



## **15 Years of Ocean Education and Outreach Activities by the College of Exploration.**

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Since 1997 the College of Exploration has created ocean related interactive and engaging online and onsite education and outreach programs that have reached over 15,000 participants in over 30 countries. Partners and funders have included in the USA the National Oceanic and Atmospheric Administration (NOAA), NASA, the National Science Foundation (NSF), National Geographic, and many others. In the UK the Natural Environment Research Council and the National Oceanography Center, and in Europe Portugal's Ciencia Viva.

The first online and onsite program was in partnership with the now Bermuda Institute for Ocean Sciences. With funding from NSF the project took the online Bermuda Atlantic Time Series (BATS) dataset and made it more accessible to teachers and students in a custom spreadsheet with easier to use macros and graphs. Online training and workshops helped teachers learn more about using BATS in the classroom.

The next project in 1998 in partnership with the University of Southern California Sea Grant was an online workshop on El Nino. This was one of the first teacher professional development projects offered online. Scientists with expertise in El Nino were able to meet and discuss with teachers.

Over the past 15 years there have numerous programs, workshops and activities on topics such as Autosub Under Ice, Ocean Exploration then, now and the future, Ocean Observing Systems, Harmful Algal Blooms, Coral Reefs, and much more. These will be summarized.

Every activity has been evaluated and assessed. The cumulative results of these evaluations will be presented along with the results of a recent survey of all participants over the past 15 years.

Since 2002 the College of Exploration has played a key role in the development and promotion of the Ocean Literacy campaign, an effort to bring innovative approaches to promoting the ocean in K-12 education as well integrating the ocean into national standards and curriculum and promoting the ocean to the general public. A summary of these efforts will be presented along with an update on the Ocean Literacy campaign in Portugal and plans for more ocean literacy activities in Europe.