Network of European Blue Schools

A wave of EUROPEAN BLUE SCHOOLS

Handbook for teachers

Network of European Blue Schools

A wave of EUROPEAN BLUE SCHOOLS

Handbook for teachers

TABLE OF CONTENTS

REFERENCE

This publication was drafted for the European Commission Directorate-General for Maritime Affairs and Fisheries by:

- European Marine Science Educators Association, EMSEA, Belgium
- Ciência Viva, National Agency for Scientific and Technological Culture, Portugal
- Acteon Environment, France

How to cite this publication:
Copejans E., Besançon M., Lourenço C., Batista V., Soares S., Noronha A., European Commission (2020). A wave of European Blue Schools. Handbook for teachers. 2022. European Commission, Directorate-General Maritime Affairs and Fisheries, Brussels, 62 pp.

More information on the Network of European Blue Schools at eu-oceanliteracy.eu

Main Authors

Evy Copejans (EMSEA)
Marion Besançon (ACTEON)
Carla Lourenço (CIÊNCIA VIVA)
Sandra Soares (CIÊNCIA VIVA)
Vanessa Batista (CIÊNCIA VIVA)

Contributing Authors

Adnana Mihaela Patrascoiu
Agnès Lavergne
Alan Deidun
Andrea Oltmans
Andreea Ionascu
Annekathrin Schuldt
Annika Devos
Athanasios Mogias
Björn Källström
Carmen Bucovala
Carolyn Scheurle
Cassie Stymiest
Cathy Baxter
Chloe Schwendemann
Christian Berthelot
Ciocan Emilia
Constantinescu Adriana
Cushla Dromgool-Regan
Dominika Wojcieszek
Eliane Bastos
Esther Farrant
Francois Morisseau
François Arbellot
Giovanni Cecconi
Irini Skoula
Jerry Lust
Juliette Grosschmidt
Karen Wilcocks
Korina Lukašić
Linda Mederake
Maaike Steyaert
Maggy Sinnaeve
Malin Rosengren
Marica Kucan
Mark Ward
Melanie Bolks
Melita Mokos
Nicola Bridge
Noirin Burke
Peder Hill
Raquel Costa
Rita Borges
Ruth Teerlynck
Stu Higgs
Susanna Canuto
Tina Johansen Lilja

PREFACE

We live on a blue planet. Our planet has one ocean, without which, life as we know it would simply not exist.

Despite sharing a vast coastline and maritime history, many European citizens are not aware of the importance of the ocean and the opportunities it offers us – how it regulates the climate, how it produces much of the oxygen we breathe and the food we eat, and supports human livelihoods and wellbeing.

A paradigm shift is needed to reorient society towards valuing the riches of the ocean, so that it can continue sustaining life. Education is a key agent in this transformation, by equipping citizens with knowledge, skills, and competencies to secure a vibrant European Blue Economy and a healthy ocean for us all.

The EU4Ocean Coalition, with the support of DG MARE, brings together organisations, projects and individuals committed to promoting ocean literacy across Europe. The DG MARE recognises that the role of teachers is essential to the mission of the EU4Ocean Coalition. To support teachers, a Network of European Blue Schools is being established.

The concept of a European Blue School evolved from the marine education expertise gathered from consultations with teachers and educators across Europe. It acknowledges the variety of cultures and school communities from the 27 EU Member States and champions the concept of open schooling[1] – encouraging the development of local partnerships to make the learning context relevant. The challenges that the work of teachers faces are many, but through the Network of European Blue Schools, you will not be working alone.

All teachers are invited to join this effort to promote ocean literacy by taking the ocean into their classroom, helping to make it everyone's concern, no matter where you are. Teachers are mentors and inspirational figures for students and the subjects they chose at school, as well as their future career choices and attitudes towards the environment.

To get started, this Handbook is designed to meet you where you are on your ocean journey. It includes a wealth of useful resources and best practice to inspire you to find what connects you and your school to the ocean. It has built in flexibility to encourage and support teachers across all disciplines to bring the ocean to their classrooms, whether through biology, physics, chemistry, technology, mathematics, history, literature, or the arts.

[1] http://ec.europa.eu/research/swafs/pdf/pub_science_education/KI-NA-26-893-EN-N.pdf

By becoming a European Blue School you will:

- be able to work collaboratively with a growing network of European colleagues;
- be supported at every step by the Handbook and Coalition;
- have access to teacher development opportunities in different languages organized by EU4Ocean Coalition members and other European institutions and projects;
- have your efforts recognised through award of a certification by DG MARE;
- be in line with international initiatives including the UN's Decade of Ocean Science for Sustainable Development.

Every student has the right to an education that nurtures understanding of the complex biosphere they inhabit. The ocean touches all aspects of society, so it is time for us to assume our collective responsibility, as citizens of the Earth, and guide our lives knowing that the ocean matters.

Thank you for considering taking this journey of discovery with your students; championing ocean change within your community and leading the way towards fostering a generation of European Blue Citizens.

1

WHAT IS THE NETWORK OF EUROPEAN BLUE SCHOOLS?

1

WHAT IS THE NETWORK OF EUROPEAN BLUE SCHOOLS?

1.1 Embark on a journey to Ocean Literacy

We live on a blue planet. Our planet has one ocean, without which, life as we know it would simply not exist. All people on Earth are directly and indirectly connected to the ocean in a variety of ways: from what they eat, drink, breath and use to how they relax and enjoy the life… The ocean is our planet's life support system and it is thus a priority to protect it. Ocean health is a prerequisite to our future health.

However, many European citizens are not aware of the importance of the ocean and the services it offers us. While the ocean and seas are suffering under increasing human pressure, scientists, educators and public authorities have empowered citizens to increase their knowledge on the ocean and take more responsible decisions towards the health of the ocean, thus being ocean literate.

A paradigm shift is needed to reorient society towards valuing the riches of the ocean, so that it can continue sustaining life. Education is a key agent in this transformation, by equipping citizens with knowledge, skills, competencies and values to secure a clean, vibrant and healthy ocean for us all.

DG Maritime Affairs and Fisheries (DG MARE) from the European Commission, has set up the **EU4Ocean Coalition for Ocean Literacy** (see 2.3) to enhance ocean literacy across Europe and make the ocean a concern of everyone. The DG MARE acknowledges that the role of teachers is essential to the mission of the EU4Ocean Coalition. The EU4Ocean Coalition has therefor established the **Network of European Blue Schools** to support teachers in their mission to a European eco-citizenship of the ocean. The Network of European Blue Schools invites teachers to be the rudder of this wave of change.

