

Ocean Literacy within the United Nations Ocean Decade of Ocean Science for Sustainable Development

A Framework for Action

The United Nations
Decade of Ocean Science
for Sustainable Development
(2021-2030)



2021 United Nations Decade
2030 of Ocean Science
for Sustainable Development

Published in 2021 by the United Nations Educational, Scientific and Cultural Organization (UNESCO), 7 place de Fontenoy, 75352 Paris 07 SP, France

© UNESCO 2021



This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) licence (<http://creativecommons.org/licenses/by-sa/3.0/igo/>). The present licence applies exclusively to the text content of this publication and to images whose copyright belongs to UNESCO.

By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (<http://www.unesco.org/open-access/terms-use-ccbysa-en>).

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

UNESCO-IOC. 2021. *Ocean Literacy Framework for the UN Decade of Ocean Science for Sustainable development 2021–2030*. Paris, UNESCO. (IOC Ocean Decade Series, 22.)

{IOC/2021/ODS/22}





Table of contents

/4 Acknowledgements

/5 Foreword

/8 Introduction

Section 1: Ocean Literacy in the Ocean Decade

/10 · Ocean Literacy: an overview

/11 · The importance of Ocean Literacy in the Ocean Decade

/12 · Ocean Decade Challenges and Objectives in terms of their connection with Ocean Literacy

Section 2: Ocean Literacy - Ocean Decade: Actions

/15 · Ocean Literacy initiatives throughout the Ocean Decade – An IOC-led Ocean Literacy Programme

/18 · An Ocean Literacy Framework for Action

/19 · Ocean Literacy Priority Areas

Section 3: Mechanisms for stakeholder engagement

/22 · Ocean Literacy - Ocean Decade Actions and endorsement process

/24 · Stakeholder engagement in the Ocean Decade

/24 · Data, information and digital knowledge management, and interaction with Ocean Literacy

/25 · Collaborations, partnerships and networks

/25 · Monitoring and evaluation



Acknowledgements

Thanks are extended to all lead and contributing authors, reviewers and all those involved in preparing this publication. Their knowledge and vision made it possible to develop a framework for the future of Ocean Literacy in the Decade of Ocean Science for Sustainable Development.

In addition, the authors would like to acknowledge the insightful contributions from the stakeholder consultations involving over 300 participants from across the world, as well as the multi-stakeholder workshop held in Venice in December 2019. Their contributions provided important and invaluable inputs to the future priorities for the Framework on Ocean Literacy.

Special thanks are extended to the Government of Sweden for its generous financial support.

The support and tireless engagement of hundreds of individuals in the co-creation of this publication is gratefully acknowledged by IOC-UNESCO.

Foreword

In the words of renowned science-fiction writer, Sir Arthur C. Clarke 'How inappropriate to call this planet Earth, when it is quite clearly Ocean'. However, most people are largely unaware of the extent to which their life depends on the ocean and how the ocean remains mainly unexplored and not fully understood.

In 2017, the United Nations General Assembly declared the Decade of Ocean Science for Sustainable Development (2021-2030), the Ocean Decade. As a result, 193 countries recognized the key role of ocean science in finding innovative ocean-based solutions for the major global challenges of our time. This new level of responsibility requires a paradigm shift in the research and application of ocean science. The Ocean Decade creates the conditions for such a revolution in its capacity as a global platform for targeted and systematic knowledge co-creation, with a view to developing solutions for a more sustainable planet that connects people and ocean.

Wide social participation is crucial for the success of this historic endeavour. Everyone must come together to identify knowledge gaps, produce ocean knowledge that drives much-needed solutions and walk the talk by turning the knowledge generated into real action. For this to happen, it is essential to increase awareness of the critical role the ocean plays as the life support system of the planet and humankind. This means that people everywhere need to become more ocean literate. Ocean literacy is not just a measure of what people know, but also a reflection of the values, attitudes and behaviours towards the ocean and its tangible and intangible resources. Striving for greater ocean literacy can promote the vital behavioural change that drives the Ocean Decade. It will ensure that citizens feel compelled and empowered to promote and undertake actions to address the most pressing threats to ocean health.

The Ocean Decade has just begun. Its ambitious goals are clear, but the complexity of this endeavour (including ocean literacy) should not be underestimated. This is why the Ocean Literacy Framework of Action for the Ocean Decade was created. It offers ways of improving ocean literacy, as well as inviting global ocean literacy experts and practitioners to formulate actions targeting the different priority areas. It is hoped that this document inspires significant ocean actors to help bridge the gaps and engage society and communities into inclusive and constructive dialogues on the ocean. The overall goal is to contribute to the Ocean Decade aim: to collectively produce new knowledge and transform this knowledge into actions that contribute to ocean sustainability.

At the same time, ocean literacy goes beyond improving ocean science and knowledge. The ocean is a source of inspiration, recreation and discovery, as well as an intrinsic part of many cultures. This Framework of Action also invites actors to develop initiatives that inspire humanity to care more about the ocean and become faithful ocean citizens.

Thanks are extended to all the experts, institutions and organizations that contributed valuable insights, knowledge and ideas during the development of this Framework of Action. The aim is to inspire readers to take an active role, strengthen or create partnerships and networks, share ideas and experiences and develop new approaches and initiatives so that ocean literacy can pave the way towards the ocean we want by 2030.



Dr. Vladimir Ryabinin

Executive Secretary of the Intergovernmental
Oceanographic Commission and Assistant
Director General of UNESCO

'The Anthropocene is changing our relationship with the planet and we must determine how to assume this responsibility'

(Nobel Laureate Elinor Ostrom, 1933-2012)



Introduction

The United Nations has declared that the Ocean Decade of Ocean Science for Sustainable Development (the Ocean Decade) will take place from 2021 to 2030. The vision of the Ocean Decade is 'the science we need for the ocean we want', and it provides a common framework for diverse stakeholders to generate and use ocean knowledge towards achieving the 2030 Agenda for Sustainable Development. To that end, the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (IOC-UNESCO) was mandated by the United Nations General Assembly to develop an Implementation Plan¹, in collaboration with partners, to serve as a roadmap to mobilize the resources and technological innovation needed to build capacity, develop scientific knowledge, create and share infrastructure and foster partnerships for a healthy ocean. In so doing, the Ocean Decade will transition us from the 'ocean we have' to the 'ocean we want'. The latter will support a sustainable, equitable and healthy future for all. The Implementation Plan, which is the culmination of a highly participatory three-year process, has now been finalized and is a non-prescriptive, strategic framework for the roll-out of the Ocean Decade that details its objectives, challenges, actions and mechanisms for implementation.

The enhancement of Ocean Literacy (OL) is critical to the success of the Ocean Decade. Ocean Literacy refers to the understanding of the ocean's influence on us and our influence on the ocean. Many people are unaware that the ocean is intrinsically linked to major global issues such as climate change and food security, human health and the global economy. The ocean also represents a range of social values for various cultures, as people from all over the world are able to recognize and relate to the ocean in different ways. To achieve sustainable development and well-being across the globe, everyone needs to understand our dependence on the ocean, and how we can contribute to its sustainability. In this context, Ocean Literacy has a twofold goal: to learn more about the world's ocean, and to contribute to the co-design and co-delivery of solutions to the problems and threats it faces. In this way, Ocean Literacy becomes more than a tool for capacity development and knowledge generation. It also represents an ambitious approach to promoting the common understanding of global citizens as stakeholders, as well as furthering societies' relationships to the ocean. Understanding the value of the ocean can enhance protection, conservation and sustainable use of the ocean and its resources, as well as contributing to the achievement of the Sustainable Development Goals.

Throughout the Ocean Decade planning process, the importance of Ocean Literacy was reinforced during Global and Regional Planning Workshops (IOC-UNESCO, 2020). As a result, Ocean Literacy features prominently in the Implementation Plan and is reflected as one of the seven Ocean Decade Outcomes, 'An engaging and inspiring ocean'. It is also explicitly referenced in the following two of the Ocean Decade Challenges that represent the most pressing priorities for the Decade:

- **Challenge 9:** Ensure comprehensive capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science and for all stakeholders, and
- **Challenge 10:** Ensure that the multiple values and services of the ocean for human well-being, culture and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.

Ocean Literacy is also relevant to the remaining eight Ocean Decade Challenges, as it is a tool that encompasses cross-sectoral, inter- and transdisciplinary approaches that can empower governments, businesses, the media, educators, civil society and the general public to understand the key role the ocean plays within their lives. Ocean Literacy can therefore create an environment conducive to achieving the ambitions of the Ocean Decade, including helping to ignite behaviour change, enhance collaborations, mobilize resources, promote sound policy-making, spark creativity and innovation and increase investment in ocean science.

