imagination of children. As for the scientific part, the aim was to introduce children to "scientific observation" and "experimentation", applied to the study of marine environments, in particular, rocky and sandy shores (both typical of our region), and environmental degradation use of water and energy resources in the area and so on. Several tools have been used to achieve these main objectives: naturalistic design, data collection and sampling, cataloguing, experimentation in classroom with small demonstration prototypes. But the real idea behind this project has been the multidisciplinary approach for tackling all these subjects.

All produced artworks (herbarium sheets, poems, drawings, exhibits, etc.) have been exposed during a two-day exhibition in Sarzana. Moreover a DVD has been produced as a final deliverable that collects the work of a whole year and the contribution of each one of the different organizations participating in the project.

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References

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