1.2
Find the Blue Challenge

The EU4Ocean Coalition invites all teachers to become a **European Blue School** by taking up the Find the Blue challenge and bringing the ocean on a more long-term basis into the classrooms.

The ocean is a fascinating world to discover, especially for young people. Through the *Find the Blue* challenge, students will build a (stronger) connection to the ocean, the seas and other aquatic ecosystems. People living on our coasts understand their dependence on the sea for everything from food to jobs and pleasure. The rest of us, living hundreds, or even thousands, of kilometres away, need to think a little harder about our ocean connections. They may not see the effects of pollution, beach litter, and climate change on the ocean, but this does not mean that they cannot have a positive effect on the ocean. The water on our planet is a shared responsibility. It does not matter where you live, you can always protect the ocean by keeping rivers clean, by disposing your trash, not putting chemicals in the drain, cutting down on pesticides in your garden, eating sustainable fish or taking a train or bike for travelling. Whether a school is located by the sea or hundreds of kilometers inland, teachers can always Find the Blue. The ocean is everywhere in our life. It is simply a matter of recognising it.

In a European Blue School,
teachers help students
to increase their understanding
of the ocean, the issues it is facing,
and the opportunities it offers.

Through the *Find the Blue* challenge,
students explore how they are
connected to the ocean or the sea,
whether they live close by or far away.

1.3
The European Blue School

A European Blue School recognizes the importance of the ocean in its education activities by taking up the Find the Blue challenge and creating a school project on an ocean topic. Through **project-based learning** (see 2.1) teachers actively engage to bring marine topics into the classroom, making marine (science) education an essential part of the school curricula, allowing students to explore new societal concepts such as 'Ocean Health', 'Food from the Ocean' and 'Climate and Ocean' in a meaningful way. By becoming a European Blue School, schools give rise to a new generation of ocean literate citizens.

Teachers from European Blue Schools are **agents of change** and inspiration to their students, allowing them to address local to global challenges in school. An agent of change is someone who sees a problem in his or her community, large or small, and does something to take action for substantial change.

European Blue Schools are new **school ecosystems** that foster the acquisition of ocean knowledge, blue skills and values together with the ocean community. Here they work on real-life issues with real-life ocean professionals that can support them to address ocean topics in the classroom. European Blue Schools champion the concept of **open schooling** (see 2.1). They encourage the development of local partnerships to make the learning context relevant.

The main goals of the
European Blue School program
are to:

- create a more ocean literate society where schools become agents for change and sustainability.
- build bridges between ocean professionals and schools.
- set up a network where teachers can share experiences and collaborate with other schools, nationally and internationally.

In a European Blue School,
teachers and students become agents
for change and sustainability
of the ocean and seas.

1.4

Take part in the Network of European Blue Schools

The challenges that teachers face when setting up a school project are many, but through the **Network of European Blue Schools**, you will not be working alone. Together with the local or wider ocean community, teachers will embark on a journey to help students become responsible citizens who care for the ocean and have the capacity to act on real-life issues.

School networks play an important role in bringing quality education to a larger scale. These networks can serve as an environment to explore innovative pedagogical ideas and methods.

By becoming a European Blue School you will:

- be able to share experiences and work collaboratively with a growing network of European colleagues;
- have access to teacher resources, activities and professional development opportunities organized by **EU4Ocean Platform and Youth4Ocean** members (see 2.3) and other European institutions and projects;
- have your efforts recognised through award of a **certification** (see 2.2).

2

WHY BECOME A EUROPEAN BLUE SCHOOL?

2

WHY BECOME A EUROPEAN BLUE SCHOOL?

2.1 Core principles of the European Blue School

To teach about the ocean is to teach about the world. Developing an ocean project contributes to the development of 21st century skills, a wider and active European citizenship, aware of environmental and socio-economic issues, and sustainable development challenges. By exploring real-life marine and maritime contexts, students are encouraged to become more aware, responsible and engaged ocean literate citizens. The values of a European Blue School are based on the following principles:

// Project-based learning

This student-centered pedagogy involves a dynamic classroom approach in which students learn about a subject by investigating it for an extended period of time. This style of active and inquiry-based learning contrasts with paper-based or teacher-led instruction. Here, students create knowledge by posing questions or actively exploring a question, challenge, or problem, thus acquiring a deeper knowledge of it. It also allows students to develop a wide combination of skills, attitudes and values that are relevant to their future adult life and essential to compete in the global 21st century society.

// Environmental education

Ocean education is by nature an essential part of environmental education. It teaches students to explore issues related to the marine environment, and engage in wise ways of preserving it. But in Europe, ocean and environmental education are not yet fully integrated. The effects of our actions to the health of the ocean are often not experienced, -out of sight, out of mind- creating a disconnect between us and the ocean. European Blue Schools help to raise awareness on the importance of protecting the ocean as they are the world's greatest asset.

// Open learning and schooling

Open learning and open schooling are broad terms that describe learning which is 'open' in terms of timing, location, teaching roles, instructional methods, and any other factors related to learning processes. Most schools already do some level of open learning, through off site trips, on site visits and remote learning. European Blue Schools collaborate specifically with ocean professionals from enterprises and organisations in bringing real-life topics and activities into the classroom where students can investigate and solve challenges in and with the wider society.

// Outdoor learning

In the European Blue Schools we encourage students to learn outside the classroom walls on real-life topics related to the ocean, to let children and students experience the world actively and develop a wide range of secondary skills (social skills, solution-oriented thinking, creative thinking.) on top of the classic school skills.

// Active European Citizenship

To equip young people for their future as European citizens, we need to stimulate them to engage more in society and feel concerned by local issues and the wider European processes. In a European Blue School, students explore active European citizenship through ocean subjects. Teachers support their students to carry out activities directed towards the common good for the seas and ocean. They have the important role of empowering their students to take part in society and give them a confident voice.

