

The Leaflet
January 2010



FRONT PAGE

The Big Picture

By Roberta Fujimoto Chu, President of the Board of Directors

2009 ANNUAL REPORT



Eight years ago, The Kohala Center was founded with a mandate to create greater employment and educational opportunities by caring for and celebrating Hawai'i Island's spectacular natural and cultural landscape. Our staff has had the courage and the wisdom to listen to island residents and to truly address their needs with creative solutions.

Members of the board and I, as well as members of the staff, continue to be astonished and impressed by the inventiveness and pragmatism of island communities. When our board approved the establishment of the Hawai'i Island School Garden Network (HISGN), ably organized by staff member Nancy Redfeather, we had no idea how meeting what seemed like a simple request would lead to such enormous possibilities for bolstering K-12 education, for enhancing the health of island residents, and for creating a more sustainable future for our society and economy. The momentum and immense transformative potential of the school garden movement reminds me that we have an unusual staff. (Please see the staff profiles beginning on p. 43 of the 2009 Annual Report at <http://www.kohalacenter.org/pdf/TKCAnnualReportFINAL09.pdf>.) While they have long professional histories and strong professional ties upon which to draw, they are not so disciplined by their disciplines that they are unable to recognize novel solutions to challenges. These solutions usually arise from conversations with community partners who say, "Well, let's just start small and begin with what we have at hand." The school garden movement draws on the strength of our communities and on the creativity of island people—people who are driven by a sense of optimism.

Consider this:

In 2009, HISGN expanded to serve 49 schools on the island. In partnership with the Ulupono Initiative, The Kohala Center provided direct financial support to 14 school gardens in the Network. These 14 gardens alone served 1,591 students who are cultivating 180,000 square feet of land to produce over 14,000 pounds of food. In the district of North Kohala, more vegetables are produced by the Kohala Youth Agriculture Project, a member of HISGN, than by any other farm in that community.



Learn more about our work, our partners, our staff, and our vision for the future. Read the 2009 Annual Report at <http://www.kohalacenter.org/pdf/TKCAnnualReportFINAL09.pdf>.

Meaningful Outdoor Experience

A cohort of 14 West Hawai'i teachers and roughly 500 of their students are currently participating in The Kohala Center's HI-MOES (Hawai'i Island Meaningful Outdoor Experience for Students) Program. (See <http://www.kohalacenter.org/himoes/about.html>.) HI-MOES focuses on two *ahupua'a* (watershed) complexes on Hawai'i Island as centers for outdoor learning: Kahalu'u in Kona and Kohala Mountain in Kohala. The aim of HI-MOES is to support a network of environmental educators in the public, charter, and private school system to provide meaningful outdoor place-based and science-based learning opportunities which promote environmental stewardship and which meet Hawai'i Content and Performance Standards.



Teachers and their students are taking field trips to these two very different areas of the island to learn about watershed and bay ecosystems. Each school is undertaking a variety of scientific research projects, designing experimental protocols, and collecting data in the field.

Photo: HPA 7th grade students Alex Cavaliere and Kaipolani Hubbard record their observations made during an introductory activity at Pu'u o Umi Natural Area Reserve on Kohala Mountain.

Here is 7th grader Kaipolani Hubbard's poem about her first day in the forest with the HI-MOES Program:

*Infinite children crowd into the van.
Not my favorite road to travel on.*

*Scenery takes me hostage.
Heard so many beautiful noises.
Oh so many sights to see.
Red and yellow birds in every tree.
Tasting roots and ferns was so cool!*

I'm in total awe!

*Listening to the wind, waterfall, and nature.
Oh my, never so relaxed.
Very interesting smelling mango leaves.
Every sound was music to my ears.
Definitely worth the bumpy ride.*

*In total shock of nature's capabilities.
The best field trip ever!
!*

Some of the students participating in HI-MOES have never been on a school field trip. Often there are challenges to outdoor-based education, such as lack of funding, difficulties scheduling activities outside of school due to logistics and transportation, and lack of appropriate field-based or data collection equipment. HI-MOES aims to alleviate some of these challenges so that teachers and their students can spend time outdoors, learning hands-on about different ecosystems. We hope to be able to assist teachers to incorporate field research into their classes and start

long-lasting research projects that can continue year after year. In addition, exposing students to professional scientists in the field is inspiring and can open their eyes and understanding to a whole new world of science.
–Samantha Birch, Kohala Center Field Educator

Learn more about the field projects now underway in “There’s Life in These Streams!” on the Back Page.

Like Nowhere Else on Earth

Photo: The rare and endangered ‘akiapōlā‘au occurs in only a few areas of upper elevation koa/‘ōhi‘a forest on Hawai‘i Island. Photo credit © Jack Jeffrey.

