Blue School Global Network: a toolkit



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Blue School Global Network: a toolkit

Contents

| Publication team | 4 | Part 3 — Engaging with the Blue School | |
|---|----|--|-----|
| Foreword | 5 | Network: a guide for all participants | 46 |
| Executive summary | 6 | | |
| | | For coordinators | 48 |
| Part 1 — Overview | 8 | For teachers and students | 52 |
| | | For local communities and early career ocean | |
| Navigating the toolkit | 10 | professionals | 56 |
| Understanding OL in education | 10 | For stakeholders | 58 |
| The evolution of the OL movement | 11 | The role of Lighthouse projects in the Blue School Network | 60 |
| The need for long-term and systemic OL initiatives | | | |
| in education | 14 | Part 4 — Blue Schools worldwide: | |
| Making OL inclusive and accessible for schools globally | 15 | examples and contacts | 62 |
| Challenges and opportunities for advancing OL in | | | |
| education | 16 | Blue Schools in 2025: Impact statistics | 64 |
| Blue Schools: a global educational response | 18 | Network of European Blue Schools | 65 |
| The origin of the Blue School concept | 19 | Ireland | 81 |
| Network of European Blue Schools | 20 | Portugal | 87 |
| All-Atlantic Blue Schools Network | 20 | Spain | 93 |
| Blue School Global Network | 22 | Caribbean Regional Blue School Networks | 99 |
| | | Honduras | 101 |
| Part 2 — The Blue School program | | Mexico | 106 |
| and its criteria | 24 | National Coordination Highlights | 109 |
| | | Angola | 110 |
| The Blue School program and its criteria | 26 | Argentina | 116 |
| The Blue Schools vision | 26 | Brazil | 121 |
| Criteria for becoming a Blue School | 27 | Cabo Verde | 128 |
| Optional criteria for enhanced engagement | 28 | Canada | 133 |
| How to become a Blue School – Application and | | India | 144 |
| implementation | 28 | Namibia | 148 |
| The Blue School educational framework | 32 | Nigeria | 152 |
| Interdisciplinary learning | 33 | South Africa | 156 |
| Community engagement & partnerships | 34 | United States of America | 162 |
| Strategic alignment with International frameworks | 36 | Regional coordination contacts | 165 |
| The Blue School Global Network | 40 | National coordination contacts | 166 |

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This document was co-constructed with the Regional and National contact points of the Blue School Network, whose input and field experience have been instrumental in shaping this toolkit.

This toolkit aims to equip educators, national coordinators, and other education-related stakeholders with the necessary resources to expand Ocean Literacy (OL) within the Blue School Framework. By fostering global collaboration, interdisciplinary learning, and active engagement, we can empower future generations to become ocean stewards and advocates for marine sustainability.

Executive summary

The Blue School Global Network Toolkit is a practical guide designed to support the development and implementation of Blue Schools at national, regional, and global levels. Aligned with the Ocean Literacy Framework, the UN Decade of Ocean Science for Sustainable Development (2021–2030), and Education for Sustainable Development (ESD) principles, this toolkit offers strategic guidance for schools, national coordinators, and stakeholders.

The toolkit is structured into four key parts:

Part 1 - Project overview

This section contextualizes Ocean Literacy within education, highlighting its evolution, importance, and current global momentum. It introduces Blue School as one effective response to fostering long-term systemic change in ocean literacy and sustainability practices, identifying both challenges and opportunities for advancing Ocean Literacy initiatives in educational contexts.

Part 2 – The Blue School program and standards

Detailed guidance on the certification and implementation process, clearly outlining essential criteria for schools, such as interdisciplinary learning, student engagement, and community involvement. It also introduces optional criteria to deepen schools' engagement, including roles like Blue School Student Ambassadors, and describes the pedagogical framework supporting interdisciplinary, experiential, and action-based learning.

Part 3 - Engagement with the Network

A practical guide tailored specifically for different actors:

 Coordinators: Instructions on establishing and managing national or regional networks, including stakeholder engagement, policy integration, training, mentoring, and evaluation.

Blue School Global Network: a toolkit

- Teachers and Students: Steps to become a certified Blue School, benefits of certification and how to participate in global network activities.
- Local Communities and Early Career
 Ocean Professionals (ECOPs):
 Opportunities for direct collaboration,
 community engagement, and real-world
 educational contributions.
- Stakeholders: Clear guidance on partnership roles, benefits, and steps to actively participate and support Blue School initiatives.

Part 4 - Blue Schools worldwide

An overview of existing Blue School networks, offering concrete examples from national and regional contexts.

This section includes profiles of active national coordinators, impact data, visual documentation, and insights into successful regional initiatives. Importantly, this toolkit was developed collaboratively, giving voice to countries and regions leading Blue School implementations. It ensures national coordinators are recognized as key actors in shaping and adapting the global model.

As a living resource, the toolkit remains adaptable and open to continuous co-construction, evolving with the growing Blue Schools community.



The Blue School Global
Network toolkit is designed
as a comprehensive
resource for educators,
coordinators, stakeholders,
and communities engaged
in promoting Ocean Literacy
(OL) in formal education.

It provides structured guidance on establishing and sustaining Blue Schools, integrating OL principles into curricula, and fostering global and regional collaborations.

Navigating the toolkit

Understanding Ocean Literacy in education

This toolkit is structured to serve different users based on their interests, roles, and needs within the Blue School Framework.

Whether you are an educator, student, National Coordinator, stakeholder, or community member, this document will guide you on how to participate and contribute to the Blue School movement effectively. The ocean is essential to life on Earth, serving as a climate regulator, a provider of biodiversity, and a source of economic, social, and cultural value. It influences global weather patterns, absorbs carbon dioxide, and provides food, energy, and medicine for billions of people.

Despite its critical role, the ocean remains poorly understood and undervalued by society. Many people view it as an infinite resource or believe it is "too big to fail," diminishing individual and collective responsibility for its protection.

This perception fuels apathy, often reinforced by negative media narratives that focus solely on environmental degradation, pollution, and climate change without offering engaging, action-driven solutions. This highlights the urgent need for OL, ensuring that individuals and communities recognize their connection to the ocean and feel empowered to act in ways that support ocean sustainability for current and future generations.

The evolution of the Ocean Literacy movement

The concept of OL emerged in the early 2000s, when educators and scientists in the United States began advocating for the integration of ocean-related content into formal education. A pivotal moment was the collaborative work led by Cava et al. (2005)¹, which resulted in the "seven principles of Ocean Literacy" — a foundational framework that has since guided ocean education efforts globally.

Over time, OL has expanded far beyond ocean science and awareness-raising. It now embraces a holistic perspective that includes cultural, economic, historical, emotional, and ethical dimensions. In 2011, the creation of the European Marine Science Educators

Association (EMSEA) accelerated the spread of OL across Europe. That same year, Portugal became one of the first European countries to incorporate OL into its formal education system, marking a significant step in the regional advancement of ocean education.

This evolution continued through key transatlantic collaborations. The Galway

Statement (2013) and the Belém Statement (2017) emphasized the importance of international cooperation on marine research and education. These policy milestones helped embed OL into broader agendas of sustainable ocean governance. In parallel, projects like SeaChange (2015–2018) and ResponSEAble (2015–2019), funded by the European Commission, worked to integrate OL into national policies, school systems, and public engagement initiatives.

In 2018, Canada launched the <u>Canadian Ocean</u> <u>Literacy Coalition</u>, and by 2021, it became the first country in the world to release a national OL strategy². This landmark achievement coincided with the start of the United Nations Decade of Ocean Science for Sustainable Development (2021–2030) (hereafter the Ocean Decade), which elevated OL to a central pillar of global efforts toward ocean sustainability.

The Ocean Decade positioned OL not merely as an educational tool but as a key enabler of transformative change.

¹ Cava, F., Schoedinger, S., Strang, C., & Tuddenham, P. (2005). Science content and standards for ocean literacy: A report on ocean literacy.

² Official website of COLC (Canadian Ocean Literacy Coalition) - https://colcoalition.ca/

Initiatives such as the <u>EU4Ocean Coalition</u> (2020), the <u>Network of European Blue Schools</u>, the <u>All-Atlantic Blue Schools Network</u> (2021), and the Intergovernmental Oceanographic Commission of UNESCO's (IOC) <u>"Ocean Literacy With All" programme</u> (2021) are direct responses to this momentum.

These initiatives operationalize OL in schools and communities, helping translate global goals into local action. By 2025, the vision is for a truly global ecosystem of national, regional, and international education programs to work together to influence curricula, teacher education, and public engagement in ways that foster lasting ocean stewardship.

This broadened understanding of OL recognizes that nurturing a sustainable relationship with the ocean requires more than scientific knowledge.

OL now calls for critical reflection, empathy, cultural connection, and active citizenship. It involves learning through multiple knowledge systems, including scientific, Indigenous, and local perspectives.

It means applying emotional intelligence and ethical reasoning to decisions that affect both people and the ocean.

The IOC now defines OL as:

- Learning about the ocean through diverse knowledge systems (science, Indigenous, local) and disciplines (history, economics, ethics, sociology);
- Understanding personal, local, and global perspectives on ocean challenges;
- Applying critical and ethical thinking to actions that affect individuals, communities, and the planet.

Approaches to OL today are not just about acquiring facts. They are about building meaningful, lifelong relationships with the ocean. For OL to be truly transformative, it must connect knowledge with emotion and identity, and it must empower people to act. Transdisciplinary approaches are essential: OL thrives when science is integrated with cultural narratives, storytelling, artistic expression, and Indigenous worldviews. These allow people to connect with the ocean in personal and community-rooted ways.

For example, the Canadian Ocean Literacy
Coalition's giant ocean floor map program and
the National Film Board of Canada's Ocean
School incorporate Indigenous knowledge
and storytelling into ocean education. These
place-based tools invite students to reflect on

their relationships with the ocean and learn in ways that are inclusive and meaningful. Their collaborative development with Indigenous communities ensures respect and authenticity.

Similarly, the Bow Seat Ocean Awareness
Programs use "artivism"—art combined with
activism—to encourage youth to explore ocean
issues through visual arts, poetry, film, and
music. By engaging learners emotionally and
creatively, such initiatives transform abstract
environmental concepts into personal stories
and deepen the sense of connection and
responsibility.

Promoting OL means creating learning environments where students can explore and embody values, practices, and knowledge that help them understand and act on the ocean-human relationship. It is about cultivating awareness of the ocean's role in our lives—not only ecologically and climatically, but also in terms of cultural heritage, economic livelihoods, and community resilience.

Engagement is at the heart of this process.

Research shows that experiential learning—
through hands-on projects, citizen science,
immersive tools like virtual reality, and oceanbased experiences such as diving or sailing—
deepens emotional connection with the

ocean and motivates action³⁴⁵. Participatory governance, where communities help shape marine policy and decision-making, further strengthens long-term commitment.

Yet, challenges remain. Many OL initiatives are still fragmented, short-term, and reliant on temporary funding. Structural barriers to access and inclusion persist. For OL to achieve its full transformative potential, it must be co-designed with diverse voices, particularly from Indigenous, coastal, and historically underrepresented communities.

This leads us to a crucial question:

How can we foster a deeper, more empathetic, and action-driven connection between individuals, communities, and the ocean—one that moves beyond knowledge and toward lasting engagement and stewardship?

Answering this question requires vision, inclusivity, and collaboration.

Only by working together across sectors, geographies, and cultures can we shape
Ocean Literacy as the foundation for a just and sustainable relationship with the ocean.

Gillooly, D. (2022). "Percorsi nel Blu" ("Blue Paths"): a long-lasting project to integrate Ocean Literacy and Marine Citizen Science into school curricula. Mediterranean Marine Science. https://doi.org/10.12681/mms.27152

⁴ Fauville, G., Vośki, A., Mado, M., Bailenson, J. N., & Lantz-Andersson, A. (2024). Underwater virtual reality for marine education and ocean literacy: Technological and psychological potentials. Environmental Education Research. https://doi.org/10.1080/13504622.2024.2326446

Hayati, R. S., Ma'rifah, D. R., & Irmawanty, I. (2024). Marine education through experiential and joyful learning—Marine edutourism based on the potential of Lantebung mangrove ecosystem to improve student's ocean literacy. Lingua: Jurnal Pendidikan Bahasa. https://doi.org/10.34005/lingua.v20i2.4153

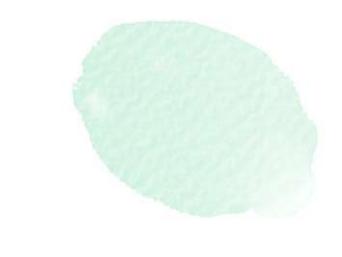
The need for long-term and systemic Ocean Literacy initiatives in education

Despite the existence of numerous OL projects, many initiatives lack long-term, sustained funding and operational structure(s) to ensure sustained and coordinated engagement over time. This documented reality leads to several identified gaps, including for example:

- The ability to move beyond awareness raising activities to efforts that drive lasting changes in behaviours, policies, and decision-making;
- The ability to measure the impact of OL activities on people's perceptions and actions;
- A lack of sustained funding and capacity to build and maintain strong partnerships between schools, governments, private sectors, non-governmental organizations (NGOs), and local communities that are essential to measurable impact.

For OL to truly drive societal change, it must be integrated into national and regional education policies, curricula, and teacher education. Although other drivers have been identified as essential for building an ocean literate society (see <u>Ocean Decade Challenge</u> <u>10 White Paper</u> ⁶), formal education and equipping youth with the knowledge, skills, empathy, and commitment to sustainable use of the ocean provides a foundational platform for all other drivers.

Ocean education needs to transition from an optional add-on topic when time or interest allows, to a core component of learning throughout formal schooling.



⁶ Glithero, L. D., Bridge, N., Hart, N., Mann-Lang, J., McPhie, R., Paul, K., Peebler, A., Wiener, C., Yen, C., Kelly, R., McRuer, J., Hodgins, D., & Curtin, F. 2024. Ocean Decade Vision 2030 White Papers - Challenge 10: Restoring Society's Relationship with the Ocean. Paris, UNESCO-IOC. (The Ocean Decade Series, 51.10.). https://doi.org/10.25607/ekwn-wh61

Making Ocean Literacy inclusive and accessible for schools globally

One of the major advancements in OL has been the recognition that diverse cultural perspectives and Indigenous and local knowledge must be integrated into ocean education.

The ocean holds various cultural, spiritual, and practical meanings for different communities, shaping their connection, priorities, livelihoods, and stewardship.

Indigenous and local knowledge and regional experiences must be acknowledged and recognised in OL frameworks to ensure relevance and inclusivity.

The IOC has recently developed a <u>policy</u> brief ⁷ and a <u>toolkit</u> ⁸ for curriculum developers to assist with embedding OL into formal education systems globally. The Ocean Decade presents a unique opportunity to accelerate the mainstream adoption of OL, particularly within education systems and community-based programs.

However, integrating ocean education into

schools is not just about adding ocean-related content in lesson plans.

A whole-of-school approach is required, where OL is embedded across different subjects (math, history, arts, languages, social sciences, physical education), while linking it to real-world experiences.

This approach helps to bridge the gap between formal (school-based) and informal (community-based) education, ensuring that OL is not confined to classrooms, but extends into daily life and decision-making.

⁷ UNESCO-IOC (2025). Promoting Ocean Literacy – an education policy brief, UNESCO, Paris (IOC Policy Brief no1)

⁸ UNESCO-IOC (2022). A new blue curriculum: a toolkit for policy-makers, Paris (IOC Manuals and Guides, 90)

Challenges and opportunities for advancing Ocean Literacy in education

Despite growing recognition of its importance, the implementation of OL continues to face structural and systemic challenges in both formal and non-formal education settings.

These barriers—identified through international studies, toolkits, and experiences from the Portuguese and All-Atlantic Blue School Networks—also highlight promising pathways for transformation.



Curriculum and resources

Challenges

- Limited integration of ocean content into national education frameworks.
- Lack of teacher training and access to highquality resources.

Opportunities

- Embed OL in national curricula and across disciplines.
- Include OL in initial teacher training and continuous professional development programs.



Sustainability and continuity

Challenges

- Short-term project funding limits long-term planning.
- Weak integration of OL in education policy and school planning.

Opportunities

- Develop long-term funding mechanisms beyond project-based models.
- Advocate for institutional policies that embed OL into school structures and national education strategies.



Community and collaboration

Challenges

- OL often remains school-focused, missing broader societal engagement.
- Limited involvement of key stakeholders such as Indigenous communities, local industries, or policymakers.

Opportunities

- Build partnerships with communities, civil society, and ocean-related sectors.
- Promote co-creation to ensure locally relevant and culturally inclusive OL strategies.



Monitoring and participation

Challenges

- · Few tools to assess OL's impact on behavior and attitudes.
- · Lack of context-sensitive research to identify what works where and why.

Opportunities

- Co-develop shared evaluation tools with the Blue School Governance and Advisory Boards.
- Encourage participatory learning and citizen science to link knowledge with action.

Tackling these challenges—and embracing these opportunities—requires cross-sector collaboration, sustained investment, and a commitment to inclusive, transformative education.

The Ocean Decade offers a global framework to align efforts and build an ocean-literate society where education supports long-term ocean stewardship.

Blue Schools: a global educational response

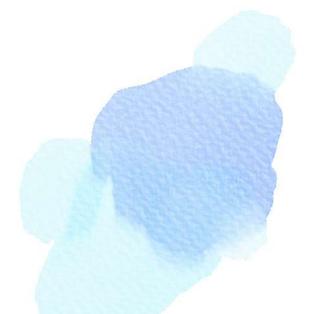
Blue Schools provide a structured framework for integrating OL into daily school activities, creating tangible links between education, citizenship, and sustainable development.

By combining scientific, Indigenous, and local knowledge with hands-on experiences, interdisciplinary learning, social activism, and multi-sectoral collaboration, Blue Schools enable students to not only learn about the ocean but also actively contribute to its protection through community-based conservation projects and sustainable use practices.

In this section, we will explore the following questions that define and shape Blue Schools:

- 1. What are the origins of the Blue School movement?
- 2. What is the Blue School program and its criteria?
- 3. How do Blue Schools integrate OL into their educational framework?

Blue Schools are more than just an educational program and pedagogical approach; they are, through a global network, a movement—one that connects students, educators, researchers, policymakers, and communities in a shared mission to help create a more ocean-literate and ocean-conscious society.



The origin of the Blue School concept

The idea of creating a "Blue School" began to emerge in the mid-2010s through discussions among marine educators and OL experts, including some exchanges held during the SeaChange project (2015–2018), funded by the European Commission. While the project itself did not move forward with the development of a school model, it helped highlight the need for a more structured and long-term approach to OL in education.

