



Place-based After-School Literacy Support (PALS)

Place-based After-School Literacy Support (PALS) program provides culturally relevant and responsive learning opportunities for students in elementary, intermediate and high schools on the Waiʻanae coast of Oahu, Hawaii, serving a predominantly Native Hawaiian population. The program has grown from 2 schools and 35 students to as many as 8 schools and 500 students. The growth is in response to an increased interest in a place-based learning approach that resonates with students' lives.

PALS utilizes a place-based cultural project (PBCP) curricular approach in which 'place' – community and its natural resources – serves as the springboard for learning. PALS teachers are an integral part of that process, pairing students with projects relevant to their own lives.

PALS leaders developed an Instructional Framework and Instructional Model to guide the implementation of the afterschool program. The PALS Instructional Framework aims to increase teacher understanding of and skills in teaching place-based education. The Framework consists of four components: Relationships, Relevance, Reflection, and Rigor.

Relationships set the foundation for success in PALS: relationships between teacher and students, students and students, and students and place.

Relevance frames learning in a way that makes sense for students. By ensuring students know what they are doing and why they are doing it, helping them to make connections to lessons, and creating opportunities to produce projects for an authentic audience. PALS grounds each lesson in real-world application.

Reflection encourages students to think deeply about their own learning. By asking and processing questions, teachers encourage students to develop effective thinking processes and to reflect on their learning through the lens of community and Place.

Rigor ensures students are building conceptual understanding, not just recall. Students actively organize or build knowledge and communicate their understanding.

In addition to an instructional framework, PALS has also developed an Instructional Model. The PALS Instructional Model consists of three parts: *Beginning* of program day, *Throughout* the program day, and *End* of the program day. The beginning of the program is designed to establish Community, Relationship, and Purpose. *Throughout* the day Relationship and Relevance are reinforced and Question & Discussion and Conceptual Understanding are included. The *end* of the day focuses on Reflection. The purpose of the activity and the learning is at the center of all three phases of the PALS Instructional Model. The goal is to maintain constant relevance of the tasks and application in the community.

Given the PALS focus on effective instruction, their development of an instructional framework, and their implementation of their instructional model, in 2016, Kamehameha Schools, one of the PALS funders, was interested in exploring the possible impact of an after school program on in-school performance of teachers and students.

The BERC Group had conducted the PALS Annual evaluations for four years, as a third-party evaluator, and was hired to lead a specific inquiry.

Research Questions:

1. To what extent does the quality of PALS teacher instruction during the school day change over time?
2. To what extent does PALS student achievement in school differ from whole-school student achievement?

BERC evaluators utilized a pre-/post- measure to determine the extent to which teacher instruction changed over time and compared PALS student reading achieved to whole school student achievement over time.

The STAR Classroom Observation Protocol® was used to measure the extent to which effective, cognitive-based, standards-based classroom practices (Powerful Teaching and Learning™) were present in the classroom during the school day.¹ The Overall score represents the extent to which the overall teaching and learning practices observed were aligned with Powerful Teaching and Learning™ (PTL).

In the fall 2015 baseline (see Figure 1), PALS teachers exhibited the same degree of (PTL) alignment as the STAR average (48%). This was used as the baseline for comparison. The spring, 2016, classroom observation study showed a substantial increase in the degree to which classroom lessons, delivered during the school day were aligned with PTL.

Figure 1, shows the extent to which classroom practices were aligned with Powerful Teaching and Learning during the study. During the spring, 2016 observations, 81% of the classrooms observed were aligned with Powerful Teaching and Learning. This is an increase of 33 percentage points over the baseline data collection.

In addition to PALS teachers changing the way they taught during the school day, student achievement for PALS students was greater than whole school achievement in Reading over several years of study (see Figure 2).

Although inappropriate to draw causal connections between teacher and student involvement in the PALS

and in-school performance, there is a correlation that should be explored further. In interviews and focus groups, both teachers and students reported that they believed the after-school program had an impact on their in-school performance.

References:

Abbott, M. L. & Fouts, J. T. (2003). *Constructivist teaching and student achievement: The results of a school-level classroom observation study in Washington*. Lynnwood, WA: Washington School Research Center, Seattle Pacific University. Available at: <http://www.spu.edu/orgs/research/ObservationStudy-2-13-03.pdf>

Baker, D., Gratama, C., Peterson, K., Thompson, C., (2010). *The STAR Classroom Observation Protocol: A reliable and valid measure of Powerful Teaching and Learning™ in 15,000 classrooms*. Bothell, WA: The BERC Group Inc. Available at: www.bercgroup.com/portfolio/reports.

Fouts, J. T., Brown, C. J., & Thieman, G. Y. (2002). *Classroom instruction in Gates grantee schools: A baseline report*. Seattle, WA: The Bill & Melinda Gates Foundation.