// Education for Sustainable Development (ESD)

ESD empowers people to change the way they think and take action responsibly, based on the understanding that what we do today can have further implications in people's lives and in the future of our planet. ESD aims to empower learners to transform themselves and the society they live in. Working on sustainable development issues such as pollution, climate change and biodiversity are at the heart of Europe's Blue Schools. To embrace the Sustainable Development Agenda, schools can show their students how their own actions can help achieve the SDGs by making ocean-friendly choices on a school level.

// Blue economy careers

With Europe investing in the blue economy, maritime professions are likely to be the careers of the future. They are diverse but not well known. Schools can take advantage of the Find the Blue challenge to explore ocean careers and give rise to vocations. The EU Blue Economy Report[2] provides an overview of the blue economy sectors such as coastal tourism, aquaculture, ocean energy, marine biotechnology, shipbuilding, maritime transport and fisheries. Blue Economy careers[3] are an attractive, modern and prosperous professional pathway and way out of unemployment for the young.

[2] European Commission, Directorate-General for Maritime Affairs and Fisheries, Addamo, A., Calvo Santos, A., Guillén, J., et al., The EU blue economy report 2022, 2022, https://data.europa.eu/doi/10.2771/793264

[3] http://ec.europa.eu/research/swafs/pdf/pub_science_education/KI-NA-26-893-EN-N.pdf

2.2 The certification of a European Blue School

The EU4Ocean Coalition grants a certificate to schools who have successfully developed a project on an ocean topic (criteria for projects see 4). This acknowledgement award recognises the achievements of the school, teachers and students:

- The certification is of value for the school to get an international visibility for their projects. The website of the Maritime Forum, aimed to improve communication amongst EU maritime policy stakeholders, showcases all projects.
- The certification recognize teachers for their outstanding contributions. It can expand to using social media tools, (virtual) workshops and meetings to feature the teachers in the network.
- And lastly, it is of value for the students, as a personal accomplishment that can spark an interest for a future blue career and can be an asset on their CV.

2.3 Building a European Blue School Framework

For many years now, several initiatives, programmes, policies and frameworks have greatly contributed to the promotion of sustainability education and ocean literacy, which has given life to the idea of having a European network to develop the concept of a European eco-citizenship of the ocean.

// Ocean Literacy

The term Ocean Literacy was defined in the early 2000s as an understanding of the ocean's influence on us – and our influence on the ocean. The idea was born in the USA, where the knowledge required to be considered ocean literate was outlined into a comprehensive framework[4], now translated into many languages[5]. After the concept was introduced in Europe and adapted by Portugal[6], two European Horizon 2020 - funded projects on ocean literacy were set up to improve ocean literacy in Europe. Researchers from the projects Sea Change[7] and ResponSEAble[8] set the stage for a more wider and action-oriented definition of ocean literacy where citizens from all sectors do not only have the knowledge but feel empowered and responsible to take care of marine environments, individually or collectively.

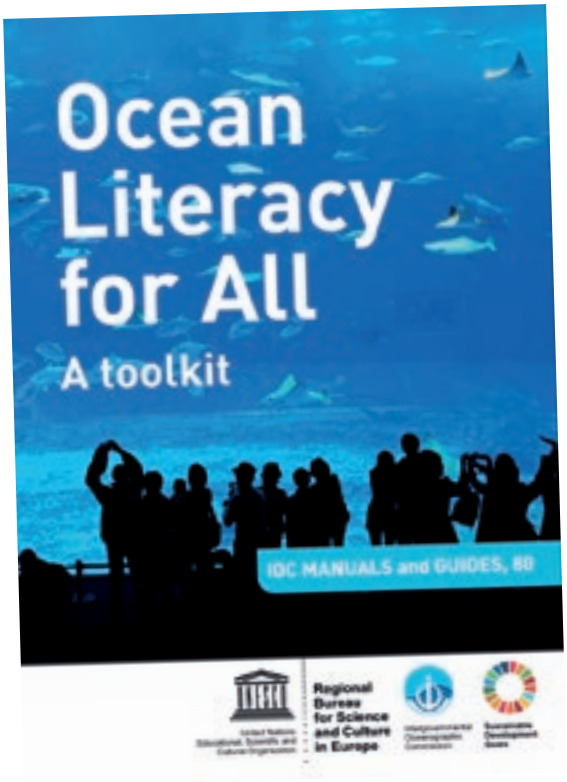
SEA CHANGE
OUR OCEAN | OUR HEALTH

RESPONSEABLE

[4] https://www.marine-ed.org/ocean-literacy/overview
[5] https://www.marine-ed.org/ocean-literacy/translations
[6] https://www.cienciaviva.pt/oceano/home/
[7] https://www.seachangeproject.eu/
[8] http://www.responseable.eu/

// Ocean Literacy for all

The Ocean Literacy for All initiative of UNESCO aims to raise awareness on conservation, restoration and sustainable use of our ocean and its resources and to build an improved public knowledge base across the worlds population regarding our global ocean. As a way to contribute to SDGs 4 - Quality Education and 14 - Life Below Water, UNESCO has a global Ocean Literacy programme with an Ocean Literacy Toolkit that is used in schools belonging to the UNESCO of ASPNnet worldwide. The initiative is an active contributor to the United Nations Decade of Ocean Science for Sustainable Development (2021-2030).



// Ocean Literacy Principles

According to the European Marine Science Educators Association, ocean literacy is a fundamental means to enhance ocean knowledge, build connections in people's lives and support and encourage citizens and stakeholders to act in a positive way for our Ocean. Ocean literacy is a way to advance sustainable practices, develop policy, promote responsible citizenship and encourage young people to be involved in the future. Ocean literacy is essential to protect the ocean for future generations.

Ocean Literacy is defined by IOC-UNESCO as a mean to:

- Learn about ocean issues from a multiplicity of knowledge areas;
- Identify and understand personal and global perspectives;
- Apply decision-making processes to complex issues that affect individual, community or global well-being.

// The Blue School

The concept of a European Blue School originated from the European project Sea Change in 2017. Here, national working groups established in each partner country (Greece, Ireland, Sweden, Belgium, Denmark, Portugal, UK and Spain) discussed the feasibility, the obstacles, the guidelines and the implementation of a blue school. In their countries. From the working group in Portugal, a network of marine and maritime stakeholders received the support from the Ministry of the Sea to set up a Portuguese Blue School initiative called Escola Azul[9]. Both the experiences within Sea Change as Escola Azul and other well-established school and marine / environmental education programmes such as Aires Marines Educatives[10] (FR) and UNESCO's Baltic Sea Project[11] were an exceptional source of inspiration to build EU4Ocean's European Blue Schools.