Ocean Literacy is radically evolving from its application in formal educational contexts into an approach for society as a whole that catalyses actions to protect, conserve and sustainably use the ocean. As such, Ocean Literacy initiatives can be implemented in formal or non-formal educational settings and can be part of school learning, citizen science, corporate training, public-awareness campaigns, the science-policy interface and so forth. Throughout the Ocean Decade, Ocean Literacy initiatives will be developed and implemented by actors including governments, United Nations entities, intergovernmental organizations (IGOs), international and regional organizations, research institutes, businesses, foundations, non-governmental organizations (NGOs), schools, educators, community groups and individuals.

To date, a significant number of Ocean Literacy initiatives have been developed and implemented in every corner of the world. They range from educational programmes focusing on ocean issues (Blue Schools² in Portugal or Ocean School³ in Canada), to Ocean Literacy centres promoting hands-on activities (see the Marine Educational Centre⁴ in Malmö) and company-funded education programmes for students (see AXA XL Ocean Education programme⁵), as well as public-awareness campaigns (see the European Union's Sea Change project⁶) and immersive learning programmes at aquariums. The Ocean Decade provides a powerful and unique opportunity to catalyse and scale up these and other Ocean Literacy programmes at the global level.

1 <https://oceanexpert.org/document/27347>

2 <https://escolaazul.pt/en/escola-azul/o-que-e>

3 <https://oceanschool.nfb.ca>

4 <https://en.smkc.se>

5 <https://encounteredu.com/partners/axa-ocean-education>

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

As outlined in the Implementation Plan, the vision for Ocean Literacy throughout the Ocean Decade is 'to enable and scale up action in all sectors'. This Ocean Literacy Framework for Action was created to complement the Implementation Plan and provide a succinct, non-prescriptive framework to promote the development of global, regional, national and local Ocean Literacy Actions by diverse actors around the world as part of the Ocean Decade. This Framework was developed through a series of stakeholder consultations, including an open international questionnaire with over 300 respondents, a participatory multi-stakeholder workshop held in Venice in December 2019, a bibliographical review and peer review by international experts.

This document is divided into three sections. The first one describes Ocean Literacy and its potential contribution to the Ocean Decade. The second one presents a framework for the Decade Actions on Ocean Literacy. The third section outlines the participation opportunities for potential partners and stakeholders, as well as the linkages between existing Ocean Literacy tools and participation mechanisms for Ocean Decade stakeholders.



© Billion Photos | Via Canva



© Rawpixel.com | Shutterstock.com



Section 1

Ocean Literacy in the Ocean Decade

Ocean Literacy: an Overview

Ocean Literacy has historically been described as 'the understanding of the ocean's influence on us and our influence on the ocean' and defined by seven principles (Cava et al., 2005):

- Principle 1:** Earth has one big ocean with many features
- Principle 2:** The ocean and life in the ocean shape the features of the earth
- Principle 3:** The ocean is a major influence on weather and climate
- Principle 4:** The ocean makes Earth habitable
- Principle 5:** The ocean supports a great diversity of life and ecosystems
- Principle 6:** The ocean and humans are inextricably interconnected
- Principle 7:** The ocean is largely unexplored.

To read a detailed description of the Ocean Literacy principles and hear different ocean champions and experts highlighting their main messages, check out the Ocean Literacy portal:
<https://oceanliteracy.unesco.org/principles/>.

It is worth noting that Ocean Literacy is an evolving concept, with much to discuss and debate through academic research, as well as practical lessons learned through implementation.

Ocean Literacy can be adapted to cultural, linguistic and geographical contexts and can be referred to as marine education, ocean education, marine awareness, marine consciousness and marine culture. As noted above, Ocean Literacy can take many forms, including:

- Design and development of national Ocean Literacy strategies to inform educational policy
- Training of formal and non-formal educators including pre-service teacher educators and educators at schools, universities, education centres and aquariums
- Student education programmes and training, including students enrolled in early childhood education; special needs education; primary and secondary education; and vocational, undergraduate and graduate education
- Knowledge exchange and transfer between scientists and members of society, including indigenous and local communities, educational organizations, governments and the private sector
- Training programmes on the Blue Economy and/or ocean sustainability for government, business and civil society leaders, as well as members of the media
- Youth empowerment programmes
- Public-awareness campaigns.

These and other types of Ocean Literacy initiatives can specifically contribute to capacity development objectives and, more broadly, to creating a more informed society. To support these and other Ocean Literacy initiatives, IOC-UNESCO developed the Ocean Literacy Toolkit for Educators⁷, the Ocean Literacy Portal⁸, the Social Hub of Ocean Action and Literacy (SHOAL)⁹ and Ocean Literacy Training Courses¹⁰ to help transform ocean knowledge into actions that promote the protection, conservation and sustainable use of the ocean and its resources. The IOC-UNESCO Ocean Literacy tools are available for all stakeholders to use throughout the Ocean Decade to develop and implement Ocean Literacy actions, as well as to support capacity development and the sharing of best practices.

7 <https://unesdoc.unesco.org/ark:/48223/pf0000260721>
8 <http://oceanliteracy.unesco.org/>
9 <http://shoal-app.com/>
10 <https://oceanliteracy.unesco.org/training/>

The importance of Ocean Literacy in the Ocean Decade

Ocean Literacy is a powerful tool to increase awareness and understanding of the critical role and value of the ocean in our lives. Even more important is the potential for Ocean Literacy to impact all stakeholders within a Theory of Change model, from awareness and understanding to attitude changes and ultimately desired behaviour change.

Figure 1: Theory of Change

What is the Theory of Change?

“The Theory of Change is a method that organizations and groups use to think critically about the required means to bring a desired social change. It is a process designed to depict how a complex change initiative (e.g. a change of behaviour towards the ocean) will unfold over time. It creates an illustration of all the various moving parts that must operate in accordance to bring a desired outcome” (Adapted from UN-Habitat, 2017).

Source: UN-Habitat, 2017.

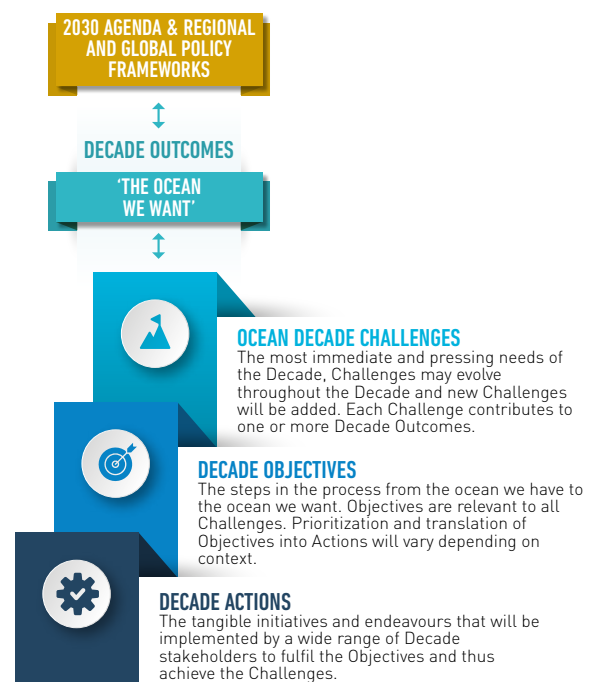
Research has shown that Ocean Literacy can effectively drive these shifts when tailored information and content are delivered to targeted stakeholders. These research findings help to validate the critical importance of Ocean Literacy and the value of its contributions to the success of the Ocean Decade. This value cannot be overstated.

The Ocean Decade will support the development of Ocean Literacy - Ocean Decade Actions that will be identified, implemented and resourced by global partners as part of the Ocean Decade Action Framework. These Actions will stimulate innovation; increase knowledge; communicate and promote the role of ocean science for sustainable development; and increase access to Ocean Literacy approaches across different stakeholder groups. Through these Actions, Ocean Literacy will also play an essential role in achieving desired behaviour changes that are fundamental to the overall success of the Ocean Decade, including: promoting sound public educational policy; fostering more responsible behaviours; increasing investment in ocean science; encouraging more ocean-aware corporate practices; and encouraging young people to start a career in the sustainable ocean economy, ocean science, marine policy or ocean conservation/management.

This Ocean Literacy Framework for Action (the Framework) builds on the Ocean Decade Action Framework developed in the Implementation Plan to provide all stakeholders with further insights into how Ocean Literacy supports the Ocean Decade, as well as how Ocean Literacy Actions can be designed to contribute to the Ocean Decade Challenges and Objectives. The Framework is an invitation for all stakeholders to develop Ocean Decade Actions and any collaborations, partnerships and networks needed to: expand access; to showcase and share Ocean Literacy tools; and to increase the research, monitoring and evaluation of the impacts of Ocean Literacy.

Figure 2 illustrates the hierarchy of actions, objectives and challenges through the Ocean Decade.

Figure 2: Ocean Decade Action Framework.