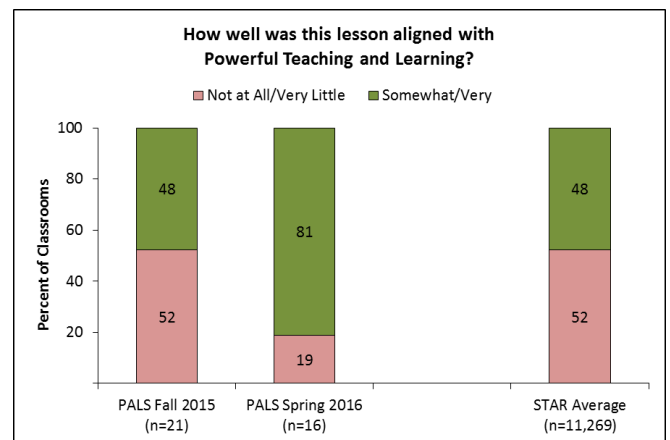


Figure 1. Percent of Classrooms Aligned with Powerful Teaching and Learning (33% Increase)

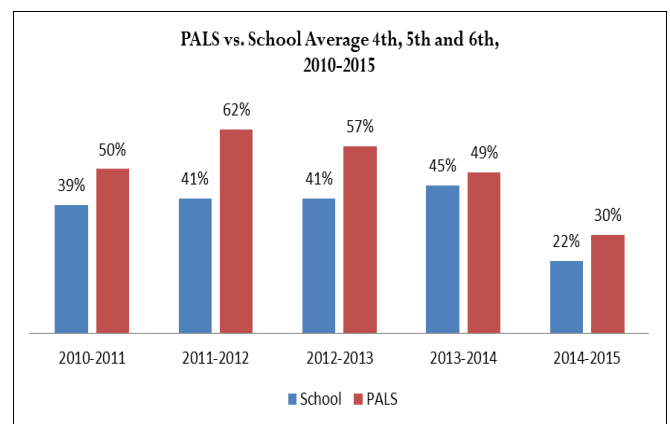


Figure 2. Elementary HSA and SBA Reading Proficiency: PALS vs. Whole School

Full report will be published in June, 2016

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¹ The BERC Group has conducted more than 40,000 classroom observations using the STAR Protocol

PALS

PLACE-BASED AFTER-SCHOOL LITERACY SUPPORT

AQUAPONICS FOR LIFE

Fourth, Fifth, and
Sixth Grade

Kamaile Academy
Wai'anae, Hawai'i

Makaha Elementary
Makaha, Hawai'i

Wai'anae Elementary
Wai'anae, Hawai'i



WATER, FOOD, AND SUSTAINABILITY

The Aquaponics for Life: Water, Food, Sustainability Project supported children in inquiry about the island's water supply and the major sources of food. Children problem-solved many difficult issues of water and food shortages and investigated promising solutions with the help of community members. The project culminated with children designing and building aquaponics systems and communicating, in various ways, the potential of aquaponics as a sustainable and water-efficient food source to the community.

Aquaponics for Life

WATER, FOOD, AND SUSTAINABILITY

SUMMARY

The Aquaponics for Life: Water, Food, and Sustainability Project was taken up by three schools within the PALS program, across several years. Children from Kamaile Academy and Wai'anae and Makaha Elementary Schools engaged in projects that supported them in inquiry, around the island's water supply and its major sources of food. Multiple investigations within the project had children problem-solving difficult issues of water and food shortages and investigating promising solutions with the help of local community members. Children read about, wrote about, and constructed different kinds of gardens; including soil gardens, raised bed and container gardens, and different aquaponics systems. They conducted scientific experiments to answer questions around water conservation and efficiency. They communicated their learning with the larger community, sharing both their harvests and their knowledge at several community and school events.

These projects benefitted from close collaboration with several organic farms in the area, Hoa 'Aina O' Makaha and Ka'ala Farms. Staff at both farms shared their expertise with the children - teaching them about the different kinds of gardens and helping them to explore and build different kinds of aquaponics systems. They also worked with local community activists, the Board of Water Supply, and military archaeologists and biologists, who provided an understanding of the history of water use and human impact in several local watersheds.

Throughout the diverse investigations in this project, children were asked to work together to critically assess and design solutions to real-life, compelling issues and problems - 21st Century skills necessary for full and productive participation in society and at the heart of most school reform agendas. As children focused on these problems, they were involved in reading, writing, and presenting for authentic purposes and to authentic audiences; thus ensuring that the standards were taken up in meaningful ways. Children left these projects with not only the knowledge they needed to understand their changing world, but also with skills they could use to make a difference today!



GUIDING QUESTIONS

What issues and problems around water and the supply of food affect us in Wai'anae?

What possible solutions are there to these problems?

How do we start educating others about these problems and solutions?