ESCOLA AZUL

REPÚBLICA PORTUGUESA

United Nations Educational, Scientific and Cultural Organization

UNESCO Associated Schools

The Baltic Sea Project

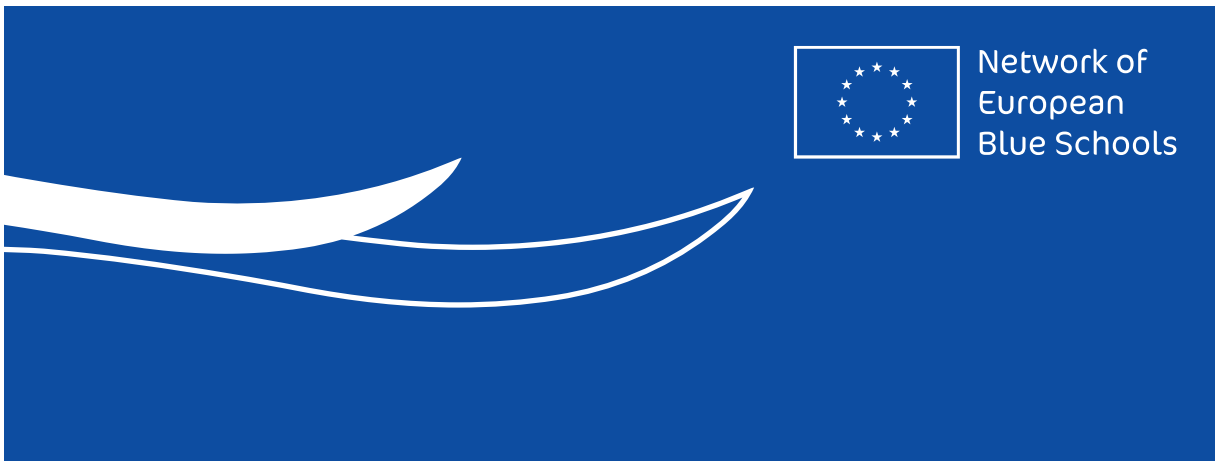
AIRE MARINE EDUCATIVE

[9] https://escolaazul.pt/
[10] http://www.aires-marines.fr/Proteger/Sensibiliser-le-public/Les-aires-marines-educatives
[11] https://www.nationalpark-partner-wattenmeer-nds.de/partner/biosphaerenschulen

// EU4Ocean's European Blue Schools

With its development in 2020 by the EU4Ocean Coalition, the concept of a European Blue School evolved from the marine education expertise gathered from consultations with teachers and educators across Europe so it acknowledges the variety of cultures and school communities from the 27 EU Member States. The concept continues to take shape as more and more schools participate in the Network of European Blue Schools.

The Network of Blue Schools is a gateway for teachers to marine education. It sets up long term collaborations to help schools connect to programmes and facilitators offering marine education. The Network of Blue Schools is linked to the EU4Ocean Platform that includes members from research institutes, universities, education centers and NGO's and the Youth4Ocean Forum, a network of young marine professionals. They include some of the main providers of school resources and education activities on ocean related matters in Europe.



[12] https://allatlanticblueschools.com
[13] https://www.ecoschools.global/

// International Blue School endeavours

The international ocean literacy community engages in a collective effort to set up blue schools in different countries and continents via various funding programmes. Following the steps of the Blue Schools Network established by the EU4Ocean Coalition, the Blue Schools Mediterranean is an Erasmus + funded project, that joins together partners from four Mediterranean countries: France, Italy, Greece and Malta. The project partners, school teachers and pupils will co-create projects to inspire action to protect the Mediterranean Sea, alongside local ocean professionals. The All-Atlantic Blue Schools Network was created in 2021 under the All-Atlantic Ocean Research Alliance. The All-Atlantic Blue Schools Network[12] aims to connect the blue school networks from the Atlantic countries: South Africa, Angola, Argentina, Brazil, Cape Verde, Canada, USA, France, Ireland, Morocco, Mexico, Namibia, Portugal, São Tomé and Príncipe and the United Kingdom.

// Complementing with other school labels

The Network of European Blue Schools aims to be an umbrella initiative specific for ocean related school projects in Europe, bringing them together to increase the visibility and impact. It is complementary to other existing sustainability and environmental school networks such as Ecoschools[13] and UNESCO schools due to their shared values and pedagogic principles (see 2.1) For those schools and teachers that are already in the field, it is important to highlight that the Find the Blue challenge can go hand-in-hand with other school labels and projects. You can develop a project that is eligible for different initiatives. Accepting the Find the Blue challenge with students should not necessarily mean additional work for the teachers or a duplication of certifications for the school. Schools can apply to become part of the Network of European Blue Schools with an existing environmental school project, as long as it focused on an ocean related topic.

Eco-Schools

[12] https://allatlanticblueschools.com
[13] https://www.ecoschools.global/

GET INSPIRED!

European Atlas of the Seas

The European Atlas of the Seas[14] is an interactive and educational mapping application on seas and coastal regions, provided by the European Commission Directorate-General for Maritime Affairs and Fisheries.

The Atlas is a leading tool for ocean literacy and education, used by schools, aquaria, NGOs and anyone interested in learning more about the sea. It contains reliable, high quality and up-to-date information on topics such as tourism, security, energy, transport, fishing stocks and quotas, aquaculture and much more!

With the Atlas, your students can easily:

- Search for map layers in their language
- Create their own map in combining layers of interest
- Click on the map to find more information and statistics
- Zoom in on a particular area
- Measure distances
- Print a map in different sizes
- Share it on social media
- Embed it on a webpage
- Insert it in documents and presentations

Your teaching tool!

[14] https://europa.eu/!QK93nF

eTwinning[15] is a free and safe platform for schools and teachers in Europe, where they can do transnational online projects with their classes, take part to a variety of Professional Development activities, and exchange ideas with their peers in groups or forums.

To join a group, you need to first register in eTwinning. Once you receive the confirmation that your application has been accepted, you can create or access "eTwinning live", the space reserved for members only; and there, you can access to one of the European Blue Schools Groups, as well as all the activities and initiatives available to eTwinners.

