At the European Maritime Day, maritime professionals, entrepreneurs and ocean leaders come together to discuss and celebrate the blue economy. The European Atlas of the Seas lets you find which events are happening around Europe, mobilising citizens and young people around the theme of responsible and sustainable use of the oceans.

European Atlas of the Seas · European Maritime Day

European Maritime Day in my country (2019)
Involve all students
- Develop a project with interlinked activities
- Produce a clear output
- Collaborate with a local partner
- Communicate project results
- Mobilise beyond the classroom
- Work with cross-disciplinary projects
- Foster a land-sea interaction
- Bring in a European dimension

Providing all students the practice of various water sports that are difficult to access.

Country
Portugal

Goal
Engage students and teachers, from different disciplines, in the nautical world in its most diverse aspects through the practice of water sports (sailing, canoeing, rowing, stand-up-paddle). This playful approach allows to explore diverse subjects in an experienced way and also to develop parallel projects in the domain of curricular articulation.

School + City
Escola Básica e Secundária À Beira Douro, Agrupamento de Escolas À Beira Douro – Medas (Gondomar)

Age
Kindergarten (3 - 5 years old)
Primary School (6 - 9 years old)
Junior and Senior High Schools (12 - 18 years old)

Inland/Coastal
Inland (river side)

School subjects
All subjects (multidisciplinary approach).

My project
The Blue School “À Beira Douro” – “From Rio to the Sea” was started in January 2019 and is a project that involves several schools and kindergartens with the purpose of increasing Ocean Literacy and bringing young people closer to the sea.

The trip around the nautical world began in 1995 with the Expo’98 Schools Network. The school was one of 10 in the country using material and human resources for the development of sailing in a school environment. Since then, school never stopped taking the “river boys” to know more about the different water plans and it was assumed ourselves from the beginning as a Center for Sport Training in Nautical School Sports. Hosting students from all over the country, we increased our sports offer and encouraged the use of these resources, for the learning of transversal and specific contents and competences of the different disciplines.

Since water is not the natural environment of people, all aspects of knowledge were explored to provide students with transversal and specific skills and competences from different areas of knowledge that allow them to know how to be in the water.

Anyway, we only love what we know and if the Ocean is learned in an experienced way in an apparently informal and fun environment, children and young people can feel motivated to look at the Ocean and understand what unites us with it as well. This can be a new direction, a future full of opportunities.
Students from different countries explore the maritime cultures through watersport activities.

**Country**
Spain (Portugal/Ireland/ France/UK)

**Goal**
Make more young people aware of the marine environment as a resource to protect and enjoy, and as an exciting career path.

**School + City**
IES Guadiana, Ayamonte
IES González de Aguilar, Ayamonte

**Age**
Middle School (10 - 11 years old)
Junior and Senior High Schools (12 - 18 years old)

**Inland/Coastal**
Inland/Coastal

**School subjects**
Foreign languages; STEM; History; PE; Arts...

**My project**
The objective is the development of the maritime culture among the youth, specially through watersports and maritime education in schools and clubs in the 5 participating countries. It is also to make Atlantic Area a pole of excellence for the maritime culture of the youth.

Activities include watersports, coastal cleaning, birdwatching in the marshes, visiting different types of ports, tidal mills, shipyard, fish market, etc.

The project also includes the creation of pedagogical tools for maritime inclusive education of young people at school (2 videos and 2 guides), 3 transnational maritime education events for the students, and a conference about maritime education.

The project runs from 2017 – 2021. It includes:
• Baseline assessment of current situation regarding access of the young people to watersports;
• Education and training modules: collaboration between public authorities, schools, and watersports clubs;
• Action plan – with pilot actions in schools (purchasing of equipments, training and remuneration of the instructors, implementation of the modules);
• Participation of school teams representing the partner cities and areas in the Atlantic Games that will be organized each year in a different country: https://www.atlanticgames.eu/.
Country
Germany

Coordinator
Andrea Oltmans

Goal
To educate the children on the local Wadden Sea mud flats, part of a UNESCO world heritage site.

School + City
Grundschule Rheinstrasse, Wilhelmshaven

Age
Primary School (6 - 9 years old)
Middle School (10 - 11 years old)

Inland/Coastal
Coastal

School subjects
Biology; Geography; Geology; Natural Sciences

My project
In this project children discovered and explored the Wadden Sea through a wide range of activities throughout the year: from the mud flats, the tides, the seals, the construction of dykes, bird migration routes (migratory birds), coastal protection and flooding. The children also reflected on the lack of sustainability in one’s own behaviour.

Students worked together with the visitor center UNESCO-Weltnaturerbe Wattenmeer in Wilhelmshaven, which is located close to the school and which has an aquarium with marine mammals and the Küstenmuseum. Apart from the fieldtrips and different learning activities the center provided, students created movies on distinct topics.

