

# PRISM connects scientists with K-8 students and teachers

by Megan Lamson, Jackie Gaudio, Nick DeBoer & Elizabeth Stacy

PRISM, or Partnerships for Reform through Investigative Science and Math, is building a learning community of students, educators, and scientists to provide Hawai'i's K-8 students with learning opportunities that exceed the usual classroom fare.

PRISM is a collaborative effort between the Hawai'i Department of Education and UH Hilo's Education Department and M.S. program in Tropical Conservation Biology and Environmental Science (TCBES). PRISM partners Hawai'i Island teachers and TCBES graduate students to develop and implement inquiry- and standards-based, hands-on science curricula in K-8 classrooms. PRISM curricula, which to date focus on the life sciences, are developed to suit Hawai'i's unique natural and cultural environments and incorporate math, art, language arts, and technology. Infusion of traditional Hawaiian values, such as *malama ka`aina*, enhance curricula and lead to a greater understanding of scientific principles and their connections to traditional knowledge. Since the program's inception in 2006, 18 TCBES graduate students have implemented PRISM curricula in 37 Big Island schools, reaching over 1,000 students.

PRISM's success is made possible in large part to the connections the program is making with scientists from Hawai'i's federal, State, and nongovernmental agencies, many of whom are affiliate faculty in TCBES. These scientists are broadening the hands-on opportunities for students and teachers while demonstrating that scientists are real people with a range of backgrounds and interests. For example, PRISM helped to coordinate collaboration between the Waikoloa Middle School 6<sup>th</sup> grade and Dave Faucette of the Waikoloa Dry Forest Restoration Project. Faucette provided seeds of rare native species for the students to germinate and grow as part of their PRISM curriculum, and these plants were later outplanted in the Waikoloa restoration area. Across the island at Hilo Intermediate, 7<sup>th</sup> graders are connecting with scientists from UH Hilo's CAFNRM, Hawai'i Community College Forest Team, the USDA-Forest Service, Hawai'i Division of Forestry and Wildlife, and the International Year of the Reef outreach program. These students are learning how to carry out a native plant restoration project at Carvalho Park in Hilo in cooperation with the County Department of Parks and Recreation. The koa seedlings used for restoration will be grown by 2<sup>nd</sup> graders at Hilo Union Elementary in exchange for native plant field guides created by the 7<sup>th</sup> graders.

PRISM's partnerships allow access to extraordinary sites on the island as well as the development of place-based curricula. For example, PRISM is working with the state Division of Forestry and Wildlife to help make both Natural Area Reserves and conservation and restoration specialists more accessible to teachers and students. PRISM has worked with the Ka`u branch of The Nature Conservancy (TNC) to allow 5<sup>th</sup>-grade students from Na`alehu Elementary to explore organisms along the nature loop trail within the TNC Ka`u Preserve, Kaiholena. In Hamakua, PRISM is working with Cheyenne Perry, a TCBES graduate student and the Research and Education Manager for the Hawai'i Experimental Tropical Forest (HETF), and Paula Dickey of Laupahoehoe School, to incorporate PRISM curricula into the growing relationship between HETF and the Laupahoehoe community. In a related effort, PRISM is launching a partnership with *Imi Pono no ka`Aina*, a member of the Three Mountain Alliance that holds scientist-run workshops for K-12 teachers. PRISM is providing lesson plans and other resources for these workshops.

As PRISM continues to expand its education and outreach network throughout Hawai'i, we ask to help us further our goal of connecting students and scientists. Please send ideas to [prism@hawaii.edu](mailto:prism@hawaii.edu). For more information on the PRISM Program, visit: <http://www.uhh.hawaii.edu/affiliates/prism/>.

(Editor's note: Megan Lamson, Jackie Gaudio, Nick DeBoer and Elizabeth Stacy are PRISM Program participants.)



Dave Faucette of the Waikoloa Dry Forest Restoration Project shows 6<sup>th</sup> graders at Waikoloa Elementary School how to pot up native dry forest seedlings.