Join the European Blue School eTwinning Groups to share experiences with teachers from your or other countries

[15] https://www.etwinning.net/en/pub/index.htm

3

HOW TO REGISTER TO BECOME A EUROPEAN BLUE SCHOOL?

3

HOW TO REGISTER TO BECOME A EUROPEAN BLUE SCHOOL?

3.1

Apply for the European Blue School certification

Network of European Blue Schools

1 Fill in the online application

2 Receive an email confirming your submission

3 Submission is reviewd by the European Blue Schools coordinating team

4 Receive an email with the results

5 A webpage for your submission is generated

6 Enter the European Blue School Community on the Maritime Forum

7 Update your webpage content with pictures, activities and resources

8 Keep in touch with Network of European Blue newsletter, webpage and community #EUBlueSchools

3

HOW TO REGISTER TO BECOME A EUROPEAN BLUE SCHOOL?

step 1

Fill in the online application form before you start the project.

- Provide us with information on the project.
- No EU Login required.

step 2

You receive an automatic email confirming your submission.

step 3

Review of your application by the coordinating team of the Network of European Blue Schools.

step 4

You will receive a message of the results.

- The project is approved, the European Blue School certification is granted for the current school year.
- The project is declined, alter the project so it matches the minimum requirements (see 4.1) and submit a new application.

step 5

With the provided information in the application form, a webpage of the project is automatically generated on the Maritime Forum.

step 6

Enter the European Blue School Community on the Maritime Forum

- Create an EU-login[16]
- Request access to the Maritime Forum[17]
- Request access to join the online European Blue School community[18]

step 7

Update your webpage after finalizing the project with pictures, activities and resources.

step 8

Follow the Network of European Blue Schools via the newsletter and the online community #EUBlueSchools

[16] https://webgate.ec.europa.eu/cas/login?
[17] https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1485
[18] https://webgate.ec.europa.eu/maritimeforum/en/subscribe/4482/MaxOz.g8nxIxg

3.2
Taking part in the Network of European Blue Schools

Would you like to become a member of the online community? You can find a user guide with detailed explanations of the technical functionalities of the website. The manual covers the following functions:

- How to create an EU Login and login to the Maritime Forum website;
- How to request membership to an EU4Ocean online community;
- How to create an article on the website (for community members, with public and members-only functionality);
- How to use the discussion forum (for approved members of EU4Ocean Platform, Youth4Ocean Forum or Network of European Blue Schools).


4
HOW TO
DEVELOP
A PROJECT ?
© Joshua Hibbert

4

HOW TO DEVELOP A PROJECT?

4.1

Follow ten keys to success: criteria to become a European Blue School

The educational model of a European Blue School is based on ten key-points. These can be considered both as guidelines to develop a project, and as criteria to self-evaluate your application to become a European Blue School. The first five criteria are compulsory, every project needs to address these criteria to obtain the European Blue Schools Certfication. Remaining criteria are optional.

Every project needs to address compulsory criteria to obtain the European Blue School Certfication and to be part of the Network

BECOME A EUROPEAN BLUE SCHOOL

DEVELOP A PROJECT

COMPULSORY // ADDRESS THESE CRITERIA TO OBTAIN EUROPEAN BLUE SCHOOL CERTIFICATION

- **Develop a project with interlinked activities**
- **Produce a clear output**
- **Involve all students**
- **Collaborate with a local partner**
- **Communicate project results**

OPTIONAL

- Provide authentic learning experiences
- Work multi - or interdisciplinary
- Mobilise beyond the classroom
- Foster a land-sea interaction
- Bring in a European dimension

Develop a project with interlinked activities

Finding the time

How much time is spent to *Find the Blue* is entirely up to the teachers as it depends on the topic, the age of the students and of the workload. A project can have a duration from 1 week to a semester, up to 2 years. Adding a new project to a teachers' tight shedule is a challenge. Therefore we encourage teachers to find as many synergies as possible with the curriculum (see 4), and looking for inspiring projects or ongoing projects that are anchored in the school planning. Informing your colleagues and the school director about your intentions and the process is therefore a necessary step to take. The ocean can be addressed in most schools subjects and can be used to work multidisciplinary or to tackle cross-curricular and alternative skills. If the school is planning a (multiday) school trip or thematic week, these are opportunities to link the activities with the project.

There is always a "blue spot" nearby connecting us to the ocean

Young children can be given a short list of possible topics to choose from, presented by a visual or a description

Find the Blue

Identifying a relevant ocean topic to work on is a creative and democratic process where the teacher facilitates and provides assistance.

Teachers can advise students to Find the Blue by:

- Investigating the personal existing links between them, their families, the school and the sea or ocean;
- Looking at the specific geographical or ecological context that they experience, such as living by the coast or near a river, how the community depends on marine resources (food, raw materials, energy, leisure and professional activities, communication route, etc.);
- Sharing their concerns or questions on a provided marine topic (which is linked to the curriculum topic the teacher wishes to address);

Both coastal and landlocked communities are linked to the ocean through goods and services, economic activities, cables and pipelines, and geographic features such as rivers, or even the atmosphere. The ocean is crucial to humankind as a source of oxygen, water, food, energy and resources, communication route, influence on weather, and as a place for sports and leisure activities.

Challenge the students to find a topic that connects them to the ocean and to act actively on their sustainable conservation.

Possible ocean topics to start investigating

Food from the ocean

- Fisheries
- Algae
- Aquaculture

→ *Sustainable consumption*
Promote the use of sustainable seafood at schools, restaurants and hotels in the school area

Climate and ocean

- Ocean acidification
- Sea level rise
- Coastal erosion
- Storms / floods
- Carbon cycle
- Migrating species
- Ocean warming

→ *Working to protect our coast, beach and dunes*
Campaign on promoting public transportation, biking, or sharing rides

Healthy and clean ocean

Water quality
- Industries
- Swimming
- Wastewater

→ *Investigating what goes in the drain and rivers, goes into the ocean*

Marine litter
- Single-use products
- Microbeads

→ *Tackle the litter problem in the school environment*
Take action against the overuse of plastic in school and at home

Produce a clear output

Choose the project outcome

The outcome describes specific changes in the knowledge, attitudes, skills, and behaviors a teacher expects to occur in the students as a result of this project. The outcome is important to set up the different activities, outputs and collaborations in the project.

