

10 years of Ocean Literacy in the USA and beyond: actions, results, reflections and discussion

Strang Craig¹ and Peter Tuddenham²

¹ Lawrence Hall of Science, University of California, 94720-5200 Berkeley, USA
E-mail: cstrang@berkeley.edu

² College of Exploration, 230 Markwood Drive, 20165-5813 Potomac falls, USA
E-mail: Peter@coexploration.net

This three part session will: 1) trace the path of the Ocean Literacy Campaign in the USA, including the actions and results to date; 2) highlight the processes and principles that are promoting an ocean literate world; and then 3) engage conference delegates in a short discussion.

In the USA in 2002 scientists, educators and policy makers began a national conversation about how to include the ocean in the mainstream K-12 curriculum, and also what about the ocean is most important to teach, both in geography and science. The National Geographic Society, the National Oceanic and Atmospheric Administration, the National Marine Educators Association, the Centers for Ocean Sciences Education Excellence and The College of Exploration began a process of building a grass roots Ocean Literacy Campaign. After an online conference of scientists, educators and policy makers, a definition for Ocean Literacy was drafted, and 7 essential principles and 44 fundamental concepts were agreed upon. From this beginning the work has continued to include developing a comprehensive K-12 conceptual scope and sequence, to influence the direction of new national science education standards, government ocean policies and public understanding of the importance of the ocean to all life.

The direct involvement of hundreds of scientists and educators in the process has built a shared language and ownership of all aspects of the Ocean Literacy Campaign. We have facilitated national conversations and large-scale decision making with the support of asynchronous technologies and a technology supported facilitation process. The Campaign has now influenced whole systems that establish funding and set priorities related to ocean science education within the national conversation about science education.

The work in the USA has prompted several other countries to consider the extent to which ocean subjects are included in school curriculums and other aspects of the education system. Other ocean literacy efforts in Japan, Portugal, Chile, China, Australia, Canada, and South Africa are in various stages of development.

In most countries the ocean is not a part of the school curriculum. The majority of populations have little or no knowledge about the issues concerning the ocean nor the role the ocean plays in our lives from food to energy to weather and climate to international trade to the air we breathe. The ocean must be a part of every student's education.

As the quest for an ocean literate world progresses we must be sensitive to regional and national priorities and realities and the use and nuance of language in building shared understandings. Making the ocean meaningful and relevant to every individual's life by building connections through the web of water, and connecting to global issues of climate change and energy may offer directions to follow. To be ocean literate, or to know the ocean, must be a holistic experience, engaging all our senses and inspiring our lives by touching our souls not only through science and geography, but art, music, business, policy, essentially to include all disciplines and subjects.

After the two presentations we will facilitate a discussion about the challenges and processes of enhancing ocean literacy on a local, regional, country and global basis.