

Ocean Sciences Curriculum Sequence for Grades 3-5

*A Proposal to the Office of Education, National Oceanic and Atmospheric Administration
Environmental Literacy Grants for Formal K-12 Education
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Project Period: 10/1/07 – 9/30/10

Amount Requested:

Year 1: \$206,306

Year 2: \$245,813

Year 3: \$257,873

Total Amount requested: \$709,992

This project will create an unprecedented Ocean Sciences Curriculum Sequence for Grades 3-5. In close collaboration and partnership, the Lawrence Hall of Science (LHS) at the University of California, Berkeley, the Jacques Cousteau National Estuarine Research Reserve, the Coastal Ocean Observation Laboratory (COOL), Rutgers University Institute of Marine & Coastal Sciences, and the Carolina Biological Supply Company will update, adapt, transform, and widely disseminate existing instructional materials from the LHS Marine Activities Resources & Education (MARE) and Great Explorations in Mathematics and Sciences (GEMS) programs. It is anticipated that this new Sequence will become the most widely used ocean-focused science education curriculum nationwide at the elementary level. The materials will provide teachers with a standards-based tool for teaching basic science using the ocean as a compelling integrating context. The materials will be grounded in current research on teaching and learning and designed to connect to the *National Science Education Standards*, the Ocean Literacy Essential Principles and Fundamental Concepts, and to a large sample of state science standards. The activities will be thoroughly pilot and field tested to ensure their effectiveness and applicability nationwide. The finished product will include print materials for teachers, with inquiry-based learning activities, student readings and data sheets, curriculum-embedded assessments, and commercially available materials kits that will allow the Sequence to be adopted by whole school systems and/or states. No comparable ocean sciences curriculum materials are currently available.