The outcomes are preferably linked to the curriclum. There can be more then one outcome and it can of course evolve along the way.

Think carefully about what the students can realistically accomplish with the project.

Good outcome statements are specific, measurable and realistic.

- What do you as the teacher want your students to achieve at the end of the project?
- What do your students want to achieve with this project?
- Is the outcome relevant for the school, the community and the ocean?

Let students identify their main end products of the project

Select the activities

Now that you have your *Find the Blue* topic and know the outcome, you can move on to planning your work and activities with the students. Your students will accomplish a full range of activities to explore their topic, gain knowledge and skills, and increase ocean awareness.

Possible classroom activities:

- Literature research
- Developing a poster
- Presenting
- Lab experiments
- STEAM activities
- Use of ocean-related data (e.g. sea surface temperature satellite data) and maps, like the European Atlas of the Seas
- Working with films and documentaries
- Inviting a speaker (in person or online) to the classroom

Possible outdoor learning

- Fieldwork
- Outdoor sports
- Participating in a citizen science project
- Visit to science centre, a museum or an aquarium
- Visit to company or government agency
- For many more examples, we refer to chapter 4. Inspiring projects.

The project outcome activities and the output(s) are closely linked to each other. The projects' activities should lead to the creation of a product linked to the *Find the Blue* challenge.

Students can produce:

- Communication products:
  website, Instagram account, booklet, poster, leaflet, environmental statement
- Art or literature product:
  song, graphic novel, film, poems, pledges
- Manufactured product:
  a straw made of pasta, glue from shell fish

Invlove al students

Find the Blue projects are ideally student-based and promote co-creation. Students engaged from the first steps in project design show greater enthusiasm and concentration on assigned tasks. They take ownership of the project, which encourages them to engage more deeply in the research and learning activities. By getting students involved, learning becomes all about team work as teachers and students become partners reaching for the same learning goals. When students are actively engaged in a project with their community, there is a good chance that they will be doing something similar in their future adult life.

Using the students' interests and fascinations is a simple strategy to make them more involved. Find out what your students are passionate about and then use those interests as natural motivators to increase engagement. Younger students can bring their favorite toys, books or objects to the classroom that are relevant to the project. More mature students can bring in hobbies, talents and unique skills and experiences into the project. The result? Happier and more motivated students.

Engagement increases whenever students are empowered to make their own choices. Instead of having all students participating in every aspect of the project, teachers can let students choose in which part of the project management they can be succesfull or can grow. Giving roles to students can help them to succeed.

Breaking the class up in smaller teams increases the likelihood that everyone will contribute to the class discussion and problem solving during the project development.

A great way to achieve involvement is by creating an assesment process such as a growth portfolio in which students know exactly what is expected from them and see when they are succesfull or what needs to be fixed. This way students will start to understand how to achieve success on their own as the project moves forward. By teaching students how to self-access, their focus stays on learning. They create a life long learning attitude where they have self mastery over their learning.

Involve your students
in all parts of the project
development and management

Collaborate with a local partner

Project partners are crucial for the success of the *Find the Blue* project. These experts will share their skills, knowledge, and provide resources to students, helping them to: generate ideas and materialize them, obtain funds, engage with the local community, and disseminate project results.

Some partners will help students to *Find the Blue*; others will help to design engagement activities; some will be able to share their skills and knowledge to ensure the success of their projects and others may be prepared to put resources into the activity. Partners can also help students to disseminate the main results of their projects to different audiences. Working together with the local community is key to scale-up projects and to ensure their long-term sustainability. Community engagement will add value to the project activities, events and results.

A teacher can help his/her students to identify relevant partner(s). The students can present an outline of their project to several stakeholders in order to receive support. Teachers and students can reach out and collaborate easily with the members of the EU4Ocean Platform[19]. These organizations, initiatives and people all contribute to ocean literacy and the sustainable management of the ocean. They include local and national organisations to regional sea and European initiatives, spanning the areas of marine research, science-policy, blue economy, maritime industry and the private sector, civil society, arts, education, youth and media.

At the core of the platform is the exchange of expertise, knowledge, resources and best practices in ocean literacy.

Have you considered one of the following potential partners yet?

- Local councils
- Local community organisations
- NGO, volunteering teams
- Public transportation
- Schools and libraries
- Aquaria, coastal visitor centers
- Art galleries, museums and science centres
- Marketing and commercial companies
- Maritime sector workers: fishermen, fish farmers, boating company, dredging engineer, offshore wind engineer, port authorities, water sports schools, coastguards, tour operators, diving clubs
- Manager of a river, lake, or other water body

Find European ocean literacy partners in the EU4Ocean Coalition founding members platform [20]

[19] http://eu-oceanliteracy.eu
[20] https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1483

There are free-access online platforms, where schools will be able to connect to a diversity of stakeholders that are key to the sustainable management of the ocean, finding inspiration and support to address ocean topics. Consult some of those networks (see chapter 6), look carefully to the field of activity of each stakeholder and help your students to find the partners that best fit the goal of their project.

Finding resources in your own language can be a challenge. Contact an aquarium, marine researcher or visitor center to help you.

There is no need to look too far to find relevant partnerships

Fundraising

It is possible to set up a project without funding. Funding can however become a necessity when teachers take students to the sea, especially for inland schools, or when teachers need extra time to coordinate a large project.

The funds needed for each project and the way they can be achieved will depend on the nature of the projects developed by students, the partners engaged to it, the local context, and the impacts of these projects to the community.

Raising money to finance project activities can be an exciting challenge. Make your students become managers of their *Find the Blue* project and let them organise a fundraising activity or find sponsors. Students' first steps must include a list of the resources needed for the project and set a clear goal of how much money they need to raise. Then, they should draw inspiration from existing ideas and brainstorm some original ones. Afterwards, students pick the best idea(s). There are many great ways to collect funding, but some of the best ways are the unique ideas that pop-up on student's mind.

There are several stakeholders available to fund school projects with impact on the local community, universities looking for local collaborative projects or national of European funding calls to you can apply with the projects. Pay attention to the opportunities that best fit the purpose of your students and motivate them to take the lead of their project, taking it to a step further, as real project managers.

GET INSPIRED!