INVESTIGATION ONE

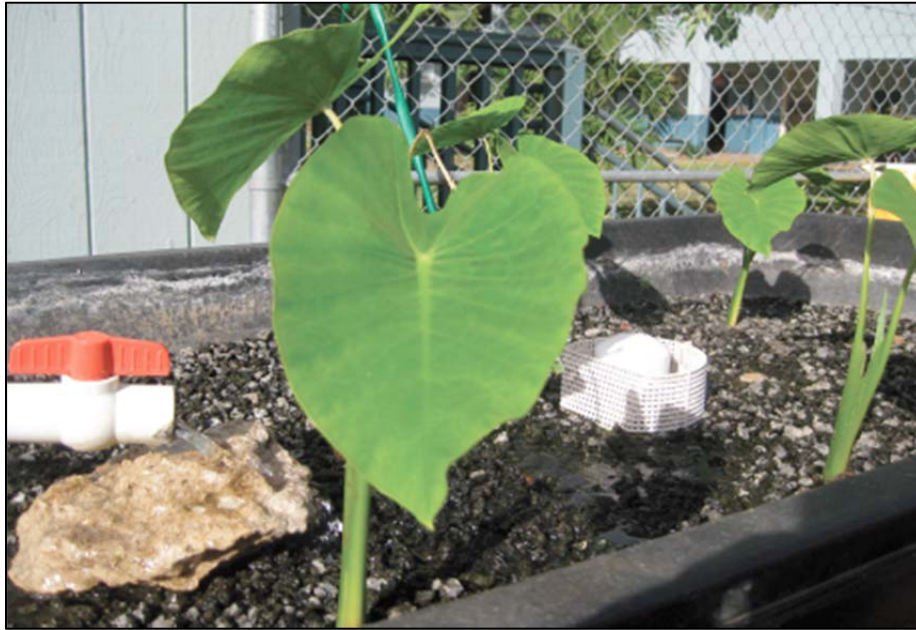
Water and Food Sources in Our Community

The first investigation had children exploring the critical nature of water within the islands and the relationship between water and food sources in Hawaii. They gathered information from books, online sources, and local activists and organized their learning using different schematic maps. These they used to analyze the information. They made several field excursions: visiting a local valley, used by the military since World War II and scheduled to return to Native Hawaiian control by 2029; tracing the diversion of water in another valley by (**what company had diverted the water in the stream the children saw with Vince**) and seeing firsthand how the watershed had been damaged over time, how water use had changed, and the reality of the shortage of water today.



As they learned that experts predict that local water supplies for their community will not last beyond 2030 and that their island community has only a 3 day supply of food at any time, as a result of dependency upon large container ships bringing it from outside the islands, they began to consider the impact of these realities on their lives and the lives of family and community members. As a result, they posed the questions of how more local, sustainable approaches to food production might be developed and how to conserve water within these efforts.

Children took these questions to local organic farms; where they explored different kinds of farming techniques including soil gardening, raised bed gardening and aquaponics systems, observing each type and taking detailed notes and eventually drawing and labeling flow maps to describe the way each system worked. They grew seedlings, developed and planted their own container gardens, and built a small aquaponics system as a group. They engaged in research comparing a raised (**was it a raised bed or a container garden that was compared?**) bed garden with an aquaponics system, keeping track of the water used each day. They found that the aquaponics system used less water than the raised bed garden. They communicated their findings in a presentation to friends, family and community members using a line plot chart to communicate the difference in water usage.



INVESTIGATION TWO

Aquaponics Systems



In the second investigation within these projects, children followed their enthusiasm for aquaponics as a solution for both growing food and conserving water into a deeper exploration of these systems. After developing questions to guide their visits, the students visited several local organic farms that had multiple systems. Through talks with experts and outside study, they learned of the science behind the systems. They discovered a system of interdependence and mutual benefits in which fish waste is turned into valuable food for the plants which, by using up these nutrients, makes the water a healthy habitat for the fish. They learned about different kinds of aquaponics systems, including the “flood and drain” system where the worms within the cinder rocks eat the algae created by the system. They also examined the “continuous flow”

system in which taro grows, learning that both systems need continual turbulence in the water to provide oxygen for the fish.

Children then designed their own aquaponics systems, first diagramming the system and the water cycle and then building the system with the help of the PALS teachers. They used what they had learned about plants, native to Hawaii and plants that thrive within such systems, to make choices about what to plant. They planted lettuce, mint, chives, chili peppers, egg plants, strawberries and chose tilapia, a fish known to thrive in aquaponics systems, to finish the system.



INVESTIGATION THREE

Enjoying the Fruits of Our Labor and Spreading the Word

In the third investigation, children designed different scientific experiments around their aquaponics systems. They posed questions of growth and water maintenance and analyzed their data to answer these questions. They used this information to make necessary changes to their systems to ensure optimal growth of both plants and fish. As both plants and fish grew, students began to harvest. They investigated what could be made using the vegetables and fruit grown; and, among other delicious edibles, turned their strawberries and mint into Mint Strawberry Soda and their greens into a bountiful green salad that they enjoyed together. Other harvests were sent home to be enjoyed by families.