Source: Implementation Plan. © UNESCO.



© Dapa Images | Via Canva

Ocean Decade Challenges and Objectives in terms of their connection with Ocean Literacy

The Implementation Plan sets forth ten Ocean Decade Challenges that represent the main priorities of the ten-year period. Overcoming these challenges requires collaborative and collective action from stakeholders to fulfil the objectives of the 2030 Agenda and other policy frameworks. The Ocean Decade Challenges are divided into three main groups: knowledge and solutions challenges, essential infrastructure challenges and foundational challenges.

Knowledge and Solutions Challenges

- **Challenge 1:** *Understand and map land and sea-based sources of pollutants and contaminants and their potential impacts on human health and ocean ecosystems and develop solutions to remove or mitigate them.*
- **Challenge 2:** *Understand the effects of multiple stressors on ocean ecosystems, and develop solutions to monitor, protect, manage and restore ecosystems and their biodiversity under changing environmental, social and climate conditions.*
- **Challenge 3:** *Generate knowledge, support innovation, and develop solutions to optimise the role of the ocean in sustainably feeding the world's population under changing environmental, social and climate conditions.*
- **Challenge 4:** *Generate knowledge, support innovation, and develop solutions for equitable and sustainable development of the ocean economy under changing environmental, social and climate conditions.*
- **Challenge 5:** *Enhance understanding of the ocean-climate nexus and generate knowledge and solutions to mitigate, adapt and build resilience to the effects of climate change across all geographies and at all scales, and to improve services including predictions for the ocean, climate and weather.*

Essential Infrastructure Challenges

- **Challenge 6:** *Enhance multi-hazard early warning services for all geophysical, ecological, biological, weather, climate and anthropogenic related ocean and coastal hazards, and mainstream community preparedness and resilience.*
- **Challenge 7:** *Ensure a sustainable ocean observing system across all ocean basins that delivers accessible, timely, and actionable data and information to all users.*
- **Challenge 8:** *Through multi-stakeholder collaboration, develop a comprehensive digital representation of the ocean, including a dynamic ocean map, which provides free and open access for exploring, discovering and visualizing past, current and future ocean conditions in a manner relevant to diverse stakeholders.*

Foundational Challenges

- **Challenge 9:** *Ensure comprehensive capacity development and equitable access to data, information, knowledge and technology across all aspects of ocean science and for all stakeholders.*
- **Challenge 10:** *Ensure that the multiple values and services of the ocean for human wellbeing, culture and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.*

Ocean Literacy efforts can contribute to progress in all of the Ocean Decade Challenges by encouraging an informed society that values the ocean and takes action to overcome such challenges. This includes but is not limited to stimulating investment in ocean science by governments, foundations or the private sector; promoting sound policies that reflect the science; and increasing the number of partnerships for co-creating Ocean Decade Actions. Ocean Literacy is also critical to the dissemination of research findings relating to Ocean Decade Actions, whether broadly to the general public as part of public-awareness campaigns, more specifically as lesson plans in formal education for students, or as part of the science-policy interface to engage policy-makers. Ocean Literacy actions are inextricably linked to foundational challenges 9 and 10, where the full range of efforts (including above-mentioned formal and non-formal approaches) can help to deliver measurable results. Below is a non-exhaustive list of Ocean Literacy actions that can support the achievement of Ocean Decade ambitions.

The Implementation Plan also outlines a multi-step, iterative and cyclical process to guide the development and delivery of Actions to help meet the Ocean Decade Challenges. This process is driven by three interconnected objectives with supporting sub-objectives:

- **Objective 1:** Identify required knowledge for sustainable development, and increase the capacity of ocean science to deliver necessary ocean data and information.
- **Objective 2:** Build capacity and generate comprehensive knowledge and understanding of the ocean, including human interactions and interactions with the atmosphere, cryosphere and the land-sea interface.
- **Objective 3:** Increase the use of ocean knowledge and understanding, and develop capacity to contribute to sustainable development solutions.





© Stijn Pijkstral Shutterstock.com

Meeting these objectives requires a significant expansion of ocean science capacity as an integral part of every step, to ensure that no one is left behind during Ocean Decade implementation. Ocean Literacy is essential to meeting all three objectives, to help facilitate the co-design of ocean science, the co-production of knowledge and the co-delivery of solutions in support of decision-making, policy, management and innovation. Ocean Literacy also helps to expand access to ocean knowledge, technology and services that provide a common understanding of the ocean's value for human well-being and sustainable development. For example:

- By valuing local knowledge and collaborating with local and indigenous communities, Ocean Literacy directly contributes to Ocean Decade sub-objective 1.4: Develop mechanisms that support community-led science initiatives and the recognition and inclusion of local and indigenous knowledge as a fundamental source of knowledge.

- By valuing and showcasing local and indigenous knowledge, Ocean Literacy contributes to Ocean Decade sub-objective 2.3: Innovate and expand the use of historical ocean knowledge to support sustainable development solutions.

- By engaging and connecting multiple stakeholders, Ocean Literacy efforts contribute to Ocean Decade sub-objective 2.5: Expand cooperation in ocean-related education, training, capacity development and transfer of marine technology.

- By valuing and fostering citizen science initiatives, Ocean Literacy contributes to Ocean Decade sub-objective 2.1, which includes furthering understanding on human interactions with ocean components.

Ocean Literacy plays a particularly essential role in Ocean Decade Objective 3 and its sub-objectives, which can further facilitate the progress of Objective 1 and Objective 2. The sub-objectives for Ocean Decade Objective 3 are as follows:

3.1: Broadly communicate and promote the role of ocean science for sustainable development across diverse stakeholder groups, including through formal and informal education and an expansion of Ocean Literacy approaches across stakeholder groups.

3.2: Develop interoperable, open-access platforms and applications to share data, information and knowledge in a format that connects knowledge generators and users.

3.3: Undertake interdisciplinary, multi-stakeholder co-design and co-delivery of ocean solutions including policy; decision-making; integrated ocean management frameworks; applications and services; and technology and innovation.

3.4: Expand and enhance spatial planning processes to contribute to sustainable development across regions and scales.

3.5: Expand and enhance inclusive and integrated management frameworks and tools, including nature-based solutions, to maintain ecosystem functioning, provide for adaptive processes under changing ocean conditions and incorporate community values and needs.

3.6: Expand and enhance services, applications and management tools for building and mainstreaming preparedness and adaptive responses to multiple stressors and hazards.

3.7: Expand and enhance tools, applications and services that integrate and facilitate use of data, information and knowledge on ocean-related natural capital, including the social, cultural, environmental and economic characteristics of the ocean.

For example, Ocean Literacy initiatives can contribute to the delivery of sub-objectives in the following ways:

- Developing interactive Ocean Literacy interventions such as art exhibitions or film screenings that increase awareness of the ocean among a large group of stakeholders: contributes to Ocean Decade sub-objective 3.1.