The project has now taken place 7 years in a row and the activities are financed mainly by donations. The children receive badges every time they end a part of the project. Children who showed a lot of interest had the opportunity to become a junior ranger during the course of the project.

Children explore all facets of the Wadden Sea and produce short movies
My project
The Explorers Education Programme outreach team carried out a project called "Our Ocean – Marine Legends, Fairy Tales and Folklore in Ireland", with up to 300 primary school children and their teachers around the coastal counties of Ireland.

The project aimed to promote ocean literacy through storytelling and the arts, with a particular focus on how the ocean and humans are inextricably inter-connected. By reflecting on Ireland’s marine and maritime heritage, the children engaged in learning about a selection of Ireland’s well-loved Irish marine legends, fairy tales and folklore from each of their counties.

Inspired by the stories, the children worked together creating their own original pieces of artwork, poems, songs and short films. Promoting further learning and engagement, the children’s work was published in a book and launched at Seafest, 2019.

During Ireland’s national maritime festival the children’s art work was showcased at an exhibition reaching over 100,000 people. Copies of the book were presented to the children who took part in the project, as well as to national and international delegates at Ireland’s Our Ocean Wealth Summit.

The project was been further promoted through media and social media promoting Ireland’s marine heritage. As part of the evaluation of the project, the children’s ocean literacy knowledge and engagement was assessed pre (57%) and post (75%).

The Explorers Education Programme is supported by the Marine Institute of Ireland, the state agency for marine research and development.

Children find inspiration in the Irish maritime heritage stories to create and display works of art
TBA21–Academy leads artists, scientists, and thought-leaders on expeditions of collaborative discovery, dedicated to fostering a deeper understanding of the ocean through the lens of art and to engendering creative solutions to its most pressing issues. TBA21–Academy commissions interdisciplinary research that catalyzes engagement, stimulates new knowledge, and inspires artistic production. Established in 2011, the non-profit’s program is informed by a belief in the power of exchange between disciplines and in the ability of the arts to serve as a vessel for communication, change, and action.

The “Ocean Space” was created by TBA21–Academy and is located in the Church of San Lorenzo, in Venice. It is a new collaborative platform for ocean imagination and ocean action, by catalyzing ocean literacy, research and advocacy through the arts.

“Ocean Space” offers targeted educational paths towards sustainability, through pragmatic activities and the promotion of best practices, encouraging collective reflection, critical thinking and conscious action in the name of the environment. “Ocean Space” intends to start a permanent educational program that allows everyone to feel like an active participant, and offer a solid contribution to the protection of our planet.

---

23 https://www.tba21.org
24 https://ocean-space.org
Country
France

Coordinator
Christian Berthelot, Clémence Chapoutot

Goal
Preservation of maritime space, awareness of the marine environment, together with the ocean.

School + City
Collège - lycée Externat des Enfants Nantais, Nantes

Age
Junior and Senior High Schools (12 - 18 years old)

Inland/Coastal
Coastal

School subjects
Mathematics; English; Technology; Geography; Music; Arts; French; SVT

My project
This interdisciplinary project brought together three sixth grade classes around marine environment and nautical activities. During the school year, each teacher brought up different marine themes: diversity and relationships within the marine ecosystem, ocean vulnerability, landscape evolution (SVT), ecological impact of coastal and seaside tourism on the seascape (Geography), Homer’s Odyssey and the Maritime Adventure (French), sailor and polyphonic songs (Music), logotype on the sail and the sea to adorn the Classes Glénan T-shirt (Arts), seamanship, inspired dance, wind, waves and sails (EPS), expressing oneself on the marine environment and interacting with a navigator (English), nautical charts, tides, wind angles (Mathematics), matter and energy at sea (Technology).

Activities included presentations related to the marine environment, filling in a logbook on the year, press articles, calligrams, letters, painting, sculpture, T-shirt logo, maritime orienteering course, dances inspired by the ocean, sea songs, conference by Jean-luc Van Den Heede, visit of the city of sailing, Operation Clean Up nature and beaches, and identification and classification of marine species.

This project ended with a stay on the island of Penfret in the Glénan archipelago in association with the Glénans sailing school.

The organization of this stay was an opportunity to go beyond just learning to sail since the students discovered the association “Les Glénans” based on “love of the sea, team spirit and solidarity”. They became more and more autonomous and took responsibility and initiative through the assignment of roles like those one can adopt on a boat, where they learnt to act safely. Students also became aware of the natural environment to greater respect. In short, the pupils were confronted with a real “School of life”. Classes Glénan exists since 1999.
Maritime students celebrate their own ocean festival with the local community

Country
Croatia

Coordinator
Marica KuÅan

Goal
To awaken the ecological awareness of students.