Children also learned how to butcher and clean the tilapia, enjoying a fish dinner together afterwards.

Culminating events and products included children writing procedural texts on how to construct aquaponics systems for home use. They studied different kinds of procedural texts and used these models to create 'kit directions' or fold out procedural pieces. They published books that included the materials and the step-by-step process of building and caring for a system. One group designed and built an aquaponics system that they demonstrated at a local organic market and then auctioned off at a school event to raise money for future systems. All of the groups made presentations to family, friends, and community at an end of the year event, communicating their concerns about water, food, and sustainability and their strong beliefs in the value of aquaponics to address these concerns.



FINAL PRODUCT

Over the course of their study, children studied and designed multiple aquaponics systems. As a result, one of the final products for this project was a fully functioning aquaponics system at each of the schools. These systems will remain at the school to be used both in PALS and more widely by the school. Children harvested both plants and fish from their systems, feeding themselves and guests many meals. They felt this was proof that aquaponics not only lends itself to efficient water use, but holds great potential as a sustainable food source.



A second product created in this project was a procedural text or “how to” book entitled, *Making Our Life Easier – Aquaponics*. Children collectively wrote the book which taught others how aquaponics works and how to construct a system. This book was published through an online publishing service and distributed throughout the school community.

Another final product was the design and assembly of parts for an aquaponics home kit. The children made a presentation on the importance and value of aquaponics and then auctioned this kit to the highest bidder at a local school function. The money was then donated to the school to support future aquaponics efforts.

MAKING OUR LIFE EASIER – AQUAPONICS BOOK



AQUAPONICS HOME KIT

STANDARDS

Reading

LA.4.2.4 Distinguish fact from opinion and cause from effect when reading information texts

LA.4.2.5 Summarize main points found in informational texts

LA.5.2.1 Understanding Text Structures: Use organizational patterns to access information

LA.5.2.2 Make inferences and draw conclusions about grade-appropriate texts

LA.6.2.2 Use knowledge of organizational structures to construct meaning from text

LA.6.2.3 Draw and support conclusion about information or ideas in a text

Writing

LA.4.4.1 Write in a variety of grade-appropriate formats for a variety of purposes, such as: reports that focus on a central question and incorporate summaries from research

LA.4.5.1 Use appropriate facts and interesting details that develop the intended meaning and anticipate the needs of the audience

LA.5.4.1 Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as: reports incorporating a framing question and including research from two or more sources

LA. 5.5.1 Use information from appropriate sources: self, peers, and a variety of grade-appropriate sources

LA.6.4.1 Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as reports with a narrowed focus that allows for thorough treatment

LA.6.5.1 Select appropriate details, examples, reasons, and/or facts to support an insight, message, or thesis

Science

SC.4.1.1 Scientific Inquiry: Describe a testable hypothesis and an experimental procedure.

SC.4.3.2 Interdependence: Describe how an organism's behavior is determined by its environment

SC5.3.2 Interdependence: Describe the interdependent relationships among producers, consumers, and decomposers, in the ecosystem in terms of the cycles of matter

SC.5.1.1 Scientific Inquiry: Identify the variables in scientific investigations and recognize the importance of controlling variables in scientific experiments

SC.6.1.1 Scientific Inquiry: Formulate a testable hypothesis that can be answered through a controlled experiment

SC.6.3.1 Cycles of Matter and Energy: Describe how matter and energy are transferred within and among living systems and their physical environment

Math

MA.4.11.1 Data Collection and Representation: Pose questions, collect data using observations and experiments, and organize the data into tables and graphs

MA.4.12.1 Data Interpretation: Compare related data sets with an emphasis on how the data are distributed

MA.5.12.1 Data Interpretation: Determine the range, median, mode, and mean for a data set

MA.5.13.1 Predictions and Inferences: Design studies to further investigate the conclusion/predictions made based on data

MA.6.11.1 Data Collection and Representation: Analyze how data collection methods and sample size can affect the results of data sets

MA.6.13.1 Predictions and Inferences: Make inferences about a population based on the interpretation of a sample data set

PLACE-BASED EXPERIENCES/COMMUNITY CONNECTIONS

Field Work

Hoa 'Aina O' Makaha Farm

Ka'ala Opelu Project

Kahumana Farm

Tour of Makua Valley (with the military and cultural practitioners)