Hakalau Forest National Wildlife Refuge (NWR) is a very special rain forest, as it has one of the oldest broad leaf tree forests in the northern hemisphere. It also contains some of the rarest plants and birds in the world. You’ll have the opportunity to see, smell, feel, and hear a Hawaiian rainforest, found nowhere else on Earth. –Jack Jeffrey



The public is invited to join The Kohala Center (TKC) for our first Circle of Friend’s event of 2010, a two-mile hike through native montane rainforest which is home to 12 species of native birds, 5 of which are endangered. Join award-winning photographer, birder, and wildlife biologist Jack Jeffrey on Saturday, January 23, from 7:00 a.m. to 3:30 p.m., for a special journey into the Hakalau Forest NWR in search of rare and endangered birds. Jeffrey will explain how reforestation efforts at the NWR are restoring a healthy native ecosystem and leading to recovery of native bird and plant populations. Jeffrey is an entertaining storyteller and participants will learn more about the history of the refuge, as well as tour a 100-year-old koa cabin on the site.

Current Friends of TKC’s Circle of Friends pay just \$25 for this excursion, which includes lunch. Cost is \$75 for new Friends, which includes the event; subsequent excursions are just \$25. For details about upcoming learning events and to download registration forms, visit www.kohalacenter.org, click on “Programs and Events,” and “Kohala Center Learning Events 2010.” Other trips planned this year are Chocolate Growing and Production on Kuaiwi Farm in Kealahou on February 13, Beekeeping and Volcano Island Honey with Richard Spiegel on March 20, and the Keauhou Bird Conservation Center and Kipuka Puauulu with Jack Jeffrey on May 15.

Healthy Soil for Healthy Bodies



Photo: Jerry Brunetti and Dr. Paul Hepperly, experts on sustainable agriculture and conference presenters, check out the mulch layer from the rolling down and crimping of the cover crop.

We believe a sustainable society must be built on a sustainable agricultural foundation—which means building and growing healthy soils. The basis of any healthy natural system is the balance of beneficial microbes. If we grow nutrient rich foods, they will contain all the beneficial flora we need. The agricultural practices that enable farmers to grow nutrient rich foods enhance the soil by promoting conditions for the growth of beneficial microflora. From this foundation comes health and wellness for the entire community. –Steve Sakala, Wai‘aha Farm Manager

Healthy soil, nutrient-rich foods, and a healthy body! Explore the relationship between physical health and soil health at Hawai‘i Island’s first Body and Soil Farm Health Conference on January 23 and 24 at Wai‘aha Whole Systems Farm in Hōlualoa, Kona. The conference, “Culturing the Micro-Flora of the Body & Soil,” focuses on agricultural practices to grow nutrient-rich food. Conference attendees will learn sustainable agricultural practices that they can directly apply to their farms and gardens in order to grow nutrient-rich foods. “Attendees will learn how to foster biological diversity and sustainability in their gardens and farms and to grow foods that have direct and indirect health benefits,” explains Sakala, conference organizer and Wai‘aha Farm manager.

The conference features nationally recognized experts on sustainable agriculture and global health, who will discuss topics ranging from cover crops, to soil science, to heavy metals and how they affect nutrient uptake in the body.

The Hawaiian Language Shall Live

Photo: Kauanoe Kamanā (**center**) accepts the 2007 Cultural Freedom Award on behalf of the ‘Aha Pūnana Leo, Inc. at the National Indian Education Association’s national conference at the Hawai‘i Convention Center in Honolulu. She is pictured singing “Hele au i ka Pūnana Leo” with NIEA president Verlie Ann Malina Wright (**right**) and off-camera staff and families at this gala event.



In this issue we are pleased to feature the work of Mellon-Hawai‘i Doctoral Fellow Kauanoe Kamanā, who is earning a Ph.D. in Hawaiian Language and Indigenous Language and Culture Revitalization at the College of Hawaiian Language at the University of Hawai‘i (UH) at Hilo. Kauanoe’s dissertation title is “*Ke Ō O Ka ‘Ike Ku‘una Ma O Ka Mo‘oki‘ina Ho‘oponopono Ma Ke Kula ‘O Nāwahīokalani‘ōpu‘u: Living Traditional Culture through the Contemporary Application of the Conflict Resolution System, Mo‘oki‘ina Ho‘oponopono, at Ke Kula ‘O Nāwahīokalani‘ōpu‘u School.*”

I became involved in establishing the ‘Aha Pūnana Leo as a parent and as a teacher of Hawaiian language. As teachers, we were concerned about the fate of the Hawaiian language and about the death of our culture in Hawai‘i. The last native speaking kūpuna (elders) were alive and working with us at the time. We all knew that their days were numbered. The mission of the ‘Aha Pūnana Leo, E Ola Ka ‘Ōlelo Hawai‘i, “The Hawaiian Language Shall Live,” means that the culture will thrive as a result of perpetuating the language.