School + City
Pomorska škola Bakar, Bakar

Age
Primary School (6 - 9 years old)
Middle School (10 - 11 years old)
Junior and Senior High Schools (12 - 18 years old)

Inland/Coastal
Coastal

School subjects
Art; Biology; Chemistry; Foreigner language; Information Technology; Natural Sciences; Physics; STEM

My project
Over the last 13 years students have been learning about the laws of life at sea and ways to protect the ocean. The school has its own boat, Vila Velebita Dva, which is used to take students out on the sea in order to help develop their awareness of sustainable, ocean-linked development.

Students learn to take care of the environment, applying key principles of how to protect the sea through research of microplastics in sea sediment and sea water, chemical and physical analysis of water parameters and the protection of sea turtles. Students take a proactive involvement in the removal of plastics and other waste from the ocean and have the chance to develop underwater photography skills.

Throughout their participation in the project they discover the role of Posidonia oceanica as the lungs of the sea and learn about the impact of carbon dioxide in sea life. In addition, a special festival is held every year – Blue Day. Blue Day is a celebration of the ocean looking at a range of topics focused on protecting sea life and connecting the community. Blue Day brings a wide range of people into the programme including scientists, fishermen, politicians, press, chefs, teachers, artists, harbor master’s offices & divers.
My project
Students were invited to the Explore base (exploration incubator) to discover and set up a maritime expedition. This was part of the "Projet de Territoire" initiative, which aimed to raise among the students a state of mind committed to the environment, a collaborative way of being, as well as to share some know-how based on the existing maritime skills and professions.

The students choose the subject, duration and route of the expedition. They were then divided into different groups – ship, communication, subject, administrative – and simulated the expedition's set-up. For this project the students developed a "virtual" two-year expedition around the world on a 15-metre boat to study the influence of global warming on polar bears, the bioluminescence of jellyfish and innovative water and energy management techniques.

In-situ workshops allowed them to get to know all sorts of jobs on the water, but also to discover the importance of the collaborative aspect, of team spirit. This activity was in the form of a role-playing game very participative. The richness of the hosted explorations, the presence of the members of the expeditions (face-to-face / telephone / video links) allowed the students to be in contact with "real life" and thus share experiences and build their "project".

At the end of the activity, a report in the presence of Explore staff allowed the pupils to present their expedition, their choices and their options.
Building bridges between communities

Country
Portugal

Goal
Students and teachers engagement in a project with an international dimension. Communicate and create links with other educational communities, strengthening knowledge about other realities. Make known our community with strong connections both to the river and to the sea. Provide students with new connections to the ocean, promoting Ocean Literacy.

School + City
Escola Secundária Diogo de Macedo, Agrupamento de Escolas Diogo de Macedo - Olival (Vila Nova de Gaia)

Age
Kindergarten (3 - 5 years old)
Primary School (6 - 9 years old)
Junior and Senior High Schools (12 - 18 years old)

Inland/Coastal
Inland (river side)

School subjects
Portuguese; English; Natural Sciences; Geography; Biology and Geology; Information and Communication Technologies; Programming and Robotics and Visual Education; Canoeing Sports Training Center

My project
The Diogo de Macedo School Grouping is Portuguese Blue School (Escola Azul). It is located in the municipality of Vila Nova de Gaia, district of Porto (Portugal) and is part of a community with strong connections both to the river and the sea. It is on the Oporto wine production and trade route and close to the Port of Leixões. The project is part of another project with an international dimension Educational Passages. It consists of hosting the mini-sailboat that hit the shore at Praia do Baleal on October 20, 2019, from the USA, launched by the students of Webster School in New Hampshire; and prepare it for the new trip.

The project involves the following steps:
1. Knowledge about the Educational Passages project and stories of other mini-sailboats (training);
2. Assessment of the conservation status of the sailboat and its maintenance and repair;
3. Decoration (selection of iconic elements of the community, drawing and painting);
4. Definition of: a) the symbolic place for launching the sailboat (Douro River) and checking the navigability conditions of the sailboat; and, b) the actual launch location of the sailboat (partnerships);
5. Communicate with Webster school students;
6. Production and preparation of documents and souvenirs that follow inside the sailboat on the next trip;
7. Construction of a digital “Logbook” (recording the stages of preparation and monitoring the trip to the next destination).

Students are the main actors throughout the project. They produced a video that they sent to students at Webster’s school where they answered their initial questions:
https://www.youtube.com/watch?v=4pH6jcbXhNU&feature=emb_logo

Involve all students
Develop a project with interlinked activities
Produce a clear output
Communicate project results
Collaborate with a local partner
Provide authentic learning experiences
Work in multidisciplinary teams
Collaboration beyond the classroom
Mobilise beyond the classroom
Bring in a European dimension

The Pilot Programme “Educar para uma Geração Azul” (Educating a Blue Generation25) targets children between 6 and 10 years old and was designed to facilitate the inclusion of ocean topics within the existing curriculum, during the four years of the first cycle of education of the Portuguese system.