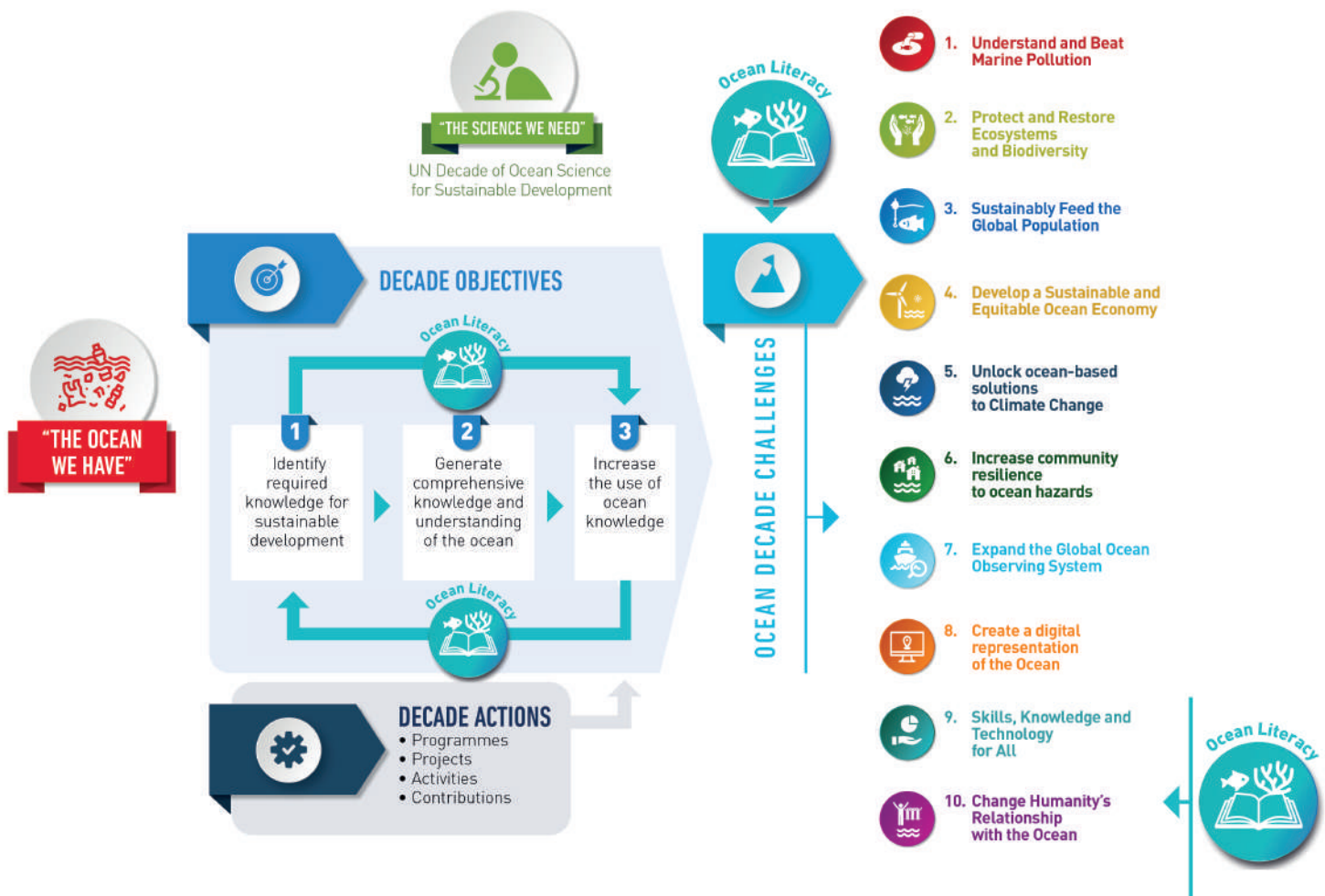
- Support for Ocean Literacy Actions from multiple stakeholders, including professionals involved in waste management, marine spatial planning, urban planning, city councils, policy-makers and so forth: contributes to Ocean Decade sub-objective 3.4.

- Including Ocean Literacy in educational curriculums at different institutions such as primary schools, secondary schools and universities: contributes to Ocean Decade sub-objective 3.1.

- Training Blue Economy and other professionals such as media, journalism and communication specialists: contributes to Ocean Decade sub-objective 3.5.

Figure 3 depicts how the Ocean Decade objectives, actions, challenges and outcomes are organized.

Figure 3: Contribution of Ocean Literacy to the Ocean Decade Objectives, Actions, Challenges and Outcomes



Source: Adapted from the Implementation Plan. © UNESCO.



© Joe Benning | Shutterstock.com

Section 2

Ocean Literacy - Ocean Decade: Actions

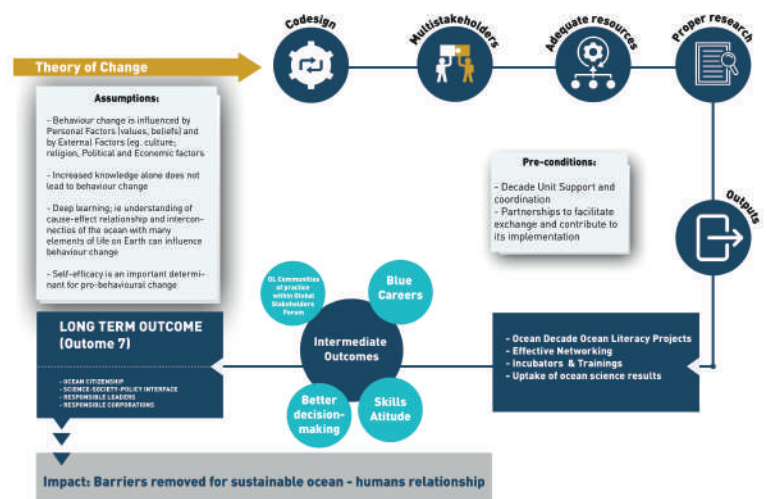
Ocean Literacy initiatives throughout the Ocean Decade – An IOC-led Ocean Literacy Programme

The Ocean Decade seeks to promote ways for all stakeholders to contribute to Ocean Literacy. The ultimate goal is to fully implement Outcome 7: An inspiring and engaging ocean where society understands and values the ocean in relation to human well-being and sustainable development. Moreover, the Ocean Decade aims to fully tackle Challenge 10: Ensure that the multiple values and services of the ocean for human well-being, culture and sustainable development are widely understood, and to identify and overcome barriers to behaviour change required for a step change in humanity’s relationship with the ocean, as well as contributing to numerous other Ocean Decade Challenges. Implementing Outcome 7 and tackling Challenge 10 involve formulating a global Ocean Decade - Ocean Literacy Programme to define the main components of action from research to networking and capacity development.

Using the Theory of Change, the Programme will define the main assumptions, pre-conditions, intermediate outcomes and final outcome. The Programme will be coordinated by IOC-UNESCO and implemented in partnership with several stakeholder groups, including academia, IGOs and NGOs, the private sector and educational institutions. Other Ocean Literacy programmes are expected to emerge over the course of the Decade. In addition, smaller-scale projects and activities will be developed as part of the IOC-led programme, other programmes or as stand-alone initiatives. All these endeavours will come together to ensure optimal synergies and collaboration under the umbrella of a broad community of practice focusing on ocean literacy that will be convened and coordinated by IOC.

Figure 4 illustrates how the Theory of Change can support the implementation of Ocean Literacy initiatives in the Ocean Decade context.

Figure 4: Theory of Change adapted to Ocean Literacy throughout the Ocean Decade

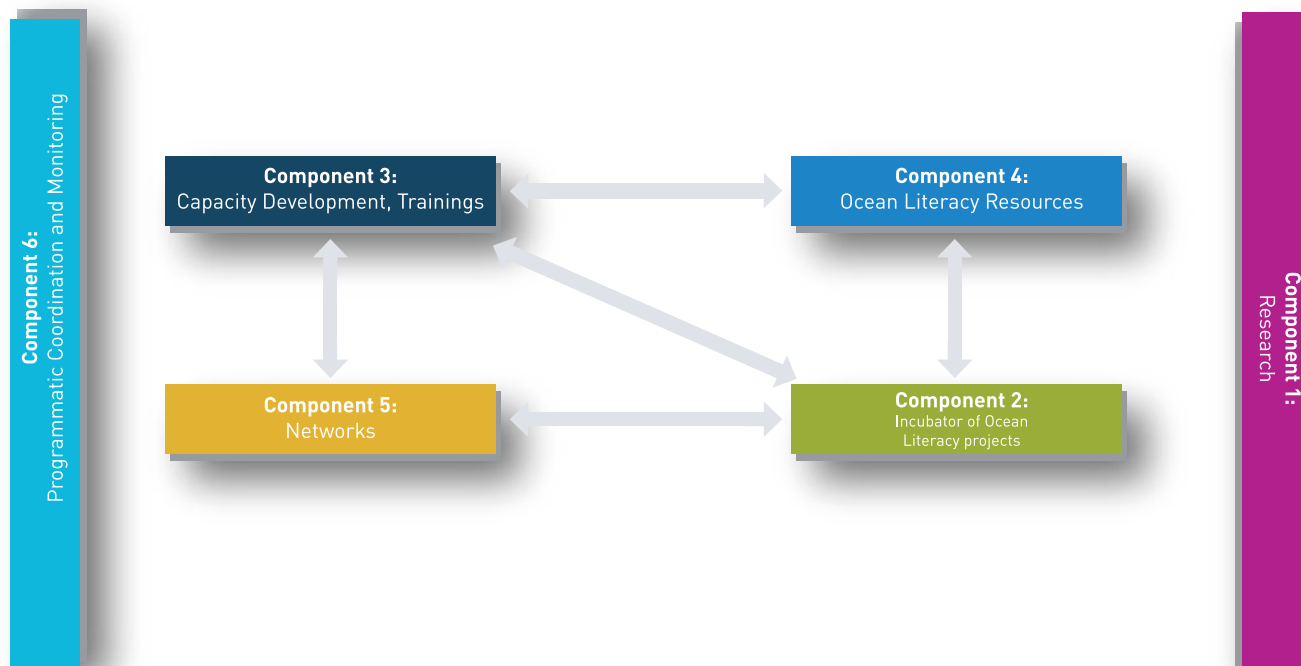


Source: 2021 © UNESCO.

To facilitate the design and development of Ocean Literacy - Ocean Decade Actions across cultural contexts, the main components of an Ocean Decade Ocean Literacy Programme are described in Figure 6. They represent the areas that need further development to promote a better understanding of the Ocean Literacy concept and approaches, in addition to finding ways to measure the impacts of Ocean Literacy activities. One important area is the development of proper research into the Ocean Literacy concept, its main areas of intervention and the evaluation of their impacts. The components can also help identify ways to strengthen connections among existing Ocean Literacy networks and promote the creation of new ones, while facilitating the development of relevant Ocean Decade projects. An important part of the Ocean Decade Ocean Literacy Programme is the idea of incubation, which provides a space for interested parties to seek support and assistance from the international Ocean Literacy community.

