How & Why

These resources are intended specifically to help teachers who want to know more about Hawaiian history, culture & values, and how each relates to the sciences.

All materials were piloted from 2004 to 2006 with Grade 8–12 Hawaiian students in general and/or special education to:

- improve student achievement of Hawai‘i Department of Education content standards
- increase student knowledge & skills in science, math and language arts
- engage students in scientific study with more relevant, interesting content
- respond to the unique learning needs of Native Hawaiian and/or at-risk students

Our aim is to teach students and teachers not just about, but also through Native Hawaiian ways of knowing. In this way it is hoped each will develop a greater sense of self, place and pride.

Take PDERI #1667 to adapt this curriculum to your science courses!
About This Project

Nā Hana Ma Ka Ahupua'a, Science in Hawai'i, is a 3 year Native Hawaiian Education project funded by a US DOE grant. The curriculum offers middle & high school teachers over one year of General Science Lessons centered on the Interdependence of Natural Resources in our watersheds, the Ahupua'a of Hawai'i.

Evidence-based components infused into the curriculum to help all students succeed include:

- **Differentiated instruction** for general and/or special education students
- **Hands-on activities**, concrete learning, projects & field trips
- **Interaction with role models**, kūpuna/elders, community members & local scientists
- **Adapted readings** appropriate to student reading levels and age
- **Locally relevant content** focused 1st on community, island & state, then linked globally
- **Culturally responsive** teaching methods & learning styles

Overview Of The Curriculum

**Introductory Unit: Ahupua'a - Watershed**

Features lessons & activities focused on Lōkahi/Harmony, Diversity, Interdependence, Origins, History, Hawaiian Values, Wai/Water, Conservation & Āina/Land

**Unit I: Kai - Ocean**

Features lessons & activities focused on Limu/Seaweed, Kai/Seawater, Phosphorus, Matter, pH & the Scientific Process & Method of Inquiry

**Unit II: Kula - Midlands**

Features lessons & activities focused on the Kumulipo/Hawaiian Evolution Chant, Darwin, Flora, Fauna, Climates, Propagation

**Unit III: Uka - Mountains**

Features lessons & activities focused on Geology, Earth Day, Volcanoes, Basalt, GPS & Mapping, Stars & Navigation