



Network of
European
Blue Schools

A wave of

EUROPEAN

BLUE

SCHOOLS

Handbook for teachers



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

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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 schooling¹ – 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.

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





WHAT IS THE NETWORK OF EUROPEAN BLUE SCHOOLS?

WHAT IS THE NETWORK OF EUROPEAN BLUE SCHOOLS?

1.1 Embark on a journey to Ocean Literacy

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.

While the ocean and seas are suffering under increasing human pressure, educators and public authorities have empowered citizens in Europe through projects and initiatives to increase their knowledge on the ocean, and take more responsible decisions towards protecting the health of the ocean, which is a prerequisite to our future health.

The EU4Ocean Coalition, supported by the European Commission – DG Mare, now invites teachers (from kindergarten, primary school, middle school, junior high school, senior high school or vocational schools, from the coast to landlocked countries) to bring the ocean on a more long term basis into the classrooms all over Europe by taking up the *Find the Blue* challenge, and becoming part of the Network of European Blue Schools.

1.2 Find the Blue Challenge

The challenge is to **identify an ocean topic**, such as a good or a service that the ocean provides for our daily life, or a human activity that affects the ocean, **develop a school project** from it, together with a **local partner** (see 3. how to) and **communicate** about your project. The ocean is a fascinating world to discover, especially for young people. Together with students and 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. Through the *Find the Blue* challenge, students build a stronger connection to the ocean, the seas and other aquatic ecosystems.

People who live far from the sea may fail to 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. 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*, find a connection to the ocean or the sea. The ocean is everywhere in our life. It is simply a matter of acknowledging it.



The *Find the Blue* challenge is designed to increase the understanding of the ocean and the issues it is facing, and to develop a sense of responsibility to take action to protect it.

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

Take part in the Network of European Blue Schools

European Blue Schools are new school ecosystems that foster the acquisition of the ocean knowledge, skills and competencies. Marine education will allow students to address local to global challenges and will enable them to become independent while able to perform active, critical and responsible teamwork.

In a **European Blue School**, teachers actively engage students to bring the ocean into the classroom through project-based learning. Teachers from European Blue Schools are waves of change and inspiration to their students, contributing to a new generation of ocean literate, active and responsible citizens, by making the ocean a relevant part of the school curricula. In a European Blue School, teachers and students become agents for change and sustainability of the ocean and seas.

The **Network of European Blue Schools** will bring teachers together to:

- (1) share their project with other schools;
- (2) find inspiration on how to address ocean topics that are relevant to the curricula, the school and the local community;
- and (3) receive the European Blue School certification recognising the value of the project developed. In addition, (4) participating teachers will gain access to specific training, resources and assistance by other members of the EU4Ocean Coalition.

The Network of European Blue Schools invites teachers to be the rudder of this wave of change!





2

WHY

BECOME

A EUROPEAN

BLUE SCHOOL?

WHY BECOME

A 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. By bringing real-life marine and maritime contexts to the classroom, students are encouraged to become responsible and engaged ocean literate citizens.

To teach about the ocean is to teach about the world. The ocean is a motivating learning context that contributes to the development of a wider and active European citizenship, aware of socio-economic issues and sustainable development challenges, and supporting democratic values.

Accepting the *Find the Blue* challenge 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, such as collaborating, problem solving, creating, synthesizing information, creative thinking, project managing and utilizing high tech tools.

2.1

Building a European Blue School Framework

Setting up a pan-European school certification with a relevant pedagogy can not be done overnight. For many years now, several initiatives, programmes, policies and frameworks have greatly contributed to the promotion of sustainable education and ocean literacy, which has given life to the idea of having a European network to further develop the concept of a European eco-citizenship of the ocean.

The concept of a European Blue School originated from the European project '**Sea Change**' in 2017. With its development in 2020 by the **EU4Ocean** coalition, it has built extensively on the experiences of well-established school and marine education programmes (see 2.2).



<https://www.seachangeproject.eu/>



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European
Blue Schools

<https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1482>



WHY BECOME A EUROPEAN BLUE SCHOOL?

// Ocean Literacy movement

The term Ocean Literacy was defined in the early 2000s² as an understanding of the ocean's influence on us – and our influence on the ocean. The idea was born in the USA³, where the knowledge required to be considered ocean literate was outlined into a comprehensive framework. After the concept was introduced in Europe and **adapted by Portugal**⁴, two European Horizon 2020-funded projects on ocean literacy were set up to improve ocean literacy in Europe. Researchers from the projects **Sea Change** and **ResponSEable**⁵ 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.**

Ocean Literacy is defined by IOC-UNESCO⁶ 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.