In Portugal, this opportunity was embraced by a multidisciplinary team working closely with the Ministry of the Sea, who developed a national programme tailored to the educational landscape of the country.

The model was piloted in 2017 and laid the foundations for what would become the Portuguese Blue School programme — the first structured initiative to give form to the Blue School concept (Costa & Faria, 2025).

Since its inception, <u>Portugal's Blue School</u> <u>program</u> has evolved into a nationally

recognized model for structured OL implementation in formal education.

Key milestones include the first National Blue School Meeting in 2018, which convened educators, scientists, and policymakers; the launch of the Blue School Day Challenge in 2020, engaging schools across the country even amidst the COVID-19 pandemic; and by 2024, the program had demonstrated its potential for national scaling and international adaptation.

This success was recognised by the IOC, positioning Portugal as a reference point for developing and expanding Blue School networks globally.

Network of European Blue Schools

All-Atlantic Blue Schools Network

Recognizing the initiative's effectiveness and scalability, the European Commission decided in 2019 to establish the Network of European Blue Schools (NEBS). With EU financial support, the NEBS aims to:

- Empower students and teachers to become agents for change and sustainability of the ocean;
- Put schools on the forefront of advancing OL in European society;
- Foster collaboration among teachers to share experiences and collaborate with other schools, nationally and internationally;
- Build relationships between ocean professionals and schools;
- Provide institutional backing for long-term OL projects; and
- Encourage the development of regional networks to support schools and educators.

By 2020 year, the NEBS became the largest regional Blue School initiative in the world and played a critical role in demonstrating the viability of structured OL programs at a continental level.

Shortly after, the Blue School concept crossed the Atlantic in 2020, leading to the creation of the All-Atlantic Blue Schools Network (AA-BSN).

The AA-BSN was one of the six Joint Pilot Actions developed under the All AtlaNtic Cooperation for Ocean Research and innovation (AANChOR) initiative, tangible projects that put into action science diplomacy - specifically the implementation of the Belém Statement on Atlantic Research and Innovation Cooperation.

The AA-BSN initiative formally launched in 2021 and was led by Brazil, with Argentina and Portugal as co-coordinators.

The goals of AA-BSN were to:

- Connect schools across Atlantic nations, fostering OL without geographical, cultural, social, or language barriers;
- Promote a bottom-up approach, allowing each school to design its own ocean-related

- projects based on its unique socio-cultural and economic context; and
- Facilitate knowledge exchange between schools, enhancing cross-border collaboration and synergies in OL education.

The network rapidly expanded, and by January 2023, a total of 16 Atlantic countries had developed national Blue School programs linked to the AA-BSN.

This network serves as a bridge between European, African, and American Atlantic regions, reinforcing the global relevance of OL while respecting regional diversity. "The All-Atlantic Blue Schools Network was an opportunity to extend the transformative power of the Blue School approach—shaping individuals and training professionals—through a regional lens on Atlantic realities. From local to global, our shared challenges required regional perspectives.

By bringing together countries with diverse social, economic, cultural, and environmental contexts, the AA-BSN fostered meaningful exchange and shared learning in Blue Citizenship. It also responded to Atlantic cooperation agreements, indirectly influencing national and international public policies with the potential for long-term impact."

Ronaldo Christofoletti Universidade Federal de São Paulo (UNIFESP) AA-BSN Coordinator

Blue School Global Network

By 2024, the growing interest in the Blue School concept — particularly from countries beyond Europe — revealed the need for a coherent, internationally recognized framework to support its expansion. In response, the IOC stepped in to establish the Blue School Global Network.

As a neutral and internationally mandated body, the IOC was uniquely positioned to coordinate this effort. Its role ensures that the network is built on shared principles, common standards, and collaborative governance, preventing fragmentation and safeguarding the integrity of the Blue School model as it scales globally.

The creation of the Global Network was driven by the emergence of diverse national initiatives, often working independently and without a central coordination mechanism. To address this, and to preserve the core values of the Blue School, the IOC provided leadership and facilitated the development of a global community of practice.

This structure now supports national coordinators, and stakeholders worldwide in sharing resources, aligning efforts, and advancing OL in a cohesive and inclusive way.

The Blue School Global Network now stands as the leading force in ocean education, ensuring that future generations grow up with the knowledge, skills, and motivation needed to protect our ocean.

However, this impact is only possible because we are a community—a collective of educators, students, researchers, policymakers, and stakeholders working together toward a shared vision.

It is through collaboration, shared learning, and mutual support that Blue Schools thrive.

By building connections across countries, cultures, and disciplines, we ensure that OL is not just a concept but a living, evolving movement that inspires action at local, national, and global levels.

"The strength of the Blue School movement lies in its people—a growing network of schools, partners, and supporters who believe in the power of education to transform the way society interacts with the ocean.

Together, we are shaping a future where the ocean is understood, valued, and protected by all."

Raquel Lorenz Costa Co-creator of the Blue School concept





The Blue School program, championed by the IOC, is a pioneering global educational initiative.

It aims to weave OL into school curricula seamlessly and significantly, engaging schools globally in a unified commitment to interdisciplinary, participatory, and community-focused ocean education.

The Blue School program and its criteria

The Blue School vision

The Blue School program, championed by the IOC, is a pioneering global educational initiative.

It aims to weave OL into school curricula seamlessly and significantly, engaging schools globally in a unified commitment to interdisciplinary, participatory, and community-focused ocean education.

At its heart, the Blue School program strives to:

- Empower students and educators with deep ocean knowledge, cultivating responsible and proactive global citizens;
- Forge robust connections between schools, local communities, and the blue economy, facilitating real-world applications of OL;
- Champion sustainability education that aligns seamlessly with the United Nations Sustainable Development Goals (SDGs); and
- Foster a worldwide network of schools, stakeholders, and partners dedicated to advancing ocean stewardship.

The vision powering the Blue School Global Network (BSGN) is both bold and transformative:

- To transcend geographic and cultural barriers, uniting countries and regions in a shared mission to boost OL among children and youth;
- To seamlessly integrate education with marine and maritime sectors, embedding the principles of ocean sustainability into learning environments; and
- To cultivate a worldwide community dedicated to sharing knowledge, enhancing marine education, and jointly safeguarding the ocean for the generations to come.

This movement is built on the pillars of equality, diversity, and cultural respect, ensuring that all children—regardless of background—can access quality ocean education and become informed and empowered ocean stewards.

Criteria for becoming a Blue School

These standards ensure that schools incorporate OL effectively and holistically.

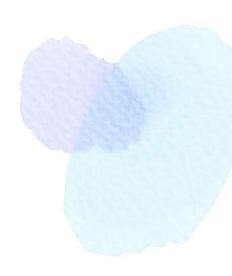
The criteria were established after consultation with existing national and regional coordinators across the Blue School Global Network.

From a diverse pool of potential criteria used in the Portuguese, European, and All-Atlantic networks, the following five have been identified as the most essential.

Blue Schools should:

- Explore and select a meaningful oceanrelated issue: Schools should focus on significant and relevant maritime topics that resonate with their students and local community contexts.
- Use an interdisciplinary approach to explore the ocean: Incorporating multiple subjects such as science, arts, and social studies to provide a holistic understanding of ocean issues.

- Involve students from different classes/ ages: Encouraging participation across various age groups to foster a broader, inclusive educational impact.
- Inspire students to become active citizens: Empowering students to use their knowledge and skills in real-world applications, enhancing their civic engagement.
- 5. **Engage the local community**: Building partnerships with local organizations and stakeholders to deepen the educational experience and foster community ties.



Optional criteria for enhanced engagement

How to become a Blue School – Application and implementation

To further enrich the program additional criteria tailored to specific educational and cultural environments may be added.

These optional criteria may include:

- Develop activities related to intangible heritage practice
- 2. Interact with maritime professionals
- 3. Select Blue School student ambassadors *
- 4. Provide authentic outdoor activities promoting nature connectedness
- Communicate actions with a wider community
- 6. Choose other criteria of convenience.
- * Blue School student ambassadors

 are student representatives who lead ocean
 stewardship activities, such as campaigns,
 events, and peer engagement.

Becoming a Blue School starts with a school-wide commitment to integrating OL in a meaningful and structured way. The process is centred around the development of a thematic project created by a teacher or a group of students, which is then submitted to the coordination for evaluation.

This process ensures that schools do not just participate symbolically or superficially, but engage in real, interdisciplinary, and community-relevant learning.

The school application involves several key steps aligned with the criteria:

1. Design a thematic project

The project should explore a meaningful ocean-related issue, involve students across classes or age groups, and engage with the local community. It should reflect the interdisciplinary nature of the Blue School criteria and inspire student participation and citizenship.



2. Meeting the criteria

To apply for certification, schools must complete the Blue School Application Form, describing how their project meets the required criteria. Each country may adapt the template by including additional national or regional criteria, while maintaining the core dimensions defined by the Blue School Framework.

- ★ In countries with an established National or Regional Coordination, the completed form should be submitted to that team, which is responsible for reviewing applications and issuing certifications.
- ❖ In countries where no coordination body exists yet, schools are encouraged to express their interest by contacting the Blue School Global Network. Although certification cannot be granted without a national or regional structure, the global team can offer guidance and support the development of local coordination efforts.

Once a school submits its project, it is reviewed by the National Coordination team based on the Blue School criteria.

- ★ If the project meets the requirements, the school is officially awarded the Blue School certification.
- If some criteria are not fully met, the school receives detailed feedback and guidance on how to improve. The coordination team then supports the school in making adjustments, and the school is invited to revise and resubmit its application.

This process is designed to be supportive and formative, helping each school succeed in its journey toward becoming a Blue School.

3. Celebrate and share your certification

Once certified, schools are encouraged to communicate their achievement internally with students and families, and externally with their communities.

Certification validity

The certification is valid for 1–2 years, depending on National Coordination practices. Schools are encouraged to review and renew their projects before the expiration date.

Note for coordinators

In many cases, when teachers are continuously supported—through mentoring, training, and networking opportunities—they tend to remain actively engaged in the Blue School journey.

Define your school project.

Fill the application form and submit.

Include all information about your project in the application form and submit it.

The national coordination will review it.

See the application form to reach all the criteria to become a Blue School.

"An extraordinarily relevant aspect for the students involved in the Blue School program is that they feel they are working on a program at both a national and now international level. Participating locally in more global initiatives is crucial for developing planetary consciousness, referred to by Edgar Morin and present as a principle in the Profile of Students at the End of Compulsory Education. Many of our students have a very limited cultural horizon; many live in their neighborhood and do not go much beyond the borders of their municipality, whether for economic and financial reasons or socio-cultural reasons. Feeling that they are participating in a national or international initiative gives them a perspective on their existence, their life, on a planet that needs to be viewed as such by all who live on it."

High school chemistry Teacher, Portugal

Coordinators
recomendations:
If some tasks,
objectives or criteria
are not reached
in the project, you
will receive the
application with
recommendations.
If not, you will receive
the certification
(point 5)!

Review and re-submit.
In case you need to change the project to fill the requirements, improve you project and submit again.



Project accepted, you are a Blue School!

Make sure to communicate the achievement with your students and community and understand with your national coordination for how long the denomination is valid.

The Blue School educational framework

The Blue School framework is more than teaching students about the ocean—it transforms how they think, learn, and act on ocean-related issues.

Rooted in the principles of the US Ocean Literacy Network and Education for Sustainable Development (ESD), it promotes critical thinking, civic engagement, and community participation through a comprehensive, interdisciplinary pedagogical model.

This transformation is visible when students debate the ethics of deep-sea mining in philosophy, or have also led community interviews to preserve coastal traditions, created podcasts about marine myths, or designed campaigns to reduce packaging waste in school cafeterias.

Beyond the classroom, these learning processes have inspired concrete behavioural shifts: in some schools, students have implemented plastic-free snack policies, or taken responsibility for monitoring and protecting specific sections of nearby beaches, rivers, or estuaries.

These actions reflect a growing sense of agency and long-term commitment to ocean sustainability.



Interdisciplinary learning

OL is not confined to science classes—it is woven across multiple disciplines to help students understand the interconnectedness of ocean systems with human life.

Ocean themes can be explored through:

| Subject | Example of Ocean integration |
|----------------|--|
| Science | Test the salinity of water samples from different places; build a simple model showing how oil spreads at sea; study how plastic breaks down in salt water. |
| Geography | Use digital maps to simulate sea level rise in your town; create relief models of coastlines; trace ocean currents using floating objects or dye in water. |
| Economics | Set up a class project on "eco-friendly ocean markets"; compare the costs and impacts of fishing methods; calculate how a plastic ban could affect a local beach café. |
| Social Studies | Interview local fishers or elders about how the sea has changed; explore maritime migration routes; role-play a marine policy debate. |
| Arts | Create ocean mosaics with beach litter; compose ocean-inspired soundscapes; write poems or short plays from the perspective of a sea creature or a plastic bottle. |

By integrating ocean topics into various subjects, students grasp the ocean's far-reaching influence and its relevance to multiple areas of knowledge and life.

Community engagement & partnerships

The Blue School model thrives on meaningful, multi-level collaboration.

Schools are encouraged to actively involve a wide range of local and international stakeholders, building strong bridges between education, maritime professionals, communities, and the marine environment.

These partnerships take many forms. Some schools collaborate with hotels and local tourism businesses to raise awareness among tourists about ocean conservation. Others engage in citizen science projects in partnership with research centres and marine institutes, collecting data on biodiversity or monitoring coastal water quality. There are also schools working with municipalities to redesign public spaces with ocean themes, or with artisans and fishers to recover and celebrate maritime heritage.

Such collaborations not only enhance the educational experience, but also anchor Ocean Literacy in the reality of each territory — making it tangible, participatory, and relevant for all involved.

Partnerships may include:

- Local industries: fisheries, aquaculture, tourism, shipping, and marine science
- NGOs and conservation groups: supporting marine protection and advocacy
- Government bodies and policymakers: aligning educational activities with national sustainability strategies
- International organizations: facilitating knowledge exchange and global connections
- Families and local communities: co-creating learning experiences and reinforcing ocean stewardship at home
- Indigenous and traditional knowledge holders: sharing cultural perspectives and sustainable ocean practices rooted in local heritage

These partnerships are essential to create learning that is contextual, culturally relevant, and action-oriented. By involving diverse voices and lived experiences, students gain a deeper, more personal connection to the ocean and its protection. Real-world, hands-on engagement

helps them understand their role within a larger ecosystem—both ecological and social—enhancing the relevance and impact of their learning journey.

Sustainability education & active citizenship

The program is closely aligned with the United Nations Sustainable Development Goals (SDGs), particularly:

- SDG 4 Quality Education:
 Promoting inclusive and equitable education
 by integrating OL into learning environments.
- SDG 14 Life Below Water:
 Raising awareness and encouraging students to act for marine conservation.
- SDG 17 Partnerships for the Goals:
 Fostering collaboration between schools, sectors, and communities for sustainable ocean management.

Students are not only learners—they are empowered to become active ocean stewards, initiating sustainability projects that generate

tangible impact in their schools and communities.

Global & local connectivity

The Blue School Global Network (BSGN) promotes a balance between global vision and local action. Each Blue School adapts the program to its cultural and environmental context while contributing to a wider international movement for OL. This dual perspective ensures learning is both locally relevant and globally impactful.

International connections between schools happen through collaborative projects, virtual exchanges, and shared campaigns. For example, schools have worked together on ocean-themed exhibitions, digital storytelling, and video exchanges. Through Erasmus+ partnerships, schools across Europe co-develop educational materials, organise teacher mobility, and promote student collaboration on ocean-related topics. In other regions, coordination teams have facilitated bilingual exchanges, joint challenges, and knowledge-sharing sessions between schools in different countries.

Strategic alignment with International frameworks

UN Decade of Ocean science for sustainable development (2021–2030)

The Blue School program contributes directly to Challenge 10 – "Change humanity's relationship with the ocean" by:

- Embedding Ocean Literacy into formal education systems, with certified schools across North and South America, the Caribbean, Africa, Asia and Europe;
- Promoting student-led, sustainabilityfocused actions, such as the adoption of
 plastic-free school policies, the stewardship
 of local coastal or riverine areas, and the
 development of interdisciplinary exhibitions
 that raise awareness of marine challenges
 within the school and broader community.

These initiatives not only foster environmental responsibility, but also build key competencies like critical thinking, collaboration, and civic engagement.

- Building multi-sector collaboration, for example:
 - In Portugal, Blue Schools collaborate with local fishers and hotel schools to promote sustainable seafood and raise awareness among tourists;
 - In the Caribbean, schools in Honduras work directly with marine scientists and ministries of education to co-develop OL materials adapted to local realities;
 - In several coastal towns, students have engaged with municipal authorities to influence local planning and protection of sensitive ecosystems, such as dune systems or riverbanks.

These examples reflect the spirit of Challenge 10 by combining education, emotional connection, and civic action in long-term, community-rooted efforts.

European policy initiatives

As part of the EU4Ocean Coalition, the Blue School model actively contributes to key European policy priorities:

- The European Green Deal, by integrating sustainability into education through tangible actions at school level for example, students redesigning canteens to reduce plastic use, launching campaigns on sustainable seafood, or engaging in citizen science projects on water quality;
- The EU Blue Economy Strategy, by exposing students to ocean-related careers and local maritime heritage. In several Portuguese and Spanish schools, partnerships with marine institutes, port authorities, and tourism entities help students understand the role of the ocean in local and regional economies;

The European Education Area, by fostering international collaboration and co-creation.

Through Erasmus+ projects, schools from different EU countries co-develop teaching materials, conduct joint challenges, and promote teacher mobility around Ocean Literacy themes.

OECD & 21st century education goals

The Blue School approach aligns closely with the OECD's vision for the future of education, particularly in cultivating:

- Interdisciplinary learning, as seen in projects that link marine biology to geography, history, and the arts — for example, by combining water sampling with data visualisation, storytelling, and historical mapping of coastal change;
- Global competence, by encouraging students to investigate local impacts of global ocean issues and collaborate with peers in other countries through shared digital projects or thematic exchanges;
- Educational innovation, through student-led initiatives such as designing communication campaigns, producing podcasts, or coorganising community Ocean Days in collaboration with municipalities.

Alignment with the Ocean Literacy framework

The Blue School model builds on the seven OL principles developed by the US Ocean Literacy Network (Cava et al., 2005), which laid a key foundation for ocean education worldwide.