The programme includes:
- Key partnerships with the Education ministry, regional government, local municipalities, school directors and teacher training centers;
- Teacher engagement and capacitation, through certified training, including a series of practical activities;
- Teacher handbook and supporting educational materials;
- Follow-up opportunities ensuring that teachers can clarify and share their experience and any difficulties;
- Actions with students: educational activities with Oceanário de Lisboa, and visits to the aquarium, that create an emotional connection leading to a more powerful and long-lasting interest in the ocean;
- Evaluation of impact, critical to ensure effectiveness and to inform decisions on scaling up the programme.

Content:
Questions posed by students from the target ages informed a brainstorm between educators, biologists and those working more broadly in ocean policy to design the programme’s content. Through a multidisciplinary and holistic approach to our relationship with the ocean, topics include:
- Ocean geomorphology, marine ecosystems and biodiversity;
- Marine ecosystem services;
- Ocean economy;
- Law of the sea;
- Historical importance of the ocean;
- Portugal’s strong relationship with the ocean;
- Main threats and opportunities to restore and conserve the ocean;
- Importance of what is still to be discovered.

These contents and activities can be explored in a flexible and adaptable way, from the 1st to 4th year, both in the classroom across all curricular disciplines, as well as in extra-curricular activities.

Scope:
- 6 municipalities in mainland Portugal
  + 4 islands in the Azores Region
- More than 900 teachers
- More than 15 000 students

25 https://www.youtube.com/watch?v=U3YBXXFjCs
USEFUL RESOURCES, INITIATIVES AND NETWORKS
USEFUL RESOURCES, INITIATIVES AND NETWORKS

6.1 Ocean Literacy networks and platforms

Blue Society campaign from the EU-funded Sea for Society project

EU4ocean Coalition platform

EuroGOOS Ocean Literacy Network
http://eurogoos.eu/ocean-literacy/

European Marine Science Educators Association (EMSEA)
http://www.emsea.eu/

Irish Ocean Literacy Network
https://irishoceanliteracy.ie/

Italian Ocean Literacy Network
https://oceanliteracyitalia.it/

Ocean Literacy 4 All (UNESCO) Toolkit
https://unesdoc.unesco.org/ark:/48223/pf0000260721

Ocean Literacy Poland
https://mir.gdynia.pl/

Ocean Literacy Portal UNESCO
https://oceanliteracy.unesco.org/

The Ocean Project (global)
https://en.wikipedia.org/wiki/The_Ocean_Project

United Kingdom We are Ocean Collective
https://weareocean.blue/

United Kingdom Careers at Sea Network
https://careersatsea.org/ambassadors/

World Ocean Day Schools
https://worldoceanday.school/

World Ocean Network (Réseau Océan Mondial)
https://www.worldoceannetwork.org/
USEFUL RESOURCES, INITIATIVES AND NETWORKS

6.2 Resources and tools

Encounter Edu - Teachers Resources
https://encounteredu.com/teacher-resources

European Atlas of the Seas - Teacher corner

International Ocean Literacy Survey (IOLS)
https://www.geraldinefauville.com/international-ocean-literacy-survey

Make a Sea Change in the bathroom, kitchen, restaurant, supermarket, office, commute
https://seachangeproject.eu/resources

Ocean Edge Directory: resources and marine citizen science programmes in Europe

Ocean Literacy Best Practices and User Stories

Ocean School French/English online classroom
https://oceanschool.nfb.ca/

Resources on education for sustainable development (UNESCO)
https://en.unesco.org/themes/education-sustainable-development/resources

Responseable Ocean Literacy Tools
https://www.responseable.eu/ocean-literacy-tools

Sea Change: Increasing Ocean Literacy (video)
https://vimeo.com/139562761

More resources, organizations and links can be found on the website
6.3 Publications


6.4 School labels related to the ocean

Biosphärenschulen · Germany
https://www.nationalpark-partner-wattenmeer-nds.de/partner/biosphaerenschulen

Blue Flag · International
https://www.blueflag.global/

Eco-schools · International
https://www.ecoschools.global/

Escola Azul · Portugal
https://escolaazul.pt/en

Les Aires Marine Éducatives · France
http://www.aires-marines.fr/Proteger/Sensibiliser-le-public/Les-aires-marines-educatives

Ocean Literacy for All · International
https://oceanliteracy.unesco.org/

Plastic Free Schools · United Kingdom
https://www.sas.org.uk/plastic-free-schools/
A wave of EUROPEAN BLUE SCHOOLS

Handbook for teachers