The proposed Ocean Decade - Ocean Literacy Programme has six components, including research capacity development, promotion of ideas, the exchange of good practices and the enhancement of OL networks. Components 1 and 6 support components 2, 3, 4 and 5, as illustrated in Figure 5.

Figure 5: Components of the Ocean Literacy Programme



Source: 2021 © UNESCO.

Figure 6: Description of components

Description of Components:	
Component 1: Research	Component 1 (C1) aims to provide a baseline assessment and develop standards, indicators and methods for measuring the impact of Ocean Literacy through the Ocean Decade to feed into the Ocean Decade Monitoring and Evaluation Framework. C1 is focused on knowledge, communication and action. Research also aims to understand the largest gaps in OL worldwide, including Ocean Decade Challenges. The data produced in this component can support other components and OL projects, e.g. the OL Incubator.

Component 2: Incubator of Ocean Literacy Projects	Component 2 (C2) is a space to promote, support and facilitate international OL research collaborations, and co-identify research priorities and areas of intervention. It is ideal for co-developing projects and creating a central database of OL research. The Incubator also provides proactive financial support to bring partners to scope and develop OL Ocean Decade Actions under the Ocean Decade OL Programme, e.g. Ocean Decade projects and activities. C2 also aims to provide seed funding for priority Ocean Decade Actions to be included in the Ocean Decade OL Programme.
--	---

Component 3: Capacity Development and Trainings	Component 3 (C3) aims to develop OL training courses for different target groups including educators, media, government, the private sector, civil society, NGOs and diplomacy professionals. Training can also be adapted to geographic regions including SIDS, LLDCs and LDCs, among many others.
Component 4: Ocean Literacy Resources	Component 4 (C4) aims to amplify and improve the accessibility of OL educational resources and programmes promoting the use of new technologies such as Artificial Intelligence, Augmented Reality, Virtual Reality, etc.

**Component 5:
Networks**

Component 5 (C5) aims to:

- a. Increase collaborations at the regional level (by supporting the creation of new OL networks, but also strengthening the exchange among existing ones).
- b. Support collaborative alliances of national OL strategies.
- c. Create a Global Network of Blue Schools.
- d. Develop a Blue Cities Network (to be linked with existing UNESCO Cities Networks and initiatives, e.g. learning cities).
- e. Develop a network of OL centres, including aquariums.
- f. Connect OL networks and partners to the Ocean Decade Global Stakeholder Forum.

**Component 6:
Programmatic
Coordination
and Monitoring**

Component 6 (C6) aims mainly to:

- a. Monitor and report OL projects carried out under the Programme
- b. Provide resource mobilization for Ocean Decade OL Programme expansion through new projects and activities.
- c. Strengthen partnership meetings for OL project leaders and programmes.
- d. Support communications and outreach activities to engage new partners in the Ocean Decade OL Programme and provide visibility of achievements of OL projects and programmes.
- e. Coordinate and create synergies between projects developed under the Ocean Decade OL Programme.



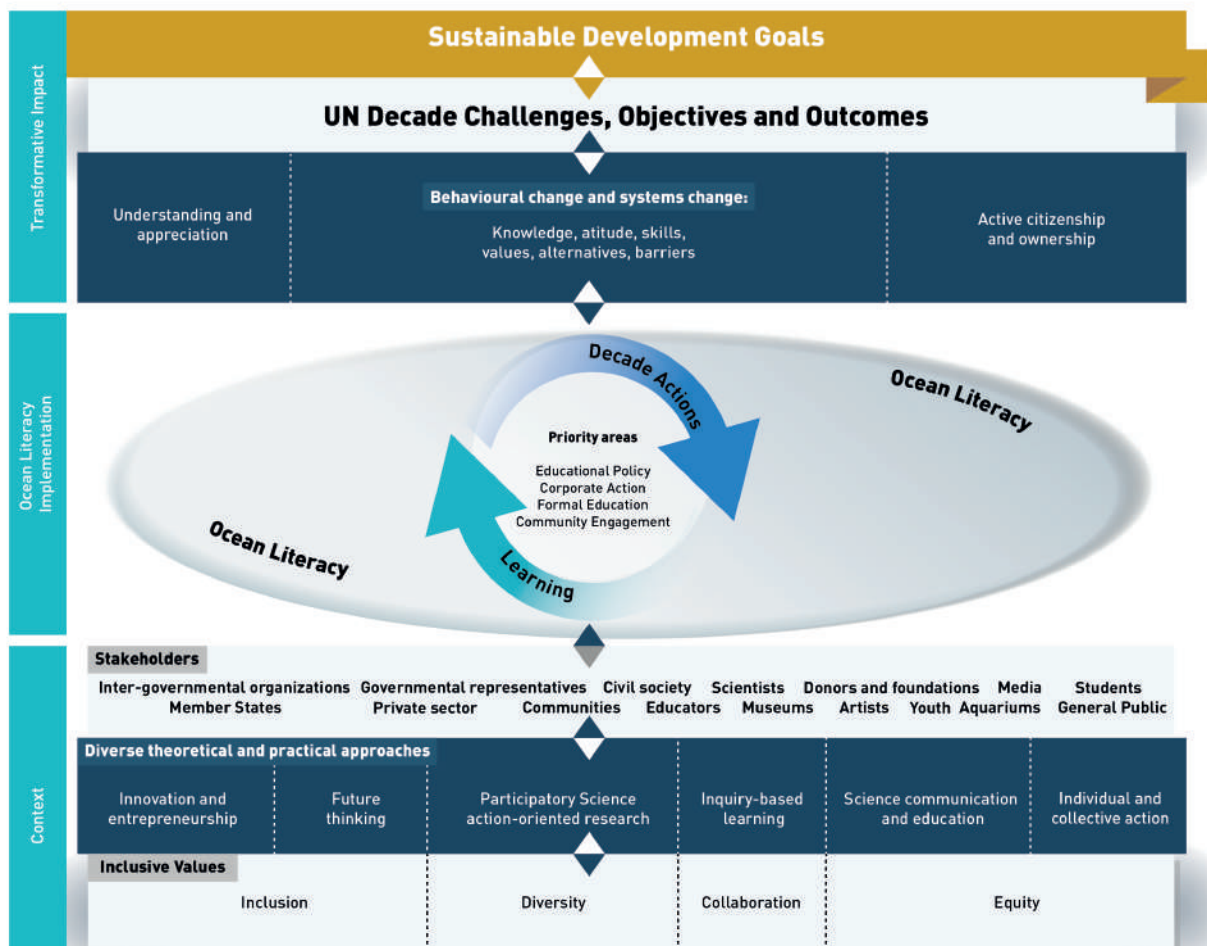
An Ocean Literacy Framework for Action

Throughout the Decade, in addition to the IOC-led Ocean Literacy programme, other Ocean Literacy Decade Actions will emerge at the programme, project or activity level. Although such initiatives will be part of a community of practice convened by IOC, they will be co-designed, co-delivered and resourced by a wide range of partners. To help promote and guide the co-design and co-delivery of local, national, regional or global Ocean Literacy initiatives within the Ocean Decade (including the Theory of Change and the previously indicated components), the following Framework was developed through an extensive stakeholder consultation process that included an open international questionnaire with more than 300 respondents, a participatory multi-stakeholder workshop held in Venice in December 2019, bibliographical review and peer review by international experts. This consultative process led to the development of the framework described below.

The framework illustrated in Figure 7 has three sub-components: the context; Ocean Literacy implementation (focused on the four priority areas of educational policy, corporate action, formal education and community engagement); and transformative impact.

- Context:** as previously mentioned, Ocean Literacy aims not only to increase understanding of the ocean's influence on people, and people's influence on the ocean, but also to encourage everyone's active participation in the necessary system change. In the context of the Ocean Decade, Ocean Literacy activities (and the the four priority areas of policy, formal education, corporate action and community engagement) will propose an inclusive science narrative. Through this, every sector of society will be invited to identify knowledge gaps, produce new knowledge and increase the uptake and use of that knowledge to design innovative solutions for ocean issues. For this reason, this framework is based on inclusive values and diverse theoretical and practical approaches, all aimed at achieving: enhanced collaboration among sectors, the introduction of innovative educational approaches and the transformation of ocean knowledge into action.
- Ocean Literacy Implementation:** together with the four identified priority areas of policy, formal education, corporate action and community engagement, this framework identifies learning needs and opportunities for each of the Ocean Decade elements (challenges, objectives and outcomes). The framework also considers that Ocean Literacy ultimately aims to transform understanding of the ocean into tangible action for sustainability.