However, as argued in <u>Costa & Faria (2025)</u> ⁹, today's challenges call for a more holistic and transformative approach — one that links knowledge with values, attitudes, and action.

⁹ Costa, R. L., & Faria, C. (2025). The Blue School Program: A Model for Holistic Ocean Literacy Education. Sustainability, 17(2), 661. https://doi.org/10.3390/su17020661

The Blue School model reflects this shift by integrating:

- Education for Sustainable Development
 (ESD) positioning OL as action oriented, collaborative, and rooted in civic
 responsibility;
- Interdisciplinary Learning connecting ocean topics across science, economics, arts, and social studies to reflect the ocean's systemic relevance;
- ✓ Local and Global Relevance enabling students to respond to real marine challenges in their communities while understanding their global dimension.

In this model OL becomes not just a body of knowledge, but a strategic educational approach for sustainability and collective engagement.

The Blue School Global Network

Regional and National Coordination

Regional and National Coordinators adapt the Blue School Framework to local and regional needs, ensuring the program is culturally relevant and environmentally appropriate.

Responsibilities:

Local Adaptation

Tailors the program to meet local educational, cultural, and environmental needs.

Autonomous Decision-Making

Makes strategic decisions that best serve regional and national interests.

Training and Support

Provides training, mentoring, and resources to local schools.

Networking and Collaboration

Facilitates connections between schools within the region.

Key Community Actors

Teachers are instrumental in integrating the Blue School Framework and fostering an environment of active learning and sustainability

Responsibilities:

Implementation

Integrate OL into various subjects using interdisciplinary approaches that connect students with local and global ocean issues.

Student Engagement and Development

Guide and inspire students to take part in participatory learning, project-based activities, and community-focused ocean actions.

Professional Development

Teachers are supported through a variety of training and mentoring opportunities provided by the Blue School Network and its partners.

These include:

- Workshops and webinars organized by national coordinations and the global network:
- Courses on the OTGA platform (Ocean Teacher Global Academy), developed by the IOC and other partners.
- Training sessions delivered by stakeholders, such as NGOs, marine research centres, and education networks;
- Participation in communities of practice, where teachers share experiences, cocreate resources, and learn from peers both virtually and in person;
- Ongoing mentoring by national coordinators and local partners, who offer tailored guidance and help schools adapt the Blue School model to their specific context.

This professional support empowers teachers to deepen their knowledge, strengthen their confidence, and become facilitators of ocean-literate, student-led learning.

Stakeholders

Partnerships with local businesses, NGOs, government bodies, and international organizations provide essential support through resources, expertise, and opportunities.

Contributions:

Resource provision

Supplies materials, financial support, and professional expertise.

Learning opportunities

Offers practical experiences, workshops, and real-world applications that complement the educational content.

Policy and community engagement

Facilitates relationships with policymakers and the community to enhance the program's reach and impact.

Governance of the Blue School Network

The formal governance of the Blue School Network at the level of the IOC is yet to be developed. One potential approach would be to establish an overarching governance board that would have oversight of the network at a global level. This board could be supported by an advisory board comprised of experts that could provide the governance board with regional perspectives and specialist guidance.

Here we provide an outline of the operational functioning and focus of a governance board and an advisory board that might be considered.

Blue School Governance Board

The Governance Board of the Blue School Global Network (BSGN) coordinated by the UNESCO-IOC plays a pivotal role in steering the network towards its mission, ensuring that all activities align with the overarching strategic objectives of promoting OL globally. The Governance Board maintains an active connection with the network primarily through National and Regional Coordinators, who act as both implementers and key informants. Regular updates, consultations, and feedback loops are ensured through structured meetings, reports, and shared planning tools.

The Board's strategic decisions are guided by insights gathered from national implementation processes, regional needs, and collective priorities identified during global events and working sessions.

Over time, we aim to strengthen these mechanisms by formalising reporting channels and increasing opportunities for two-way dialogue.

Composition of the Board

• The IOC:

Provides ongoing institutional support and ensures continuity and alignment with international goals and standards. Regional Representatives:
 Experienced leaders from each region engaging in the Blue School Network who bring regional insights and ensure that local implementations align with global standards.

Responsibilities:

Standards and oversight

The Board provides new national and regional coordinators and continuously monitors compliance with the established program standards, ensuring that every member upholds the values and goals of the network. The Governance Board works in close connection with National and Regional Coordinators (NCs and RCs). Its decisions are informed by country reports, implementation feedback, and ongoing exchanges with coordinators and stakeholders. This ensures that strategic planning and oversight remain grounded in local realities, while maintaining coherence across the global network.

• Event management

Coordinates the planning and execution of strategic gatherings that strengthen the network and promote collaboration.

This includes:

The BSGN Annual Meeting, held in the context of major global events (e.g. UN Ocean Conferences), which brings together national coordinators, partners, and stakeholders;

Regional workshops, often co-hosted with national coordinators, focusing on capacitybuilding, teacher training, and strategic planning;

Virtual convenings, such as thematic webinars and coordination meetings, which ensure continuity between in-person gatherings.

Supporting national teams in aligning local campaigns with the global narrative of OL and education for sustainability.

Resource development

Develops, updates, and disseminates educational toolkits, and guidance materials that support the implementation of the Blue School programme.

This includes:

The Blue School toolkit, which offers stepby-step guidance for schools, national coordinators, and partners;

Application templates and evaluation rubrics adapted to different national contexts;

Supporting documents such as FAQs, visual identity guidelines, and examples of good practices. All materials are codeveloped and/or validated with input from national teams and the advisory board (see below). They are disseminated through the Global Network's website, training sessions, and direct support from the coordination teams.

Advisory board

A formal Advisory Board has yet to be established within the Blue School Global Network governance structure.

The following proposed composition and responsibilities outline how this board could be structured and supported in a sustained manner, ideally with ongoing involvement and guidance from the Group of Experts (GoE) and the Ocean Literacy With All (OLWA) initiative.

Composition:

Chairperson

Ensures alignment between the Advisory Board's activities and the Governance Board's objectives.

· Regional representatives

Offers regional insights and ensures that local nuances are considered.

Educational experts

Specializes in curriculum development and effective pedagogical strategies.

Outreach and communication specialists Focuses on enhancing global and regional awareness of the program.

Fundraising specialists

Identifies and secures financial resources to support program sustainability.

Responsibilities:

• Strategic guidance

Offers expert advice to the governance board.

Policy advice

Provides insights on funding strategies and policy development.

Evaluation and feedback

Assists in evaluating program effectiveness and suggesting improvements.





This section offers structured guidance tailored to the diverse participants in the BSGN — including schools, national and regional coordinators, and external stakeholders.

Each type of participant plays a unique role in expanding OL and supporting the Blue School vision.

For coordinators: setting up a national or regional Blue School Network

This part of the guide is designed for countries, institutions, or organizations interested in creating a National or Regional Blue School Network. It provides a roadmap for establishing a national coordination team, outlines the necessary resources, and highlights key responsibilities and engagement strategies.

Note: This section refers specifically to national-level coordination and not to the implementation of Blue School activities within individual schools.

How can a Blue School Network be created?

A national or regional Blue School Network can be initiated in different ways:

Government-led

A ministry or public body takes the lead in establishing coordination with the support of their IOC Focal Point and/or The IOC Ocean Literacy Team, often within existing educational structures.

Organizations

The IOC encourages any existing organization already working with schools (e.g. on sustainability, marine education, or citizen science) that would like to set up a national coordination to contact their country's IOC Focal Point, UNESCO Ocean Decade National Committee, UNESCO Regional Office, propose and support the establishment of a national coordination.

Formal expression of interest

An IOC Member State may formally express its intention to implement the Blue School model nationally, in partnership with the IOC Secretariat or other institutions.

Minimum requirements to launch a National coordination

- Dedicated personnel to manage the program.
- An annual budget to fund activities, events, and network growth.

 Access to schools and the ability to disseminate resources and information nationally.

What are the responsibilities of National coordinators?

National Coordinators are essential for creating and maintaining a strong Blue School community.

Their key responsibilities include:

- Strategic development
 - Develop and implement a national plan for promoting the Blue School model and ensuring long-term sustainability.
- Stakeholder engagement
 Build partnerships, secure funding, and work with ministries, NGOs, universities, and community organizations.
- Policy and program integration
 Advocate for the inclusion of Ocean

Literacy in national curricula and align Blue Schools with existing education policies.

- Training and support for Teachers
 Organize workshops and provide tools to help schools implement Ocean Literacy activities effectively.
- Network development
 Create and strengthen a network of schools, teachers, and partners, fostering a culture of collaboration and knowledge

Engagement strategies that work

exchange.

- Work with Governments
 Collaborate with local and national education authorities to gain recognition, support, and long-term integration.
- Start with pilot projects
 Engage a small group of motivated
 teachers and schools to test and refine the
 approach before scaling up.

- Offer online and in-person activities
 Begin with cost-effective online sessions;
 then move to in-person events or visits as
 the network grows.
- Empower communities and early career ocean Professionals

Provide access to resources, funding opportunities, and platforms for showcasing their work and impact.

Celebrate and share

Give visibility to local efforts through publications, social media, and conferences. Recognition helps grow engagement.

Encourage feedback

Maintain open communication with schools and stakeholders to adapt the program to local needs.

Mentoring and continuous support

Offer regular:

- Workshops and training sessions
- Peer-to-peer meetings
- Opportunities to exchange ideas and resources

These help teachers feel supported, capable, and motivated — building trust and ownership of the process.

Evaluating the national Blue School program

Annual assessments

Evaluate how well OL is integrated into schools, and measure student engagement, community involvement, and sustainability practices.

Assessment tools

Use surveys, case studies, and both qualitative and quantitative methods to monitor progress and inform improvements.

Optional indicators for voluntary evaluation

Until common evaluation tools are formally agreed upon, national coordinations may choose to use optional indicators to begin monitoring and reflecting on progress.

These can help build internal knowledge and support future reporting efforts.

Some examples include:

- Number of certified Blue Schools in the country or region.
- Diversity of participating schools (e.g. rural vs. urban, primary vs. secondary).
- Types of OL activities implemented (e.g. science, arts, citizenship, local knowledge).
- Student engagement levels, such as participation in projects, events, or campaigns.
- Community involvement, including partnerships with NGOs, universities, municipalities, or local businesses.
- Teacher training initiatives offered or attended.

- Media coverage or public recognition of Blue School initiatives. municipalities, or local businesses.
- Feedback from teachers and students, gathered through simple questionnaires or interviews.

These indicators are not mandatory and are offered as inspiration. National coordinators are free to adapt or expand them based on their local context and capacity.

For teachers and students: how to become a Blue School and ways to participate

Teachers and students are the heart of the Blue School movement. It is through their ideas, creativity, and commitment that OL comes alive in classrooms and communities.

Becoming a Blue School is not just about meeting criteria — it's about joining a global community that values learning, action, and care for the ocean.

Here's how a school can start its journey:

Joining the Blue School Network

1. Connect with the National or Regional Network

Joining the network starts with reaching out to a National or Regional Coordinator.

They are the first point of contact and can guide schools within their country/region through every step. Coordinators that have been established can be found on the IOC Ocean Literacy Portal or through social media channels.

2. Understand what it takes

Schools are encouraged to take the time to explore the criteria for becoming a Blue School. These criteria are available on the websites of national Blue Schools or alternatively can be sourced from national/regional coordinators (see pages 165, 166). The Blue School toolkit is also there to help—filled with practical tips and examples to guide schools through the process.

3. Submit an application

Once ready, an application form needs to be submitted to the national/regional coordinator. This should outline how OL will be integrated into its teaching curricula, individual projects, and connect with local communities. National coordinations will be ready to help shape and advise on project ideas.

Why become a Blue School? Benefits for schools

★ Access to resources

Free access to high-quality materials, toolkits, and training opportunities to make teaching and learning more engaging and ocean-connected.

National and global support

Ongoing guidance and mentoring from national coordinators and the global team.

Be part of a global community

Exchange of ideas, collaborations on projects, and sharing of experiences with teachers and students from around the world.

★ Gain visibility and recognition

Recognition of commitment to sustainability and education — locally and internationally.

Active participation – A practical guide for Teachers

Bringing OL into the classroom doesn't have to be complicated. It can start with a simple idea, a curious question, or a shared moment with students.

Developing and delivering something meaningful, fun — and deeply educational can be supported through the following steps.

1. Make Ocean Literacy part of everyday learning

Use interdisciplinary approaches to integrate ocean content into subjects already being taught — from science to arts, geography to citizenship.

This might include water cycles in science, coastal communities in social studies, seainspired poetry or visual arts.

2. Explore through projects

Learning by doing is well recognised as an effective approach to education. Schools are encouraged to develop or take part in project-based activities that bring students into action. These might include:

Creating new projects that classes or the school as whole might participate in — it can be about marine biodiversity, plastic reduction, or even ocean-related traditions in your region.

Joining existing initiatives — from local cleanups to international campaigns. Think globally, act locally.

Combining disciplines — a project can mix science, technology, art, and values in powerful and creative ways.

Telling stories — invite students to write, draw, film, or act out what the ocean means to them or their community.

3. Choose a Lighthouse project (optional but powerful)

Lighthouse projects provide a welltested, ready-to-use project with support materials, allowing for direct application.

These initiatives are selected for their quality and impact, and provide:

- A clear roadmap;
- · Access to resources; and
- Automatic alignment with Blue School certification criteria.

See page 60 for more details.

4. Collaborate and grow together

Being part of the Blue School Network means being connected to teachers and students around the world, facilitating partnering with other schools on shared projects, participation in online exchanges, video calls, or creative regional and global challenges.

The network provides the opportunity to participate in regional/national meetings to share progress, ideas, and celebrate achievements.

It provides a living community of practice, with dedicated communication channels, connecting educators from around the world

For local communities and early career ocean professionals: how to engage and ways to participate

Local communities and Early Career Ocean Professionals (ECOPs) may play a crucial role in the Blue School Global Network by linking academic knowledge with traditional wisdom and active community engagement.

Their involvement enriches the educational experience and also ensures the sustainability and relevance of OL efforts.

Engagement opportunities with local communities and ECOPs

1. Public awareness campaigns:

- Objective: Raise awareness about the importance of OL and the Blue School initiatives.
- Activities: Organize events, workshops, and social media campaigns that highlight local Blue Schools' efforts and successes.
- Impact: Increase community participation in Blue Schools events and foster a broader understanding of ocean conservation issues.

2. Direct collaboration with schools:

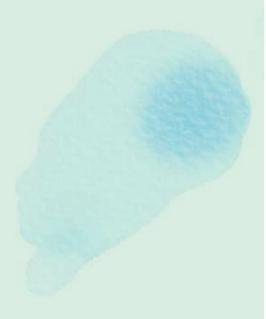
- Objective: Enhance the educational impact by bringing real-world experiences into classroom settings.
- Activities: Participate in school projects, contribute to curriculum development, and co-create citizen science initiatives.
- Impact: Provide students with hands-on learning opportunities and insights into practical applications of their studies.

3. Workshops, training, and mentorship:

- Objective: Build capacity and provide ongoing support for teachers and students involved in the Blue School program.
- Activities: Lead training sessions on OL integration, offer mentorship to teachers for project development, and guide student projects with professional insights.
- Impact: Ensure that OL is effectively integrated into school curricula and that educators and students are wellequipped to lead their initiatives.

4. Strengthening collaborations:

- Objective: Forge and maintain strong connections between schools, research institutions, and policymakers.
- Activities: Facilitate partnerships that can provide schools with access to the latest research, expert advice, and policy support.
- Impact: Enhance the scientific basis of school projects, aligning educational efforts with national and global environmental policies.



For stakeholders: how stakeholders can get involved

Stakeholders, including NGOs, private sector partners, government agencies, and research institutions, play a crucial role in supporting Blue Schools.

Their involvement integrates deep into the fabric of the educational and community engagement process.

Stakeholders benefit from participating in the Blue School Network:

1. Strategic alignment with corporate goals:

- Sustainability objectives: Aligning with Blue Schools helps stakeholders meet their corporate social responsibility targets by actively contributing to sustainable education and environmental stewardship.
- Public relations boost: Participation enhances brand visibility and positively impacts public image through association with global sustainability and educational initiatives.

2. Networking and market access:

- New partnerships: Engaging with the network opens doors to new business opportunities and collaborations with likeminded organizations and institutions.
- Market expansion: Stakeholders
 can access new markets, especially
 in the education sector, and among
 environmentally conscious consumers.

3. Knowledge sharing and innovation:

- Access to research and innovations:
 Stakeholders can tap into the latest academic and scientific research through collaborations with educational institutions and research bodies involved in the Blue Schools.
- Employee engagement and skills
 development: Employees who participate
 in mentorship and support initiatives not
 only strengthen their own skills, but also
 play a key role in promoting the company's
 commitment to citizenship and social
 responsibility.

Roles and commitments of stakeholders

Mentorship and Expertise: Provide ongoing support to educators and students, including workshops, training sessions, and real-world expertise in marine science, sustainability, and education.

- Resource provision: Supply schools
 with necessary resources such as funding,
 educational materials, and technology.
- Advocacy and promotion: Leverage their networks to promote the Blue School initiatives, expanding the program's reach and impact.

How stakeholders can become partners

Stakeholders interested in joining the Blue School Network should express their interest through official channels provided by the Blue Schools website or directly through national or regional coordinators.

Initial meeting: arrange an initial consultation with the Blue Schools coordination team to understand the scope, expectations, and nature of potential contributions.

Partnership agreement: formalize the collaboration through a partnership agreement that details the roles, responsibilities, and contributions of each party, ensuring alignment with both parties' goals and capacities.

Integration into activities: integrate into the network by participating in scheduled training sessions, workshops, and planning meetings to align stakeholder contributions with current educational projects and needs.

The role of Lighthouse projects in the Blue School Network

Lighthouse Projects are flagship initiatives selected by the Blue School Network for their excellence in promoting OL. These projects are designed by expert organizations or stakeholders and made available for schools to adopt.

By choosing a Lighthouse Project, schools gain access to a high-quality, ready-to-implement OL pathway.

What makes a project a Lighthouse project?

To be recognized as a Lighthouse Project, an initiative must:

- Demonstrate strong alignment with the Blue School criteria (knowledge, action, values, community).
- Be educationally sound, with clear goals, methodology, and resources adapted to school use.

- Offer replicable models that can be scaled across different countries and school realities.
- Show evidence of positive impact in terms of student learning, community involvement, and sustainability awareness.