The majority of Pūnana Leo school children are still learning English or Hawai‘i Creole English as the language of the family. Unfortunately, only 2% of all Hawaiian children in the public schools attend Hawaiian medium schools. The ‘Aha Pūnana Leo is the leading entity in Hawai‘i and in the United States that is committed to the revitalization of Hawaiian language. As a result, Pūnana Leo’s efforts are positively impacting the health and vitality of the Hawaiian culture and the Hawaiian worldview among all of Hawai‘i’s people. –Kauanoe Kamanā, 2009 Mellon-Hawai‘i Doctoral Fellow

Read Kauanoe’s story “Living Traditional Culture” on the Back Page.

The Mellon-Hawai‘i Fellowship recognizes Hawai‘i’s leading thinkers and writers. Through the Fellowship Program, doctoral fellows are given the opportunity to complete their dissertations before accepting their first academic posts. Postdoctoral fellows are given the opportunity to publish original research early in their academic careers. Doctoral fellows are awarded \$40,000 for the academic year, and postdoctoral fellows are awarded \$50,000. Application materials for the academic year 2010–2011 are now available on our Web site at

<http://kohalacenter.org/mellon/app.html>. Completed applications must be received by **5:00 p.m. on Monday, February 15, 2010.**

Spotlight on School Gardens: Honoka‘a High School Agriculture Program



Photo: Students installing an irrigation system to hold "upside down gardens."

The fact that there is an agriculture program at our school is awesome. I value many things about the Honoka‘a ag program, but especially the hands-on experience it provides compared to other classes. The agriculture program is helping me with my future, preparing me to become a construction worker. I learn the basics of measuring, constructing different structures, and working with other students.

–Kaimana Lutey, senior at Honoka‘a High School in his third year in the Agriculture Program

Students at Honoka‘a High School have a broad spectrum of agriculture-related courses to choose from during their high school careers, including Natural Resources, Agricultural Technology, Horticulture, Agricultural Science, Aquaculture, and Plants and Animals of Hawai‘i. Manuel Jadulang teaches all of these classes, and he believes the program offers something for every interest. “My agriculture classes encompass everything from animals (i.e., feeding and handling them); caring for the ‘āina (land); growing vegetable crops in fields, greenhouses, hydroponically, and aquaponically; construction skills (use of different carpentry tools and equipment); forestry; aquaculture; irrigation; and other topics. I believe this kind of knowledge and experience is something students will remember and use some time later in their lives,” says Jadulang.

Photo: Students seeding trays for future plantings.

Honoka‘a’s Agriculture Program facilities include six greenhouses (circulating and non-circulating hydroponics, tropical flowers, vegetables, and native plants), an agriculture shop, a plant tissue culture lab, a golf course, and an aquaculture area for freshwater ornamental fish and aquaponics. Students in the program work on projects ranging from maintaining the program’s golf course and grounds using lawn equipment to planting an herb garden.



Agriculture projects involve students in growing vegetable field crops and cultivating native plants, working in the shop to maintain farm equipment and learn welding and small farm woodworking, setting up and managing a fresh water ornamental aquarium, working in the plant tissue lab doing micro-propagation, and tilapia aquaculture and aquaponics. This year the students have fenced off an area for a sustainable garden plot, using ducks and chickens to fertilize this paddock. Students just completed a chicken tractor to be used in this system.

In 2008–2009, The Kohala Center provided funding and support to the Honoka‘a Agriculture Program through the Hawai‘i Island School Garden Network (HISGN). “The Kohala Center has been a tremendous asset to our program,” explains Jadulang, “by facilitating networking opportunities that can help us to transition from chemical to organic agriculture and develop a composting and nutrient recycling area.”

The Art and Science of Map-Making



Photo: Thomas Dye.

Whether maps are drawn with pencil and paper, aided only by a measuring tape and compass, or designed on a high-speed computer using the latest laser scanning technology, the result gains meaning only through interpretation. –Thomas Dye, archaeologist

The first *Puana Ka 'Ike* (Imparting knowledge) and *Eia Hawai'i* (Here is Hawai'i) lectures of 2010 will feature a brief history of archaeological map-making in Hawai'i. Archaeologist Thomas Dye will speak on the art and science of archaeological map-making in Kona from 5:30 to 7 p.m. on Friday, January 22, at the Keauhou Beach Resort Ballroom, and in Hilo from noon to 1:30 p.m. on Monday, January 25, at the University of Hawai'i at Hilo in University Classroom Building 127. Dye will discuss the role of interpretation in archaeological map-making in Hawai'i, with special reference to maps of *heiau* (temple) foundations, including those in Kahalu'u.

Dye graduated from Kailua High School and UH Mānoa before earning a Ph.D. at Yale University. During his 41 years practicing archaeology, he has taught at Hawai'i Pacific University and at UH Mānoa, served as O'ahu Island Archaeologist for the State Historic Preservation Division, and worked for various archaeological consulting firms, including the Bishop Museum. He is currently president of T. S. Dye & Colleagues, Archaeologists, Inc., an archaeological consulting firm in Honolulu.

