

AAORIA 2026 Intergenerational Hackathon, Team 6 Report: *Blue School Hub — A Connection, Cooperation, & Action Platform*

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I. Context & Problem Statement

“Ocean Literacy is Contagious.” —Raquel Costa (AA-BSN National Coordinator, Portugal) (AA-BSN, 2023).

The All-Atlantic Blue Schools Network (AA-BSN) is an ambitious project, connecting schools across the Atlantic, to collaboratively create and strengthen Generation Ocean (AA-BSN, 2023).

Following Portugal’s 2017 Blue School implementation, AA-BSN began in 2021 (AA-BSN, 2023). Participants included National Coordinators, students and teachers, Indigenous and local communities, Ministries, and Ocean Professionals of various career stages; with each stakeholder sharing their unique perspectives (AA-BSN, 2023).

By exploring multiple dimensions – such as Science, Sustainability, Culture, and Gender Equality, AA-BSN promotes diversity and inclusion, and understanding the Ocean through topics like Marine Spatial Planning (MSP) and pollution; with the ultimate objectives being taking action and changing behaviors (AA-BSN, 2023). Since AA-BSN is built with all, for all, based on all available Knowledge Systems, it contributes not only to Ocean Decade targets, but also to national and international strategies, by connecting Atlantic schools to raise societal awareness and promote Ocean Literacy (AA-BSN, 2023).

Previously, participating Atlantic teachers and coordinators identified major obstacles causing them to lose out on an All-Atlantic community’s true potentials, especially lack of time and fragmented resources, (Atussa Payton & Matthews, 2026).

This led to the problem statement, tackled by the Blue Schools/Ocean Literacy Team, at the 2026 All-Atlantic Ocean Research and Innovation Alliance (AAORIA) Intergenerational Hackathon:

“How could Blue Schools, across the Atlantic, transform real-world barriers into opportunities that empower students and communities to understand, value, and actively safeguard the Ocean?”.

II. Added Value of the Solution

Every country along and across the Atlantic is unique, with its own interpretations and best practices of implementing Blue Schools. For example, a Canadian Blue School is a school community engaging in purposefully planned experiential learning about marine, freshwater, and coastal areas; while a Portuguese Blue School aims to promote Ocean Literacy within the formal education sector, and a Brazilian Blue School values strategies to support autonomous behavior and creativity openness, in carrying out Ocean-related activities (AA-BSN, 2023). For a full list of countries in the AA-BSN (as of 2026), please see Appendix.

With that in mind, we devised our solution: the ***Blue School Hub – a centralized Atlantic Blue School Platform***, for teachers to find Ocean resources, and create opportunities to connect ECOPs directly with schools (Galveia, 2026). The immediate added values of this solution include saving teachers time, increasing the quality and information specification to students (Galveia, 2026); and allowing stakeholders to adjust their activities and practices to best support the Seven Principles of Ocean Literacy, based on their unique circumstances (National Marine Educators Association, n.d.; AA-BSN, 2023).

In addition, through Blue School Hub, ECOPs and LCOPs will have new opportunities to share their knowledge, and enhance their own capacities for Science Communication and Intergenerational Dialogues (Atussa Payton & Matthews, 2026). With teachers now able to interact with and learn from each other, the visibility and efficiency of Blue Schools will be vastly increased, making the AA-BSN coordinators' work much easier, when assessing each school's work and managing simultaneous projects (Galveia, 2026). And to ensure all countries and Peoples are properly included and represented, verifiable AI integrated systems will be used, to provide resources in all languages spoken and written across the Atlantic (Galveia, 2026). This in turn opens the door to the eventual possibility of expanding the Hub, to include schools and students beyond the AA-BSN (Galveia, 2026).

Moreover, through the Blue School Hub, slower but long-term positive changes can also be expected, such as new engagement and training opportunities for students and educators alike, as well as the continued development of innovative and immersive resources and activities, for facilitating new schools to join the Hub and AA-BSN (AA-BSN, 2023).

III. Prototype

The Blue School Hub Prototype is a centralized, digital, Atlantic Blue School Platform, leveraging and connecting two existing networks: the All-Atlantic Blue Schools Network (AA-BSN) and the Blue Intergenerational Programme (Galveia, 2026). Connecting Atlantic schools from pole to pole, and teachers with ECOPs, this multilingual prototype – available in both browser and app format – will give more capacity for teachers, provide learning opportunities for ECOPs, and comprises a three-phased design (Galveia, 2026).

Phase One is the first 0-24 months, requiring one Part-Time Employee (PTE), with an estimated cost of €33,290 (Atussa Payton & Matthews, 2026). Here, a community is built with an AI-powered membership directory, to create an **innovation connection** (Galveia, 2026). **Comprehensive knowledge sharing** will be made possible using a living resource hub with vetted content, sustaining momentum from the tip to tail of the Blue School process; in addition to **Atlantic Integration**, where for the first time, teachers will be able to find both local and Atlantic Blue Experts, and other colleagues (Atussa Payton & Matthews, 2026).

