



"Ocean Literacy and awareness raising of blue careers"

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Kick-off meeting of the expert group on skills and career development in the blue economy

Ocean Literacy for Empowered Citizens

“Ocean Literacy” - an understanding of the ocean’s influence on us and our influence on the ocean.

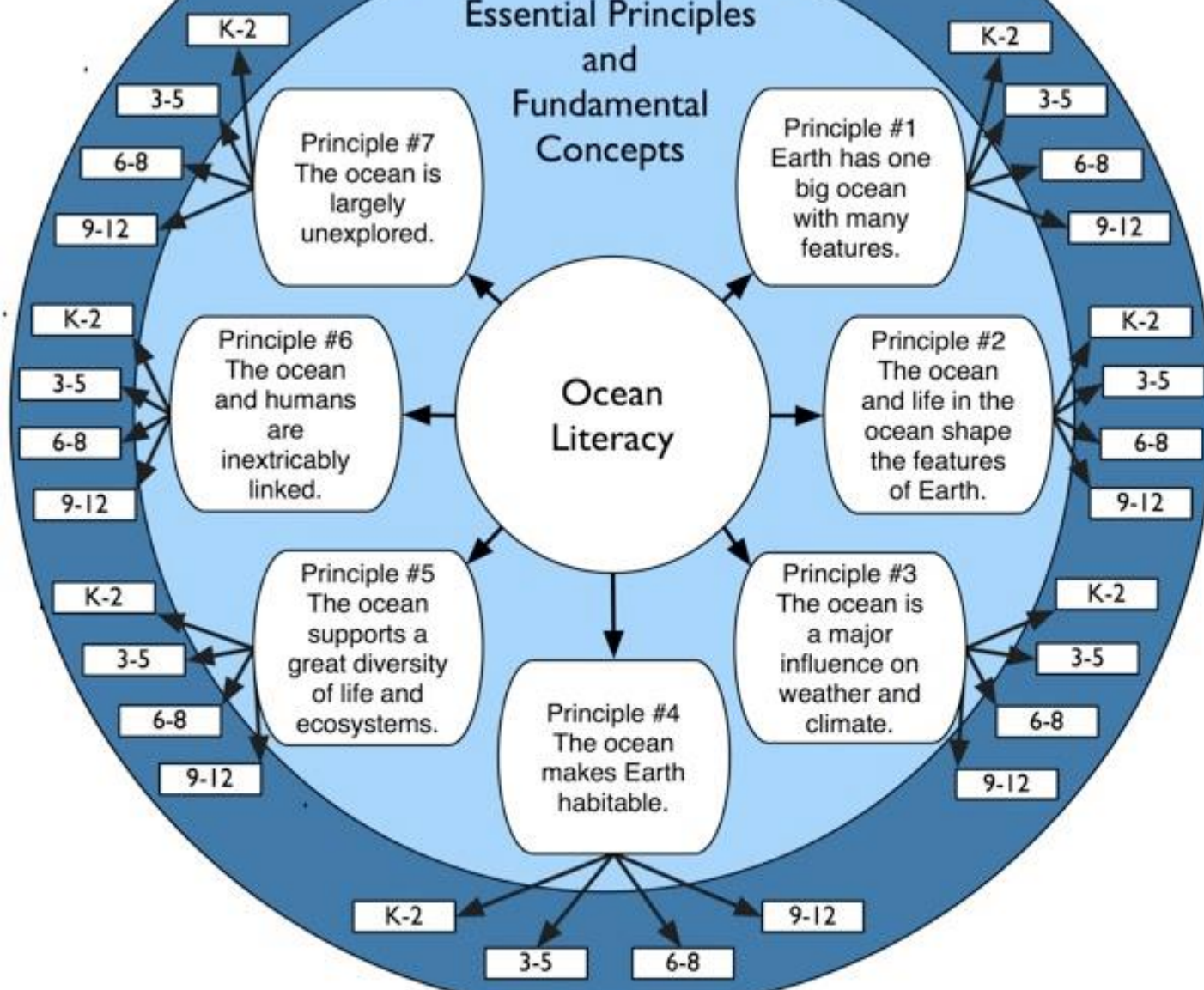


An Ocean-Literate person:

- **Understands** the importance of the ocean to humankind
- Can **communicate** about the ocean in a meaningful way
- Is able to make informed and responsible **decisions** regarding the ocean and its resources

Scope and Sequence Conceptual Flow Diagrams

Essential Principles and Fundamental Concepts



Ocean Literacy is not Communication

Many initiatives, media and social media, but how to amplify, reach people not already interested

THE PEW CHARITABLE TRUSTS

SEARCH MENU

The Pew Charitable Trusts / Multimedia / High Stakes on the High Seas

ALL VIDEO IMAGE GALLERY DATA VISUALIZATION SURVEY / QUIZ

DATA VISUALIZATION

High Stakes on the High Seas

Protecting biodiversity in waters beyond national jurisdiction

May 01, 2015 | Protecting Ocean Life on the High Seas

SHARE →

An infographic from The Pew Charitable Trusts and the Prince Albert II of Monaco Foundation | April 2015

High Stakes on the High Seas

Protecting biodiversity in waters beyond national jurisdiction

Life Beyond Borders

The high seas, ocean areas beyond national jurisdiction, fall outside countries' exclusive economic zones.

