



AGRUPAMENTO DE ESCOLAS  
MOINHOS DA ARROJA

## Erasmus+ KA229 SCHOOL EXCHANGE PARTNERSHIP

### Project Title

"There is sea and sea ... There is an entire ocean to take care of"

### Project Summary

The initiative of this application is part of a broader international movement, which seeks to provide guidance and operationalize strategic actions capable of protecting the oceans. The United Nations Organization (UN), in its 2030 agenda, defined 17 objectives for sustainable development of the planet, among which is the objective 14 "Protect marine life". For the development of this objective, UNESCO's work was also associated with the definition of 7 principles that promote ocean literacy.

It is our intention to operationalize the following principles from UNESCO:

Principle 2. The Ocean and marine life have a strong action on the Earth dynamics;

Principle 5. The Ocean supports an immense diversity of life and ecosystems;

Principle 6. The Ocean and humanity are strongly interconnecte.

For the teaching of ocean literacy, schools must develop activities linked to the curriculum, aligning them with the programmatic content of each subject area. We intend to contribute to the development of critical and reflective students, capable of dealing with the challenges of today's society.

Our priority issue is: "What trash do we find on the beaches near us? What are the consequences of this waste on marine ecosystems and on humans? ".

The specific objectives are:

- Promote sustainable actions for the conservation and preservation of the oceans in conjunction with the curriculum of various disciplines in different teaching cycles;
- Develop ocean literacy by presenting solutions;
- Combining ocean literacy with STEAM;
- Collect natural and unnatural material on visited beaches, in order to proceed to the observation / analysis / classification / comparison / establishment of conclusions about the material collected;
- Streamline laboratory activities based on elements collected from field trips, proceeding with data processing;
- Streamline artistic activities, transforming the garbage into art;
- Participate in environmental activism actions;
- Develop awareness raising actions to local community promoting the oceans protection;
- Work on reading as a transversal domain of the curriculum, combining it with other forms of expression;
- Produce support materials;
- Disseminate the work creating training actions for teachers.

The pedagogical teams of each partner school, since they integrate teachers from different levels of education and from different subjects, will create a set of activities that aim to promote ocean literacy in a holistic way and with different levels of deepening. The principles of the ocean to be worked on will be articulated from different perspectives: environmental, civic, artistic, literary, cultural, biological, chemical / physical and mathematical.

Our activities are organized around 5 large clusters:

- Experimental activities with and without field trips;
- Environmental activism activities ("Ecological Brigades");

- Innovative artistic activities (artistic objects from the garbage collected);
- Awareness-raising activities;
- Training (teacher training to disseminate good practices).

To take students to action, we intend to carry out field work, using laboratory and other experiments. These, based on the STEAM and Project Based Learning methodology, will allow students to carry out "in loco" collection of data and materials that allow a comparative analysis.

The results expected are:

- Formation of pedagogical teams, promoting the vertical and holistic articulation of the curriculum;
- Design and development of training actions;
- Development of a common program, applicable in the future, including a resource base;
- Promotion of multiliteracy using different digital tools and producing by-products;
- Creation of a collective e-book translated into all languages of the partners;
- Realization of 1 workshop, in all partner schools, for transforming garbage into art;
- Participation in environmental activism activities: one collection of marine litter and one awareness campaign with the local community.

The school's long-term benefit from this project will be an extended curriculum about ocean literacy. Active methodologies are also promoted and work is being done in conjunction with the objectives of the UN and UNESCO for the decade about the sustainability of the oceans. Throughout the project we use tools (Google Earth and Marine LitterWatch - a project developed by the EEA - European Environment Agency), that contribute to the international sharing of data. The activities foreseen in this project will continue to be operated mainly in science and mathematics, as they address contents that are part of the curriculum. We intend to share these lesson plans and examples of their implementation with the educational community, with a view to replicating them. The work networks established with stakeholders (Universities, specialists in the area, Institutes and Associations), throughout the project, are extremely important, and the continuity of this collaborative work is expected.