Find the Blue with Erasmus+ funding

Thanks to the Treaty of Rome, we now have a Europe without borders, where everyone can go abroad to travel, work or study without hindrance. In 1987, Erasmus started as a student exchange program. Today the European Commission offers via Erasmus+ funding for students to go abroad as part of a class exchange, a project meeting or individual learning mobility. Schools from different countries can form partnerships of 1 to 3 years. These Strategic Partnerships include simple, small collaborations to exchange good practices and large-scale projects to develop and disseminate innovative resources.

Contact your Erasmus+ National Agency to find out the different opportunities to develop a Blue Project together with schools from a different country.

Browse the Erasmus+ Project Results Platform[21] to find other success stories and good practice examples or to search for projects near you.

In this handbook, you can find great examples of projects where schools have collaborated on ocean topics via Erasmus+.

Your teaching tool!

[21] http://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details-page/?nodeRef=workspace://SpacesStore/e10bcccd-c7fd-47e7-900f-ff214ce3b01c

Communicate project results

Share the project by communicating about the project locally, nationally and at the European scale!

Students can start to disseminate their acquired experience locally with their school, family, the schools's community, the local municipality and the project partner(s).

Then the project results, best practices, main problems, and the solutions, can be shared with students, teachers, schools from other European Blue Schools (both national and interntional). Several strategies and tools can be used to give projects the most visibility possible:

- Public events
  (exhibition, activities, campaigns, school festivities)
- Project, school or partners webpage
- School and municipality journals and newsletters
- Local/regional media (newspaper, radio, TV)
- Social networks

Provide authentic learning experiences

Ready with a *Find the Blue* project to address and explore, students can develop both academic and 21st Century skills in a context that is more relevant to the learner.

Authentic learning is by nature both student-driven and applicable to the real world. It can take different forms in a project such as participating in a research or citizen science project or communicating with the local municipality on a local issue.

A popular form of authentic learning is taking students out on a field trip. The most direct way to build a relationship with the ocean or seas is having regular visits to the coast over an extended period of time, rather than a one-off visit. Students can then observe, explore and experience the natural marine environment and create a physical and personal relationship with it. But even without leaving the classroom a teacher can provide the students with authentic learning experiences. Why not let students explore the ocean via products from the supermarket or recipes? This will help students to be aware of the strong connection we as consumers have to the seas and ocean.

Work multi-or interdisciplinary

Extracurricular activities contribute to the personal training of a students' active behavior, becoming deeply involved with their communities. And even more important, students will have the opportunity to develop their talents and passions.

After-school science or water sports clubs, project teams, awareness campaigns, community activism, volunteering activities and field trips are, therefore, examples of some extra-curricular activities that can promote ocean literacy in students.

As part of your project students might undertake extra curricular activities

Oceanography is an inherently multidisciplinary field. One needs to understand how the water moves and flows to understand the patterns you see in chemistry and biology. It's like a giant puzzle where physics, biology, geology, chemistry, technology and human activities affect each other. The ocean role in the Earth's climate's system, in providing resources and in the global economy requires a lot of interaction between the different fields.

To improve students' understanding of real-life topics and make the learning process more productive and enjoyable, they can study the topic from a point of view of different disciplines and experience the connection between distinct subjects of the school curricula. For example, studying pollution on a beach can be achieved by investigating the effects of microplastics in organisms (biology) or by calculating how many microplastics are in seawater (maths).

Multidisciplinary projects are meaningful for students' learning

Mobilise beyond the classroom

Another approach is to work interdisciplinary where the design of a solution for beach litter might require engineering skills as well as the knowledge on wind and sand transport, tourism and psychology.

Projects that join different skills, knowledge, and ways of thinking, challenge the compartimentalized knowledge of several school subjects. This multi-or interdisciplinary approach allows students to contextualize their learning with their daily lives.

Exploring complex topics such as climate change and ocean health in a multidisciplinary way is a perfect approach to start creating an ocean literate generation

Having more then one class or even the entire school involved in the project will no doubt increase its impact.

To get more people on board you could:

- Accept the *Find the Blue* challenge together with another class.
- Collaborate with teachers from different subjects to add new dimensions to the project.
- Organise a thematic week in the school where more classes take part.
- Tackle issues that appeal to the entire school such as litter or the school menu.
- Establish a working group composed of the school management staff, teachers and students from different classes.
- Select ambassadors in the school to gain more awareness for your project.

Foster a land-sea interaction

While the coast is the ideal environment to *Find the Blue*, many other sites situated inland such as a river, a scientific lab, a natural history museum, a fish restaurant or an aquaculture facility are able to support a good project.

What happens inland does impact the ocean. From the pollution that is added to streets, rivers and air to the excess of carbon dioxide, it all affects water quality and the health of marine ecosystems. How we live affects the ocean. Our energy use, our diets, and so much more, all connects to the health of the ocean and seas. By being consious about the origin of the fish and seafood you eat, the energy you use and the single-use items you buy, you as an individual can influence markets and political decisions. The ocean belongs to us all and it is up to us to protect it. You do not have to live close to the sea to know or protect it.

A land-sea connection can also be established by uniting an inland school and a coastal school through a *Find the Blue* project. The students can share results of field work, compare the different aspects of their regions or spread more awareness at the coast and inland communities.

Bring in a European dimension

Taking part in the online community of the Network of European Blue Schools supports the intercultural exchange and global dialogue between its teachers and students, and provides opportunities to develop a European eco-citizenship of the ocean. The *Find the Blue* challenge is not only embedded on a local level, but has both a regional (e.g. regional seas) and a European dimension. We encourage teachers and students to explore how the local reality is connected to that wider European scale.

The Network of European Blue Schools promotes the use of eTwinning to collaborate with other teachers and the European Atlas of the Seas as a useful education tool to enhance your marine knowledge and understanding of the local and wider contexts.

4.2 Blue Curriculum (Blue Entry Points)

Ocean literacy is not – yet – an integral part of the school curricula. Ocean topics are at best scattered across science curricula with different subjects organized in separate disciplines. Teaching and learning about an inherent multidisciplinary and authentic topic such as the sea is quite challenging and relies on the incredible resources created by individual teachers or marine education organisations. To help teachers find a link with the curriculum or undertake multidisciplinary projects, European Schoolnet identified a number of Blue Entry Points in a selection of curricula.

Current ocean issues such as climate change and ocean health can be easily linked to different subjects in European curricula. In science courses, languages, sports and art, some topics can also be 'marinated' into a more ocean relevant content.

