

# PICTURING SCIENCE

## Photographing and Writing About Island Environments

By Lori Phillips and Kavita Rao

“What was the impact on our ancient environment when the caldera we live in erupted?” These words were written by Naomi Vaeau and Winona Lineberger to accompany the image at right. They produced both words and images as participants in an all-day professional development workshop presented during the July 2002 Pacific Educational Conference (PEC) in American Samoa. The Picturing Science workshop trained teachers in an instructional approach that integrates students’ science learning through use of language arts and digital photography. Workshop activities were geared to show teachers how to implement a two-week unit in their classrooms.

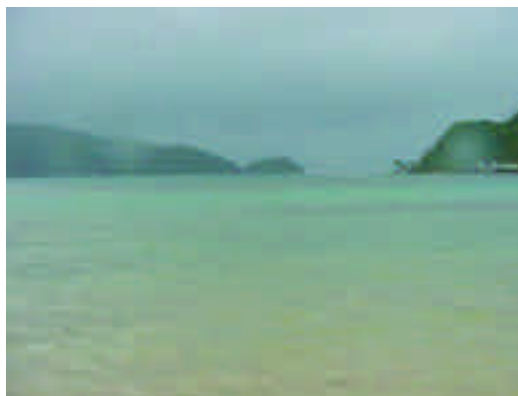
Starting with science standards, teachers develop vocabulary around key concepts like stewardship, a common concept underlying much inquiry-based science education and appropriate for all grade levels K-12. Once students discuss the concept, they create a word board that displays related vocabulary. Choosing from categories like “plants,” “animals,” “landforms,” “geology,” and “natural resources,” the students work in groups to take the photographs they will use to illustrate their writing.

While use of digital cameras promotes technology literacy, disposable cameras or drawings work just as well. Once the photographs have been taken or the drawings have been made, the students work together to articulate the ideas behind the images. Referring back to the word board and the central theme, they are encouraged to write descriptively and to recreate their images in words using metaphors, analogies, and other literary devices. Teachers with bilingual learners have the option of having students write in their first languages, in English, or in both.

For more words and images, visit the Picturing Science website, a showcase of work by participating teachers and students available at [www.prel.org/picturingscience/preconference/index.html](http://www.prel.org/picturingscience/preconference/index.html). The Picturing Science approach was developed by Lori Phillips and Kavita Rao; the PEC workshop was sponsored by the Pacific Center for the Arts and Humanities in Education (PCAHE), the Pacific Mathematics and Science Regional Consortium, and the Pacific Regional Technology in Education Consortium. The workshop has also been presented in Guam, Saipan, and Hawai‘i.

Capturing their images helps students take a fresh look at their environment and rethink their relationship to it. By writing about the photographs they have taken, students explore the connections between words and images and the ways in which they reinforce each other. But whatever literary technique students use, the powerful message of environmental stewardship shouts at the viewer both in image and in word.

*For more information about the project, contact PCAHE Program Director Lori Phillips at [phillipl@prel.org](mailto:phillipl@prel.org) or Pacific Mathematics and Science Consortium Instructional Design Specialist Kavita Rao at [raok@prel.org](mailto:raok@prel.org). ★*



▷ Yesterday: What was the impact on our ancient environment when the caldera we live in erupted? If we really treasure the beautiful land formations it created, we’ll keep them clean. Conservation is our business!



▷ Today: Let Rain Maker Mountain own the panorama of nature. Like the flimsy man-made ship on the edge, let’s stop trying to conquer Nature and become responsible stewards. Bubbling jewels of delight, the clean seawaters will salute us forever.



▷ Tomorrow: People cast a foreboding shadow on their planet and its ecology today. Let’s learn to use its resources wisely or else we’ll lose it all. Conservation: it affects everything and everybody everywhere.

Photos and captions: Naomi Vaeau and Winona Lineberger