BLUE GROWTH

71% of the Earth surface is WATER

Why?

Blue Growth is the European Commission's initiative to further harness the potential of Europe's oceans, seas and coasts for:

- Jobs
- Value
- Sustainability

Focus Area

Five sectors with high potential for sustainable Blue Growth are to be further developed:

- Renewable energy
- Biotech-nology
- Coastal & Maritime Tourism
- Aquaculture
- Mineral resources

5 SECTORS

other sectors of the blue economy crucial for value & jobs



The EU 'Blue' Policy context:

2008: *EU Integrated Maritime Policy
Marine Strategy Framework Directive*

2012-14: *EU Blue Growth Agenda (Sea-basin Strategies e.g. the Atlantic Strategy and its Action Plan (aquaculture, biotech, energy, deep sea, tourism))*

2014: *Revised EU Common Fisheries Policy
Maritime Spatial Planning Legislation*

2014: *Several Communications, such as:*

- the Blue Energy Communication
- the Blue Tourism Communication
- the Blue Innovation Communication (*Joint RTD & MARE*)



Galway Statement on Atlantic Ocean Research Alliance

**Signed by Canada, the
European Commission,
and the United States
May 2013**



THE ATLANTIC A SHARED RESOURCE

Tri-Partite Galway Implementation Committee

"The What" - Ocean research and observation efforts defined under statements of purpose in which we have agreed to work together in the following priority areas of cooperation:

- Atlantic Seabed Mapping and Characterization
- Aquaculture
- **Ocean Literacy**
- Ocean Health and Stressors
- Ocean Observation and Prediction
- Marine Litter (G7 Science Ministers)





Priority Area of Cooperation:

Ocean Literacy

Objective - Make future citizens ocean literate so that they understand environmental challenges and policies, and make informed, responsible decisions based on ocean stewardship.

Ocean Literacy Working Group Co-Leads:

Canada – Anne Stewart (CaNOE)

EU – Ivan Conesa (EC)

USA – Paula Keener (NOAA)

Transatlantic Partnership

- National Oceanic and Atmospheric Administration (NOAA), USA
- National Marine Educators Association (NMEA), USA
- College of Exploration: - the founders of the Ocean Literacy campaign in the USA.
- Centres for Ocean Sciences Education Excellence (COSEE), USA
- The Canadian Network for Ocean Education (CaNOE), Canada
- European Marine Science Educators Association (EMSEA)
- And several national scientific and educational institutions (including museums, univ, research,..)

Our Ocean Our Health

What does our ocean have to offer?



