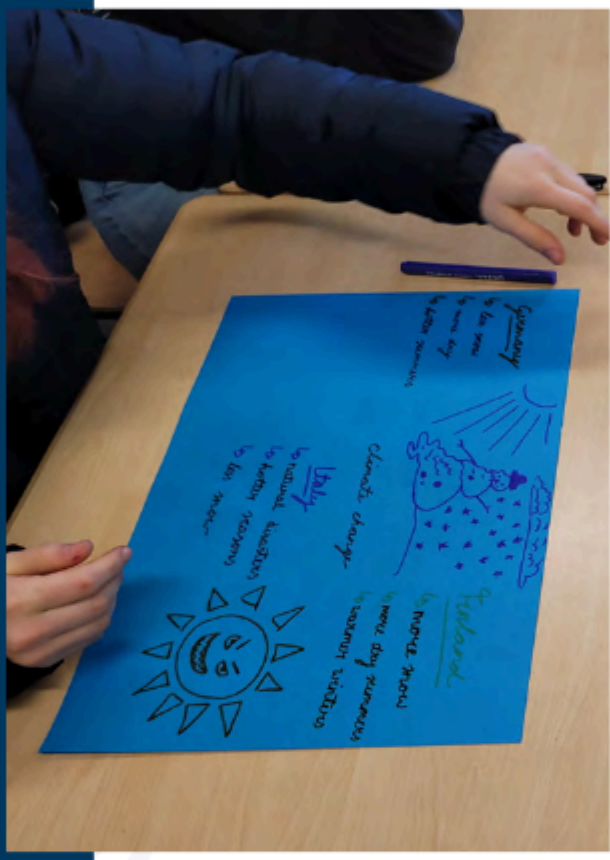
Blue Education: Empowering Learners to Become Blue Citizens

By BlueLightS, ProBleu & SHORE

Blue education briefs: what for and why now?

While recent, strategic frameworks such as the European Ocean Pact and UNESCO's Sustainable Education Strategy have clearly articulated the need for blue education, implementation across Europe remains fragmented. As the BlueLightS, SHORE, and ProBleu projects come to an end, the run-up to the 2027 Ocean Decade Conference is the ideal time to reflect on their findings.

Based on their results, the three projects are co-developing an upcoming series of issue briefs, offering a three-pronged perspective to drive the mainstreaming of blue education. While the series opens by placing schools at the centre of the narrative, it also zooms out to the wider community, examining how we can build the support networks necessary to sustain these initiatives beyond the school gates. Ultimately, the series looks ahead to the systemic level, outlining the conditions required to permanently embed blue education into national education systems. The briefs can't say it all, but they do aim to support the conversation on how to deliver transformative blue education for all.



Student from Oriveden yhteiskoulu in Finland, funded by BlueLightS

BlueLightS, ProBleu and SHORE are EU-funded projects supporting schools across Europe and beyond in bringing blue education into everyday learning. Through practical tools, expert guidance and funding for school-led initiatives, they empower young people to explore aquatic ecosystems, connect learning with local water-related challenges, and take action to protect our ocean, seas and rivers.

Together, the projects contribute to the EU Mission Restore our Ocean and Waters by 2030, helping more schools become active participants in building a water-literate and sustainable future.

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A Blue Blind Spot

Education, both formaland informal, is one of the most powerful tools we have to drive the behavioural and societal changes needed to empower the next generation. Yet, “the blue” remains a significant blind spot in our education systems and public knowledge. The disconnect is stark, and exemplified by our understanding of the ocean; a 2022 study in Wales revealed that while 84% of people believe protecting the marine environment is important, **40% feel their lifestyle has no impact on the sea.** This gap between concern and understanding is echoed globally, undermining our ability to tackle biodiversity loss, climate change, and pollution.[1]

The problem runs deeper than individual attitudes; it is embedded in our education systems. In 2023, the UN Secretary-General’s Special Envoy for the Ocean, **Peter Thomson, called upon member states to address the under-representation of ocean-related subjects in their curricula.** Three years on, progress is slow. Ocean content is almost completely absent from the Swedish curriculum. In France, less than a quarter of learning goals that could explicitly introduce ocean-related content do so. In the English curriculum, the words “coastal” and “marine” are absent.[2]

The absence of the ocean in European curricula is but one example: this **terrestrial bias trickles down to the education system as a whole, lacking in textbooks, assessments, and teacher trainings,** and creating a dependency on informal education settings and teachers who have little systemic support.[3] Crucially, **this blind spot also extends to all aquatic ecosystems.** Freshwater systems and wetlands are equally overlooked, despite their critical role in global ecology.