Field expedition through Makua Valley

Participation at Wai'anae Farmer's Market

Experts from the Community

Mr. Gigi Cocquio – Community Activist, founder of Hoa 'Aina O' Makaha Farm

Kai Cocquio - Hoa 'Aina O' Makaha

Eric Enos – Executive Director, Ka'ala Cultural Learning Center

Archie Grey - Education Director, Ka'ala Cultural Learning Center

Vince Dodge - community activist; founding member Mohala I Kawai

Fred Dodge, community organizer, Save Makua Valley

Leandra Rodrigues, cultural expert, Makua Valley

United States Department of Defense Archaeologist

United States Department of Defense Biologist

KOA 'ĀINA ENVIRONMENTAL STEWARDSHIP CAMP

Fourth, Fifth, and Sixth Grade

Ka Waihona o Ka Na'auao
Kamaile Academy
Mā'ili Elementary
Mākaha Elementary
Nānāikapono Elementary
Wai'anae Elementary



Our 21st Century Ahupua'a: Sharing, Stewardship, Conservation, Sustainability

The PALS Koa 'Āina (warrior of the land) week-long overnight Environmental Stewardship Camp supports children in their investigations into, and experiences with what it means to be an advocate for their community and a steward of the environment. Children were provided with experiences that supported them in gaining a sense of power (i.e., developing the discourse of environmental stewards and community activists and applying Hawaiian cultural values that foster positive self identity) regarding their abilities to investigate important issues and effect change. Camp supports children to be confident risk takers, assume leadership roles, and take on active responsibility in their own learning. The camp culminated with a hō'ike (exhibit) in which children presented their knowledge about environmental stewardship to an audience of parents, community members, and cultural practitioners.

Koa 'Āina Environmental Stewardship Camp

OUR 21ST CENTURY AHUPUA'A: SHARING, STEWARDSHIP, CONSERVATION, SUSTAINABILITY

SUMMARY

The PALS Koa 'Āina Environmental Stewardship Camp hosted eighty students from five Wai'anae Coast schools on the west side of O'ahu. Children from Wai'anae, Nānāikapono, Mā'ili, and Mākaha Elementary Schools and Kamaile Academy participated in a weeklong overnight camp held at Our Lady of Kea'au Retreat Center. Through multiple field experiences students were able to learn and discuss the characteristics of a healthy watershed and its relationship to an ahupua'a (Hawaiian traditional land division from mountain to sea), the impacts on Hawaiian watersheds, and the ways in which people in their community were involved in reclaiming and restoring watersheds. They were further encouraged to become actively involved in restoring watersheds on the island.



Children explored the watersheds of their Wai'anae community and expressed what they learned in various forms including journal and poetry writing, painting, song, and dance. Their camp week culminated with a traditional lū'au (Hawaiian feast) and hō'ike (exhibit) presented to parents and community partners.

The camp involved extensive collaboration with community members who shared their knowledge and supported children in their inquiries as they discovered the wahi pana (legendary places) of their 'āina (land). Children explored the mountains on hikes led by Watershed Resource Specialists from the Honolulu Board of Water Supply and cultural practitioners from Ka'ala Farm and Mohala I Ka Wai. Practitioners from Philosophy for Children (p4c) helped children process through the thoughts and feelings they developed during their daily encounters. Local artists helped students process, represent, and express their knowing visually.

Children applied collaboration, critical thinking, and communication skills as they tackled physically demanding activities and shared reflections of their encounters with each other and community partners. Most importantly, students left camp with a developing sense of civic and community responsibility and a clearer connection to live as Koa 'Āina (warriors of the land) stewarding their land.

INVESTIGATION ONE

GUIDING QUESTIONS

- *Why is water important?*
- *What can we observe in this place? (Trees, shrubs, plants, ground cover, etc.)*
- *What is a water cycle? How does water travel?*
- *What is a watershed, and what are the characteristics of a watershed?*
- *What traditional knowledge do we have of water?*



Journey of Water

The first investigation explored the Mākaha Valley watershed and the importance of water. Children hiked into Mākaha Valley on the west coast of O‘ahu led by Water Resource Specialists and cultural practitioners to begin their investigation with the ancient question, “Aia i hea ka wai a Kāne?” (i.e., Where is the water of Kāne?). Children learned through mo‘olelo (story, history) that Kāne, the chief

god of Hawaii, was responsible for the creation of life sustaining water. Campers were tasked with finding out where the water of Kāne could be found. Through hikes, mo‘olelo, wala‘au (conversation), and observation students began their journey to understand the importance of water.



Beginning with guided observation to nurture presence and intentionality, their first stop was at the ocean to understand the connectivity between ocean and mountain and the impacts of the health of the uplands upon the health of the ocean. Cultural practitioners helped students observe the different hues of blues and greens in the ocean and how they were indicative of the locations of channels created where mountain streams ran out into the ocean. Students learned that the absence of coral in a channel indicated the presence of freshwater (the water of Kāne!) as coral does not grow where there is freshwater -- accounting

also for the lighter hues. The connection between mountain and ocean began to emerge.