Figure 7: Ocean Literacy Framework for Action



The framework therefore recognizes that Ocean Literacy can directly or indirectly help to achieve Ocean Decade objectives.

Ocean Literacy Priority Areas

The four Priority Areas are strongly connected to the Ocean Decade strategic framework. In particular, the Ocean Literacy initiatives and activities developed throughout the Ocean Decade will support the entire value chain, and the three Ocean Decade objectives. Engaging all sectors of society from educational policy formulation to communities and corporations will support the participatory identification of the knowledge required for sustainable development. Furthermore, the Ocean Decade aims to promote the idea of participatory and transdisciplinary science, and through Ocean Literacy actions and activities all stakeholders will be empowered not only with the capacity to better understand ocean processes and characteristics, but also to become active members of an expanded research community. Finally, a society that is more ocean literate will be able to better understand the value of ocean knowledge and how to incorporate it to promote actions and sustainable ocean practices.

Mainstreaming Ocean Literacy in Education Policy Formulation:

Policies govern and help shape the operation of formal and non-formal education systems globally. While the adoption of overall policies regarding environmental education and education for sustainable development is increasing worldwide, in many cases there remains a critical need to further strengthen specific ocean issues within these agendas, by considering the importance to inform policy-makers and develop further policies to advance Ocean Literacy. Systemic change in terms of Ocean Literacy will require relevant, context-specific and coherent policies designed by ministries and local governments, supported by cross-sectoral and multi-stakeholder engagement.

Enhancing Formal Education of Ocean Literacy:

Formal education institutions at every level from primary to secondary are key to help shape knowledge, attitudes, behaviours and actions towards ocean sustainability. Too often the ideas and knowledge of society around the ocean and sustainability issues in general are conceived in silos. Ocean Literacy, applied through a multi-disciplinary and cross-cutting approach, can be incorporated into most classroom courses and subjects, thus supporting ocean stewardship and regular subject delivery. Additionally, by fostering context-specific and hands-on learning and inquiry-based learning, Ocean Literacy can provide opportunities to enhance critical thinking, problem-solving and leadership skills, among other significant educational outcomes.

Mobilizing Corporate Action around Ocean Literacy:

The private sector has a powerful role to play in achieving the ambitions of the Ocean Decade and more broadly the sustainable development agenda. Ocean Literacy for business means being able to understand the connections between the ocean and various economic sectors, and to transform this understanding into taking responsible actions. Ocean Literacy can support the understanding within the private sector of the ocean's role for a sustainable ocean economy, as well as a source of solutions for urgent issues such as the climate crisis. Both large and small businesses shape and influence environmental and socio-economic policies, investments, actions and attitudes through the implementation of their go-to-market strategies and resultant business practices, investments, products and services, advocacy, marketing communications and philanthropy. Mobilizing corporate action also reaches a broad range of stakeholders across the value chain, including, but not limited to, employees, investors, suppliers, vendors and customers.

Increasing Community Engagement on Ocean Literacy:

Citizens and communities around the world, whether urban or rural, coastal or landlocked, have a key role to play in enhancing Ocean Literacy and increasing ocean sustainability. Non-formal education, commonly referred to as community education or lifelong education, refers to all education efforts occurring outside the formal school system, including aquariums, art galleries and museums, to name only a few. It includes a diverse range of approaches, ranging from home-based learning to community initiatives, and creates opportunities to engage a wide range of stakeholders, including but not limited to fishers, women, youth, disadvantaged and marginalized groups, media and the general public, among many others. Through this, stakeholders and communities can be empowered to make informed and ocean-literate behavioural choices in their daily lives, for example as tourists, consumers and local custodians of the marine environment.

- **Transformative impact:** Ultimately, this framework aims to support all elements of the Ocean Decade by supporting behaviour change among all stakeholders. According to many studies, making stakeholders aware of their impacts on the environment rarely leads to behavioural change (McHugh, Domegan & Santoro, 2016). Instead, collective and individual actions (Jagers et al., 2020) can be encouraged by recognizing everyone's capacity to help identify and implement solutions. The Ocean Literacy Framework aims to highlight individual and sector-wide behaviour options to reduce the human impacts on the marine environment, as well as using targeted Ocean Literacy initiatives to encourage an active-citizen mindset among those tackling them. Collectively providing ocean solutions will contribute to system change and ultimately provide an opportunity to enable the Sustainable Development Goals to be achieved.

The priority areas identify the main focus of the initiatives and activities to be developed during the Ocean Decade. The targets listed below are not intended to be a prescriptive list but rather to identify the potential long-term objectives of the actions to be developed. All of the items described in the following table are linked to the Ocean Decade OL Programme Components.



© AlexRaths | Via Getty Images.com

Ocean Literacy Priority Areas			
Priority Area	Targets	Potential Ocean Decade Actions	IOC-led Ocean Literacy Programme Components (Components 1 and 6 are cross-cutting)
Mainstreaming Ocean Literacy in Education Policy Formulation	<ul style="list-style-type: none"> By 2025, 70% of Member States have a National Ocean Literacy Strategy and integrate Ocean Literacy into the curriculum and education policies of formal education systems. By 2025, governmental representatives and officials possess the knowledge capacity, skills and commitment to incorporate ocean sustainability into local, national and regional policies. By 2028, Ocean Literacy policies are adequately monitored and measured. By 2025, Member States increase annual spend on Ocean Literacy. 	<ul style="list-style-type: none"> Establish a National Ocean Literacy Strategy and Ocean Literacy coordination mechanism, and designate a National Focal Point for Ocean Literacy. Include Ocean Literacy in National Curriculum Standards in order to embed ocean education in primary and secondary schools. Offer/organize training programmes for government officials on ocean sustainability and/or Blue Economy opportunities. Boost investments in Ocean Literacy schools and/or Ocean Literacy programmes. 	Component 5 Component 3
Enhancing Formal Education	<ul style="list-style-type: none"> By 2025, schools across the world have access to high-quality Ocean Literacy educational resources in their own language. By 2030, 70% of all formal educators receive training and pedagogical tools to incorporate Ocean Literacy in the classroom. By 2030, 70% of students worldwide are educated on Ocean Literacy and are provided with opportunities to contribute to ocean sustainability. By 2030, formal education institutions worldwide exhibit a whole-institution approach towards Ocean Literacy where ocean sustainability is incorporated at each level of the administration. 	<ul style="list-style-type: none"> Training programmes for pre-service educators and active educators from multiple disciplines, including Ocean Literacy workshops, courses and field trips, in person and online. Knowledge exchanges between formal educators and experts. Development of curriculum materials for primary and secondary schools, including digital resources and tools. Nature-based opportunities and educational actions for students (e.g. field trips, interactive workshops). 	Component 3 Component 4 Component 5

Mobilizing Corporate Action	<ul style="list-style-type: none"> · By 2025, private sector employees and investors worldwide receive training in Ocean Literacy to understand the connection of their operations with the ocean. · By 2030, ocean sustainability is strongly incorporated into business planning and operations, including strategic planning and environmental practices and policies. · By 2030, companies around the world enhance and incorporate actions for ocean sustainability and Blue Economy opportunities within their operations, including R&D, products and services, investments and reporting. · By 2025, partnerships are developed and enhanced among companies and/or companies and non-profit organizations to strengthen ocean sustainability. 	<ul style="list-style-type: none"> · Training programmes for employees and/or customers and suppliers on ocean sustainability and Blue Economy. · Investments in incubators focused on ocean innovation, technology, sustainability and social enterprise. · Development of programmes that empower women and girls in ocean science and conservation. · Development of school-based programmes that empower capacity building and developing the next generation of ocean professionals. · Introduction of certification schemes for ocean-literate companies demonstrating commitment to ocean conservation/sustainability. 	Component 2 Component 3 Component 4
Increasing Community Engagement	<ul style="list-style-type: none"> · By 2025, multi-stakeholder networks and collaborations are built and operate at a local level, fostering sustainable action for ocean issues. · By 2025, there is increased recognition and incorporation of Indigenous and local knowledge in Ocean Literacy efforts. · By 2030, Ocean Literacy is built into community regulations, policies and governance structures around the world. · By 2030, coastal and non-coastal community members have increased opportunities to receive education and engage in ocean sustainability actions. 	<ul style="list-style-type: none"> · Interactive interventions of Ocean Literacy such as art exhibitions or movie screenings. · Public awareness campaigns on key ocean topics. · Citizen science programmes that empower the general public to engage in the Ocean Decade. · Knowledge exchanges and transfer between scientists and members of society, including Indigenous communities, educational organizations and governments, among others. · Training programmes for media and journalists. 	Component 2 Component 3 Component 4 Component 5





Section 3

Mechanisms for stakeholder engagement

Ocean Literacy - Ocean Decade Actions and endorsement process

As outlined in the Implementation Plan, Ocean Decade Actions are initiatives and endeavours that will be implemented by a wide range of Ocean Decade stakeholders to achieve the objectives and Ocean Decade Challenges. Ocean Decade Actions, including Ocean Literacy initiatives, will be proposed and carried out by a wide range of actors including research institutes, governments, UN entities, intergovernmental organizations, international and regional organizations, business and industry, philanthropic and corporate foundations, NGOs, educators, community groups or individuals (via community-led science initiatives, for instance).

