

## HOW TO DEVELOP A PROJECT?

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### 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

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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.

#### 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);

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

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.

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



### **HOW TO DEVELOP A PROJECT?**

### 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?

### 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.



### HOW TO DEVELOP A PROJECT?

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

Let students identify their main end products of the project



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





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 EU40cean Platform<sup>17</sup>. 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.

Find European ocean literacy partners in the EU4Ocean Coalition founding members platform <sup>16</sup> Finding resources in your own language can be a challenge.
Contact an aquarium, marine researcher or visitor center to help you

<sup>&</sup>lt;sup>17</sup> https://webgate.ec.europa.eu/maritimeforum/en/frontpage/1483



<sup>16</sup> http://eu-oceanliteracy.eu

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

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, coastquards, tour operators, diving clubs
- · Manager of a river, lake, or other water body
- For many more examples we refer to chapter 4. Inspiring projects

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.

### **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.







# 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<sup>18</sup> 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!

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
- For many more examples we refer to chapter 4
  - Inspiring projects.





### Provide authentic learning experiences

Ready with a *Find the Blue* project to address and explore, students can develop both academic and 21<sup>st</sup> 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.

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).

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.

Multidisciplinary projects are meaningful for students' learning

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.





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.





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.



The European Atlas of the Seas<sup>19</sup> 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!



19 https://europa.eu/!QK93nF



eTwinning <sup>20</sup> 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



<sup>&</sup>lt;sup>20</sup> https://www.etwinning.net/en/pub/index.htm

#### **HOW TO DEVELOP A PROJECT?**

### 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.