Recognition process:

- Stakeholders or partner organizations submit their project proposal to the Blue School Global Coordination team.
- 2. The project is reviewed by a panel of education and OL experts.
- 3. If approved, the project receives the status of Lighthouse Project and is included in the official list made available to Blue Schools.

How can your project become a Lighthouse project?

Organizations, institutions, or initiatives working in OL that want projects to be adopted by schools in the Blue School Network, can apply for Lighthouse project recognition. The application process involves five steps:

- 1. Ensuring the project is aligned with the Blue School Framework: it should integrate knowledge, action, values, and community participation.
- 2. Preparing a proposal including:
 - A summary of the project
 - Objectives and methodology
 - Target age groups
 - Required resources and timeline
 - Evidence of past impact and scalability
- 3. Submission of the proposal to the Blue Schools Global Coordination team via the IOC's OL portal

- 4. The project will be evaluated by a panel of education and OL experts.
- 5. If approved, the project will be listed as an official Lighthouse project and shared across the global network of Blue Schools.

Lighthouse projects gain international visibility, are promoted within the Blue School toolkit and the IOC OL Portal, and can be adopted by schools worldwide as a path to certification.



This section is dedicated to showcasing the contributions of national and regional coordinators who are actively implementing the Blue School model in their countries and regions.

Each contribution is a living example of how the Blue School concept is being interpreted and adapted to different educational, cultural, and geographical contexts.

Blue Schools in 2025: Impact statistics

These pages reflect the diversity of strategies, challenges, and local innovations that emerge when Ocean Literacy is rooted in real communities.

N° of Schools

2.000

N° of Teachers

7.000

N° of Countries

60

N° of Students

300.000



Network of European Blue Schools



65

Introduction

The concept of a Blue School emerged in 2015 as part of the EU-funded Sea Change Project, which aimed to promote OL across Europe.

Through consultations held in eight European countries, the idea of Blue Schools began to take shape (Sea Change Project Blue Schools Final Report, 2018). Research highlighted the challenges of integrating Ocean-related topics into classrooms, as these subjects are often absent from school curricula. A lack of financial and political support, the dominance of existing environmental education programs, and the cultural and educational diversity across Europe presented significant obstacles to creating a large-scale Blue School initiative.

Despite these challenges, the first Blue School program was successfully launched in 2017 by the Portuguese Ministry of the Sea (see below – Escola Azul). Inspired by this success, the Network of European Blue Schools (NEBS) was established in 2020 as part of the <u>EU4Ocean</u> <u>Coalition for Ocean Literacy</u>.

This initiative, supported by the European Commission (<u>Directorate-General for Maritime Affairs and Fisheries & European Climate, Infrastructure and Environment Executive Agency</u>) and funded by the European Maritime, Fisheries and Aquaculture Fund, represents a collaborative effort to advance OL.

The main goals of the NEBS are to:

- Foster a more ocean-literate society, with schools serving as agents of change and sustainability.
- Create connections between schools and ocean professionals to enrich education and foster collaboration.
- Establish a network for teachers to share experiences and collaborate with other schools, both nationally and internationally.

The foundations of the network of European Blue Schools

The NEBS was developed through a cocreation process involving key stakeholders, including teachers, education professionals, and marine experts. Before its launch in 2020, a comprehensive survey was conducted to identify gaps and needs in teaching ocean topics. Participants included teachers, school managers, ministry of education staff, and professionals in marine science education. Following the survey, eight virtual focus group meetings were held in May and June 2020. These meetings engaged stakeholders from Portugal, France, Ireland, and Romania, covering diverse sea basins such as the Mediterranean, Atlantic, North, and Baltic Seas.

From the focus groups, several key preconditions for NEBS were identified:

- There is strong interest in the NEBS initiative.
- Curricular constraints make it challenging to develop Ocean-related projects.
- A clear and accessible handbook is essential to guide schools in joining the Network.

- Certification criteria should remain flexible to adapt to local contexts.
- A simple and non-bureaucratic application process would encourage growth.

The survey, focus groups, and Portuguese Blue School program helped define the European Blue School as a school that adopts innovative teaching approaches that actively engage students in exploring ocean-related topics through project-based learning and open schooling.

By integrating ocean themes into classroom activities, students can investigate subjects that are not part of the traditional curriculum. These projects enable students to develop critical skills such as problem-solving, critical thinking, and teamwork while tackling real-world challenges connected to their local communities.

The concept of open schooling enhances this approach by extending learning beyond the classroom. Students collaborate with local organizations, marine scientists, NGOs, and maritime companies, gaining first-hand experience with Ocean stewardship and related careers. This model fosters a deeper awareness of the Ocean's critical role in sustaining life and encourages a sense of responsibility for its preservation.

The NEBS educational model is built around ten key criteria, which provide both a framework for developing projects and a basis for self-evaluation when applying to become a European Blue School (*Figure 1*). Of these, five criteria are mandatory, while the remaining optional criteria allow for greater depth and creativity in project design.



Figure 1 — The five compulsory and five option criteria to become a European Blue School

The mandatory criteria ensure that:

- Students engage in an in-depth exploration of an ocean-related topic, gaining knowledge and skills.
- 2. Students play an active role in the learning process.
- 3. Projects emphasize student-centered, active learning that develops secondary skills such as teamwork, creative thinking, and solution-oriented approaches.
- 4. Projects establish connections with local ocean stakeholders.
- 5. Project outcomes are widely shared within the school's community.

Optional criteria encourage teachers to design more complex projects, incorporate outdoor and experiential learning, and promote collaboration across disciplines, age groups, and even schools in different regions.

Becoming a European Blue School

Any public or private school, whether coastal or inland, can become a European Blue School if it has completed or is currently carrying out an ocean-related project that meets the NEBS criteria. The application process is conducted entirely online, making it accessible to all schools.

To apply, teachers must complete an application form available on the Maritime Forum Blue Schools Community website, providing details about the project and contact information, and confirming that they meet the specified criteria. Additionally, the application form requires information such as the sea basin connected to the project, the school's geographic coordinates, the number of participating students, the project's connection to the curriculum, and other related initiatives,

The European Blue School Certificate application period is open twice a year: from September to December and from January to May. The NEBS Secretariat evaluates

applications during these periods. During the review process, teachers may be contacted for additional information. Once the evaluation is complete, they are emailed the results.

If the application is approved, the school receives the European Blue School Certificate, valid for the current school year.

If the application does not meet the requirements, feedback is provided so the project can be adjusted and resubmitted.

Post-certification benefits

Project visibility and networking opportunities

Once certified, schools remain part of the Network even after their project concludes.

This approach encourages ongoing communication and collaboration between teachers, enabling:

- Continued support and networking opportunities;
- Sharing of best practices;
- Enhanced quality of Ocean education across Europe.

Upon approval, each project is automatically published on the <u>Maritime Forum Blue</u>
<u>Schools Members page</u>.

This allows stakeholders and anyone interested in NEBS to explore approved projects and learn about participating schools. Teachers and schools also have the option to create accounts on the website to:

- · Edit project details;
- Add photos, documents, and other materials created during the project;
- Share contact information to connect with collaborators and expand their network.



Featuring on the European Atlas of the Seas

The geographic coordinates provided in the application form are used to add certified schools to the <u>European Atlas of the Seas</u> (*Figure 2*).

This tool, part of the European Marine
Observation and Data Network (EMODnet),
provides rich insights into Europe's marine
environment, covering topics such as
nature, tourism, energy, sea-level rise, fish
consumption, and more, with certified schools
prominently featured.

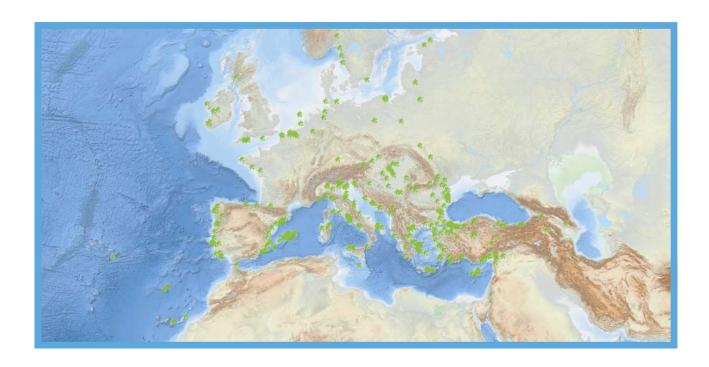


Figure 2 — European Blue Schools map in the European Atlas of the Seas

The European Blue Schools Certificate

Each school that successfully completes the certification process receives an official European Blue Schools Certificate, which highlights the school's and project's name.

To ensure uniqueness, certificates are assigned individual serial numbers tied to specific projects and schools.

As interest in the Network of European Blue Schools (NEBS) continues to grow, the program has evolved to reflect the dynamic landscape of blue education and respond to emerging challenges and opportunities. Following a detailed analysis and evaluation in the summer of 2023, three distinct categories of European Blue Schools were officially introduced:

• European Blue School

Schools that meet the NEBS criteria and are located in EU member states

Associated Blue School

Schools that meet the NEBS criteria and are based in countries associated with Horizon Europe

Partner Blue School

Educational institutions such as maritime vocational education and training (VET) schools, teacher training centers, and nonformal education centers



Introducing diversified certification levels

The NEBS criteria emphasize project-based learning and open schooling but remain intentionally flexible. There are no strict requirements regarding project duration or the need for comprehensive, school-wide involvement. This flexibility allows schools to integrate OL at their own pace, aligning with their unique educational objectives.

However, the varying levels of engagement across schools within the Network are acknowledged and appreciated. While some schools and teachers demonstrate long-term, high-level commitment, others may engage in shorter-term or smaller-scale projects.

To recognize this diversity and reward varying degrees of involvement, the NEBS has introduced a tiered certification system for European Blue Schools:

Blue School (Entry Level)

For schools that meet the core NEBS criteria and have successfully completed a foundational OL project

 Aquamarine Blue School (Intermediate Level)

For schools that demonstrate continued engagement through extended project durations, evolving initiatives, or innovative practices

 Ultramarine Blue School (Advanced Level)

For schools that exhibit exceptional commitment, consistent involvement over time, and leadership in promoting OL

These differentiated certifications celebrate and reward the efforts of schools and educators who contribute to the initiative at varying levels. Schools can progress through the certification levels by submitting new or enhanced projects that build on their previous efforts. This progression encourages schools to deepen their commitment to OL while fostering innovation and long-term impact.

Support to Teachers

Since its inception, fostering direct communication, collaboration, and networking among teachers has been a cornerstone of the NEBS initiative. One of its most valuable aspects is its European cultural dimension, enabling teachers to share experiences, tools, methods, and best practices across borders.

To support and connect educators, NEBS organizes regular online networking sessions. In May 2024, an official group for NEBS was launched on the European School Education Platform (ESEP). Funded by the European Commission, ESEP is the largest collaboration platform for school staff, researchers, and policymakers. It provides opportunities to:

- Share news, publications, and educational resources;
- · Collaborate on Erasmus+ funded projects;
- Discover potential partners for crossborder educational initiatives.

ESEP and its eTwinning feature are

particularly strategic for NEBS, as they encourage teacher collaboration, student interactions, and partnerships to bring Oceanrelated topics into classrooms.

NEBS also supports teachers by equipping them with the knowledge and tools to design impactful blue projects and draw inspiration from existing initiatives. By offering resources, platforms, and training opportunities, NEBS aims to empower teachers to take on leadership roles in promoting OL. It provides the support they need to develop innovative projects, inspire their students, and collaborate across Europe. This collective effort ensures that Ocean education remains dynamic, inclusive, and impactful.

In 2022 and 2024, NEBS collaborated with European Schoolnet and Scientix to offer a series of three-week interactive <u>Science Projects Online Workshops</u> (SPOWs). These workshops, targeted at educators new to the concept of Blue Schools, covered

various ocean-related topics and provided personalized training, including content knowledge, teaching guidelines, and classroom resources, for a limited number of educators new to the field of Blue Schools.

In 2024, the European Schoolnet Academy launched a comprehensive course on becoming a Blue School, attracting over 1,100 teachers. The MOOC, "Bring The Ocean into Your School", effectively motivated teachers to initiate new projects.

Evaluations of the NEBS applications conducted in Spring 2024 revealed that teachers successfully implemented projects they conceived during the MOOC. Course materials are still available on the European Schoolnet Academy website.

In April 2024, an additional online course titled <u>BlueMinds4Teachers</u>, funded by EU4Ocean was offered to teachers. This program focused on enhancing teachers' skills in OL. It brought together marine and

freshwater scientists, educational and social science experts, experienced teachers who have implemented ocean-related projects, and young Ocean ambassadors.

The collaborative approach provided practical insights and inspiration for educators to bring OL into their teaching practices. Following the course, the BlueMinds4Teachers <u>Digital</u> <u>Toolkit</u> was created providing teachers with OL resources for project development.

NEBS composition

The distribution of schools within the NEBS is uneven across locations and certification types. Approximately 80% of member schools are located in the EU, spanning 22 of the 27 member states, while the remaining 20% are based in EU-associated countries, primarily in Turkey. Spain, Greece, Italy, Romania, and Turkey are the leading countries in terms of participation (*Figure 3A and 3B*).

The Mediterranean Sea basin accounts for the largest share of Blue Schools (61% within the EU and 41% in non-EU countries), followed by the Black Sea region (15% in the EU and 50% in non-EU countries).

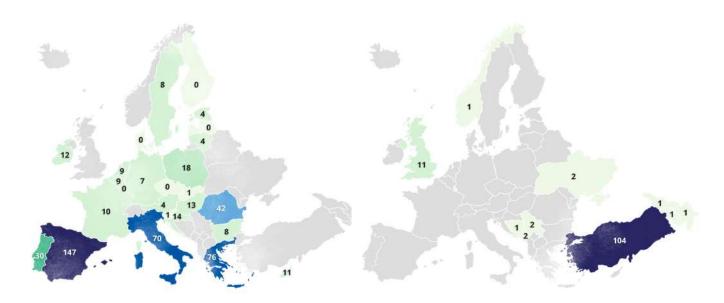


Figure 3A — The distribution of the certified European Blue Schools in the EU countries

Figure 3B — The distribution of the certified European Blue Schools in the associated EU countries

NEBS growth

Since its establishment, the NEBS has experienced steady growth. Between the 2020–2021 and 2023–2024 school years, 704 certified blue projects have been implemented. The network's growth accelerated during the 2023–2024 school year, with a significant increase in both membership and the number of applications submitted (*Figure 4*). This momentum was largely driven by <u>Horizon Europe</u> funding provided in 2023 as part of the <u>EU Mission:</u> Restore Our Ocean and Waters.

EU Missions are innovative initiatives designed to address some of Europe's greatest challenges, such as adapting to climate change, combating cancer, and restoring and protecting soils, oceans, and waters. By combining research and innovation with new governance models, collaboration frameworks, and citizen engagement, EU Missions aim to provide tangible benefits for Europeans and foster transformative changes.

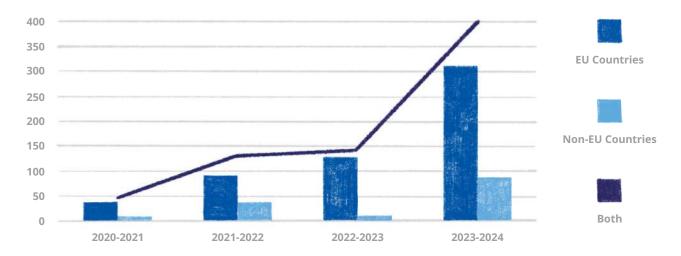


Figure 4 — Increase in issued certificates per school year

The EU Mission: Restore Our Ocean and Waters (Mission Ocean) is a cornerstone of this approach. Its goal is to protect and restore the health of our ocean and waters through research, innovation, citizen engagement, and blue investments.

Mission Ocean takes an integrated view of oceans and waters, recognizing their interconnectedness. It supports Europe's transformation into a climate-neutral, nature-positive continent and plays a key role in achieving these goals by 2030.

Three Mission Ocean projects - <u>ProBleu</u>, <u>SHORE</u>, and <u>BlueLightS</u> - are instrumental in fostering the growth of the NEBS. These initiatives are funded by Horizon Europe and are designed to:

- · Enhance environmental awareness;
- Promote water literacy;
- Support the expansion of Blue Schools within the EU and its associated countries, by providing funding to schools.

Through these projects, schools receive resources, funding, and support to implement OL initiatives, fostering greater participation and accelerating their growth. The collaboration between these projects and the NEBS not only strengthens the network but also advances the broader mission of restoring and protecting Europe's ocean and waters for future generations.

Regional initiatives - Som Escoles Blaves

The NEBS initiative leverages regional experiences to inspire and foster the development of new local OL communities. One standout example is the pioneering project in Mallorca, Spain - Som Escoles Blaves (We Are Blue Schools) - developed by the local organization Sea Teach. This initiative set out to create a network of 100 European Blue Schools on the island, aiming to enhance environmental awareness and equip young people with essential sustainability skills through OL.

Som Escoles Blaves connected students and teachers with local environmental stakeholders, including businesses and NGOs, through hands-on, engaging learning activities. These activities fostered a deep respect for marine environments and encouraged sustainable practices from an early age. By immersing students in experiential learning, the project helped bridge the gap between classroom knowledge and real-world application, reinforcing the importance of protecting marine ecosystems.

The project adopted a grassroots approach, prioritizing collaboration and strong relationships with schools over rigid or prescriptive frameworks.

This strategy involved working closely with schools to evaluate their existing environmental activities and guiding them toward meeting the goals of the European Blue Schools certification program.

The flexibility and support offered by
Som Escoles Blaves allowed schools to
seamlessly incorporate outdoor learning and
sustainability practices into their curricula. By
tailoring the program to the specific needs
and contexts of each school, the initiative
minimized the sense of overwhelm that can
often accompany the implementation of new
educational programs.

This practical and context-sensitive approach made it easier for schools to engage with OL and sustainability while building a solid foundation for long-term impact.



National contact point

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Institutions/Organizations

Irish Ocean Literacy Network

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Achievements and impact

Number of Schools involved

Two Schools completed an all Atlantic Blue School Award, in association with existing marine education programmes in Ireland. which have been in existence for over 15 years.

Number of Teachers engaged

Approx fifteen teachers were engaged in the two schools involved. In both schools one teacher took on the lead role of guiding the work, while engaging the rest of the teaching staff within the school. For one of the projects another 100 pre-service students teachers were engaged, by observing an element of the schools project work.

