

"Adopt an aquarium in your school": a teaching tool for developing local awareness on marine environment

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ABSTRACT

Besides being the oldest in the world, the Stazione Zoologica Anton Dohrn Aquarium (Naples, Italy) stands for the most representative aquarium in terms of specificity and variety of the Mediterranean marine organisms displayed in it. The Aquarium of Naples is devoted to the preservation and promotion of the aquatic life through conservation, research and teaching tools, and with particular focus on teaching, scientific divulgation and environmental education.

Since 2004, the Aquarium staff has been working on a new teaching project called "Adopt an aquarium in your school", which is mainly addressed to local schools. The course aims at promoting and spreading the knowledge on flora and fauna species living in the Gulf of Naples, by amusing and entertaining at the same time. As set forth in the project, which has involved 4 schools by far, students learn how to build and take care of a Mediterranean aquarium inside their classroom. Any material necessary for the tanks, as rocks and sand, is provided by our Aquarium while the living organisms come from by-catch. Students are guided into a dock not far from the Aquarium, in the city center, where artisanal fisheries stay. Students "save" animals taking it directly from fishermen. Afterwards, other activities as tank decoration, species identification, food supply, animal behavior observation and water surveys are carried out. Finally, each school realizes a sort of digital database, that is an hypertext including cards of all the species displayed in their aquarium. The final goal is to create a web network including all the schools involved in the project. In conclusion, students, in an attempt to make their aquarium more "competitive" than others, will necessarily develop a deep awareness on the environment and its living organisms.

INTRODUCTION

The historic Aquarium of Naples hosts more than 100.000 visitors per year including nearly 10.000 schoolchildren. The Naples Aquarium deals with students from any educational background, who come to visit the structure. We also offer a huge variety of educational programs inside the classrooms, that are often included in the National Operational Programs (P.O.N.) by school administrators. The P.O.N. are financed by the European Social Fund (M.I.U.R., 2009).

The project called "Adopt an aquarium in your school" is our most creative P.O.N. This Aquarium-School collaboration was born in 2004 and its final target is to favor the approach to marine biodiversity in Naples (Italy).



MATERIALS AND METHODS

The program, addressed to primary and secondary school pupils, is scheduled in 10 meetings for a total of 30 hours. It includes a training phase on marine sciences and a practical experience for the setting-up of an Mediterranean aquarium.



The Naples Aquarium provides rocks, sand, specimen and food. When the tank is ready to be filled, students are guided into a dock not far from the Aquarium, in the city center, where artisanal fisheries stay. Students "save" animals taking it directly from fishermen.

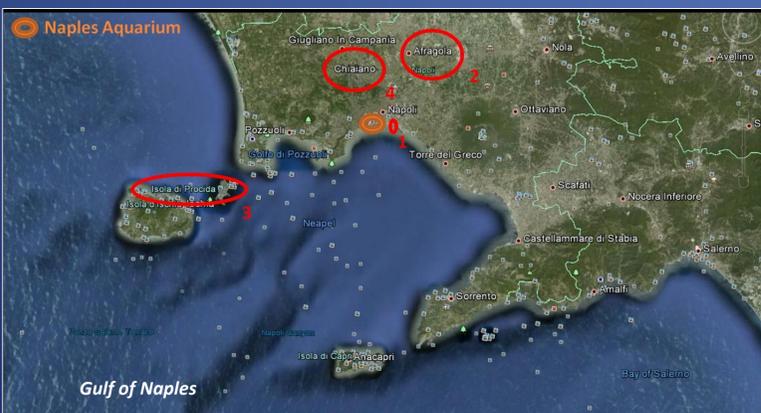


Students work in teams of three-five units. Each group is charged with a different task concerning: species identification, feeding, behavior monitoring, decoration arrangement, cleaning, water temperature and quality, photos, diary update.



OUTCOMES

To date, a total of 4 schools have joined our "school aquariums network", as follows:



- 1) Istituto Comprensivo "G. Fiorelli" di Napoli, from 2004 to date;
- 2) Scuola Media Statale "G. Ciaramella" di Afragola, from 2007 to date;
- 3) Istituto Tecnico Nautico "Caracciolo" di Procida, only in 2009;
- 4) Scuola Secondaria Statale "A. Aliotta" di Chiaiano, from 2012.

As a result, students, teachers and administrators showed great interest on sea life. In one case in particular, the school "G. Ciaramella" di Afragola got so inspired that created an aquarium room with a set of 4 tanks with the help of their very dedicated teachers and parents. Furthermore the inner and outer walls of the room were frescoed recreating submarines scenarios.



CONCLUSIONS

Every year Naples Aquarium organizes teaching activities related to school audience, such as "Adopt an aquarium in your school". This project is a theoretical-operative course related to the biodiversity of the territory with the proposal of establishing a permanent collaboration between Aquarium and schools across the region.

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