Phase Two is around 2-4 years into implementation, requiring one PTE and one Full-Time Employee (FTE), with an estimated cost of €30,000 (Atussa Payton & Matthews, 2026). Here, **deepening connections** are made possible via calendar optimization to schedule engagements, **two-way content- and knowledge-sharing** among members, and the **integration of additional schools**, where non-Blue Schools also receive free access to the Hub's resources (Galveia, 2026).

Phase Three is 4+ years into implementation, requiring two FTEs, with an estimated cost of €42,000 (Atussa Payton & Matthews, 2026). Here, **AI pairing** connects Ocean professionals and schools, **collaborative grant opportunities** partners schools with potential funding opportunities, and international showcases are conducted virtually, for students to share their learnings with one another (Galveia, 2026).

The Blue School Hub's organizational layout will be a governance structure, overseeing a trio comprising a secretariat, steering committee, and national coordinators (Atussa Payton & Matthews, 2026). The governance body will be AAORIA – merging the Intergenerational Dialogue programming and Blue Schools, the secretariat organizes the Hub's day-to-day coordination, the steering committee handles strategic direction and content validation based on their understandings of Blue Schools' on-the-ground realities, and national coordinators will be leveraged for annual country-level platform engagements (Atussa Payton & Matthews, 2026).

AA-BSN has already proven that amazing accomplishments often happen along the way, including meeting Sustainable Development Goals (like #4, Quality Education), adapting curricula to embrace regional nuances and circumstances (e.g. shifting online during COVID-19), and using community storytelling as a tool to help build cross-cultural understanding and recognition of Indigenous Protected and Conserved Areas (AA-BSN, 2023). Ultimately, the Blue School Hub empowers teacher capacity to further engage students in Ocean Literacy with verified materials, connects scattered existing networks and resources to create an Atlantic-focused Blue Schools community, allows for intergenerational exchanges between schools and researchers, and fundamentally bridges gaps between knowledge and impact among communities, because that is what Ocean Literacy and Education are all about (Atussa Payton & Matthews, 2026).

To build and look toward a sustainable future bringing diversity, equity, and inclusion, we must work towards a sustainable, inclusive, and equitable Ocean, within the All-Atlantic community (AA-BSN, 2023).

“In the End, we will Conserve only what we Love, we will Love only what we Understand, and we will Understand only what we are Taught.” — Baba Dioum (1968)

IV. Limitations

Some significant Atlantic Blue Schools challenges and limitations previously identified include the COVID-19 pandemic, language barriers, lack of funding, and non-standardized education systems (AA-BSN, 2023). Additional implementation barriers included physical distance to the Ocean, lack of lead time to develop projects (especially school calendars that do not mesh well with stakeholder calendars), lack of curricular flexibility, as well as lack of support from decision-making bodies and school management (AA-BSN, 2023). Although the Blue School Hub is virtual, its resources are meant to be adapted for in-person programming; which unfortunately means that these AA-BSN issues, challenges, and limitations are also applicable to it. During the Hackathon, additional limitations were considered and raised, including the following.

Many existing resources are region-specific and fragmented, which means the average overworked and exhausted teacher is unlikely to have the time and energy to look for them, let alone combine them (Atussa Payton & Matthews, 2026). Similarly, ECOPs may not have financially-stable jobs to support themselves, with many only able to participate on a voluntary basis; which limits their availability (Galveia, 2026).

In addition, balancing different school calendars, time zones, and meeting agendas across the Atlantic is a logistical nightmare, and different socioeconomic and geopolitical realities may mean some ECOPs simply cannot afford to travel, while others may be unable to access digital resources due to connectivity issues (Galveia, 2026).

Moreover, repeated cancellations or rescheduling due to conflicting schedules may hamper students' subject interest and teachers' trust in the Hub, while insufficient funds reduce the ease of procuring programming materials, whether buying, making, or ordering. Any and all phases and stages can potentially have insufficient inclusion, especially women, BIPOC, and rural voices. The platform itself being virtual also opens up general cybersecurity concerns, and may worsen technological gaps, in regions with unstable or non-existent internet connections being unable to support video calls and participate in online lectures. The transcontinental scale of the AA-BSN also creates safety concerns over non-standardized and potentially insufficient security screening of regional staff and other personnel, who will be working with Atlantic youth.

The sheer cultural and language diversity across the Atlantic also creates language barriers, especially for dialects; where being unable to find fluent speakers and writers to translate and verify materials in some languages, could effectively eliminate entire groups from being able to meaningfully access, interact, and engage with the resources and materials.