✓ Number of Students impacted

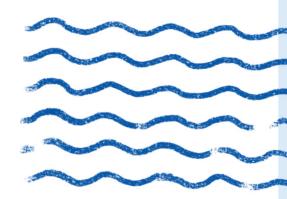
Approximately 300 students between the ages of 5-12 years of age, and 100 preservice student teachers, all of whom were over 18 years of age.

Key milestones

Linking in with existing marine projects such as the The Marine Institute Explorer Education Programme and the national The Green Schools programme in Ireland were significant milestones in 2021 and 2022.

Exploring the role of the Irish Ocean Literacy Network Education Working Group in 2023 was also significant.

★ Scoil Caitriona Junior Co. Galway has had an active focus on marine topics through its work with the Marine Institute Explorers Education Programme in Ireland for over 10 years. The All Atlantic Blue School Award provided the school the opportunity to to take its marine content and link to a wider global network, and work closely with teachers and students from a school in France. This was highly beneficial for both schools. The school has won an Explorers Ocean
Champion Award, EU Blue School Award,
and All Atlantic Blue School Award. They
have spread their message to the school
community, pre-service teachers when
they visited a teacher training college
to perform their musical on Ocean
Conservation through Irish (the native
language of Ireland), and they have had a
class of students from a school in France
visit them to exchange knowledge and
learning.



Community and partner engagement

- Local community involvement
 With many community members and
 organisations working on marine
 focused tasks in Ireland, the potential for
 collaboration is high. The Irish Ocean Literacy
 Network provided a platform for these
 collaborations to begin, as schools were able
 to identify partners in their local area, who
 were focused on relevant themes. We have
 also worked together with many research
 projects to help share the learning and
 outcomes of ongoing research with students.
- Government collaboration

The Department of Environment, Climate and Communications is currently part of the IOLN Education Working Group as well as a sponsor of the Green Schools Programme, along with the Department of Transport, Department of Education and Department of Foreign Affairs and Trade and the Department of Tourism, Culture, Arts, Gealtacht, Sports and Media.

Corporate and private sector partnerships
 Many of the IOLN members are privately
 owned companies such as Galway
 Atlantaquaria. The Marine Institute Explorers
 Education Programme centres who have
 worked with Ocean Champion schools also
 included Seashore Kids, Oceanics Surf School
 and Marine Education Centre, Old Cork
 Waterworks, Sea Synergy Marine Awareness
 Centre, and Leave No Trace Ireland.

A full list of facilitators can be found on https://irishoceanliteracy.ie/blue-schools/

Educational initiatives

Projects

Through the Blue School initiatives, we have developed various types of educational projects such as Science Projects, Art Projects, Musicals, Community Events, Beach Cleans, Books and ebooks.

The photo below shows the students from Scoil Caitriona Junior who performed their musical to the school, local community and trainee teachers.

Teacher training and support

Teacher Training is carried out through a number of programmes in Ireland including the Marine Institute Explorers Education Programme, who deliver training with over 500 pre-service teachers each year, summer training courses to over 100 qualified teachers either face to face or online each year, and the Green Schools programme also delivers teacher training on an ongoing basis.

Validated educational resources

Resources can be found using the links to each of the programmes in Ireland, which are located in the directory at https://
https://
irishoceanliteracy.ie/blue-schools/ and also on https://irishoceanliteracy.ie/ocean-literacy-resources/

Resources can also be accessed on www.explorers.ie and https://www.explorers.ie and https://www.e



Success stories and testimonials

"The Blue School programme has been an incredible asset to our school. It has not only deepened our students' understanding of environmental issues but also inspired them to take active roles in sustainability. The curriculum is engaging, practical, and hands-on, making complex concepts accessible and exciting. Through projects and activities, students develop critical thinking skills, teamwork, and a sense of responsibility toward the planet. The programme's focus on real-world applications has enriched our teaching, creating a positive and lasting impact on both students and staff. We are grateful for the positive influence the Blue School initiative has brought to our community."

"Our involvement with the Blue School Network has transformed our junior school by bringing the ocean into our classrooms. Through engaging, project-based learning, our students have developed a profound awareness and sense of responsibility for marine and maritime topics. This program has inspired our young learners to become passionate stewards of our ocean, fostering a deeper connection with the natural world."

Jane McLoughlin, Scoil Chaitríona Junior, Renmore, Galway

Maria O'Sullivan, Cromane National School, Scoil Realt na Mara, Co. Kerry



Future goals and expansion plans

Goals for next year

Working with other education providers in the Irish Ocean Literacy Network to promote the All Atlantic Blue School Network to Irish Schools and Teaching Networks.

- New partnerships and opportunities
 Explorers if the All Atlantic Blue School
 Initiative can collaborate with existing marine education programmes in Ireland.
- Funding objectives

Start conversations with our Government Departments to sponsor focused activities and tasks. Looks at evaluating the impact of Blue School programmes in Ireland.





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Achievements and impact

- ✓ Number of Schools involved As of April 2025, 493 schools are certified as Blue Schools by the Portuguese Blue School programme – Escola Azul.
- ✓ Number of Teachers engaged Close to 4.000 teachers.
- ✓ Number of Students impacted Taking into account the number of students given by schools through their application process, we have close to 110.000 students involved (specifically 109.027).

Portugal 87

Key milestones

Every year, Escola Azul celebrates Escola
Azul Day (May 19) by issuing a challenge that
all Blue Schools must respond to. The idea
is to establish an annual moment where all
the Escola Azul community is united by one
same action or project. In 2024, the challenge
was for each school to create a big artistic
installation about the Ocean to inaugurate
on Blue School Day, in front of the school
community. Previous years' challenges
included beach cleanups, human chains
near the ocean, writing letters to companies
producing plastic straws, and creating videos
about the Ocean during the pandemic.

Unlike most challenges issued by Escola Azul, the one for the Escola Azul Day is mandatory. Blue Schools must answer the challenge as part of their commitment as Blue Schools. The level of participation is tremendous and helps to create a true sense of community among the network, engaging schools from different latitudes and backgrounds.

In terms of their work on OL, Blue Schools seek to tackle Ocean themes through a perspective that better reflects their own backgrounds. A school located near a fishing community may integrate their culture into their Blue School project, while a Professional Hotel and Tourism School develops recipes that take advantage of the local fish, seafood and algae. But one thing unites all Blue School projects: to engage younger generations on OL, getting them to respect the Ocean's importance and act for its sustainability.

Portugal 88

Community and partner engagement

Local community involvement
 One of the criteria to become a Blue School in Portugal is "A Blue School must involve its local community". This was established to promote connections between Blue Schools and their local environment, inviting them to come up with projects that tackle local issues and resonate within their communities (following the 'think globally,

act locally' motto).

- Government collaboration
 Escola Azul has been an ongoing
 initiative since the 2017/18 school year.
 The programme's implementation has
 been carried out in DGPM DirectorateGeneral for Maritime Policy, a public
 organization under the Portuguese Ministry
 of the Economy. Escola Azul's continuous
 development through the years has been
 carried out by a dedicated OL team at
 DGPM.
- Corporate and private sector partnerships
 Escola Azul has garnered the partnership
 of more than 120 entities who provide
 educational actions, projects or opportunities
 to schools working on OL. Among these
 partners are aquariums, museums,
 public institutions, non-governmental
 organizations, science centers, universities,
 sports clubs, companies, etc. By being a part
 of Escola Azul, these partners are part of a
 nation-wide OL programme and contribute
 decisively for Blue School's projects.



Educational initiatives

Projects

The best examples come from Blue Schools themselves. While some of them are involved in the programme through a project, we also have some examples of schools that are actually committed to include OL in their curriculum on a daily basis, both as a guiding principle and an end goal to their action. These schools start their school year by planning the whole year of activities. They take advantage of the pedagogical opportunities that may exist in their local communities and explore the curriculum to find the best moments to integrate ocean issues and activities in their classes.

Teacher training and support

The Escola Azul Coordination is always available to help teachers with their projects in the scope of the programme. While there hasn't been large-scale teacher training sessions recently, the Coordination makes regular online calls with teachers to

help them with their projects.

Beyond that, Escola Azul is currently financing a teachers' capacitation course related to beach monitoring. These sessions are exclusive to Escola Azul teachers and reach 120 participants. While they are not specifically about helping teachers to implement the programme, they provide interesting methods and ideas on how to include OL in their classes.

Validated educational resources

The Escola Azul platform collects educational resources from different partners. These resources are organized by their target age group and can be found at https://escolaazul.pt/en/recursos.

Portugal 90

Success stories and testimonials

A Blue School situated in a coastal community decided to focus its project on the local dunes, its ecosystem and protection. This subject had been neglected by local authorities for a long time. Within their project, the school was able to arrange a meeting with the municipality, where the students could warn the authorities regarding the importance of protecting the dunes. Their concerns were well received, and the municipality is actually taking measures, as the protection of the dunes' ecosystems became more of a priority in their action.

"I would like to express my sincere congratulations to the Escola Azul programme for the excellent work carried out in promoting environmental education and ocean conservation. It is inspiring to see how the programme has encouraged schools to integrate sustainable practices and marine knowledge into the educational curriculum. I believe that initiatives like these are essential to raise awareness among future generations about the importance of protecting our marine ecosystems. I encourage the Escola Azul Coordination to continue this commitment and further expand the horizons of environmental education through the active participation of schools. Together, we can make a difference in preserving our Ocean for future generations."

Quote from a Blue School teacher on the 2023/24 year-end teacher's survey



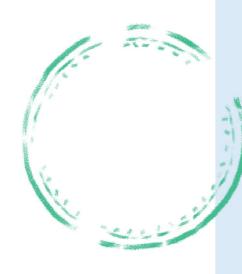
Future goals and expansion plans

Goals for next year

Escola Azul aims to grow in a sustained way. More than going for a rapid increase in the number of Blue Schools, the focus has been on providing the most to the current network, strengthening synergies and ties within the community. That said, Escola Azul has established for a few years a Regional Escola Azul Coordination in Madeira, which has been decisive for the programme's development in the Madeira Region. This success story indicates that one of the keys to allow a sustained growth of the programme might be to establish more Regional Coordinations. These would operate closer to local schools and partners but always following the guidelines and method of the National Coordination.

New partnerships and opportunities
 Escola Azul is always open and looking
 forward to new partnerships that may

provide differentiated opportunities to Portuguese Blue Schools.



Portugal 92

Blue Schools worldwide



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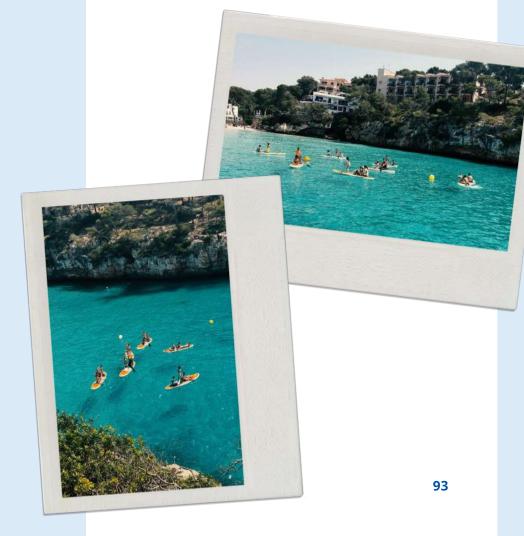
+34 601 903 274

Institutions/Organizations

Blue Schools Cluster

Achievements and impact

- ✓ Number of Schools involved 164
- Number of Teachers engaged 330
- ✓ Number of Students impacted 10.000



Key milestones

★ The Spanish Network of Blue Schools is governed by the NGO Blue Schools Cluster and works under the Spanish name "Red Española de Escuelas Azules". The NGO was founded early 2024 and started its activity as the Spanish Network of Blue Schools in July 2024.

As the Spanish education system is governed by the administrations of the 17 Autonomous Regions of Spain, the Spanish Network of Blue Schools is subdivided into these regions.

Each region will be represented by either one or a group of organisations, which sign an agreement with the Blue Schools Cluster in which they confirm their cooperation and their commitment to increase the numbers of European Blue Schools in their region and support their activities.

In 2024 the Blue Schools Cluster/ Spanish Network of Blue Schools signed agreements with 15 organisations representing 9 Autonomous Regions.

These regions currently represent 164schools that are recognised and certificated by the Network of European Blue Schools (NEBS)

Spain 94

Community and partner engagement

 The Spanish Network of Blue schools represents 16 organisations which are:

Sea Teach SL (Islas Baleares)

ICM - CSIC (Catalunya)

Plàncton Divulgació i Serveis Marins

(Catalunya)

CIBS (Islas Canarias)

CORI Institute (Murcia)

Oceanografic (Valencia region)

Cetmar (Galicia)

University Vigo (Galicia)

Northwind (Galicia)

CEIDA (Galicia)

Fundamar (Galicia)

IIM-CSIC (Galicia)

13 Grados (Galicia)

Universidad Alcalá (Madrid)

AZTI (Basque Region)

Fundación Bioparc (Asturias)

Government collaboration

Reeducamar - National Spanish Network of Marine education, organized by the Ministerio para la Transición Ecológica y el Reto Demográfico and CENEAM, the Spanish National Center of Environmental Education. They had a meeting with the Ministry of Education to introduce them into Blue Schools and the network, and they offered to help in the dissemination.

Corporate and private sector partnerships

All schools within the network are required to work in line with the rules of being part of the NEBS to cooperate with external organisations. Therefore many other NGOs, administrations and organisations are involved in the development of the network of Blue schools in Spain.

Partners:

<u>TCA Automation Technologies</u> gave electronic components to <u>support a challenge for Blue</u> Schools in Murcia

MSC España

Bluewave Alliance

Spain 95

Educational initiatives

Projects

We are Blue Schools Mallorca
ProBleu
BlueLightS
Next BlueGeneration
Blue Twinning

• Teacher training and support

- "Converteix-te en Escola Blava! Oportunitats
 i recursos per dur la mar a l'aula"
 (Barcelona, 5/7/2024)
 Organized by ICM-CSIC.
- Training offered during the "We Are Blue Schools" project implementation.
- Formació Cultura Oceànica: training on Ocean Literacy for primary and secondary school teachers. Organised by ICM-CSIC and the Green School Programme of the Catalan regional government. More information here.

Validated educational resources

- Resources (Catalan)
- Escoles Blaves (Catalan)
- El Mar a Fondo (Spanish, Catalan, English)
- ICM Divulga (Spanish, Catalan)
- Océano a Casa (Spanish)
- <u>PlanctON</u> (Catalan)
- La Mar de Medusas (Spanish)
- <u>Biodiversidad en el aula</u> (Spanish, Catalan, English)
- <u>Medclic</u> (Spanish, Catalan, English)
- Follow the glider (Spanish, English)



Success stories and testimonials

Som Escoles Blaves (We Are Blue Schools)

The pioneering project in Mallorca (Spain), developed by the local organisation Sea Teach, aimed to establish a network of 100 European Blue Schools on the island. Som Escoles Blaves adopted a grassroots approach, focusing on building strong, meaningful relationships with schools instead of imposing rigid frameworks. The main strategy of the project involved close collaboration with schools, evaluating their existing environmental activities, and guiding them toward the goals of the European Blue Schools certification program. This flexible and supportive method enabled schools to incorporate outdoor learning and sustainability practices into their curricula in ways that were both practical and relevant to their specific contexts, thereby reducing the overwhelming feelings that often accompany the adoption of new programs.

Escoles Blaves

In Terres de l'Ebre region (Catalonia) was an educational project held in 2017 aiming to bring marine research and sea life closer to school pupils and the public at large in the Terres de l'Ebre region in southern Catalonia. The project received a grant from the 'Public competition for grants to promote scientific and technological culture and innovation, 2016' awarded by the Spanish government's Foundation for Science and Technology (FECYT) and was also supported by the Catalan government's Department of Education. It was the first pilot case of Blue Schools in Spain with 8 high schools involved. The project consisted of teacher training with marine scientists from different fields. Marine Science Classroom Assistants at secondary schools one week per month, the creation of a blue case for each school and the development of several educational resources validated by teachers.



Future goals and expansion plans

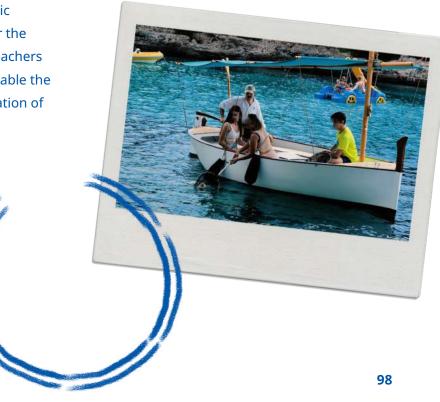
Goals for next year

- Expand to all other Spanish regions
- Expand the number of Blue Schools in Spain registered as NEBS
- Establish inland school partnerships
- Finding economic support for a network secretariat
- Create some common projects between the regions.
- Create a database with common resources

Funding objectives

We aim to establish partnerships with private companies, foundations and the public sector to provide financial support for the Blue Schools and fund activities for teachers and students. These resources will enable the further development and implementation of the Blue School Network in Spain





Caribbean Regional Blue School Networks

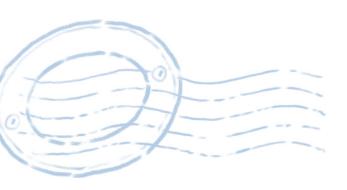
The Blue School program is an initiative designed to integrate OL into education systems across the Caribbean and adjacent regions. Our strategy focuses on designating National Coordinators who will lead local efforts to strengthen marine education.

Currently, 11 countries have expressed interest in participating, including Mexico, Honduras, Colombia, Costa Rica, Belize, Jamaica, Dominica, Brazil, Aruba, Grenada, and Trinidad & Tobago.

Many of these future coordinators have extensive backgrounds in marine sciences, education, conservation, and policy development, with successful experience in programs aligned with the Blue School vision.

As part of the next steps, we are preparing to deliver the first Blue Schools training for coordinators in the region, ensuring they have the tools and knowledge to effectively implement OL initiatives in their respective countries.

This growing network of committed professionals is a strong foundation for expanding the program's reach and impact, empowering future generations to connect with and protect marine ecosystems.





National contact point

Timna Varela Sanchez

Coordination board members

Blue Team Honduras

Institutions/Organizations

Partners in Education Roatan

Contact information

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Achievements and impact

✓ The OL program is the first initiative
of its kind in Honduras' largest marine
protected area, specifically for schools in
the Bay Islands. This pilot project within
the Bay Islands National Marine Park
aims to promote marine conservation
through a curriculum that connects people,
environment, and culture while addressing
key environmental issues.

Developed by teachers, scientists, and education experts, the program uses educational resources to enhance awareness of marine conservation in the region.