RESPONSEABLE



IOC-UNESCO approach of Ocean Literacy⁷

² <https://www.tandfonline.com/doi/full/10.1080/13504622.2018.1440381>

³ <http://oceanliteracy.wp2.coexploration.org/>

⁴ <https://www.cienciaviva.pt/oceano/home/>

⁵ <http://www.responseable.eu/>

⁶ Santoro, F., Santin, S., Scowcroft, G., Fauville, G., and Tuddenham, P. (2017). Ocean Literacy for All: A Toolkit. Paris: UNESCO. ISBN:978-92-3-100249-6. 136 pp

⁷ Costa, R. L.; Mata, B.; Silva, F.; Conceição, P. and Guimarães, L. (in press). Fostering ocean literate generations: The Portuguese Blue School. In K. C. Koutsopoulos, J. Stel (Eds), Ocean Literacy - Understanding the Ocean. Springer.

WHY BECOME A EUROPEAN BLUE SCHOOL?

// 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 the democratic process and give them a confident voice.

// Blue Economy and skills training

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 maybe give rise to vocations. The EU Blue Economy Report provides an overview of the performance of the EU economic sectors related to the ocean and the coastal environment ⁸.

// 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 climate change and biodiversity are at the heart of Europe's Blue Schools.

// 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.

// 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.

⁸ EU Blue Economy report 2020: <https://blueindicators.ec.europa.eu/>



WHY BECOME A EUROPEAN BLUE SCHOOL?

// Sustainable Development Goals (SDGs)

SDG14 Life Below Water⁹, one of the seventeen SDGs created by the United Nations as a roadmap to transform our world, is entirely focused on the ocean. Restoring the ocean is vital for reducing climate change, providing food, economic development, and improving our well being and health around the world. Targets in conserving the ocean thus also contribute to the other SDGs. Ocean Literacy will be a key pillar of the upcoming **United Nations Decade of Ocean Science for Sustainable Development (2021–2030)**.

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.



⁹<https://sdgs.un.org/goals/goal14>



2.2

Complementing with environmental school labels: an umbrella initiative

The European Blue School certification aims to be an umbrella initiative specific for ocean topics to complement with existing national and international ocean literacy initiatives and increase the impact of local school projects. It is a complementary European acknowledgement to those schools that already work on ocean literacy and environmental sustainable management with their students.

For those schools and teachers that are already in the field, it is important to highlight that the *Find the Blue* challenge can complement and/or go hand-in-hand with other school labels and projects.

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 with an existing environmental school project where the school attained a label and choose to join the Network of European Blue Schools to:

- Share experiences and discuss with other teachers at the European scale;
- Collaborate with a school in another country;
- Promote a European eco-citizenship of the ocean.

The main initiatives and labels on the European territory are the following:



// Escola Azul ¹⁰ (Portugal)

Escola Azul is an educational programme of the Portuguese Ministry of the Sea, developed by the Directorate-General for Maritime Policy. Its main goal is to improve the level of Ocean Literacy in Portugal via formal education. This programme intends to distinguish and guide the schools that work on ocean literacy, creating an ocean literacy community that brings together schools, the sea sector, municipalities and other entities with an active role in marine education.

Escola Azul encourages schools to explore ocean issues through structured and interdisciplinary strategies, aiming for a social impact both with the participation of different partners and through the involvement of local communities. Escola Azul also relies on partnerships with a variety of entities connected to the sea, who provide multidisciplinary marine education actions directed at Blue Schools.

¹⁰ <https://escolaazul.pt/>





// Les Aires Marine Éducatives ¹¹ (France)

An “Educational Managed Marine Area” (EMMA) is a small coastal area, managed in a participatory way by primary or secondary school pupils, in accordance with principles defined in a charter. It is an educational and eco-friendly programme to help young people better understand and protect the marine environment. The students become part of a local project that draws on the expertise of the school and local municipality, along with user associations and environmental protection groups. The concept of EMMA is based on three pillars: knowing, experiencing and sharing.

Each school needs to implement a programme of actions: conducting an ecological survey in the chosen area involving the students alongside scientific teams; establishing a student’s sea council to discuss the actions to be implemented; investing in educational activities within the areas so that the students can develop new understanding in a real-life situation; and developing relationships with decision makers, professionals and academics in order to link up different generations.

Biosphärenschule

Biosphärengebiet Schwäbische Alb



// Biosphärenschule – Biosphere School Wadden Sea ¹² (Germany)

Schools distinguished as “Biosphere schools” feel closely connected to the Wadden Sea region and are partners of the national park administration. Through formal anchoring in curricula, practical lessons, interdisciplinary projects and extracurricular partners, they integrate the topics and goals of the protected area and sustainable development of the region into their everyday school life. In this way, they stimulate both discussion and identification of students with their region and motivate them to actively participate in the conservation of the area.