As students began the hike mauka, guides made two or three stops as they moved into the valley to talk about what children observed in different places. They discussed forest and plant life found at the different levels of the rainforest and observed the areas of open canopy that promoted reforestation of koa (a native forest tree). Using various writing modes, students began to define water, capture thoughts and questions they were beginning to ponder, and draw sketches of their observances. Students were realizing that the water of Kāne was everywhere, in streams, clouds, oceans, and

underground. Most of all, children were realizing that there were problems in the watershed as streams were dry and water ceased to flow to the lowlands.

The pondering of the dried up streams provided guides with the perfect segway to discuss factors that impact the watershed. Discussions included the unintentional impact of water diversion; the plantation history of Hawai'i; urbanization; and the introduction of various nonnative plants, animals, and insects on the watershed. Students also learned the positive impacts native plants, animals, and insects have on keeping the watershed balanced and healthy.

INVESTIGATION TWO

GUIDING QUESTIONS

- *What can we observe in this place?*
- *Of the plants, which are endemic, indigenous, Native introduced, and alien introduced? What are the different consequences of the introduction of plants that are not endemic or indigenous?*
- *What are signs of impact?*
- *What is the story behind this place?*
- *What does interdependence mean and why is it important?*
- *How is the watershed an example of interdependence and how has this interdependence been weakened?*
- *What do you think the land is feeling?*



Interdependence

In the second investigation, children applied their learning from Mākaha to their hike into the Pahole watershed in the Wahiawa ahupua'a. Beginning with an oli (chant), in accordance with traditional



Hawaiian protocol, students grounded themselves into the place making connections with the essence of the new space they would be entering on this day. Children hiked to a snail enclosure to observe the rare and endangered kāhuli (native tree snail); and to learn about the efforts to reestablish them. Along the way, cultural guides pointed out the native, nonnative, and invasive trees and plants, and students were provided time to make comparisons to those observed in Mākaha Valley and to further discuss their impact on the health of the watershed.

From the snail enclosure students hiked up to the Pahole Mountain ridge which provided a different view of the Wai'anae 'Uka, Wai'anae, and Wahiawa ahupua'a. Further discussion of what impacts the watershed broadened to a focus on fires, feral pigs, and military bombing exercises held in the area. The hike culminated with a visit to the Pahole Rare

Plant Facility where botanists shared their efforts to preserve and reintroduce rare native plants back into the watershed.

INVESTIGATION THREE

GUIDING QUESTIONS

- *What can we observe in this place?*
- *What is the history/story behind this place? How was this place changed/impacted over time?*
- *How is this place being reclaimed? Who are the participants? How is it being done?*
- *What evidence of responsibility and stewardship do we see here (e.g., sustainability, conservation, etc.)?*
- *What do you think the land is feeling?*



Stewardship, Responsibility, Restoration, and Reclamation

The third investigation divided campers into two groups. One group hiked into Mount Ka‘ala to visit Ka‘ala Farm and Cultural Learning Center, later visiting Happy Ponics Farm and private community homes. The second group visited Hoa ‘Āina O Makaha and Leonida Farms. Both field experiences provided opportunities for children to explore the ways individuals and community organizations have started to reclaim and restore aspects of a healthy watershed.



At Ka‘ala Farm children witnessed the tremendous devastation left in the aftermath of a fire that had burned through the mountains the day before their visit. With the land still smoldering from the flames of the previous night, children carefully walked through the learning center in silence, disbelief, and heavy hearts. They observed melted PVC pipes that once brought water to the restored lo‘i (taro patches) that were now in disrepair and no longer able to deliver the needed water flow to nourish the taro. Despite the hale (house) being burned to the ground, dried up water systems, pipes burned beyond repair, and the heavy hearts of all who gathered in this place, after discussion and contemplation, there emerged a glimmer of hope and a supreme teachable moment. Aside from the devastation left by the fire was the realization that hidden beneath the thick brush that once stood in the upper parts of the farm were more ancient lo‘i. The aftermath of the fire revealed more ancient taro terraces that were always theorized to be there but were never before revealed. Farm guides shared with the students that this discovery provided an

archeological gold mine through which to study their kūpuna (ancestors). They also were excited to be able to restore the ancient terraces in honor of those ancestors in whose footsteps the children were now walking and standing. They invited the children to be part of the future of Ka‘ala Farm restoration and restoration of other lands in their ahupua‘a. This was an invitation for students to live koa ‘āina, taking on the stewardship of this land and true heart of this camp week.

At other stops throughout the community the children explored how water was being used and the impact of people and business on the watershed. The field experiences culminated with students exploring how families were engaging in sustainable practices through involvement with home aquaponic systems and home gardens. Using the wealth of knowledge gained through the various visits, students considered current and future stewardship responsibilities they could take up.