Food



Climate Regulation



Medicine



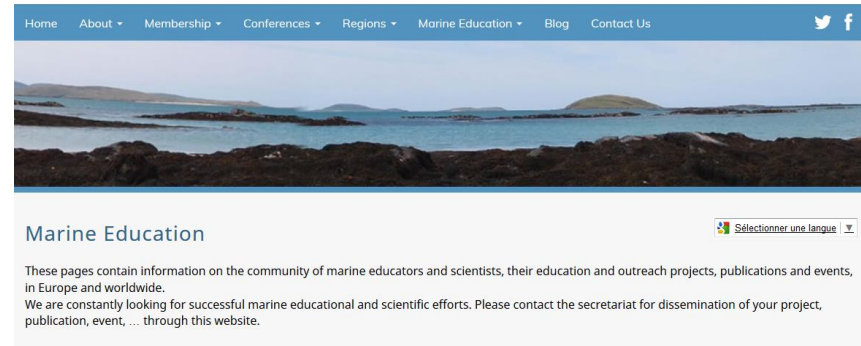
Transportation



Recreation



Economy



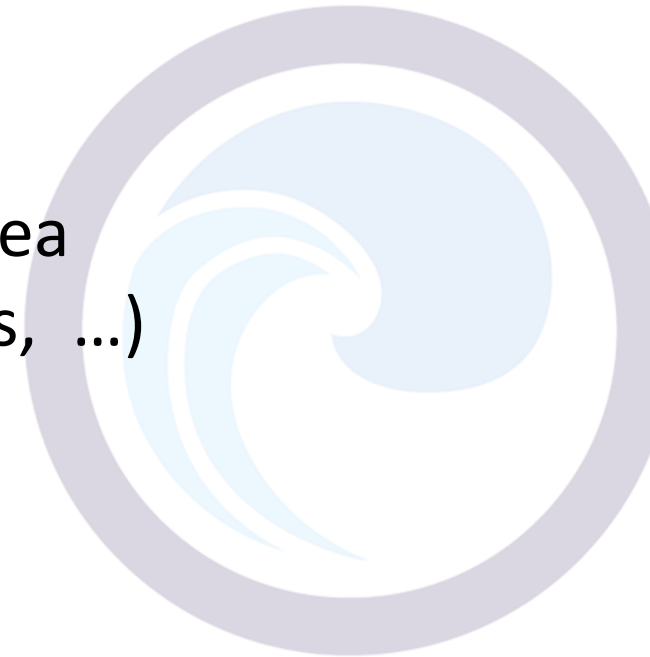
Blue Schools

Blue Schools is about effective "**BLUE**"
management of the **curriculum**.

And involvement of professionals of the Sea
(researchers, fishermen, shipping, harbors, ...)

2 strategies:

- develop the concept of Blue School
- Help Eco-schools to become more blue



Massive Open Online Course (MOOC) on Ocean Literacy

Course 1: From ABC to ABSeas: Ocean Literacy for all

[View](#) [Edit](#) [Unpublish](#) [Delete](#) [Reorder Lessons](#) [Add Lesson](#) [Manage Study Materials](#) [Invite](#) [Analytics](#)

If you need to set the correct order of lessons and units, you can use the **Reorder** feature available both for lessons and units.

This course has an extra time of 358698 days

8 Nov '16 - Lesson 1: Let's introduce ourselves

10 Nov '16 - Lesson 2: Let's know the principles

14 Nov '16 - Lesson 3: Lesson tips: ocean literacy in your classroom

18 Nov '16 - Lesson 4: How to organize hands-on activities on Ocean and Climate

25 Nov '16 - Lesson 5: How to organize hands-on activities on Sea Food, Marine Pollution and Human Health

2 Dec '16 - Lesson 6: How to organize hands-on activities on the Blue Gym effect and the ocean as a source of human medicine

Lessons: 6 | Units: 13

Mobilisation: Science & Society

Citizen Science Ocean Initiative

Citizen Science project 'Crab Watch'
being tested & executed all over Europe.



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Public engagement across Europe:

Aquarium & Science Center events

Focus on:

- inter-generational exchange of knowledge
- inter-stakeholder exchange: watersports enthusiasts vs. public

Bulgaria, Estonia, Czech Republic, France & Argentina (2016-17)



Increasing the understanding and awareness of how European citizens affect and benefit from the ocean. To do this, the project decided to focus on some key ocean issues – the ResponSEAbLe's Key Stories.

They start with what we know about the current state of the oceans in relation to the specific issues, how economic activities directly or indirectly connect to it, and our perceptions and understanding of this connection.

The identification of actors important to the issues, and gaps in knowledge that need to be filled



The identification of the activities and actors of the ocean economy connected to particular challenges has been implemented by using a "value chain approach".

Value Chain Approach

The purpose of this assessment is to make explicit the embedment of activities in a vertical/linear socio-economic structure and cross it with pressures so the different socio-ecological components of the system attached to a specific challenge of issue are well accounted for.

For the main economic activity associated to each key story, a value chain has been developed.

Any change in practice or behavior from activities that directly impact on marine ecosystems is likely to impact indirectly other activities and actors of the value chain. In some cases, activities of the value chain might be the main drivers for changes in the value chain that lead to the protection of marine ecosystems and their use as key factors of sustainable socio-economic development.

Key Story	Key Actors
<i>Eutrophication and agriculture</i>	Agricultural Producers Wholesalers Decision-makers
<i>Sustainable Fisheries</i>	The Public Wholesalers
<i>Ballast water/invasive species</i>	Shipowners European and National Legislators Marine Equipment Suppliers and Manufacturers of paints and coatings
<i>Marine Renewable Energy</i>	The Public Investors (public & private)
<i>Microplastics and cosmetics</i>	Cosmetic Producers NGOs Decision Makers
<i>Coastal development/tourism</i>	Hoteliers Tourists Policy makers Construction Marina managers Beach managers



*ResponSEAbLe Summer
Photo winner*

[MORE](#)

"The sea, once it casts its spell, holds one in its net of wonder forever."

- Jacques Yves Cousteau