The *Puana Ka 'Ike* and *Eia Hawai'i* lecture series are presented in partnership with Kamehameha Investment Corporation/Kamehameha Schools, The Kohala Center, the Kīpuka Native Hawaiian Student Center at UH Hilo, and Keauhou Beach Resort. For more information, a schedule of upcoming lectures, and videos of previous lectures, visit <http://kohalacenter.org/puanakaike/about.html>.

Good Times on Kohala Mountain

Photo: KWP volunteers celebrate the end of another successful work day on Kohala Mountain. Photo by Melora Purell.

MAHALO to all of you, our wonderful volunteers, for your work to protect and restore the watersheds of Kohala Mountain in 2009! In the last two years, our volunteers have planted over 5,000 trees. Our volunteers work hard, make new friends, explore areas that other island residents rarely have access to, experience breathtaking views, and learn about our native plants. We hope you can join us for many more good times in 2010. –Melora Purell, Coordinator of Kohala Watershed Partnership (KWP)



KWP will host two volunteer work dates per month starting in January 2010. Work sites will alternate between the dry and wet sides of Kohala Mountain, so that volunteers can experience both environments during the course of each month. All work days will involve weed removal, outplanting, or trail work. Work days are scheduled for the following Saturdays: January 16, January 23, February 13, February 20, March 13, March 20, April 10, April 17, May 15, and May 22. Learn more about volunteering with KWP at <http://www.kohalacenter.org/kwpppelekane/volunteer.html>.

There's Life in These Streams!



Photo: Melora Purell describes life in the stream to participating teachers on their field trip.

Participating with the HI-MOES Program allows our school to take advantage of a wonderful outdoor classroom experience. After just one trip my students have begun asking questions such as: 'Is there life in these streams?'; 'Should the waters of Pelekane be clearer?'; 'How long did it take for the watershed to get this way?'; and 'How do we get the water to be clearer?' They are excited to know they will be returning to study the forest and are looking forward to school next semester!"

—Sylvia Texeira, Middle School Teacher, West Hawai'i Explorations Academy

The Kohala Center (TKC), in partnership with the Kohala Watershed Partnership (KWP), received a grant from NOAA's B-WET Program for HI-MOES (Hawai'i Island Meaningful Outdoor Experience for Students). This one-year program aims to build on the previously funded HI-MEET program (Hawai'i Island - Marine Environmental Education for Teachers).

Photo: Participating teachers spent the day together meeting with TKC and KWP staff and exploring the dry and wet forest of Kohala Mountain.

In September 2009, 14 teachers and their 500 students were recruited into the HI-MOES program. The program kicked off with a teacher meeting and field trip in Kohala. Since September, TKC and KWP educators have been meeting with teachers and students to conduct classroom presentations or field trips focusing on watersheds, bays, coral reefs, and human impacts on these ecosystems.



HI-MOES teachers will be supported throughout the year by subject matter and outdoor education experts: Samantha Birch, The Kohala Center's field educator, and Melora Purell, coordinator of The Kohala Watershed Partnership. These educators provide scientific oversight of the field projects and personalized advice on how to integrate field learning with classroom science lessons. Science specialists and cultural practitioners are also participating in the classroom presentations and field trips, including professional scientists from Cornell University, such as Courtney Couch and rangers from Pu'ukoholā Heiau National Park.



Photo: TKC staff member Caroline Neary visits Pilimai Traub's class at Ke Kula 'o 'Ehunuikaimalino to talk about water quality monitoring.

To date, students have discussed their ideas for field-based science projects and most teachers have selected specific projects for their students to focus on for the remainder of the school year. TKC and KWP are assisting with background information for research projects (including classroom presentations and Web resources), site selection for field trips and research projects, and suggesting equipment and supplies needed for research/data collection.

The Kohala Center is also providing funding for transportation and mini-grants to purchase supplies for field-based science projects and to hire substitute teachers while HI-MOES teachers accompany their students into the field. These mini-grants allow teachers to purchase resource books, water testing supplies, tape measures, quadrats, and even mini field computers. “Teachers have so far been very appreciative of our help in overcoming their main challenges to doing science-based field work and have enjoyed the classroom presentations,” reports TKC’s Samantha Birch.

Photo: Students at Ke Kula ‘o ‘Ehunuikaimalino practice the scientific method by counting corals (marbles) in different wave environments (jars).

The HI-MOES Program will culminate in a scientific conference in May 2010, where students and teachers will share some of their research findings, and guest speakers will be invited to address participating students and teachers.

Visit <http://www.kohalacenter.org/himoes/schools.html> to learn more about each school’s research project.

