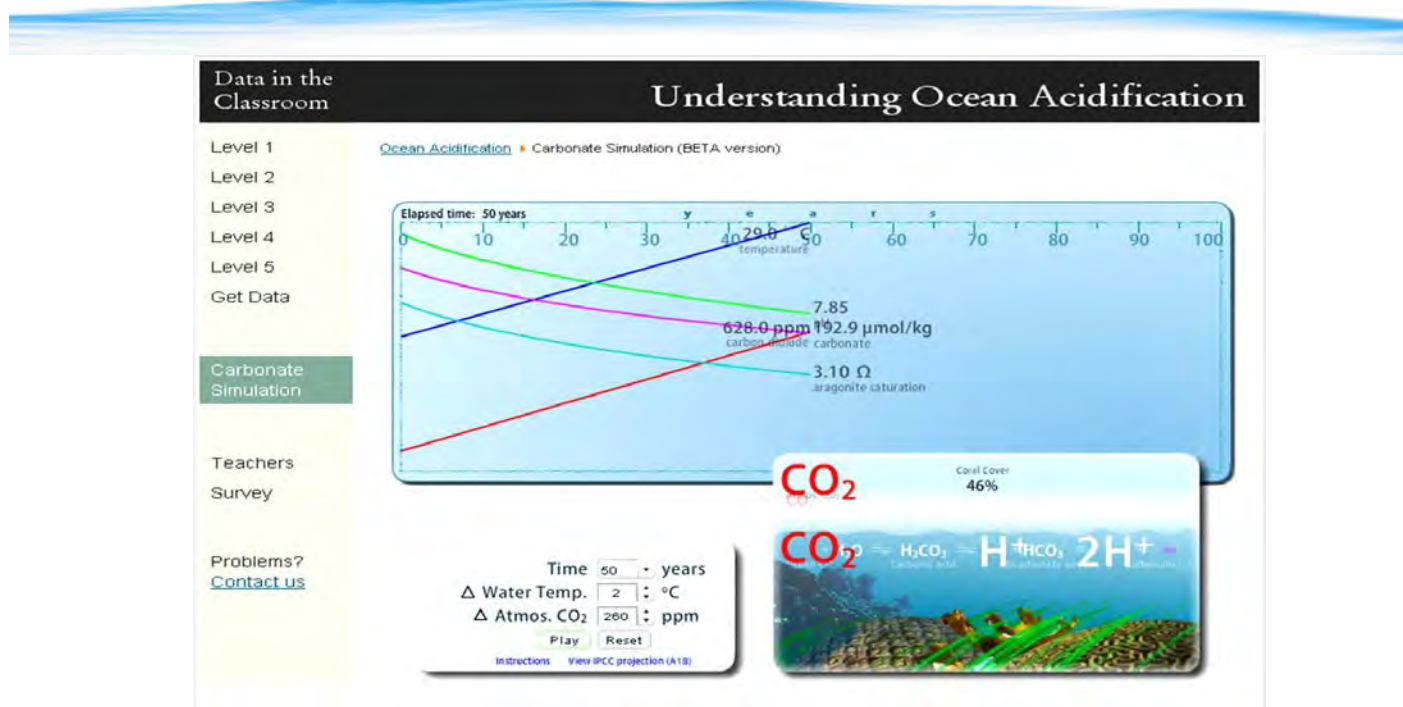


FREE Teacher Workshop

Understanding Ocean Acidification

Learn how to teach about ocean acidification and coral reefs using the latest data from NOAA



The Data-in-the-Classroom Module from NOAA Coral Reef Conservation Program incorporates real (and near-real time) data on Ocean Acidification that includes a set of five scalable lesson plans with simulations and demos. Workshop will also cover corals & watershed and a Water Quality module.

WHO

WHAT

WHEN/WHERE

HOW LONG

YOU BRING

YOU GET

High School science teachers/ Middle School teachers

Ocean Acidification and Water Quality Educational Modules

June 14, 2011 at Ft. Lauderdale (NOVA Nat'l Coral Reef Inst.)

June 15, 2011 at South Miami (UM - Rosenstiel School)

June 17, 2011 at Key West (Nat'l Marine Sanctuary Office)

9:00 AM – 5:00 PM

Your laptop

A \$75 teacher stipend provided for full-day participation, Master Plan Points/In-Service Points, plus the full printed OA Module Teachers' Guide, multimedia educational materials, beautiful coral reef posters and more



Southeast
Florida
Coral Reef
Initiative

Acting above to protect what's below.

Workshop Description



Teachers will learn to use real data from NOAA to teach ocean acidification and how it affects coral reefs and other marine calcifiers, using integrated scalable lesson plans associated with this module. Workshop will include demos and multimedia to use in your classroom, a background science presentation on ocean acidification, and a walk-through of the five scalable lesson plans and data exercises that are part of this Data-in-the-Classroom project. Workshop will also briefly present Water Quality module, aimed at the middle school level, that also help build student data literacy and inquiry-driven learning.

* *Lesson 1: Ocean pH* – Understanding spatial and temporal variations of ocean pH

* *Lesson 2: Ocean-Carbon connection* – Understanding how CO₂ goes from land activity to atmosphere to ocean

* *Lesson 3: Carbonate Chemistry* – Understand chemical pathway of how CO₂ lowers ocean pH and its affect on carbonate chemistry

* *Lesson 4: Aragonite Saturation and Marine Calcifiers* – Understanding the concept of aragonite saturation state and marine animals affected by it

* *Lesson 5: Student-driven Investigation* – Ability to design an investigation and obtain data to check it

Water Quality NODE module will introduce: Corals and Watersheds; Reading Water Temp data; Understanding Dissolved O₂; Introducing Salinity.

Agenda

9:00-10:00 AM	Registration, introduction, pre-testing
10:00-10:30 AM	Ocean Acidification & Coral Reefs
10:30-11:00 AM	NODE Overview
11-Noon	OA Module Lessons 1-2
Noon- 1:00 PM	Lunch
1:00-3:00 PM	OA Module Lessons 3-5
3:00-3:30 PM	Watersheds and Corals
3:30-4:30 PM	Water Quality Module
4:30-5:00 PM	Post-testing

To Register:

<http://coralreefs2011.questionpro.com/>

(Limited seating: Participants will receive confirmation email once their registration is processed)