

From: Kanesa Duncan <kanesa@hawaii.edu>
Subject: **New teacher resources available at Hawaii Sea Grant Center for Marine Science Website**
Date: January 14, 2010 11:00:22 AM HST
To: HaSTA <hasta-L@lists.hawaii.edu>

New teacher resources available at Hawaii Sea Grant Center for Marine Science Website
www.uhsgmarinescience.org

Sorting Out Sediment Grain Size and Plastic Pollution -

published in Oceanography

By Heather L . Spalding, Kanesa Duncan Seraphin,
and Zoe Norcross -Nu'u

This activity familiarizes students with beach erosion, beach health, and the pervasive nature of plastic pollution. Students use measurements of sediment grain size and the buoyancy and density of materials found in beach sand to describe sediment size fraction, determine sand suitability for beach replenishment, and document the relative quantity of plastics. This activity also teaches field sampling (random sampling using transects and quadrats) and mathematical skills (graphing, percentages, and extrapolation).

The Case of the Sick Coral: A Model for Integrating Research and Education to Translate Authentic Research into a Classroom Inquiry Investigation of Ocean Literacy Principles

By Kimberely A. Tice and Kanesa Duncan Seraphin

This inquiry-based lesson series, The Case of the Sick Coral, guides high school students in developing and testing hypotheses about the differential susceptibility of corals to bleaching. The place-based activities combine genetics with ecology to promote in-depth learning by facilitating students' application of new knowledge to novel situations. The Case of the Sick Coral addresses four of the seven ocean literacy principles and was developed through a partnership involving: (a) high school teachers, (b) University of Hawaii (UH) educators, and (c) Hawaii Institute of Marine Biology (HIMB) researchers. Such partnerships are beneficial not only for the researchers and their projects but also for students and teachers; the partnership described here serves as a model to encourage teachers to seek out their own research-teaching partnerships.

All materials for this lesson are freely available online at
www2.hawaii.edu/~katice/GK12/inex_coral.html

Aloha,
Kanesa

~~~~~  
Kanesa Duncan Seraphin, PhD

University of Hawaii  
Curriculum Research & Development Group  
1776 University Ave.  
Honolulu HI 96822

UH Sea Grant, SOEST  
Center for Marine Science Education  
[www.uhsgmarinescience.org](http://www.uhsgmarinescience.org)

cell (preferred): 808-225-1753  
tel: 808-956-4439  
fax: 808-956-9486  
email: [kanesa@hawaii.edu](mailto:kanesa@hawaii.edu)

~~~~~