Here are some comments from participating teachers and KWP staff:

I really feel that science needs to be hands-on and it needs to be student driven. Movement and the use of all our senses are also keys in the art of learning. Field research is the perfect way to meet these needs! Also, students gain knowledge and appreciation for the unique ecosystem present in their own backyards. It is when students learn the value of this ecosystem that they will begin working to preserve it. By being a part of a collective whole with a similar purpose, we are reaching farther than we would as individual teachers. The knowledge that we will be sharing our experiences with other teachers and students from other schools is SO exciting! –Laura Jim, Middle School Teacher, HPA



Photo: HPA 7th grade students on a field trip to introduce them to the wonders of Pu‘u o Umi and expose them to field research. **From back left to right:** Instructor Melora Purell, Kaliko Smith, Jake Schulman, Eiji Tomita, Makana Arce, Tucker Higgins, Daniel Matsuda, Tori Greco Hiranaka, Kenzie Langmade, Noor Sarwar, Sofia Boucher, Yoo Jung Choi, and Joli Welch.

The HI-MOES Program is a wonderful opportunity for my middle school science students to be able to design a marine ecology project and get out in the field to collect data and experience hands-on science. My students have chosen Kahalu‘u as their study site to survey keystone sea urchin populations and monitor marine water quality. The HI-MOES staff from The Kohala Center has been fantastic in implementing and funding our project, making it possible for local students and teachers to participate. –Lisa Diaz, Teacher, Kealakehe Intermediate School

Photo: Students at Parker School conducting a marble/jar experiment to study species of bird abundance at different altitudes.

The HI-MOES Program is a unique partnership that allows students to study and experience Hawaiian ecosystems from a scientific perspective. Without this partnership I feel that many of the students would never see the amazing flora and fauna that once existed on their island. I hope that by providing this experience, students use their new knowledge to respect and protect the living things that surround them and share their experiences with others. –Mari Taira, Teacher, Waikoloa Middle School





Photo: Melora Purell gives a classroom presentation to Mindy Higgin’s class at Parker School.

I am so honored to be working with these HI-MOES teachers! They are stretching themselves and their students into realms of field science that are rarely seen in pre-college studies. They want their students to ask authentic questions based on their own observations and experiences in the natural world. It is exciting to introduce these students and teachers to the unique ecosystems on Kohala Mountain, and to see them coming to understand the complexity of the watershed and its native species.”

–Melora Purell, Coordinator of Kohala Watershed Partnership

Body & Soil Conference

Photo: Jerry Brunetti’s garden in Martins Creek, Pennsylvania.

The Hawai‘i Island conference is presented by Maui Aloha Aina, which has organized the Body and Soil Farm Health conference on Maui for the past eight years. This year the Maui event will be January 16 and 17 at Kumulani Organic Vegetable Farm.

Last year’s conference on Maui drew about 300 people and really invigorated the Maui community. It is our desire to make this kind of knowledge and expertise available throughout the state by building collaborations with other organizations such as Wai‘aha Farm and The Kohala Center. We envision each island serving its community through educational outreach in restorative and sustainable practices. –Vincent Mina, founder of the Aloha Aina Conferences



Hawai‘i Island conference presenters include:

Photo: Jerry Brunetti.

- Jerry Brunetti, 2008 ACRES USA Lifetime Achievement Award Recipient and a consummate communicator of the connection to food as medicine and farm as “farmacy.” Brunetti will speak to the collaborations of the various inhabitants in the human gut.

Attendees will come to understand the big picture of what makes up a healthy body and a vital soil. Having this awareness will inspire folks to grow nutrient dense food and to care for the health and well being of their bodies.” –Jerry Brunetti

- Theresa Vernon, mineral tissue hair analysis expert and licensed acupuncturist. She is an expert on treating chronic fatigue syndrome along with metal toxicity to free up the body’s ability to uptake nutrients properly.

Photo: Dr. Paul Hepperly.

- Dr. Paul Hepperly, Fulbright Scholar, compost and cover crop specialist, a Rachel Carson Scientist, former director of Rodale Research and senior scientist and a recognized expert in greenhouse gases and our food system. He worked from 1999 to 2002 with organic ginger farmers on Hawai‘i Island, helping to manage ginger bacterial wilt. He has more than 35 years in agricultural research, management, education and information outreach. His conference presentation ranges from biochar, innovative compost methods, cover cropping, and tillage reduction, to the energy requirements of our food system.
- Michael Martin Melendrez, humus and Micorrhizal Fungi specialist. Owner of Soil Secrets, he coined the term “soil food web” in the seventies and is an expert on humus building and microbial inoculation. He will explain what we can do to grow our soils to prepare for growing plants.



The conference includes a trade show with local holistic and ecological vendors and on-farm demonstrations of whole systems integration with animals, cover crops, and composting. Registration includes locally sourced, nutrient-rich meals. Campers are welcome. The public is invited to meet and greet the speakers at 6 p.m. Thursday, January 21, at the Wai‘aha Farm Community Hall. Call 808-756-7945 for directions.

