NOAA Education Resources (K–16 Educational Resources; National Oceanic and Atmospheric Administration, http://www.education.noaa.gov)

If you teach marine science, chances are that one of the most challenging things you do is incorporate authentic ocean scenarios into your lessons. This can be especially difficult if you live far from any bodies of water. In part to increase the accessibility of ocean science, the National Oceanic and Atmospheric Administration (NOAA) has compiled a massive collection of real-time data and activities that bring the oceans right into your classroom.

NOAA Education Resources are divided into five major themes: "Oceans and Coasts," "Climate," "Weather and Atmosphere," "Marine Life," and "Freshwater." Another section, "Special Topics," contains information that does not fall into any of those categories. Within each theme are collections of resources that are specific to that topic. For example, the "Climate" theme includes links to activities related to the carbon cycle and changing seasons, among others. Under the "Marine Life" tab are links to aquatic food webs, coral ecosystems, and life in an estuary.

Clicking on the "Life in an Estuary" link takes you to a page that is entirely devoted to estuarine science. The content here is further divided into multimedia, lessons and activities, real-world data, background information, and career profiles. Each of these headings takes you to other locations containing relevant information. One area of particular interest, called "monitoring estuarine water quality," takes you to a website that displays temperature, salinity, and weather conditions occurring in estuaries all over the country. Students can watch the page instantly update as conditions change. There are similar activities found in all the other categories.

This website provides many opportunities for teachers to incorporate real-time data into their lessons. While the site caters to marine science educators, there are also many links to weather data and other environmental impact data, which would be beneficial in an environmental science course. The content is not organized by grade, but the activities do indicate for which grade level they would be most appropriate.

You and your students can also connect to unique opportunities offered by NOAA. For example, under the "Educator Opportunities" tab are links to programs such as NOAA's Teacher at Sea program and the Science Olympiad. The "Student Opportunities" tab lists several scholarships and internships for which students can apply.

The *NOAA Education Resources* site is an excellent collection of marine and environmental science materials that would be of benefit to teachers and students at all grade levels. With STEM and the *Next Generation Science Standards* so engrained in the curriculum, having access to real-time data provides excellent opportunities for students to develop skills like monitoring, graphing, extrapolating, and predicting in a fun and exciting manner. Students will enjoy the multimedia collection, as well as using real data to learn how the oceans and weather affect all life on Earth.

Jeffrey D. Sack
Science content writer/consultant
cnidaria@comcast.net

REMY DOU taught high school life science for eight years before becoming an Albert Einstein Distinguished Educator Fellow (2011–2013). Currently, he works as a Graduate Assistant at Florida International University where he contributes to STEM education research.

The American Biology Teacher, Vol. 77, No. 3, page 218. ISSN 0002-7685, electronic ISSN 1938-4211.
DOI: 10.1525/abt.2015.77.3.12