FINAL PRODUCT

A week's worth of field experience, reflections, and relationship building, brought the children to their finale, which was celebrated with a hō'ike performed for parents and community members. Throughout the week, in preparation for the finale, children worked intensively with a Native Hawaiian artist to create a mural depicting the changes in the land and watershed from pre-human contact to the present. This exercise included discussions around militarism, urbanization, and plantation history. Children also worked with philosophers from the University of Hawai'i to process the information and concepts of environmental, animal, and human impacts on the watershed that they were incorporating into the mural. With camp leaders children created a chant communicating their knowledge and resolve to be koa 'āina.



At the end of the evening, parents and community members joined the children in a lū'au where they were able to share traditional Hawaiian foods and "talk story" (Hawaiian Creole for having conversation) about their week at camp.



STANDARDS

Writing

LA.4.4.1 Range of Writing: Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as poems that provide insight into why the topic is memorable

LA.5.4.1 Range of Writing: Write in a variety of grade-appropriate formats for a variety of purposes and audiences, such as poems that use figurative language to convey a theme or impression

Oral Communication

LA.4.6.1 Discussion and Presentation: Participate in grade-appropriate oral group activities

LA.4.6.3 Critical Listening: Use visual structures and summarize key ideas when listening to oral messages in order to improve comprehension

LA.5.6.1 Discussion and Presentation: Use speaking and listening skills to fill a prescribed role in group activities

LA.5.6.3 Critical Listening: Recall oral messages by noting key ideas and relating them to the speaker's purpose

LA.6.6.5 Critical Listening: Find out needed information by asking thoughtful questions

Social Studies

SS.5.1.1 Use chronological order to explain causal relationships between and among people and events

SS.5.2.1 Analyze how beliefs, education, and the society one lives in shape their beliefs or point of view

Fine Arts

FA.4.1.2 How the Arts are Organized: Use a combination of visual and performing arts to create an original artwork

FA.5.1.1 How the Arts are Organized: Use the principles of art and design, including unity and harmony, in works of art

FA.6.1.2 How the Arts are Organized: Apply selected elements and principles of art and design to communicate a particular message or opinion in an original work of art



PLACE-BASED EXPERIENCES/COMMUNITY CONNECTIONS

Experts from the Community

Benjamin Lukey - philosophy 4 Children (p4c)