LikeMySea students during a snorkel session to record observations for the citizen science MINKA platform

1 Atkinson M., Wenman C., Zachary C. 2022. Ocean Literacy in Wales: Headline Findings Report. NRW Evidence Report. Report No: 633, 53 pp, Natural Resources Wales, Bangor

2 Feldkamp, N. 2026. Ocean Literacy in French School Curricula. University essay from Göteborgs universitet. https://www.essays.se/essay/d2a566c4c8/

3 BlueLightS. (2026). The Framework for Strengthening Blue Education.

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Why Blue Education Matters

The blue (water)andgreen(terrestrial) are intrinsically connected. You can't fully understand one without understanding the other, but the benefits of a holistic nature-based approach extend far beyond environmental literacy:

Health and Well-Being: A growing body of evidence suggests that contact with nature has a positive impact on children's physical and mental well-being[4] and can help transform eco- anxiety into eco-action. From forest puddles to the ocean, aquatic ecosystems make for fascinating teaching aids for students to learn about nature just beyond their back door.

Social Equity: Nature-based education has been shown to improve the quality of life and STEM (Science-Technology-Engineering-Mathematics) capacity for children from disadvantaged backgrounds, helping to address systemic educational inequities.[5]

Economic Opportunities: A thriving blue economy requires a workforce trained in sustainability, creating new job opportunities in conservation, research, tourism, and more.

Strategic Policy Goals: Blue education is key to delivering key EU policy goals, such as the European Ocean Pact. It can also help achieve the EU STEM Strategic Plan goals, by connecting schools with stakeholders that can support them and using engaging, community-based activities to attract learners who may not identify with traditional STEM.

Healthy blue ecosystems and a thriving, empowered society are two sides of the same coin.



ICM-CSIC session for teachers from rural schools in the region of L'Empordà, Catalonia.

4 Soyez-Lozac'h, B., Gottsmann, L., & Fuchs, J. (2024). L'expérience vécue pour penser un autre rapport à la nature ? HAL science.
5 Sprague, N., Berrigan, D., & Ekenga, C.C. (2020). An Analysis of the Educational and Health-Related Benefits of Nature-Based Environmental Education in Low-Income Black and Hispanic Children. Health Equity, 4(1). doi:10.1089/heq.2019.0118.

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From Schools to System

The briefs chart a course from effective classroom practices, through the governance and support structures needed to sustain them, to the policies and systemic frameworks required to embed blue education in mainstream education.

1. The first brief identifies the key ingredients of successful classroom practice, drawing on the diversity of Blue Challenge projects funded by the three projects, as well as the experiences of members of the Network of European Blue Schools. It highlights open schooling, student agency, and interdisciplinary approaches to make blue education engaging, relevant, and transformative. It provides recommendations for unlocking blue education's full potential, ensuring inclusivity so all learners can benefit, and by connecting global challenges with local realities.

2. The second brief focuses on **the support systems needed for blue education to thrive.** It explores how coordination, expertise, resources, and professional development, supported by effective governance, can help projects grow, endure, and evolve from individual initiatives into connected and scalable approaches.

3. The third brief addresses **the long-term mainstreaming of blue education within education systems.** It examines the role of curriculum design, policy frameworks, teacher support, and institutional structures, drawing on the BlueLightS Framework to provide practical guidance for embedding blue education in national curricula and policies and reaching learners at scale across diverse contexts.

JOIN THE BLUE EDUCATION PLATFORM FOR UPDATES, EVENTS AND MORE!



LikeMySea students during their session in Barcelona with the Institut de Ciències del Mar (ICM-CSIC) team

Contacts

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