Honduras 101

- ✓ The project brings together educational and scientific experts to create resources that integrate environmental education and OL into science classes.
 - These resources include a Teacher's Guide and a Student Booklet designed for preschool and basic education levels (grades 1–9). The materials adhere to the Ministry of Education's guidelines for implementation and compulsory use.
- ✓ The workshops included seven onsite
 sessions focused on the Blue Team and
 preschool educators and six online sessions
 that engaged the technical committee,
 educational coordinators, and the Ministry
 of Education.

85 teachers and 25 authorities collaborated to align the science curriculum with OL. A research study generated three reports on teachers' views, and 10 teachers' guides and 10 student booklets were created as educational materials.





Community and partner engagement

- Local community involvement The Bay Islands Education Department, in collaboration with Partners in Education Program, Roatan Marine Park's Education Program, and the Roatan Institute for Marine Sciences, organized training initiatives that reached 30 teachers from CEB Jose Santos Guardiola and 30 teachers from Escuela Juan Brooks.
 - the Latin American Network of Marine Roatan (PIER) through its Teachers Training Educators (RELATO) and the Wildlife Conservation Society's Professional Development Department.
- Government collaboration The Director of the Professional Development Department (DGDP), the Environmental Education Unit - DECOAS. and the Curriculum & Assessment Department under the Ministry of Education, along with the technicians from the former Regional Center for Environmental Education (CREA) and the UNESCO National Commission in Honduras.



Corporate and private sector partnerships

The Sustainable Ocean Alliance, along with

Honduras

Educational initiatives

Projects

Workshops have been held during the national project of curriculum revision and prioritization to incorporate key principles into the educational framework.

These included a presentation on the OL Project and a review of teachers' guides and student booklets to ensure alignment with the national curriculum.

The main focuses were on science pedagogy for conservation, the Blue Curriculum Framework for environmental literacy, and essential topics such as marine protected areas and sustainable development goals within the Science curriculum.

Success stories and testimonials

One initiative was proposed and led by a dedicated professor and environmental educator (Timna Varela) who has worked on the frontlines with students, fostering an appreciation for cultural and biological diversity while successfully engaging various stakeholders.

The completion of our project's first stage garnered significant recognition, including the Climate Guardians Award from UNICEF LAC and Fundación MERI, where we were selected from 177 projects to be one of 35 finalists and won in the School Curriculum category. This success allowed us to participate in the Teachers COP, a side event before COP27, where we earned second place, just behind France's curriculum project.

Honduras 104

Future goals and expansion plans

Goals for next year

From February to October 2025, the Blue Team and educators will validate teachers' and students' guides while providing OL training for educators from two pilot Blue Schools: CEB Jose Santos Guardiola and Escuela Juan Brooks.

The initiative will also map additional public and private schools interested in joining the program, with a goal of one school per municipality. A study will assess the adoption of the Blue School program, and stakeholders will collaborate on revising the school curriculum. Additionally, a group of science teachers will participate in a "train-the-trainer" program focused on OL.

New partnerships and opportunities

We aim to explore educator exchanges within the Meso American Region program to enhance our initiative. Additionally, the project has been accepted for Ocean Decade endorsement. Our plan is to identify more local partners through the Destination Management Organization Board for Blue Schools sponsorship, ensuring effective collaboration with local businesses.

Funding objectives

Our project is funded by the New England Biolabs Foundation for the implementation of the Blue School program in 2025.





National contact point

Dra. Irán Andira Guzmán Méndez

Coordination board members

Ashey Yaneth Ibarra Pérez Maria Geovana León Pech María Jualieta Maldonado Sanchez Victoria Romero

Institutions/Organizations

- Cinvestav
- Tecnologico de Chetumal
- Takata Experience

Contact information

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Achievements and impact

- Number of Schools involved 10
- Number of Teachers engaged
 17
- Number of Students impacted 680



Mexico



Key milestones

• We have a project that has been running for three years, focused on the restoration of the mangrove ecosystem by high school students from Cetmar 07 in Mazatlán.

This is our most successful project due to the large number of students and teachers who have participated. Additionally we had a primary school designing a coloring book to distribute among its students.

The most effective action with positive impacts in Blue Schools Mexico has been teacher training, which raises awareness beforehand and supports the development of projects in each school.



Community and partner engagement

At this moment, the Mexican network relies a lot on voluntary work and has been working with ONGs such as Takata explorer, Oceanos and Sea&Reef. Despite previous attempts, we have not yet been able to work with the governmental sector.

Educational initiatives

One successful example is a project in Campeche, where secondary school students organized themselves to collect used cooking oil from seafood restaurants to produce handmade soaps, helping to prevent water contamination from oils.

To support educators in effectively implementing the program, three teacher training workshops on OL have been conducted. This strategy has proven to be the most effective in ensuring schools remain engaged in the Blue School initiative.

Success stories and testimonials

Our ten Blue Schools each have unique stories, with different projects at various educational levels, diverse societal impacts, and varying stages of development. If we had to choose one standout example, it would be Cetmar 07 in Mazatlán. As our longest-running Blue School, it has maintained its project over time and has the highest number of participants, making it a model for sustained engagement and impact.

A six-year-old student expressed gratitude after an educational visit where marine organisms were introduced to the class:

"Thank you for coming to show us these little animals. I've never seen the ocean, but now I know what I can find when I go to the beach."

This simple yet powerful testimony reflects how the Blue School initiative sparks curiosity and ocean awareness, even among children who have yet to experience the sea firsthand.

Future goals and expansion plans

For the upcoming year, our main objective is to expand the Blue School program by increasing teacher training, allowing more schools to participate in the initiative.

The credibility and recognition provided by UNESCO's support have also generated greater interest, attracting new individuals and institutions eager to join.

While we do not currently have active fundraising activities, we have identified a potential sponsor who may support teacher training courses. This would be a significant step in strengthening and expanding the program, ensuring its long-term impact and sustainability.



National Coordination Highlights

(Alphabetical Order)



National contact point

Carmen Ivelize Van-Dúnem do Sacramento Neto dos Santos

Board members

Alexandre Costa

Cremilda Domingos

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Institutions/Organizations

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- Universidade do Namibe

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Achievements and impact

Knowing that Blue School aim to promote positive behavioral change in students regarding the marine environment, encouraging sustainable and responsible practices such as reducing plastic use, recycling, water conservation, and marine life protection, it is expected that students will develop a deeper understanding of the importance of oceans and marine ecosystems, along with the challenges in marine conservation.

- Number of Schools involved
 - 11
- Number of Teachers engaged 36
- Number of Students impacted 90

Strategic vision

The Blue School initiative in Angola is an innovative and essential tool to promote OL and drive the blue economy. This concept aims to sustainably integrate knowledge of the ocean, its riches and challenges, into the school curriculum, raising environmental awareness from an early age.

Sharing this knowledge with students and teachers of Angola's Blue Schools has been a milestone for the coordination team. By understanding the vital role oceans play in life on Earth, including climate regulation, food provision, and economic impact, students become informed and proactive advocates for marine resources.

This approach not only values marine resources through responsible practices but also encourages innovation, research, and the development of sustainable technologies. Additionally, it fosters local entrepreneurship, job creation, and socio-economic development.

Working methodology

The Participatory Rapid Appraisal (PRA) tool was used, bringing together the target group (management, teachers, and students) to:

- Identify main needs and challenges in addressing OL topics.
- Analyze the current situation and create a Participatory Action Plan with a timeline of activities aimed at solving the identified challenges.
- Identify Strengths, Opportunities,
 Weaknesses, and Threats (SWOT) in a
 participatory way, enabling a better
 understanding of the school community's
 situation, both of the target group and the
 overseeing structures, to assess available
 resources and delegate responsibilities.
- Organize groups of potential collaborators, starting with Blue School Anexa and Blue School Helder Neto, which were officially formed by the Blue School Coordination Team in Moçâmedes, Namibe.



Community and partner engagement

- Local community involvement
 Involvement includes partnerships with local organizations, NGOs, and community leaders.
- Government collaboration
 Government of Angola
 UNESCO Angola
 Ministry of Fisheries and Marine Resources
 University of Namibe
 Port of Namibe
 Municipal Administrations
- Corporate and private sector partnerships
 M2M Produções
 Gerações Design



Educational initiatives

Projects

Workshops were conducted by students with members of the fishing community of Moçâmedes Bay addressed specific issues stemming from a lack of knowledge in areas such as hygiene and sanitation, workplace hygiene and safety, small business management, leadership, and fish market administration. These topics were covered both at the fish landing sites and at the locations where fish are processed and transformed, as well as inside the markets.

The discussions took into account the fact that fish and other seafood products are highly sensitive and perishable compared to other animal products, not only due to their intrinsic characteristics but also because of their natural habitat. These factors contribute to a series of changes that quickly lead to product degradation, resulting in devaluation and rejection by consumers, or even posing health risks to those who might consume them.

Other initiatives

Message to the Ocean Training with students Beach cleanups Awareness campaigns

Participating schools

School 1009 (Samba) School 1233 (Ilha de Luanda) School 1227 (Ilha de Luanda) School 1007 (Samba)



· Teacher training and support

- An approach focused on promoting integrated strategies and policies for environmental education that involve all marine sectors.
- Improving OL among all citizens, both in the short and long term, to encourage attitude changes that support best practices in their activities.
- Raising awareness about the ocean's role in society by creating responsible and active generations that contribute to ocean sustainability through international collaboration.
- Promoting healthy dialogue among different members of the school community in activities related to OL.
- Facilitating informative discussions about the Blue School project and teacher training.

Success stories and testimonials

To promote OL and convey Blue Economy concepts and their economic significance, 20 children aged 10–13 were selected to participate in preparation classes for the 1st Workshop on the Blue Economy (Nov 23–26, 2023). The event involved national and international entities. A highlight was the children's interaction with professionals from various ocean-related fields, including NGOs like CAMBEÚ and KITABANGA, focused on sea turtle conservation.

Future goals and expansion plans

To effectively implement Blue Schools as a tool for OL and the blue economy in Angola, several actions have been taken since 2020 to mobilize and raise awareness among teachers and students in local communities.

2025 is identified as the year for expansion

2025 is identified as the year for expansion of the Blue School Network across coastal provinces, with full coverage aimed by 2030.

Goals for next year

- Create a national Blue School network dedicated to ocean protection, focused on marine sustainability education.
- Develop learning spaces connecting students to the marine environment and empowering them to become active ocean conservation citizens.

• Immediate and long-term benefits

The Blue Schools in Angola offer wideranging benefits extending beyond formal education into economic, societal, and environmental spheres.

Funding objectives

Currently developing a strategic plan to secure funding from the Government of Angola and both national and international non-governmental organizations.

Challenges

- Fundraising for the acquisition of materials that facilitate the development of activities;
- Attracting the greatest possible number of partners and collaborators;

- Lack of technical staff;



Blue Schools worldwide



National contact points

<u>Julieta Molinas</u>

Ana Carolina Zelzman

Institutions/Organizations

Centro Cultural de la Ciencia (Subsecretaría de Ciencia y Tecnología, Secretaría de Innovación, Ciencia y Tecnología)

Contact information

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Achievements and impact

- Number of Schools involved 80 (59 in 2024 alone)
- Number of Teachers engaged 150
- Number of Students impacted 8.000



Key milestones

In a country with an extensive coastline but very little oceanic culture, the greatest achievement of Argentina's Blue Schools has been incorporating this theme into their activities and establishing connections with their communities to bring it to life.

Students from all regions carried out initiatives with measurable impacts, such as beach cleanups and the installation of barriers to prevent coastal erosion ¹.

They also spread their message of conservation and sustainable use through various media, social networks, and to other students.

The projects included innovative ideas across various disciplines, such as a buoy designed to collect oil spills ² or a sculpture made from recycled materials gathered on the beach ³, which also serves as a collection point for additional waste to be recycled.



FAPE (Puerto Madryn, Provincia de Chubut) y San Patricio (Villa Gesell, Provincia de Buenos Aires)

² EEST N°1 ARA Crucero General Belgrano (Ing. White, Provincia de Buenos Aires)

³ Escuela Municipal de Enseñanza Nº1 Bellas Artes (San Clemente, Provincia de Buenos Aires)

Community and partner engagement

To achieve this, schools partnered with NGOs such as the Association of Artisanal Fishermen of Puerto Madryn, Sin Azul no Hay Verde, el Instituto de Conservación de Ballenas, ProyectoSub, Aves Argentinas and Aquamarina, which provided workshops and lectures. At the same time, many students joined existing initiatives led by these organizations. Some institutions also collaborated with private companies, particularly those focused on sustainability, such as water treatment plants and recycling facilities.

Government participation has also been essential. Many schools visited facilities of the Argentine Naval Prefecture or attended talks given by its officers. Some municipal and provincial governments supported the organization of events or provided materials and infrastructure, with notable contributions from the municipalities of Puerto Madryn and Comodoro Rivadavia.

Several public universities also collaborated with the program, including the University of Buenos Aires, the University of Tierra del Fuego, and Patagonia San Juan Bosco University. Finally, during the first three years of the program, support was provided by the Pampa Azul Initiative, which brought together various state agencies involved in sustainable marine management, conservation, and research.



Argentina

Educational initiatives

The program's coordination team provides support to schools through various virtual channels. Thematic WhatsApp groups are maintained, where teachers can exchange resources and experiences, while coordinators offer guidance. Throughout the academic year, several discussion panels are organized for teachers, along with a student gathering.

Talks with members of the scientific community are also arranged and made available on YouTube for future viewing.

Additionally, the coordination team collaborates with researchers to produce educational videos, which are also accessible on the same platform.

The coordination team also curates a <u>library</u> of <u>bibliographic materials</u> for participating teachers and has developed its own <u>guide for teachers</u>. All these resources are compiled on a website <u>accessible exclusively to participating schools</u>.

Success stories and testimonials

The most recent success was achieved by IPEM 288 José Hernández School in Río Tercero. Based on the premise that all impacts on their river and reservoir ultimately reach the ocean, the school established agreements with local companies to collect recyclable materials.

These materials will be repurposed by the companies, reducing the need for natural resource extraction and preventing water basin pollution.

Additionally, the students carried out extensive cleanups along the riverbanks, inspiring the local community to join their efforts. They also conducted hydrological measurements to assess the health of the watershed and presented their findings to the provincial water authority. In recognition of their projects, the school received acknowledgement from the provincial Ministries of Environment and Education.

Argentina 119

Success stories and testimonials

"The opportunity to engage our students in concrete conservation actions and environmental education is truly enriching.

Seeing young people empowered to lead meaningful changes in reducing plastic pollution in our beaches and coastal areas is inspiring."

Ileana Ríos, Teacher, Escuela de la Costa No. 1720, Puerto Madryn, Chubut

"The Blue School program gave direction to our school's environmental club. Teachers from all subjects collaborated. We organized an art exhibition about the ocean, where students of all ages participated, and we are also planning a more scientific exhibition. It has been a fascinating experience, and many of us are now considering pursuing a scientific career after high school. We became interested in the research being conducted in our country."

Luana, Student, Instituto Peralta Ramos, Mar del Plata, Buenos Aires

Future goals and expansion plans

Looking ahead, the goal is to integrate the program with the National Secretariat of Education and local authorities across the country while strengthening partnerships with non-governmental organizations.

In 2025, several new schools are expected to join, and the coordination team is currently in discussions with professionals and NGOs to organize new activities.

However, the main objective for the year is to hold an in-person gathering where participating teachers and students can share and showcase their work. During the first half of 2025, the program aims to be presented to non-governmental funding organizations to secure financial, material, and infrastructural support necessary to achieve these goals.

Argentina 120



National contact point

Thais Failache Ribeiro Pileggi

Coordination board members

<u>Camila Keiko Takahashi</u> Ronaldo Christofoletti

Institutions/Organizations

- Federal University of São Paulo (UNIFESP), Maré de Ciência Program
- Brazilian Ministry of Science, Technology and Innovation
- UNESCO Brazil
- Boticário Foundation Group
- Secretariat of the Brazilian Interministerial Commission for the Sea Resources (SECIRM)
- EUceano

Contact information

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Achievements and impact

- Number of Schools involved 392
- ✓ Number of Teachers engaged 2.113
- Number of Students impacted 116.058



Key milestones

In Brazil, the Blue School Program aligns synergistically with the national Ocean Olympiad movement. The Olympiad aims to mobilize society annually through activities focused on the ocean, ranging from knowledge competitions to showcasing socioenvironmental projects or artistic, cultural, and technological productions. The 2024 edition of the Ocean Olympiad recorded over 62,500 registrations, engaging initiatives and projects that reached more than 300,000 people nationwide. Blue Schools actively participate by presenting projects and registering students for the knowledge competition, while the broader Brazilian society is also encouraged to join. Also, in 2023, 142 Blue Schools from all regions of Brazil participated in Science Fairs, showcasing innovative projects. Building on this success, 2024 saw the establishment of 15 Ocean Literacy Science Clubs across Brazil's five regions, supported by government scholarships (CNPq) for teachers and students, further enhancing OL education nationwide.

Community and partner engagement

Local community involvement

Each Blue School in Brazil develops tailored strategies to engage their local community, supported by Maré de Ciência, which helps foster partnerships and involve new stakeholders. Annually, schools organize community activities such as science fairs, strengthening ties with the local community. The Blue School Program also enhances visibility through collaborations with local media, leading to TV and newspaper reports showcasing the success stories of Blue Schools across the country.

Government collaboration

The Brazilian Ministry of Science,
Technology, and Innovation supports the
Brazilian Blue School Program, funding
most activities through National Council for
Scientific and Technological Development
(CNPq) open calls. In 2024, the program
partnered with the Ministry of Education to
expand the Blue School network and

integrate OL into the national curriculum. Additionally, local governments, including 20 municipalities and three states with approved OL laws, actively support the initiative by mobilizing schools and passing legislation to include OL in their curricula.

Corporate and private sector partnerships

- Boticário Foundation Group
- British Council
- EUceano project
- Brazilian Ocean Literacy Alliance

Educational initiatives

Projects

The Blue School initiative in Brazil has fostered diverse student-led projects nationwide. These include protocols for monitoring wildfires by public school students, citizen science projects involving the collection, analysis, and monitoring of microplastics on beaches, and programs where older students serve as OL educators for younger peers.

These initiatives highlight the active engagement of students in addressing critical environmental challenges and promoting OL.

· Teacher training and support

The Blue School Program in Brazil provides comprehensive support to teachers through one-on-one or group online meetings with the coordination team. OL courses are offered by local partners, such as universities and NGOs, including a newly approved 480-hour training program for teachers supported by CAPES, a branch of the Ministry of Education. Additionally, curated educational materials are

available on the program's website to assist educators in effectively implementing the initiative.