The blue entry points identified will help teachers to make ocean literacy a part of their classes.

Please check the website for a full report from European Schoolnet (2020) on the Analysis of Blue Entry Points in each of the school curricula of Belgium, Croatia, Finland, France, Germany, Greece, Portugal, Romania and United Kingdom.

You can also consult the manual A New Blue Curriculum, developed by IOC-UNESCO[22]. Although developed for policy-makers, the document presents clear indications about entry points for ocean literacy aligned with recent trends in formal education.

[21] IOC-UNESCO 2022 A New Blue Curriculum - A toolkit for policy makers, Paris, (IOC Manuals and Guides, 90)

5

USEFUL RESOURCES, INITIATIVES AND NETWORKS

Plastic Pirates – Go Europe![23] is a joint citizen science project that promotes knowledge and research on the distribution and abundance of plastic waste in European freshwater ecosystems.

Initiated by the German Federal Ministry of Education and Research (BMBF) in 2016, it has recently evolved into a joint campaign in collaboration with the Portuguese Ministry of Science, Technology and Higher Education and the Slovenian Ministry of Education, Science and Sport.

Plastic Pirates – Go Europe! is taking place in Germany, Portugal and Slovenia from the second half of 2020 and throughout the year 2021, as part of the trio presidency of the European Council.

In this project, young people from 10 to 16 years old have the opportunity to team up with researchers and identify sources of pollution in rivers and estuaries and contribute to a better understanding of environmental problems.

Students are made aware of the problem of pollution, actively contributing to scientific research, through participation in sampling campaigns to identify and categorize waste. Data are aggregated on an online platform and later analyzed by the different research groups involved in the project.

[23] www.plastic-pirates.eu/en

The Pilot Programme "Educar para uma Geração Azul" (Educating a Blue Generation[25]) 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.

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=U3YBXXfQjCs

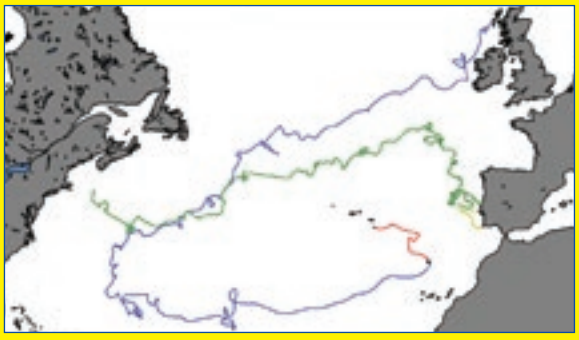
GET INSPIRED!

EDUCATIONAL PASSAGES

MINIBOAT PROGRAM

Educational Passages' Miniboat Program[26] connects people around the world to the ocean and each other, creating citizen scientists and global ocean stewards. Students work together to prepare, deploy, and track their miniboat while learning about ocean currents, weather, technology, etc. Each 1.5m long unmanned boat has a satellite transmitter and can be followed online as it sails. Students develop important Science, Technology, Engineering, Art, and Math (STEAM) skills and confidence while learning about maritime careers. With help from fisherman, research vessels, and other mariners, 145 boats have crossed the world's ocean, bringing together thousands of students, teachers, and communities around fascinating learning opportunities. Boats often land in Europe after sailing along the Gulf Stream from the USA, which provides a unique opportunity to learn about different cultures while making lasting friendships.

Partners like the Portuguese Escola Azul help to re-launch them: WEST, for instance, which had stops in Portugal, Scotland, and the Azores, travelling over 20,000 km over four voyages. In 2019, the Spirit of Ashley Hall connected students from the South Carolina (USA) to the Isles of Scilly (UK) after crossing in 118 days. Boat tracks, stories, and data are all available online.



[26] http://educationalpassages.org/start

GET INSPIRED!

TBA21 – Academy

An initiative of the Thyssen-Bornemisza Art Contemporary Foundation

TBA21–Academy[27] 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"[28] 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.

A collaborative platform
for Ocean Imagination
and Ocean Action

[27] https://www.tba21.org
[28] https:// ocean-space.org

5

USEFUL RESOURCES, INITIATIVES AND NETWORKS

5.1 Ocean Literacy networks and platforms

Blue Society campaign from the EU-funded Sea for Society project
http://www.bluesociety.org/ • http://seaforsociety.eu/np4/home.html

EU4ocean Coalition platform
https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1482

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/

5.2
Resources and tools

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

European Atlas of the Seas - Teacher corner
https://webgate.ec.europa.eu/fpfis/wikis/display/AtlasOfSeas/European+Atlas+of+the+Seas+-+Teachers+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
https://www.seachangeproject.eu/seachange-about-4/campaign/sea-change-database

Ocean Literacy Best Practices and User Stories
https://op.europa.eu/en/publication-detail/-/publication/a97f1935-3233-11e8-b5fe-01aa75ed71a1

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

5.3 Publications

Current: the journal of marine education, US, open access https://www.current-journal.com/

Fauville, G., McHugh, P., Domegan, C., Mäkitalo, Å., Friis Møller, L., Papathanassiou, M., Alvarez Chicote, C., Lincoln, S., Batista, V., Copejans, E., Crouch, F., & Gotensparre, S. (2018). Using collective intelligence to identify barriers to teaching 12-19 year olds about the ocean in Europe. Marine Policy 91, 85-96.

Fauville, G., Payne, D. L., Marrero, M. E., Lantz-Anderson, A., and Crouch, F. (2018). Exemplary Practices in Marine Science Education. Cham: Springer. doi: 10.1007/978-3-319-90778-9

Mokos, M., Cheimonopoulou, M.Th, Koulouri, P., Previati, M., Realdon G., Santoro, F. , Mogias, T., Boubonari T., Gazo M., Satta, A., Ioakeimidis C., Tojeiro A., Chicote C., Papathanassiou M., Kevrekidis T. (2020) Mediterranean Sea Literacy: When Ocean Literacy becomes region- specific, Meditteranean Marine Science, https://ejournals.epublishing.ekt.gr/index.php/hcmr-med-mar-sc/article/view/23400

Santoro F., Santin S., Scowcroft G., Fauville G., Tuddenham P. (2017). Ocean literacy for all: Learning kit. Venice, Italy: UNESCO.

5.4
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/

Network of
European
Blue Schools