Mutual support and networking with other partner schools, national park institutions, partners of the national park administration and other extracurricular learning locations are essential elements of the concept. Admission to the international “Wadden Sea Network” offers schools new opportunities for cooperation and increasing their appeal to the region.

¹¹ <http://www.aires-marines.fr/Proteger/Sensibiliser-le-public/Les-aires-marines-educatives>

¹² <https://www.nationalpark-partner-wattenmeer-nds.de/partner/biosphaerschulen>



WHY BECOME A EUROPEAN BLUE SCHOOL?



// Blue Flag ¹³ (International)

A world-renowned eco-label trusted by millions around the globe, the Blue Flag programme is operated under the auspices of the Foundation for Environmental Education (FEE). In order to qualify for this prestigious award, a series of stringent environmental, educational, safety-related and access-related criteria must be met, and maintained.

Through close collaboration with the members on all issues they may have, FEE works tirelessly to ensure the programme's expansion, and that the unrivalled standards of the Blue Flag are maintained internationally.

¹³ <https://www.blueflag.global>

¹⁴ <https://www.ecoschools.global/>



// Eco-school ¹⁴ (International)

The Eco-Schools programme is a growing phenomenon that encourages young people to engage in their environment by allowing them the opportunity to actively protect it. It starts in the classroom, it expands to the school, and eventually fosters change in the community at large. Through this programme, young people experience a sense of achievement at being able to have a say in the environmental management policies of their schools, ultimately steering them towards certification and the prestige, which comes with being awarded a Green Flag. The Eco-Schools programme is an ideal way for schools to embark on a meaningful path towards improving the environment in both the school and the local community while at the same time having a life-long positive impact on the lives of young people, their families, school staff and local authorities. Eco-schools offers the topic "Marine and Coast" in which children learn about local and/or global coastal and marine habitats, how people are affecting these habitats and what we can do to protect them.



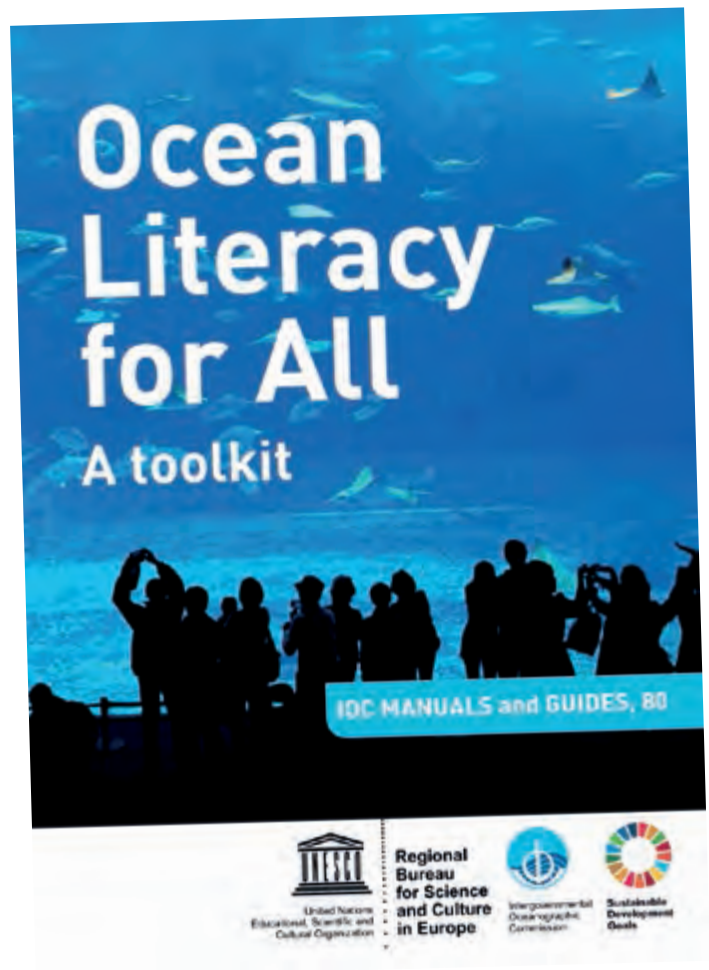
WHY BECOME A EUROPEAN BLUE SCHOOL?



// Ocean Literacy for All ¹⁵ (International)

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 world's 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).