Validated educational resources
 https://maredeciencia.eco.br/materiais/



Success stories and testimonials

There is a municipality called Barcarena in the state of Pará, North region of Brazil, which integrated its whole educational system into the Blue School Brazil Program in 2024.

There are 101 schools from kindergarten to high school, each developing its OL project valuing and respecting its local characteristics.

The Escola Azul Escola Estadual Floriano
Viegas Machado is located in the city of
Dourados in the state of Mato Grosso do
Sul, over 1,000 kilometers from the sea.
They develop OL in all school subjects in a
transdisciplinary way, and the school has
embraced OL so that it is the main theme in
the school's agenda for celebrating important
milestones and strengthens the students'
leadership so that they develop their skills
beyond school subjects, forming people
who internalize OL regardless of the future
profession they choose.

"The Blue School program, for me, is a program full of opportunities. We start by being part of an international network of schools in the Atlantic Ocean, which provides opportunities for interaction with researchers and teachers and students from other countries.

We organize science fairs, and through one of them we were able to implement our Ocean Literacy Club. In the club, we do scientific initiation with students on the beaches, bringing many reflections with the students about negative interactions between men and the beaches, with our coastline."

Tamily Roedel, Teacher

"At our Blue School, we work on the culture of the traditional community, always in dialogue with the fishing and diving community. Since it is a predominantly black school, we work on the theme of environmental racism. As a black teacher, I carry out this cultural recovery of appreciation for traditional culture that is closely connected to OL, and we see the appropriation of the theme by students that I believe we can only achieve through the Blue School."

Nivea Tavares, Teacher

"Being part of a Blue School, being part of these studies, contributes to the search for a healthy future based on sustainability, and made me realize that this is the path I want to follow.

I dove deep into this sea of knowledge, learned to love, respect, conserve and preserve the entire marine ecosystem, and now I want to dive even more."

Mariana Pimenta, Student

Future goals and expansion plans

· Goals for next year

In 2025, the Blue School program in Brazil aims to expand its reach by at least 30%, covering all 27 states in the country. This growth will be supported by the ongoing development and implementation of the National Blue Curriculum, as well as the offering of training courses for basic education teachers, in collaboration with the Ministry of Education. Given Brazil's continental size and the increasing number of schools joining the program, the appointment of regional consultants as focal points will be essential. These consultants will play a key role in connecting registered schools through meetings and actions that encourage the engagement of additional institutions in the project.

Their presence strengthens integration and collaboration among participating schools, fostering an environment conducive to the program's expansion and the reinforcement of its mission.

New partnerships and opportunities

In 2025. Brazil will establish 10 new Ocean Literacy Science Clubs, supported by three years of funding dedicated to a genderfocused initiative, ensuring women lead these clubs. The country will also seize two significant opportunities to engage schools and partners. OL will take center stage as the theme of the National Science and Technology Week, mobilizing scientific education groups across the nation and expanding the Blue School network's outreach. Furthermore, with COP30 on climate change being hosted in Brazil, Blue Schools will serve as community hubs for communication, fostering dialogue and raising awareness on critical climate-related issues. Through the challenge "My school is an information hub for COP 30," the goal is to empower students to disseminate quality information about the topics discussed at the conference. This challenge is structured into 10 steps divided into 3

phases, organized in a game-like format, with practical goals established for each phase. At the end of each phase, students will have the opportunity to share their experiences, reflecting on the lessons learned and the challenges overcome throughout the process. This initiative makes youth participation more dynamic and interactive, transforming schools into true hubs of climate awareness and the dissemination of oceanic culture. In addition to fostering youth leadership, the project combines learning and concrete actions in favor of a more sustainable future.

Funding objectives

We aim to establish partnerships with private companies to provide financial support for public Blue Schools and fund scholarships for teachers and students. These resources will enable the development and implementation of more Ocean Literacy Science Clubs across all regions of Brazil.







National contact points

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Institutions/Organizations

- Universidade Técnica do Atlântico
- Instituto do Mar

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Achievements and impact

- Number of Schools involved 10
- Number of Teachers engaged
 50
- ✓ Number of Students impacted 1.200



Key milestones

One of the major milestones of the Blue School program in Cabo Verde was the implementation of several awareness campaigns, including beach cleanup activities and educational talks in participating schools with one participating school implementing an OL program that engages students in collecting plastic waste from coastal areas and conducting workshops on recycling and repurposing these materials.

As a result of these initiatives, the Blue School program in Cabo Verde has observed a significant reduction in waste on beaches near participating schools. Additionally, there has been an increase in the number of students interested in pursuing careers related to sustainability and marine sciences.

Community and partner engagement

- Local community involvement The Blue School program in Cabo Verde actively involves local communities by engaging students and teachers in outreach activities, such as beach cleanups, awareness campaigns, and community workshops. These events foster collaboration between schools and local fishermen. environmental activists, and community members. Additionally, partnerships have been established with local NGOs that work to protect marine biodiversity and promote sustainable fishing practices. Community leaders are also invited to participate in school events, where they share traditional knowledge about the ocean and its significance to the local culture and economy.
- Government collaboration
 The Blue School initiative in Cabo Verde is supported by the Ministry of Education, the Ministry of Sea, and the Presidency of the Republic of Cabo Verde.

Corporate and private sector partnerships
 The Blue School program has received some support from corporate and private sector partners. These partnerships have facilitated the provision of educational materials, equipment for hands-on marine science activities, and financial support for school excursions and environmental projects.

Educational initiatives

Projects

The Blue School initiative in Cabo Verde has implemented a range of educational projects aimed at enhancing OL among students. These include interactive workshops, where students learn about marine ecosystems, sustainable fishing, and the importance of ocean conservation.

Teacher training and support

To ensure effective implementation of the Blue School program, training sessions have been organized for teachers, focusing on integrating OL into the classroom.

Success stories and testimonials

One of the standout success stories from the Blue School program in Cabo Verde comes from Escolas de Calhau e Salamansa. The school initiated an ambitious project called Protect Our Reefs, where students actively participated in marine conservation activities. They collaborated with local fishermen and marine biologists to understand the impact of human activities on coral reefs and then developed action plans to promote sustainable practices within the community.



Future goals and expansion plans

Goals for next year

Our primary goal for the upcoming year is to expand the Blue School program to more regions across Cabo Verde, particularly targeting schools in coastal communities that have not yet been engaged. We aim to increase the number of schools involved and introduce more hands-on OL workshops to inspire students and integrate marine conservation topics into the standard curriculum.

New partnerships and opportunities

We are currently exploring new partnerships with international marine research institutes and environmental NGOs.

Funding objectives

We have planned to launch a series of fundraising campaigns aimed at securing both local and international sponsors. Our objectives include organizing community fundraising events and applying for grants dedicated to environmental education and youth programs.



National contact points

<u>Diz Glithero</u> JD Williams

Institutions/Organizations

Canadian Ocean Literacy Coalition

Contact information

Website

<u>Canadian Ocean Literacy Coalition</u> <u>Blue Learning Lab</u>

Achievements and impact

Number of Schools involved

Our focus is not at a school level but rather an educator level. One educator integrating ocean-climate learning into their teaching practice, taking their students on community water-focused field trips, and/or using resources in our curated Blue Learning Lab does not necessarily mean that the 'school', as a whole, is engaged. We stay focused on educators. That said, we do know that, at a minimum, 250 schools have directly engaged with one or more aspects of the Blue Schools Canada initiative.

✓ Number of Teachers engaged

There are currently 86 educators registered in the <u>Blue Schools Canada community</u> of practice. In 2023, 296 educators were reached through conference presentations and professional development workshops. 2024 impact metrics will not be calculated until early 2025.

✓ Number of Students impacted

There are currently over 2500 students who are directly benefiting from Blue Schools Canada, based on the 86 teachers in the community of practice. In 2023, there were 18,828 learners (of unidentified ages) that engaged with Blue Schools Canada resources, and over 55,000 engaged with our giant ocean floor map program.

Key milestones

📌 Our multi-user, multipurpose Blue Learning Lab, launched in September 2024, is designed as a one-stop hub to support ocean learning and community action for teachers, students and the public. It includes the Inquiry Zone where users can explore a curated collection of resources to ignite their inquiry, including the giant ocean floor map; the Blue Schools Zone, where educators can dive in for ocean-focused resources, grants, and instructional support; and the Action Zone, where users can choose to participate in a variety of local ocean, water, and climate action ranging from community science initiatives to environmental campaigns. There is something in the Blue Learning Lab for every one no matter where they are in their ocean [re]connection journey.



Making waves in education

We kicked off the 2024-25 school year celebrating two exceptional Blue Schools Canada teachers, Karycia Mitchelll and Kim Zumach. These educators have made significant strides incorporating ocean and freshwater education into their classroom practice through our Blue Schools Canada experiential learning grant program.

Last year, they applied for funding to create engaging learning experiences with their students to address local water issues.

Blue Schools Canada is one of the Key
Initiatives that we track metrics for annually
through our National Strategy Impact
Measurement Program.

Blue Schools Canada 2023 metrics

- 2,800\$ in funding announced;
- 1 resource distributed (the new Blue Learning Lab website);
- 58 partnerships including 12 core project partners and 46 Blue Schools Members;
- 19,124 people reached, with 18,828 actively engaged with BSC resources and conversations and 296 people reached through presentations and conferences.

Giant floor map program 2023 metrics

- 28 resources distributed including 24 maps and the AR app;
- 137 partners with 6 core project partners;
- 5 project presentations;
- 140 map events;
- 51,382 event attendees;
- 55,649 people reached, with 55,523 actively engaged and 126 people reached through other presentations and conferences;
- 100% of map hosts would participate again and 100% hosts said the experience contributed positively to building OL (based on 11% response rate);
- 72% of AR App users surveyed were satisfied with the experience and said the experience contributed positively to ocean understanding and/or connection;
- 78% of AR App users report favourable attitudes, beliefs, interest, or concern for the ocean and 11.5% report disinterest and/or unwillingness to take action.



Community and partner engagement

Government collaboration

The Government of Canada's Oceans
Management and Contribution Program
supports, in part, the work of the
Canadian Ocean Literacy Coalition and the
implementation of the <u>Canadian Ocean</u>
<u>Literacy Strategy</u> of which Blue Schools
Canada is a key initiative.

Environment and Climate Change Canada (a Department of the Government of Canada) is currently in the process of developing a National Framework for Environmental Learning to be launched in March 2025.

Corporate and private sector partnerships

- Water Rangers
- Canadian Geographic Education
- Exploring by the Seat of Your Pants
- National Film Board (Ocean School)
- Learning for Sustainable Future
- Ocean Wise
- Dalhousie University
- L'Université du Québec à Rimouski
- Canadian Commission for UNESCO
- Canadian Network for Environmental Education and Communication (EECOM)



Educational initiatives

Projects

The Ocean, Freshwater, and Us Giant Floor Map and augmented reality (AR) app is a prime example of a successful Blue Schools Canada initiative. This immersive learning tool empowers students to investigate specific ocean-water-climate relationships, such as the impact of climate change on marine ecosystems. By engaging with the map and app, students can develop a deeper understanding of the interconnectedness of marine and freshwater environments, as well as the importance of conservation efforts.

This program has been highly effective in sparking curiosity and inspiring action among students. By providing a tangible and interactive learning experience, the Giant Floor Map has made a significant contribution to OL and climate education in Canada.



Educational initiatives

• Teacher training and support

Blue Schools Canada (BSC) offers a
comprehensive range of training and
support programs to equip educators with
the necessary tools, knowledge, and skills to
effectively implement ocean-climate learning
in the classroom and community. Through
these initiatives, Blue Schools Canada aims to
foster a generation of ocean-literate citizens
who are equipped to address the challenges
facing Earth ocean-climate systems.

Community of Practice and Networking

- Office Hours: regular virtual sessions for educators to connect, share experiences, and seek advice from peers, ocean education partners, and the BSC team.
- Bite-Size ProD Opportunities: short, focused professional development sessions which deepen educators' understanding of ocean science, climate change, and Indigenous perspectives on the ocean and water systems.

Professional Learning

- Webinars and Workshops: Opportunities to learn from experts in ocean science, education, and Indigenous knowledge.
- Exploring by the Seat of Your Pants
 'Live Hangouts': Highly interactive live
 presentations and Q&A sessions with field
 experts and classrooms across Canada
 (and globally), exploring ocean and
 climate change-related science and
 expeditions.

Experiential Learning Grants

- Funding Support: Financial assistance to offset the costs of experiential learning activities, such as field trips, community partnerships, and hands-on projects.
- Curriculum Integration: Guidance on incorporating experiential learning into classroom instruction.

Validated educational resources

1. <u>Teachers' Guide: A Turnkey Resource</u> for Engaging Ocean Literacy

This comprehensive teacher's guide provides a ready-to-use toolkit for facilitating engaging ocean education learning experiences. With five flexible lessons, each accompanied by student cards, equipment, and materials to support implementation, teachers can easily bring ocean science to life in their classroom.

Key Features:

- Learning Activities developed for the Pan-Canadian contexts:
 - Water Shapes Us
 - Water Connects Us
 - Water is Life
 - Ocean, Climate, and Us
 - One Global Ocean
- Interactive Learning: hands-on materials and visual aids foster active engagement and deeper understanding.

- Flexible Implementation: teachers can customize the activities to suit their curricular focus and students' needs, whether used sequentially or independently.
- Extensive Resources: access a wealth of additional materials, including videos, articles, and websites, to enhance learning.
- Clear Objectives and Assessment: Each activity is aligned with specific learning outcomes, making it easy to measure student progress.

By incorporating this instructional resource into their practice while animating the *Ocean, Freshwater and Us* Giant Floor Map, teachers can inspire the next generation of ocean stewards.

2. Interactive Digital Map

The digital map *Ocean, Freshwater, and Us* is a comprehensive visualization of Canada's marine and freshwater ecosystems, highlighting the intricate connections between water systems and human interactions. This interactive digital map was developed through a national collaboration led by the Canadian Ocean Literacy Coalition and the Royal Canadian Geographical Society, the map represents a comprehensive, multi-stakeholder approach to understanding Canada's water ecosystems.

3. Augmented Reality App (Android, Apple iOs)

The Ocean Canada app, created by Ocean School (National Film Board of Canada) in collaboration with the Canadian Ocean Literacy Coalition and Canadian Geographic Education, enables users to experience the ocean, coastal areas, and freshwater bodies in Canada in a brand new way. Through augmented reality (AR) and 360 video, learners of all ages can discover the various ways Canada is working to protect oceanic and freshwater areas.

4. Ocean Week Canada video collections

The Indigenous Water Guardians video collection, produced by the Indigenous Leadership Initiative and partnering communities, showcases the critical work of Indigenous Guardians. The Coastal Stories collection, produced by the SOI Foundation, shares stories celebrating the regional, cultural, and biological diversity of Canada's coastal communities. The Coastal and Underwater Ecosystem collection, produced by Hakai, provides an immersive exploration of coastal ecosystems.

Success stories and testimonials

Success stories of the Blue Schools Canada community of practice impact is reflected across the various knowledge exchange, peer learning, and teacher training sessions that took place regionally and nationally over the past year.

View a sample of the sessions that took place here: https://colcoalition.ca/past-events/

These student excerpts were extracted from our BSC post-event survey with teacher Kim Zumach:

"This trip made me find some peace that I didn't know I needed. I saw creatures that I don't usually get to see, including sea lions and porpoises." - TJ

"What this experience meant to me was that we were learning about keeping the ocean clean. I also learned that bull kelp grows very quickly."
- Micah

"My favourite moment was the one minute of silence. It was really nice to hear the birds while looking for ocean creatures. I learned that bull kelp can be eaten and has many uses in Indigenous culture." - Kiara

These student excerpts were extracted from our BSC post-event survey with teacher Karycia Mitchell:

"I can't believe we caught a jelly!" - while looking at the plankton tow.

"The current is so strong here it looks like a river!"
- while traveling through Seymour Narrows

"Even though we didn't see any whales, it was a really cool morning."

Another student testimonial shared from a BSC teacher: "Amazing, wow lobsters are so interesting, I can't believe I got to touch a real live lobster, crab!"

Future goals and expansion plans

Goals for next year

- Identify, convene and coordinate actions of other organizations working in ocean, water and climate spaces to maximize impact through collective action under a one water system frame.
- 2. Pilot educational system partnership (e.g. Toronto District School Board, March 2025) to scale BSC program with focus on student workshops and whole community ocean, water, and climate learning.
- 3. Continue to scale professional development program for teachers with a train-the-trainer model as backfill to human resources gap.

Funding objectives

Future funding for the Blue Schools Canada initiative will be sought through funding pathways for the broader next phase advancement (2026-2030) of the Canadian Ocean Literacy Strategy.





National contact point Shweta Naik

Institutions/OrganizationsJane Goodall Institute India

Contact information

Website

http://www.janegoodall.org.in http://www.blueschoolsindia.in

Introduction

Blue Schools India (BSI) is the national hub of the Blue School Global Network, an international initiative aligned with the United Nations Decade of Ocean Science for Sustainable Development (2021-2030). Coordinated by the Jane Goodall Institute India, BSI fosters ocean literacy and climate action through education. Recognizing India's unique position as a coastal nation with rich marine biodiversity, a thriving blue economy, and deep cultural connections to water, BSI connects educators, young people, and communities across India to empower them as stewards of our oceans, freshwater systems, and climate. This initiative aligns with India's priorities under UNESCO's Education for Sustainable Development (ESD) and the Greening Education Partnership, while also honoring the country's indigenous ecological wisdom and the principle of "Vasudhaiva Kutumbakam"—the world is one family. Through a holistic framework that blends science, storytelling, and tradition, BSI nurtures a generation of informed, engaged, and responsible citizens who can address environmental challenges at local, national, and global levels.

India 144

Enabling factors for success

Alignment with national and global frameworks

- Supports India's National Education Policy (NEP 2020) and integrates with UNESCO's ESD goals.
- Contributes to India's Blue Economy priorities and Greening Education Partnership.

• Experiential and multidisciplinary learning

- Integrates STEM education, indigenous ecological knowledge, and real-world conservation projects.
- Links India's maritime heritage and river systems with climate and sustainability challenges.

• Educator and youth engagement

- Provides teacher training, educational resources, and capacity-building programs.
- Encourages youth-led conservation projects, community participation, and action-based learning.