There will be different levels of Ocean Literacy Decade Actions implemented including **programmes, projects, activities and/or contributions.**

- **An Ocean Decade** programme is typically global or regional in scale and will help to achieve one or more of the Ocean Decade Challenges. It is long-term (multi-year), interdisciplinary and will consist of component projects and potentially enabling activities.
- **An Ocean Decade** project is a discrete and focused undertaking. It may be regional, national or sub-national, and will typically contribute to an identified Ocean Decade programme.
- **An Ocean Decade** activity is a one-off stand-alone initiative (such as an awareness-raising event, scientific workshop or training opportunity). It will enable a programme or project or directly contribute to an Ocean Decade Challenge.
- **An Ocean Decade** contribution supports the Ocean Decade by providing necessary resource (such as funding or an in-kind contribution). A contribution can support either the implementation of an Ocean Decade Action or the coordination costs of the Ocean Decade.

Requests for projects and programmes will be made via periodic Calls for Action, typically launched twice a year by the Decade Coordination Unit via an online platform¹¹. Both new and ongoing Ocean Literacy initiatives can be considered for endorsement as Ocean Decade Actions. The Ocean Literacy Community of Practice (convened by IOC) will work with the Decade Coordination Unit to identify Calls for Decade Actions that target priority Ocean Literacy initiatives in line with this Action Framework, as well as the results of gap analyses of endorsed Actions that will be periodically carried out.

Detailed information about the Ocean Decade Actions and endorsement are described in the Implementation Plan. Moreover, the Implementation Plan describes ways in which Ocean Decade Actions may be supported financially. There are three main mechanisms:

¹¹ <https://ioc.unesco.org/news/call-decade-actions-no-012020>

1. Direct support for Ocean Decade Actions and Coordination Costs, through for example in-kind support or contributions from Member States,

2. Support via the Ocean Decade Alliance will be a key component of the resource mobilization efforts for the Ocean Decade, focusing on significant voluntary resource commitments. The Alliance is not a funding or grant-making facility; rather, it is an engagement platform to connect large-scale resource providers with proponents of Ocean Decade Actions,

3. Mechanisms of partner-led financing/ grant-making facilities, through which an independent entity with its own grant-making capacity (such as a philanthropic foundation, an NGO or a government entity) will express the desire to mobilize resources to support Ocean Decade Actions and offer to act as a hub for mobilizing financial contributions from other donors.



© Via Layer Labs



Stakeholder engagement in the Ocean Decade

As outlined in the Implementation Plan, stakeholder engagement will take many evolving forms as the Ocean Decade rolls out. The overall goals of stakeholder engagement include catalysing: (i) co-design and co-delivery of ocean science; (ii) sharing of knowledge in formats that will be proactively adopted and used in policy, decision-making or innovation for sustainable development; and (iii) innovative multi-actor, multi- and interdisciplinary partnerships. A Global Stakeholder Forum, which will have both in-person and virtual elements, will provide a convening and exchange mechanism for all stakeholder engagement networks.

The Global Stakeholder Forum will also include an online interactive platform for all Ocean Decade implementing partners, stakeholder platforms, National Ocean Decade Committees, Alliance members and proponents of Ocean Decade Actions. There will be communities of practice at the thematic and geographic levels via the Forum, and IOC will use this Forum to convene and curate a community of practice related to Ocean Literacy. This community will be open to partners wishing to co-design and co-deliver programmes, projects or activities related to Ocean Literacy throughout the Decade to optimize synergies and the cross-fertilization of ideas and initiatives. It will allow members to post collaboration ideas and opportunities, invite membership or participation according to their defined processes, raise awareness and seek partners for national or regional Ocean Decade programmes or projects, hold virtual meetings or webinars to share knowledge/collaborate and use visibility and communications tools to raise awareness regarding their activities. More information on stakeholder engagement can be found in the Implementation Plan.



© Gray Kotze | Via Shutterstock.com



© LayerLab | Via Canva and Getty Images

Data, information and digital knowledge management, and interaction with Ocean Literacy

The IOC-UNESCO Ocean Literacy Portal¹² and the Social Hub of Ocean Action and Literacy (SHOAL¹³) will be the platforms connecting Ocean Literacy stakeholders and will also serve as important tools for the dissemination of educational materials, news and information, opportunities, events, webinars, Massive Open Online Courses (MOOCs), resources, efforts and other content about Ocean Literacy initiatives worldwide.

The platforms will also become an interactive networking space for Ocean Literacy stakeholders to facilitate dialogue among ocean professionals and with the general community. In turn, this will support knowledge exchange and best practice sharing, the promotion and celebration of Ocean Literacy initiatives, the compilation of information and the tracking and measuring of progress.

The IOC-UNESCO Ocean Literacy Portal will be connected to the Global Stakeholder Forum Portal to create synergies and opportunities for the existing Ocean Literacy Networks to connect to other practice communities, as well as to networks in other regions.

¹² <https://oceanliteracy.unesco.org/>
¹³ <http://shoal.unesco.org/>

Collaborations, partnerships and networks

Collaborations, partnerships and networks are fundamental to implementing the OL Framework for Action. These will include cross-sectoral partnerships and collaborations, such as those between the ocean science community, traditional knowledge leaders, policy-makers and education professionals. Multi-sectoral partnerships and collaborations will be promoted globally, as well as developed as part of IOC-UNESCO flagship initiatives. Efforts carried out by local, national, regional, sub-regional and global networks will be strongly encouraged via the Ocean Literacy Community of Practice to be convened by IOC.

Monitoring and evaluation

The detailed monitoring plan for Ocean Literacy within the Ocean Decade will be developed during the initial stages of Ocean Decade implementation, as part of the overall monitoring and evaluation framework for the Ocean Decade. The monitoring plan will establish specific timelines for measuring, protocols and formats. The measuring methodology and process will be developed during the first stages of Ocean Decade implementation. The roles and responsibilities for monitoring and evaluation are outlined in the Implementation Plan.

The monitoring and evaluation framework will include indicators that measure contributions to global policy frameworks and the progress against Ocean Decade outcomes, challenges and objectives. It will also include indicators to evaluate progress in the development of a robust enabling environment for ocean science, for example through enhanced systems for tracking progress in scientific and technical capacity and Ocean Literacy. During the Ocean Decade, research will be undertaken to formulate an Ocean Literacy baseline and develop protocols to measure the effectiveness of Ocean Literacy activities by drawing on social and behavioural research methods (Ashley et al., 2019).



Annex

References:

Version 2.0 of the Ocean Decade Implementation Plan submitted for presentation to UN Member States at the 75th session of the UN General Assembly. <<https://oceanexpert.org/document/27347>>.

Summary Report of the First Global Planning Meeting: UN Ocean Decade of Ocean Science for Sustainable Development (Copenhagen, 13-15 May 2019).

IOC-UNESCO. 2020. Engaging and Empowering Regional Stakeholders: Synthesis of Regional Consultation Workshops (2019–2020) [UN Ocean Decade of Ocean Science for Sustainable Development (2021–2030)]. Paris, UNESCO. 2020. 38 pp. (The Ocean Decade Series, 15). Results-Based Management Handbook, Applying RBM concepts and tools for a better urban future, UN-Habitat (Nairobi, 2017).

Cava, Francesca, S. Schoedinger, C. Strang, and P. Tuddenham. (2005). Science Content and Standards for Ocean Literacy: A Report on Ocean Literacy.

McHugh, P., Domegan, C. and Santoro, F. (2016) Sea Change. Co-Creation Participation Protocol for Work Package 5 - Governance, EU Sea Change Project.

Jagers, Sverker C. and Harring, Niklas and Löfgren, Åsa and Sjostedt, Martin and Alpizar, Francisco and Brüld, Bengt and Langlet, David and Nilsson, Andreas and Almroth, Bethanie Carney and Dupont, Sam and Steffen, Will, On the Preconditions for Large-Scale Collective Action (February 1, 2019). CeCAR Working Paper Series No. 1, Available at SSRN: <https://ssrn.com/abstract=3701650> or <http://dx.doi.org/10.2139/ssrn.3701650>.

Ashley, M., Pahl, S., Glegg, G., and Fletcher, S. A Change of Mind: Applying Social and Behavioral Research Methods to the Assessment of the Effectiveness of Ocean Literacy Initiatives; *Frontiers in Marine Science* Volume 6 June 2019.