Wai‘aha Farm consists of 100 acres located on the slopes of Hualalai Volcano, overlooking Kailua-Kona on Hawai‘i Island. It is bordered on the north by Wai‘aha Stream, which in ancient times was the only year-round river on the west side of the island. Queen Emma’s summer palace was located on this site, and King Kamehameha IV had a private farm here, where he grew native crops and experimented with new crops brought by westerners. Over the last 150 years the farm has commercially produced, taro, coffee, macadamia nuts, cotton, and cattle. Today Wai‘aha Farm is transitioning to be a commercially viable, income producing business that serves as a model for 21st century agricultural practices. These practices include soil building, agro forestry, animal husbandry, pasture and farmland reclamation, and integrated vegetable and fruit production.



Photo: An example of mob grazing in Pennsylvania. Note the height the pasture is allowed to grow to for mob grazing, in which up to 285,000 pounds of cattle graze per quarter acre. The cattle eat the seed tops off of the grass and then are moved into the next pasture.

Registration fees are as follows:

- Two-day registration fee is \$150;
- One-day registration (Saturday or Sunday only) fee is \$80;
- Camping fee is \$15 per day (Friday or Saturday) or \$25 for both days;
- Trade show booth fee (includes full conference registration) for two days is \$450.

For more information, registration, or trade show participation, visit <http://kohalacenter.org/bodysoilconference/about.html> or call 808-756-7945.

The Hawai‘i Island conference is sponsored by Hawai‘i Farmers Union, ACRES USA, Sam Vessel, NRCS Maui, The Kohala Center, and Volcano Art Center.

Living Traditional Culture

By Kauanoe Kamanā

Photo: Kauanoe and her parents Paul and Ella Kamanā.

I attended Kamehameha Schools from kindergarten, which I entered in 1956, through to my high school graduation in 1969. I remember that there were children there who had families just like mine. My favorite teachers were those who had expectations and *aloha* and who inspired me to do my best. The great majority of my teachers were not Hawaiian, but those few who were had a distinct knowledge base and behaviors that I could relate to. This held true throughout my schooling at Kamehameha. I had a special respect for these Hawaiian *kūpuna* (elders) well into my adult years.



I first learned Hawaiian phrases and songs as a child through music at home, at church, and at school. Mrs. Rosehill was our music teacher in elementary school and she taught us the fundamentals of Hawaiian music by singing, not by talking about it. My father taught me to play 'ukulele and, as students, we sang and played 'ukulele following lunch every day. Family gatherings and camping trips were always filled with singing Hawaiian songs and playing Hawaiian music, and we also enjoyed singing at Kawaiaha'o Church.



Photo: Kauanoe at her aunty's home on Kahakai Drive in Honolulu.

We attended formal Hawaiian class in the 7th grade, and there were Hawaiian language electives in high school and Hawaiian club as an option too. I took French and not Hawaiian at Kamehameha Schools. However, after seeing how happy my father was when he listened to people speaking Hawaiian on Ka Leo Hawai'i on the radio on Sunday evenings, I enrolled in Hawaiian language classes at the University of Hawai'i at Mānoa. My father was pure Hawaiian and it wasn't until college that I realized how much he enjoyed the spoken language.

My father's interest, my upbringing as a Hawaiian, my friends' interest in getting involved in Hawaiian language, and emerging Hawaiian issues all helped to spark my interest in learning the Hawaiian language. My work in Hawaiian language caught the attention of Derek Bickerton, who was part of the linguistics faculty at UH Mānoa, and he encouraged me to enter the M.A. program in linguistics. He later hired me as a graduate assistant to work as an informant on a Pidgin and Creole research project. I continue to be inspired by individuals like Derek, who are knowledgeable and passionate practitioners in their field.

Photo: A recent photo of Kauanoe Kamanā and her family. Kauanoe's family was one of the first in the Hawaiian language revitalization movement to use Hawaiian exclusively at home. **From left to right:** Kauanoe, Hulilauākea, Keli'ihoalani, Pila.

I anticipate finishing my Ph.D. this academic year. For me, writing my dissertation is an opportunity to contribute to the field of Hawaiian education by documenting the outcomes I have observed



as an active participant in the field over the past 30 years. I always think of myself as a student, so doing this kind of intellectual work is very fulfilling.

I think managing my various high-priority *kuleana* (responsibilities) will be a challenge for me this year. As the director of Ke Kula ‘O Nāwahīokalani‘ōpu‘u School, I work with colleagues who are knowledgeable and prepared to ensure that the standards of the school are met while I finish my dissertation. Our school was established in 1994, and our entire school culture is built on these kinds of understandings.



Photo: Kauanoë working on Hawaiian immersion curriculum in 1987.

My dissertation explores the *mo‘oki‘ina ho‘oponopono*, or “Hawaiian cultural system of conflict resolution.” This is a Hawaiian system that is in place at Nāwahī and that can be relevant in other places as well. The context that enables it to be successful is the overall culture of our school or of any organization. The *mo‘oki‘ina ho‘oponopono* functions as part of that culture and facilitates the improved interpersonal productivity

of its participants. As a Hawaiian process, it is part of a network of systems that reflect a Hawaiian worldview. It cannot function alone. I believe this Hawaiian worldview is especially relevant to life in Hawai‘i today.