Strong partnerships

- Collaborates with schools, universities, marine research institutions, NGOs, and indigenous communities.
- Engages scientists, conservationists, and educators to strengthen ocean literacy initiatives.
- Builds partnerships with museums, local municipal corporations, and civic bodies to enhance public engagement and community outreach.

Scalability and digital integration

- Develops digital toolkits, interactive learning resources, and scalable models for national expansion.
- Connects students through national and global Blue School Networks.

India 145

Challenges

- Limited awareness of Ocean Literacy
 The concept is not yet mainstream in India's education system.
- Resource constraints
 Requires trained educators, funding,
 and infrastructure for widespread
 implementation.
- Geographical and cultural diversity
 Adapting Ocean Literacy education for both coastal and inland schools.

Opportunities

- Growing policy support
 NEP 2020 and UNESCO-led initiatives
 promote environmental and experiential learning.
- Expanding blue economy
 Provides opportunities for youth to engage in marine conservation, fisheries, and sustainable tourism
- Global collaboration
 Connects with international Blue School
 Networks and marine science initiatives.
- Youth-driven innovation
 Encourages student-led sustainability projects with real-world impact.
- Local partnerships with museums and civic bodies
 Strengthens community engagement and outreach efforts.

India 146

Success stories and testimonials

"Blue Schools India is more than an education program—it is a movement to rekindle our connection with the ocean and awaken pride in our maritime heritage. By weaving together science, storytelling, and indigenous wisdom, we are empowering young people to understand the ocean's vital role in shaping our climate, sustaining life, and anchoring our future. Every action we take sends ripples across the blue planet. Through knowledge, compassion, and collective leadership, we are embedding ocean literacy into the way we learn, live, and lead—fostering a generation of informed, inspired ocean stewards."

Shweta Naik
Blue Schools India Lead
Jane Goodall Institute India

India 147



National contact points

BlueGrowth Namibia Lüderitz Blue School

Coordination board members

Marnie Erasmus
Harold Efraim //Guiob

Institutions/Organizations

- Lüderitz Blue School
- BlueGrowth

Contact information

Marnie Erasmus
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Eben Bok

Achievements and impact

We were member of the All Atlantic Blue School Network (AABSN) and now part of the UNESCO Blue School Global Network (BSGN). Namibia's unique arrangement is to anchor the BSGN on 2 Hubs, namely; the Henties Bay Hub and the Lüderitz Hub and work through the Windhoek UNESCO-IOC committee to bring all Ocean Literacy role players under one roof to be able to speak with once voice on issues about Ocean Literacy in Namibia.

Early achievements and impact include:

 A non-profit school of international standard, Lüderitz Blue School opened in Jan 2023 and has grown significantly since then. The school has a strong marine focus and OL is embedded in the academic curriculum and extracurricular activities. This includes sailing, surfing and Marine and Maritime Studies classes.

Namibia 148

- An OL toolkit is being developed by Namibia Nature Foundation and Namibian Foundation for the Conservation of Seabirds together with other partners to introduce OL to students in government schools. This is a collaborative project between many stakeholders and will be rolled out in the near future.
- We are partnered with the Namibia
 Maritime Museum, which opened in
 Lüderitz in September 2024. This is the
 largest Maritime Museum in Africa. Eino
 Ngesheya, curator of the museum, also
 assists the Blue School coordination team.
 There are many educational initiatives in
 place at the museum and plans to approach
 the Ministry of Education for students from
 across the country to visit the museum.

Community and partner engagement

• Government collaboration

There have been conversations with

UNESCO Windhoek office about approaching various Government Ministries and an initial plan in that regard is being put in place.

• Community engagement

The establishment of the Centre for Religious Literacy and Ecotheology is at an advanced stage. As an outcome of this Centre, a Christian Ocean Stewards Network is envisaged. Discussions with 12 mainstream churches have already commenced in order to create a national single ecumenical platform to parachute churches into conversations about environmental education which will include the creation of Environmental Clubs in Parishes with the view to offer ocean literacy in particular to coastal Parishes.

Namibia 149

Success stories and testimonials

Lüderitz Blue School, a non profit international school opened in January 2022. The first school of its kind in the region, the school has grown from 5 to 60 students. The school has a strong focus on OL, which is integrated into academic curriculum, extracurricular activities and school ethos.

The students take part in weekly Marine and Maritime Studies classes, as well as Friday Oceans Day - a club exposing them to all aspects of the ocean. The school offers a high number of scholarship places to children from the community.

BlueGrowth Namibia is also a non-profit organisation. Unlike our Luderitz counterpart, our Henties Bay Blue School is offered within the confines of the Public Kamwandi Combined School and focus mainly on afterschool and weekend activities of the blue economy club

The Blue School works for other local schools and the Henties Bay Municipality to participate in events of the annual Oceans Day.

The Coordinator of the Henties Bay Blue School is active in the establishment of the Saint Michael's Parish Youth League in Henties Bay and serves as the mentor of the Environmental Club.

The majority of youth in the Youth League are learners at the local school where the Blue School Coordinator is employed as a Teacher. These learners benefit from both the Blue Economy Clubs at the School as well as from the Youth League Environmental Club.

Educational initiatives

- Lüderitz Blue School
- Henties Bay Blue School

Namibia 150

Goals for next year

- Finalise application form for new Blue
 Schools in the //Kharas and Erongo region
- Finalise structure of network together with UNESCO-IOC and UNESCO Windhoek
- As soon as the UNESCO-IOC Committee is established, hopefully in May 2025, the Henties Bay Blue School will undergo the following transformation:
 - The Blue School will migrate from Kamwandi Combined School and become an independent entity under BlueGrowth Namibia's Henties Bay Blue Economy Learning Centre
 - The current Coordinator will be seconded from the Education Ministry to head the Blue School as its founding Director
 - The Blue School will subscribe to the UNESCO Blue School Global Network as well as becoming the member of the Windhoek UNESCO-IOC Committee

- The Blue School will contact its own independent learner recruitment and tuition policies on the basis of the UNESCO New Blue Curriculum in partnership with the NIED
- The School with maintain partnership with the Learning Centre's Information Centre and the Saint Michael's Environmental Club





National contact point

Stephanie Nzeke Waniko

Institutions/Organizations

- Nigerian Institute for Oceanography and Marine Research (NIOMR)
- EUHorizon 2020 ASTRAL Project

Achievements and impact

We have reach over 5.600 students, 125 teachers, 66 schools 5 states in Nigeria (Lagos, Ogun, Oyo, Rivers and Kano) and reach out to over 5.000 people in communities.

Contributions to the Blue School program

Funding of school campaigns, classroom teaching, cleanup exercise, setting up of clubs in schools, teachers training and capacity building workshops, Children's Day Symposium, World Oceans Day, social awareness campaign in communities, field trips, hands on activities such as Celebration of International Coastal Clean-Up Day, Development of ASTRAL Aquaculture Quiz (competition, quiz, craft from debris, drawing, essay writing and projects). Part of the development of EU Horizon 2020 ASTRAL Project educational materials: Puzzles, Crossword and Jigsaw as educational materials and games (ASTRAL Aquaculture Quiz), Children's Day Celebration and Symposium, classroom teaching and field trips.

Nigeria 152

Blue Schools worldwide



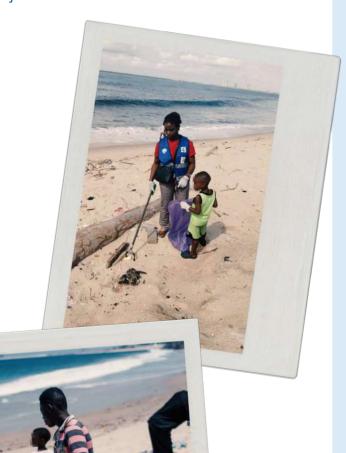
Community and partner engagement

- School outreach and programs

 We've trained teachers on integrating
 OL into their school curricula, providing
 them with teaching materials, puzzles,
 and interactive tools to engage students
 in marine conservation topics, pollution
 and resources. Students are encouraged
 to participate in science fairs, art
 competitions, and storytelling events to
 express their understanding of marine
 conservation and sustainability.
- Other collaborations

We've collaborated with NGOs, individuals, business, and government agencies to support our initiatives. Communities and groups, including fishing and coastal communities, are increasingly becoming more informed about their relationship with the ocean and the need to protect it. Students are involved in cleanup efforts, climate change action, and sharing stories about ocean protection and sustainable use.

- Collaborative projects with schools
 Children's Day Symposium, Art Competition and World Day lectures.
- Resources for students and teachers
 School outreach, teachers training and
 workshops, EU Horizon 2020 ASTRAL
 project educational materials, hand on
 projects and activities.



Educational initiatives

- Educational resources
 EU Horizon 2020 ASTRAL Aquaculture Quiz Booklet.
- Workshops and training for teachers
 Integrating OL into teachers' school curricula, providing them with teaching materials, puzzles, and interactive tools to engage with students in marine conservation topics. Annual children symposium and competition, recycling and upcycling training on plastic waste management.



Success stories and testimonials

During the 2023 Children's Day Symposium, a kindergarten group challenged the panel that they were going to participate in the quiz competition and they eventually won the prize for the primary levels.

In Makoko community, a slum in Lagos State: "We did not know that as fishermen that there is climate change, now we know and we promise to act better".

At Akodo-Ise, a community in Lagos, Nigeria: "We did not know that conserving our Mangrove tree is for our community benefit and the world".

In Kano: "I thought because I live in the north I have no business with the ocean but I can see how I am connected now".

Nigeria 154

Blue School Global Network: a toolkit



Future goals and expansion plans

Goals for next year

To expand our school network from 66 to 150 by the end of the year.

• Upcoming initiatives and opportunities

To continue to host the Children's
Day Symposium, World Oceans Day
competition, increase youth ambassadors
and extend to inland schools and
communities.

• Funding and resources

We are looking forward to NGO, private, public and government organisations to fund Blue School initiatives in the country. Also, the team is currently strategizing on various possibilities.







National contact point

Kogie Govender

Institutions/Organizations

- National Research Foundation (NRF)
- South African Environmental
 Observation Network (SAEON)
- Department of Science, Technology and Innovation (DSTI)

Achievements and impact

- Number of Schools involved 200
- Number of Teachers engaged 218
- Number of Students impacted 285

Key milestones

Workshops have been implemented with educators across the country in person and online. The workshop introduced the educators to Blue Schools in South Africa and highlighted what to expect during the programme. The workshop provided a space for engaging discussions on educators' connections to the ocean and the sociocultural 'services' the ocean provides us to better understand our ocean and how to manage it. The video, <u>Lalela uLwandle</u>, was created by Empatheatre to encourage the educators to think

about some marine issues and the concerns that coastal communities may have. Lalela uLwandle means "Listen to the Sea" in isiZulu. The next session of the workshop focused on the seven Ocean Literacy principles. These are seven important ideas about the ocean that every person should understand. This followed on with discussions around people's connections to the ocean, which encouraged the educators to ask questions and to think about how they are connected to the ocean. Participants were put into groups and each group discussed an OL principle in detail and then shared a few key points with the whole group. This activity aimed to get the educators to think about their influence on the ocean and how the ocean influences them.

These workshops also focused on the scientific method and guided educators on how to develop a research question. The educators participated in activities to show how to conduct an experiment, a comprehension of phytoplankton blooms along the South African coast and to give them some ideas on how

they could collect data to answer their research question. Nutrient data from the Sundays and Swartkops Rivers collected by the Elwandle node provided an opportunity for the educator to work with data and to show that the land and ocean are connected via rivers. These workshops have inspired educators, particularly those inland, to think outside the box (or the ocean) a little when it comes to mentoring learners to design their research projects. Educators were given a portfolio booklet that consisted of a range of OL and marine science activities. During the following seven months Blue Schools learners engage with developing research projects and completing their portfolio booklet activities. On completion of the research project and the portfolio booklet of activities, learners submit these. The projects and portfolio activities are assessed. The top ten performing learners are then invited to participate in the National Blue School Conference in South Africa which is held over three days. Learners present their research projects, engage in fieldwork activities, and participate in activities that promote ocean connections and OL.

Community and partner engagement

Coastal fishing communities and indigenous fishing communities participate in ocean literacy workshops hosted by NRF-SAEON.

The workshops commence with communities sharing how they connect to the ocean and this creates a safe space as communities understand that their local knowledge is valued and this builds trust between the communities and the facilitators. The workshop then progresses with communities sharing the local issues and challenges that they are experiencing. The community together with a range of stakeholder and facilitators participate in ocean dialogues that are shared by each other on how these local issues and challenges can be solved and develop an action plan to solve the issues. The community watches a South African video called Lalela Ulwandle and they then discuss the video by comparing it to their context. This video illustrates that cultural knowledge and practices are important for achieving sustainability practices for our

oceans. These workshops are implemented across South Africa with coastal communities to ensure that science is inclusive and that knowledge is generated from bottom up.

Local community involvement

The communities are very involved with Blue School through ocean literacy workshops through a bottom up exchange of knowledge. We work with a range of community leaders, NGO's and any interested stakeholder. We have several partnerships with others that promote Blue Schools with their beneficiaries.

Government collaboration

We collaborate with various government departments for the Blue School programme to co-facilitate community workshops. The Blue School programme in South Africa is funded by the Department of Science, Technology and Innovation.

Educational initiatives

Projects

We create a portfolio book on a yearly basis on ocean literacy and marine science which students engage in during the year. The portfolio booklet aligns to the curriculum in South Africa. Learners have to conceptualise and design a research project that solves a problem. The learners that perform very well in the portfolio booklet activities and the research projects are chosen to attend the annual Blue School Conference together with their educators. The travel and accommodation for this conference is funded by the Department of Science, Technology and Innovation in South Africa.

• Teacher training and support

Online and in-person workshops are conducted throughout South Africa with educators. These workshops introduce educators to the principles of ocean literacy, using ocean data to understand

the changes in the ocean, and how to ensure sustainability for a healthy ocean.

Validated educational resources

- https://education.saeon.ac.za/2022/10/11/ imigaqo-yolwazi-lokufunda-ngolwandle/
- https://education.saeon.ac.za/2022/03/15/isizulu-marine-science-education/
- <u>https://education.saeon.ac.za/2021/06/25/</u> 1306/



Success stories and testimonials

Alutha Botha a student from an inland school that has been part of the Blue School project. Alutha developed a research project on. "Exploring habitat use by juvenile fish using remote underwater videos" as part of his Blue School project and he was invited to attend our annual Blue School Conference. His mentor Nozi Hambaze encouraged him to enter this project at the regional science Expo and Alutha won a bursary to study any science subject at Rhodes University and was selected to attend the National Science Fair and he is now selected to attend the Regeneron science fair in the USA.

Ayuthandwa is a learner from an inland school who got to go on a flight for the first time to attend the Blue School Conference and get to see the ocean for the first time during our annual Blue School Conference. Ayuthandwa cannot swim but was able to magically catch every wave during the surf school session as part of the conference.

Anele Mlambo a learner from an inland school has never got to experience or even a glimpse of the ocean but entered a poem in the marine pollution category and won herself a tablet. There are just a few examples of this programme overcoming barriers to ocean access & experience. These opportunities enable learners to emotionally connect to the ocean. The Blue School programme reduces the psychological & geographical distance between everyday life & the ocean.

"We went to Cape Town for a Blue Schools Inland programme and saw the biggest boat, the Ocean Xplorer! It was so cool! We went on the boat and learned about the ocean and how to take care of it. We also had a lesson on coding, which was my favourite part. They showed us how they collect data from the ocean and what they use the data for. They told us everything they knew about the ocean. We also learned how to use coding to keep track of ocean information and share it with others. It was like solving a puzzle and I loved it! I

Blue Schools worldwide



want to learn more about coding and the ocean. It was an amazing trip, and I'll never forget it!"

"Hello, it's Nomvelo Mthembu, one of the learners from KZN who participated in Blue Schools Inland Programmes. Our trip to Cape Town was fantastic. They made sure every detail was taken care of and truly went above and beyond to make our experience unforgettable. Thanks for an incredible adventure; I would love to go back and experience more onboard the OceanXplorer. Thank you!"

Future goals and expansion plans

Goals for next year

We would like to expand Blue Schools so that every person, young or old, understands the principles of ocean literacy and ensures sustainable practices for a healthy ocean.

- New partnerships and opportunities
 We are in the process of encouraging other
 countries to be part of the Blue School
 programmes in Africa.
- Funding objectives
 We constantly write proposals for funding Blue
 School programmes.



Blue Schools worldwide



National contact point Meghan Marrero

Institutions/Organizations

National Marine Educators Association

Achievements and impact

- Number of Schools involved 20
- ✓ Number of Teachers engaged 45
- ✓ Number of Students impacted 3.800

Key milestones

- Received funding from the Environmental Protection Agency and the Prada Sea Beyond project to support Blue Schools.
- Four Blue Schools teachers presented at the NMEA conference in July 2024.



Community and partner engagement

Local community involvement

The National Marine Educators Association oversees the project. All schools have made partnerships within their communities with groups including parks departments, gardening clubs, and others.

Government collaboration

NOAA Office of Education supports the project through the part-time work of a Knauss Policy Fellow.

Corporate and private sector partnerships
 Prada is supporting 16 schools in the NY
 Metro area this year.

Educational initiatives

Projects

The projects have been very diverse.

Examples have included: using Apple Air

Tags in bottles to map watersheds, creating
a kindergarten "ocean helpers" curriculum,
creating informational signs to be posted in
the community.

· Teacher training and support

We hold quarterly virtual meetings for teachers for networking and professional learning. Guest speakers for organizations such as the Children's Environmental Literacy Foundation (CELF), 5gyres.org, and others have shared examples of ways to involve students in action projects.



Success stories and testimonials

At Trumbull High School in Connecticut, a science and business teacher collaborated to examine sustainable business practices. Students audited the school store, and began to add more sustainable products.

"There was great collaboration around the school as the students learned and incorporated play, science, nature, and environmental stewardship."

Future goals and expansion plans

Goals for next year

We hope to continue to expand the network, and to hold an in-person student symposium for our Long Island Sound Schools, which are a local subset of USA Blue Schools in the New York and Connecticut area.

Funding objectives

We are looking for funding to support USA Blue Schools in other regions of the country.





Regional contact points

Network of European Blue Schools

Website

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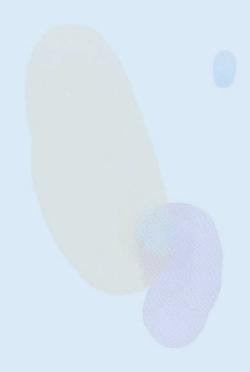
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