¹⁵ <https://oceanliteracy.unesco.org/>





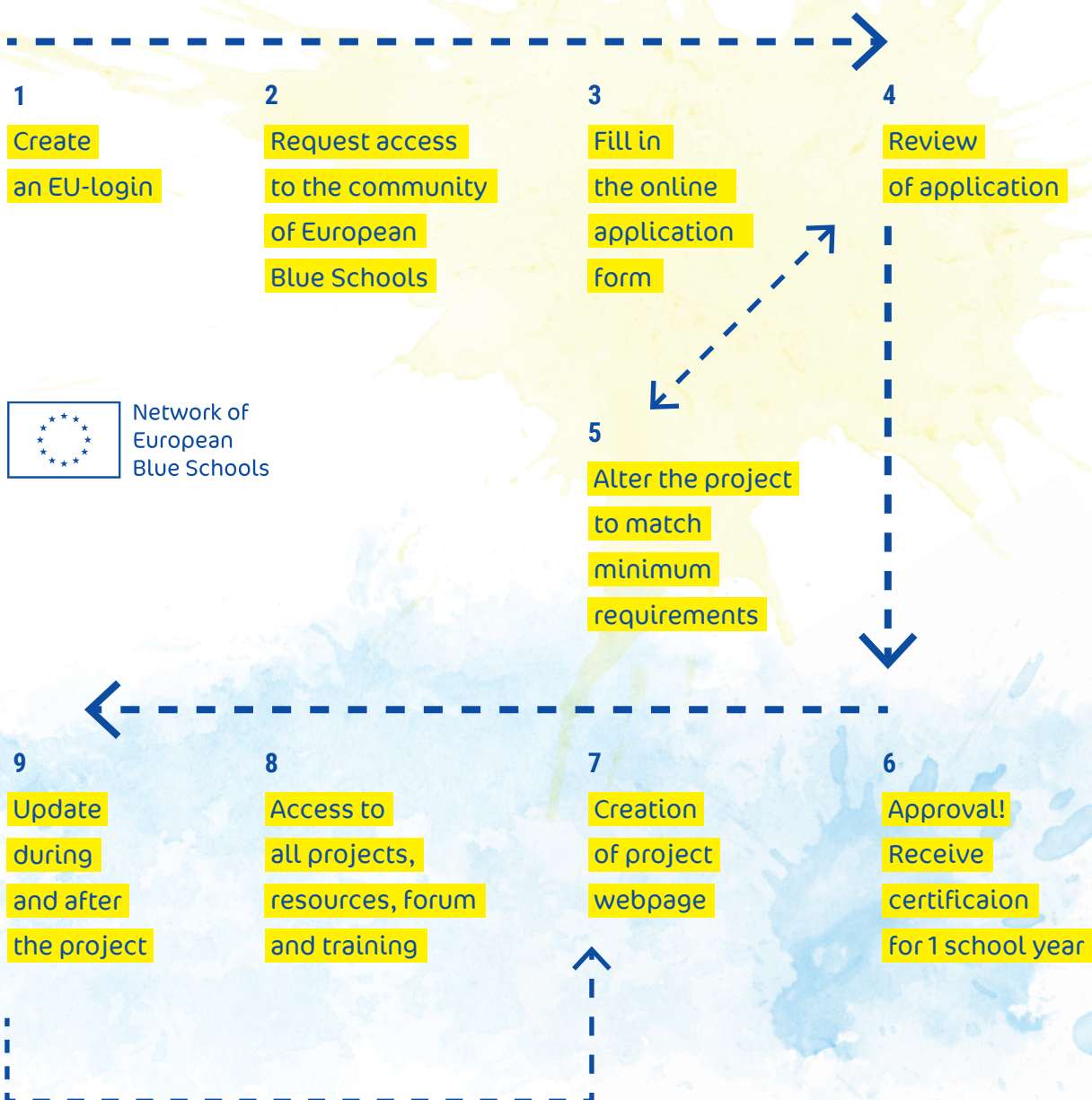
3

HOW TO
REGISTER TO BECOME
A EUROPEAN BLUE
SCHOOL?

HOW TO REGISTER TO BECOME A EUROPEAN BLUE SCHOOL?

3.1

Apply for the European Blue School certification



HOW TO REGISTER TO BECOME A EUROPEAN BLUE SCHOOL?

1.

Create an EU-login

<https://webgate.ec.europa.eu/cas/login?>

2.

Request access to the community of European Blue Schools

<https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1485>

3.

Fill in the online application form before you start the project. Provide us with information on the project to be developed by your students.

4.

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

5.

Alter the project so it matches the minimum requirements (see 3.1).

6.

If the project matches the minimum requirements you will receive the European Blue School certification that is granted for the entire school year.

7.

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

8.

After the approval of the project you will have access to all projects, resources, fora and trainings.

9.

To maintain the certification you have to update periodically the project webpage during the project and update the project webpage after finalising it.

3.2

Taking part in the EU4Ocean Ocean Literacy Community?

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).