For the *mo‘oki‘ina ho‘oponopono* to function at Nāwahī, teachers, staff, and families take on responsibilities in ways that reflect a Hawaiian worldview. Some examples of this are attaining a level of quality in terms of leadership and trusting a leader, giving one’s best effort in beginning and completing an activity, and respecting genealogical order and responsibility. Students who are surrounded with adults who behave and respond in these ways will grow up and emulate these understandings.

This system is an additional strategy for conflict resolution in the schools. It is useful as an immediate way to work within the school community before implementing the Chapter 19 DOE Administrative Rules on Student Misconduct and Discipline. This holds participants accountable and requires patience and discipline on everyone’s part in order to assure an overall successful outcome.

Photo: Kauanoë Kamanā (far right) played an important role in the development of the first Hawaiian language T.V. news program ‘Āha‘i ‘Ōlelo Ola on Sunrise on KGMB9.



The *mo‘oki‘ina ho‘oponopono* is just one aspect of the Hawaiian medium education system. My research involves observing, collecting data, documenting, and analyzing the *mo‘oki‘ina ho‘oponopono*, and my work will subsequently generate fundamental principles of the *mo‘oki‘ina ho‘oponopono*. This will enable me to help students, families, and teachers to participate and, ultimately, recreate the system in other settings. My research will also provide a means to assist with other indigenous language efforts outside Hawai‘i as well. Taking the *mo‘oki‘ina ho‘oponopono* to diverse contexts and testing its applicability as a Hawaiian process will have a positive impact on how Hawaiian education and the overall Hawaiian worldview is perceived both within academia and in a broader societal context.

My dissertation focuses on data collected at Ke Kula ‘O Nāwahīokalani‘ōpu‘u and investigates how that data reflects the Hawaiian worldview. As a Hawaiian system, the *mo‘oki‘ina ho‘oponopono* may be replicable in other

settings, including other schools. I look forward to working with other laboratory schools of the Hawaiian College at UH and with interested local businesses that may find this system valuable in their settings.



Photo: In celebration of the 20th anniversary of the establishment of the Kula Kaiapuni Hawai'i Hawaiian Immersion Program in the Department of Education. **From left to right:** Hiapo Perreira, Kaleihōkū Kala'i, Kauanoē Kamanā, and Nāmaka Rawlins.

I am also president of the board and one of the founding members of the 'Aha Pūnana Leo (www.ahapunanaleo.org), which is a grassroots community effort that continues to contribute to the life and welfare of the Hawaiian language and culture. First, as a parent, and then, as a teacher, the 'Aha Pūnana Leo's efforts are essential in establishing Hawaiian language as the language of the home. Using the Hawaiian language at the infant/toddler and preschool levels gives parents an awareness of the importance of language and cultural identity as

indications of a thriving community. As a result, young parents are now raising their children as first language speakers of Hawaiian in the home. I participate in this effort because it creates the foundation upon which all other Hawaiian language and cultural efforts are based. When Hawaiian medium education is successful, the Hawaiian worldview will ultimately strengthen the unique cultural fabric of Hawai'i.

The increased number of Pūnana Leo school graduates raising their children as Hawaiian speakers has impacted the number of students who enter Nāwahī as first language speakers. The Pūnana Leo schools have, since 1985, graduated Hawaiian-speaking children who subsequently entered kindergarten classes across the state. The majority of these children were learning English or Hawai'i Creole English at home. Today, more of those who graduate from the Pūnana Leo use Hawaiian with their parents at home.

Photo: Kauanoē Kamanā (seated left) presents on Self-Determination and Native Education at the All Ivy Conference at Yale University in April 2009.

I recently presented my work at the American Anthropological Association's annual conference in December in Philadelphia. I spoke about *Ke Kula 'O Nāwahīokalani'ōpu'u: Building from the Strength of Native Hawaiian Identity*. I provided an overall description of Hawaiian medium education, its philosophy, mission, and program design. I also pointed out relevant aspects of the school experience that relate to Hawaiian identity and to the Hawaiian worldview.



It is an honor to be a part of a national effort to significantly impact groups of indigenous people who would not otherwise have such an opportunity. This is especially significant in Hawaiian communities like ours, where practical applications and the advancement of scholarship should naturally work hand in hand. I am grateful to see that the Mellon-Hawai'i Fellowship has reached out to those involved in revitalizing Hawaiian language and culture. I am also impressed that The Andrew W. Mellon Foundation supports efforts like mine that range in scope from preschool education through the university level. The Mellon-Hawai'i Fellowship is helping to sustain the recent promising endeavors to build and strengthen the language and culture of Hawai'i for all of Hawai'i's people.