V. Plans for promoting the solution depending on the geographical scale, including the resources that could support this approach (e.g. communication, funding, networking, etc.)

After reviewing the AA-BSN report and in-depth discussions at the 2026 AAORIA Forum, we have largely grouped our Blue School Hub promoting plans under four main categories, and recorded good examples for future reference.

1. Communication: Existing platforms can be used to promote the Blue School Hub, including the potential to make this a mandatory resource for all Blue Schools within the AA-BSN (Galveia, 2026). Additional communication materials include both digital (e.g. emails, newsletters, social media, internet and television ads), and physical outlets (e.g. flyers, brochures, posters, newspaper and magazine ads).

2. Funding: Ideally, funding would come from diverse sources, so that the Hub and AA-BSN are not critically reliant on a single source to stay functional. This includes various levels of government, public and private donations, as well as supportive policies, such as municipalities (e.g. Santos, Brazil) that developed Ocean Literacy Laws (AA-BSN, 2023).

3. Network: Existing regional networks should be leveraged (e.g. community events, word of mouth, provincial and continental conferences), and international networks should be explored whenever possible. For example, starting global events during certain time periods, so project continuity will facilitate the lead time that schools and teachers need to join AA-BSN; or participating in international events, to give voice to students from Atlantic countries to talk about global issues, e.g. the AAORIA Forum, UN Ocean Conference, Ocean Literacy Dialogues, AtlantECO, and UNESCO Campus, to name but a few (AA-BSN, 2023).

4. Scaling: Already included in Phase Three of the Blue School Hub Prototype, potential scaling includes AI pairing of ocean professionals and schools based on common interests, as well as of collaborative grant opportunities and partnerships with schools and communities (Atussa Payton & Matthews, 2026). Additional, diversified, flexible scaling will allow participants to maximize synergies, such as establishing education and communication centers in uncovered areas, inviting members of underrepresented groups to become partners; and scaling up coordination efforts from local to continental, to eventually take Blue Schools global (AA-BSN, 2023).

5. Good Examples: In 2021, the Global Ocean Literacy Research Community (OLRC) initiative was developed to identify priorities in ocean literacy research, and help scientifically support public policies with collaborative solutions (AA-BSN, 2023). Then 2022 saw the IOC-UNESCO launching A New Blue Curriculum, a toolkit for policymakers to drive public policies in the educational sector, in favor of Ocean Literacy (AA-BSN, 2023). In addition, Brazil aims to reach all schools in coastal regions, riverside areas, and Indigenous territories in the country; while Canada seeks to transform learning, by making meaningful connections within and between Ocean and climate education, education for sustainable development, global citizenship, and Indigenous education, all at various levels (AA-BSN, 2023).

Thus, in closing: ***“[Cross-Cultural, Collaborative] exchange enriches Educational experiences and helps to foster Global Citizenship. There is no one way to learn about the Ocean, nor is there one single approach to Protecting it. We need to Value, Support, and Learn from each Country’s Educational Pathways, Experiences, and People.”*** — Diz Glithero (AA-BSN National Coordinator, Canada) (AA-BSN, 2023).

VI. References

All-Atlantic Blue Schools Network (AA-BSN) (2023). First edition, Santos, Brazil. E-book.

All-Atlantic Ocean Research Alliance. (n.d.). *All-Atlantic Blue Schools Network — Participating Countries*.

<https://allatlanticblueschools.com/>

Atussa Payton, L., & Matthews, C. (2026, April 14). *Blue School Hub: A Connection, Cooperation, and Action Platform* [AAORIA Intergenerational Hackathon presentation].

Galveia, M. (2026, April 16). *How could Blue Schools, across the Atlantic, transform real-world barriers into opportunities that empower students and communities to understand, value, and actively safeguard the ocean?* [AAORIA Main Forum Hackathon Pitch].

National Marine Educators Association. (n.d.). *Ocean Literacy*. <https://www.marine-ed.org/ocean-literacy/>

VII. Appendix

Below is some miscellaneous supplementary information.

- As of 2026, there are eighteen [18] countries in the AA-BSN. They are, in alphabetical order: Angola, Argentina, Brazil, Canada, Cape Verde, France, Honduras, Ireland, Mexico, Morocco, Namibia, Nigeria, Portugal, São Tomé and Príncipe, South Africa, UK, Uruguay, USA. (<https://allatlanticblueschools.com/>)
- According to the National Marine Educators Association, the Seven Ocean Literacy Principles are:
 - 1. The Earth has one big Ocean with many features.
 - 2. The Ocean and life in the Ocean shape the features of Earth.
 - 3. The Ocean is a major influence on weather and climate.
 - 4. The Ocean made the Earth habitable.
 - 5. The Ocean supports a great diversity of life and ecosystems.
 - 6. The Ocean and humans are inextricably interconnected.
 - 7. The Ocean is largely unexplored.