Figures:

Figure 1: Theory of Change description. Source: UN-Habitat, 2017.

Figure 2: Ocean Decade Action Framework. Source: Implementation Plan.

Figure 3: Ocean Decade Objectives, Actions, Challenges, and Outcomes. Source: Implementation Plan.

Figure 4: Theory of Change adapted to Ocean Literacy throughout the Ocean Decade. 2021 © UNESCO.

Figure 5: Components of the Ocean Decade Ocean Literacy Programme. 2021 © UNESCO.

Figure 6: Description of Components.

Figure 7: Ocean Literacy Framework throughout the Ocean Decade. 2021 © UNESCO.

Figure 8: Priorities, aspirational targets, potential Ocean Decade Actions and OL Programme Components that will potentially take place during the Ocean Decade.

List of Acronyms:

AI - Artificial intelligence
C1 - Component 1
C2 - Component 2
C3 - Component 3
C4 - Component 4
C5 - Component 5
C6 - Component 6
IOC-UNESCO - Intergovernmental Oceanographic Commission of UNESCO
LDCs - Least Developed Countries
LLDCs - Landlocked developing countries
MOOCs - Massive Open Online Courses
NGOs - Non-governmental organization
M&E - Monitoring and Evaluation
OL - Ocean Literacy
R&D - Research and development
SIDS - Small Island Developing States
SDGs - Sustainable Development Goals
SHOAL - Social Hub of Ocean Action and Literacy
UN - United Nations
UNESCO - United Nations Educational, Scientific and Cultural Organization

Glossary:

Actions	The tangible initiatives that will be carried out across the globe over the next ten years to fulfil vision for the Ocean Decade. The different levels of Actions include programmes, projects, activities, and contributions.
Activity	A one-off standalone Ocean Decade Action (such as an awareness-raising event, a scientific workshop, or a training opportunity). It enables a programme or project or directly contributes to an Ocean Decade Challenge.
Aspirational Targets	Potential long-term objectives of the Actions to be developed during the Ocean Decade.
Call for Action	A periodic call for requests for endorsement of Ocean Decade Actions, typically launched twice per year by the Ocean Decade Coordination Unit via an online platform.
Challenges	The ten Ocean Decade Challenges represent the most immediate, high-level priorities for the Ocean Decade, thus shaping the contribution of the Ocean Decade to the 2030 Agenda for Sustainable Development. They unite stakeholders around common action and may evolve over the Ocean Decade. Divided into Knowledge and Solutions, Essential Infrastructure, and Foundational Challenges.
Components	Six interconnected areas of development that structure the Ocean Literacy Programme.
Contribution	A resource, such as funding or an in-kind contribution, provided to support the implementation of an Ocean Decade Action or coordination costs of the Ocean Decade.
Global Stakeholder Forum	A convening mechanism for all Ocean Decade stakeholder engagement networks. The Forum will have both virtual and physical elements, including the online Global Stakeholder Forum Portal.
Incubator	A space for the international community to support, facilitate, and co-develop Ocean Literacy projects during their “incubation” phase, through seed funding and a central research database. Located in the second component of the Ocean Decade Ocean Literacy Programme.
Implementation Plan	The framework for transformational action during the Ocean Decade, presenting an overall strategic vision and approach.
Indigenous and local knowledge	Refers to the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. For rural and indigenous peoples, local knowledge informs decision-making about fundamental aspects of day-to-day life. This knowledge is integral to a cultural complex that also encompasses language, systems of classification, resource use practices, social interactions, ritual and spirituality. See: https://en.unesco.org/links
Interdisciplinary	An approach involving stakeholders from two or more distinct scientific disciplines or stakeholder groups that integrates different knowledge and methods using a synthesis of approaches. Under interdisciplinary approaches, boundaries between disciplines and groups start to break down with the recognition that each discipline can affect the output of the other.

Knowledge	An abstract representation (i.e. a mental model) of an entity which: (I) is constructed from a substantial collection of information, (II) grants its bearer reliable familiarity with that entity, and (III) can be used to reason and take action about that entity. For example, an expert with knowledge about the salinity range of the Arctic Ocean (constructed from large amounts of information on the topic) would be able to reason that a salinity value of 43‰ is a likely error, rather than a real measurement.
National Ocean Literacy Strategy	A plan of action designed to achieve the Ocean Decade Outcomes at a national level. The National Strategy should clarify the Ocean Literacy landscape and baseline, recognize and address gaps and barriers to the implementation of actions, as well as identify opportunities to foster the connection between citizens and the ocean.
National Ocean Decade Committee	Existing or new structures that coordinate actors at the national level. Committees are inclusive multi-agency and multi-stakeholder platform for the co-design and co-delivery of Actions and facilitate access to benefits such as data, products, science-policy advice, or capacity development.
The Ocean Decade	The United Nations Ocean Decade of Ocean Science for Sustainable Development (2021-2030).
Ocean Decade Action Framework	Operational framework developed in the Implementation Plan to guide the design and implementation of Actions throughout the Ocean Decade.
Ocean Decade Advisory Board	Reviews and makes recommendations for endorsement of Ocean Decade programmes submitted through a Call for Action.
Ocean Decade Coordination Unit	Reviews and makes decisions on requests for endorsement of Ocean Decade activities, projects, and contributions submitted through a Call for Action. Coordinates the implementation of Ocean Decade Actions.
Ocean Decade Implementing Partners	Stakeholder institutions (e.g. research institutes, NGOs, universities) that are committed to the vision and mission of the Ocean Decade and that are making significant and sustained efforts to implement Ocean Decade Actions.
Ocean Decade Ocean Literacy (OL) Programme	A global programme comprising six components of action needed to implement Ocean Literacy initiatives throughout the Ocean Decade. Coordinated by IOC-UNESCO and implemented in partnership with several stakeholder groups.
Objectives	Three interconnected objectives, and supporting sub-objectives, that describe the steps needed to meet the Ocean Decade Challenges and thus contribute to achieving the Ocean Decade Outcomes.
Ocean Decade Alliance	An engagement platform to connect large-scale resource providers with proponents of Ocean Decade Actions.
Ocean Literacy Ocean Decade Actions (Actions)	The tangible initiatives that will be carried out across the globe over the next ten years to fulfil the Ocean Literacy vision for the Ocean Decade, guided by the Framework for Action. The different levels of Actions include programmes, projects, activities, and contributions.
Ocean Literacy Framework for Action (Framework)	A common, non-prescriptive framework to promote the development of Ocean Decade Actions focused on Ocean Literacy by actors around the world. The Framework is based on the Theory of Change, and builds from the context, through the four priority areas, towards transformative impact.

Ocean Literacy Portal	A website for the Ocean Literacy community to share resources, news, events, and other content about Ocean Literacy initiatives.
Ocean Literacy Toolkit for Educators	Presents the history and methodological approach of ocean literacy, and example activities for use in marine education initiatives.
Ocean Literacy Training Courses	Online courses developed by IOC-UNESCO to offer Ocean Literacy training to the general public, educators, media, and government officials.
Outcome	Describes the “ocean we want” at the end of the Ocean Decade. The seven outcomes describe both the desired state of the ocean, and the desired state of society’s use of, and interaction with, the ocean.
Principles	The seven core concepts of Ocean Literacy. See: https://oceanliteracy.unesco.org/principles/
Priority Areas	Four identified areas of focus for Ocean Decade initiatives and activities: education policy, corporate action, formal education, and community engagement.
Programme	A Ocean Decade Action that is typically global or regional in scale and contributes to the achievement of one or more of the Ocean Decade Challenges; for example, the Ocean Literacy Programme. A programme is long-term (multi-year), interdisciplinary, and multinational. It consists of component projects, and potentially enabling activities.
Project	A discrete and focused Ocean Decade Action that is typically of a shorter duration. It may be regional, national or sub-national and it will typically contribute to an identified Ocean Decade programme.
Science–policy interface	The connection between science and policy, shaped by the need for and effective use of scientific knowledge for sound policy-making.
SHOAL Ocean Literacy App	A platform for the Ocean Literacy community to share materials and updates about an Ocean Decade Action.
Theory of change	A method to envisage the process of social change, including various means and actors. Used to create a model for Ocean Literacy to proceed from awareness and understanding to attitude changes and behaviour change.
Transdisciplinary	Stakeholders from different disciplines or different groups work together to create new solutions and innovations that integrate and move beyond discipline-specific approaches to address a common problem. Transdisciplinarity occurs when two or more discipline perspectives are combined to form a new holistic approach with the expectation that the outcome will be completely different from an addition of the parts.
UN entity	United Nations agencies, funds, and programmes.





.....
**Regional
Bureau
for Science
and Culture
in Europe**
.....



Intergovernmental
Oceanographic
Commission



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development