Photo: Aboriginal students from Taiwan are among many indigenous visitors to Nāwahīokalani‘ōpu‘u School where Kauanoie Kamanā serves as director of laboratory school programs for UHH’s Hawaiian Language College.

My work allows me to continue to build connections with native people and to network with other Hawaiian scholars in the field, including with my mentor Kalena Silva. After I finish the Mellon-Hawai‘i Fellowship, I will return to Nāwahīokalani‘ōpu‘u and to the university. As a college, Ka Haka ‘Ula O Ke‘elikōlani at UH Hilo has as its mission the revitalization of Hawaiian language and culture. My work there will focus on training leaders and administrators, and on expanding the mo‘oki‘ina ho‘oponopono based on the model developed thus far.

I believe the mo‘oki‘ina ho‘oponopono can function successfully in coordination with other systems in a variety of contexts. It can serve its purpose within a family, a school, or a business. The implications for applicability of the mo‘oki‘ina ho‘oponopono are far reaching. Wherever Hawaiian language is used, the mo‘oki‘ina ho‘oponopono could also be used. Its utilization in the school context today is an attempt to return this system to its natural context in times past.

Knowledge They Can Use

Photo: Students planting bean seedlings in the field system.

I think the Agriculture Program is great because this is the only class that I know that lets me go outside. I love to work with my hands and get dirty. –James Maikui, junior at Honoka‘a High School in his first year in the Agriculture Program

Honoka‘a High School Agriculture Teacher Manuel Jadulang graduated from Kohala High School, where he recalls taking agriculture classes and being a member of the Future Farmers of America. Jadulang earned a degree in Agriculture from UH Hilo and a degree in education from the University of Phoenix. This is



Jadulang’s third year teaching at Honoka‘a High School. Previously, Jadulang taught at Kohala High School from 2000–2001, then at Kealakehe High School from 2002–2007, where he created an agriculture program “from scratch.”

At Honoka‘a, Jadulang teaches four Agriculture/Natural Resources classes to a total of 130 students. “Some students take my classes because they can relate to working outdoors, and maybe their hobbies include fishing or hunting. Some take them because they sound like a fun elective,” reports Jadulang.

Photo: Clearing weeds from the pineapple patch.

Students in the Honoka‘a Agriculture Program cultivate 11,520 square feet of land and have grown and harvested 225 pounds of food so far this year. All of this food was distributed to staff or students on campus. Food production has increased by 217 pounds since 2008 and, with the assistance of HISGN mentors, Jadulang hopes to increase production even further to support a student farmers’ market on campus once a month and/or a community supported agriculture subscription program for faculty members.

Jadulang enjoys sharing his own knowledge and experiences with students, as well as new trends and techniques, such as aquaponics. “After teaching for several years, it is rewarding to see how students mature over time, especially the students who take my classes for more than one year. I like seeing my former students doing OK in their lives when I see them in the community,” remarks Jadulang. “I stress to my students that they need to establish good work ethics and respect. Many students today lack these skills,” he says.

Photo: Hydroponic lettuce grows in this shadehouse system.

Jadulang reports that many of his students do not think of agriculture as a career path because they see agriculture as hard work with low compensation. “Many of them don’t know that agriculture is no longer just farming. There are a wide array of agricultural fields, from forestry to aquaculture, to marketing, to education, to agricultural inspection at airports, to conservation, to biotechnology, and more. I try my best to provide opportunities for students to see all of the aspects of the agriculture/natural resources spectrum,” explains Jadulang.



Photo: Using a template in preparation for drilling holes for green onions in an aquaponic raft.

In 2008, the Honoka‘a Agriculture Program received funds from The Kohala Center’s Hawai‘i Island School Garden Matching Grant program to purchase lumber, irrigation materials, seeds, fertilizer, netting, weed mats, and fuel for its tractor and tiller. “The Kohala Center has also provided moral support for me and for the program. Because of the workshops and networking provided by The Kohala Center, the students and I know that we are not the only ones doing agriculture on the island.

The Kohala Center recently helped to connect Jadulang to Dash Kuhr of the Hawai‘i Youth Agriculture Project in North Kohala, who is mentoring Jadulang on sustainable agricultural techniques during the 2009–2010 school year. “Dash has been giving me ideas to transition our program from traditional agriculture (using chemical fertilizers) to one that is more sustainable,” says Jadulang. “We have been planting our field crops according to the system Dash uses at his farm in Kohala. His system utilizes raised beds, manure (chicken or cow), and cover cropping. Our partnership is going well,” Jadulang concludes.

Photo: Mulching paths with recycled paper from the school.

Jadulang invites anyone in the community who would like to volunteer in assisting the Honoka‘a High School Agriculture Program with a range of projects, including:

- coordination;
- helping students with their gardening projects;
- working in the agriculture shop on construction;



- small engine repair; or
 - installing additional electrical outlets in the farm areas, etc.,
- to contact him via e-mail at manuel_jadulang@yahoo.com or by phone at 775-8800, extension 289.

