

Oceanography Through Time

A Classroom Activity for the Ocean Gazing Podcast

Written by: COOLClassroom and COSEE NOW staff

Grade Level: 6-12

Lesson Time: 1 class period

Materials Required

Computer lab with Internet access or projection screen, copies of the lesson for each student

Summary

How large is the ocean? How deep is the ocean? What lives in the ocean? What causes the currents, and other conditions in the ocean, to change? Does the ocean affect the weather on land? How can we explore the ocean? People have asked questions about the global ocean for thousands of years. Even so, we still know relatively little about the watery world of the ocean. In fact, people have spent dramatically more time and money learning about outer space than about our world's oceans or "inner space" here on Earth!

Objectives

- ✓ *Describe* the various tools used to study the ocean throughout history
- ✓ *Apply* information found on Web site to answer questions

Key Concepts

- ✓ Technology enables exploration and study of the ocean over long periods of time
- ✓ Scientists use advanced technology to help them answer increasing complex questions about the ocean

Procedure

For this activity you will be using the following web site:

- ✓ The Evolution of Oceanography
http://coolclassroom.org/cool_window_s/timeline.html

Have students explore the Web site to help answer the following questions:

1. Why do you think it is important to study the ocean?
2. List three reasons why studying the ocean can be difficult.
3. When did people start exploring the ocean for scientific purposes?
4. List three major events in the twentieth century that you think were the most important to the evolution of ocean sciences?



Assessment

- ✓ *Performance*: Did student participate in discussion and Web investigation sessions and demonstrate an understanding of the evolution of oceanography?
- ✓ *Product*: Did student accurately describe some of the technology involved in exploring and studying the oceans? Did student apply the information he/she found on the Web site to answer his/her questions?

Sources

The related podcast episode for this activity can be found by going to the podcast section of www.oceangazing.org