Lopaka 'Aiwohi - Ka'ala Farm and Cultural Learning Center

Eric Enos - Ka'ala Farm and Cultural Learning Center

Jody Pihana - Ka'ala Farm and Cultural Learning Center

Cheryl Pukahi - Ka'ala Farm and Cultural Learning Center

Butch Detroye - Ka'ala Farm and Cultural Learning Center

Amy Tsuneyoshi - Honolulu Board of Water Supply

Vince Kana'i Dodge - Cultural Practitioner, Mohala i Ka Wai

Vince Keala Lucero - Co Creative Studios

Our Lady of Kea'au Retreat Center

Pahole Rare Plant Facility, State of Hawaii, Division of Forestry and Wildlife

Happy Ponics Farm

Kellen Smith - private home owner/community member

Brian Leonida - Leonida Farms

Luigi Coquio - Hoa 'Āina O Makaha Farms

Solomon Enos - Native Hawaiian Artist



PLACES

PLACE-BASED LEARNING AND COMMUNITY ENGAGEMENT IN SCHOOL

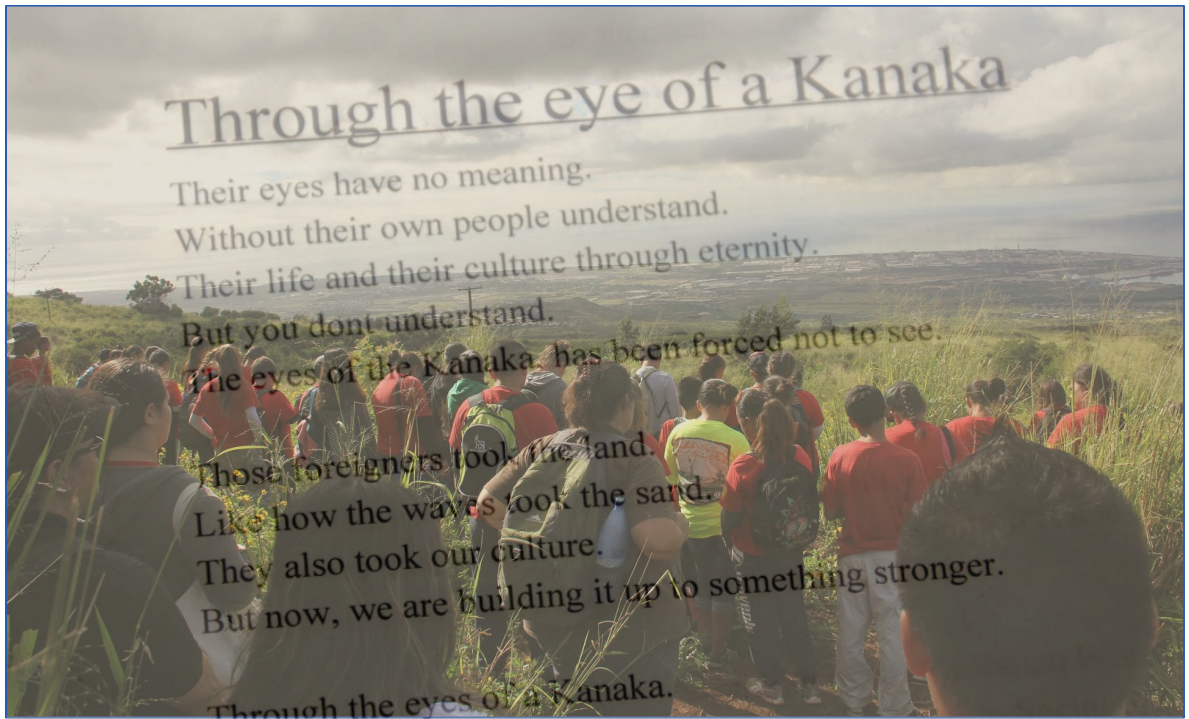
PROJECT OVERVIEW

HE AHA KE KANAKA?

Grade 7

Ka Waihona O
Ka Na‘auao
Charter School

Nānākuli,
Hawai‘i



WHAT IS KANAKA?

The He Aha Ke Kanaka - What is Kanaka project engaged intermediate students of Ka Waihona O Ka Na‘auao Charter School to discover the culture and pride they hold in themselves through experiences, stories, and knowledge of the experts within the community that surrounds them. Students were exposed to a variety of important Hawaiian values through mo‘olelo (stories, legends of life) and traditional practices in which they investigated who they were as a kanaka (person) and expressed that in a powerful and meaningful way. The project culminated with an exhibition night attended by families of the students and community members to showcase both their knowledge gained and interpretation of it displayed by a symbolic art piece and persuasive poem.

He Aha Ke Kanaka

WHAT IS KANAKA?

SUMMARY

He Aha Ke Kanaka? *How can we as Ka Waihona O Ka Na‘auao Charter School (KWON) haumana (students) create a movement that spreads our cultural pride to others?* With guidance from teachers and community partners, students explored the varieties of ethnicities that are present in themselves and their school campus. Students were exposed to cultural field experiences led by experts in their fields, expressed their knowledge through artistic pieces lead by Art to Go, and displayed their personal findings to the community in which they live in.

The project benefitted from great collaboration amongst community members who instilled authenticity and relevance by sharing their knowledge with the students. Students heard and experienced Native Hawaiian community activists invigorating stories of pride and respect for knowing who they are and where they come from. They worked with the Polynesian Voyaging Society and a master navigator to understand the importance of learning about your culture and sharing it with the rest of the world through the vehicle of the Hōkūle‘a wa‘a (canoe). They met an experienced canoe voyager from the Kanehunamoku Voyaging Academy who taught them that being keen observers of their surroundings can empower them to navigate success in life. Bringing this all together in a visual piece of artwork that could tell the story of who they are were qualified artists from the Honolulu Museum of Art’s Art to Go program.

Throughout the project, students were provided many opportunities to develop their 21st Century skills of creating original work through using multiple sources of information and valuing others contribution to their community and culture. Additionally they were able to build on their communication skills by conveying their ideas and speaking about them to others. Most importantly, students were able to apply knowledge of the past to new situations and choices in their lives. By using what was learned and experienced from kūpuna (older adults) they applied it to their own lives and deepened the sense of cultural connection in themselves as young kanaka.



GUIDING QUESTIONS

There were three subject areas of focus during this project, each of which had a guiding question that was umbrellaed by an overarching question.

Overarching Essential Question – How can we as KWON haumana create a movement that spreads our cultural pride to others?

Driving Questions

- **Social Studies** – How do you preserve your culture in a 21st century global society?
- **ELA** – How can we, the voices of Hawai‘i, use our language to communicate the importance of cultural pride to help cultures around the Pacific build pride in their own culture?
- **Science** – How can we as ‘ike kupuna be keen observers to use and practice our own observational skills?

PROJECT LAUNCH

Under sunny skies and cool breezes with the ocean as their backdrop and the mountains in the forefront, 7th and 8th grade students and their teachers at KWON sat in their courtyard listening to guest speaker Thomas Anuheali‘i, more affectionately known as Uncle Anu, from Gil-Olsen Joint Ventures at Palehua Ridge, a magical place atop the Makakilo Ridge.

“He aha ke kanaka?” he asked the students. “What is kanaka? What does it mean to be a kanaka or person? Who are you? Who are your people? Why is it important to know this?” Closely tied to his Hawaiian cultural identity, he shared his understanding of his own kanaka-ism with students and challenged each and every one of them to discover their own family histories in order to understand, take pride in, and steward their own stories of kanaka-ism. With their new understandings of self and by sharing their journeys of self discovery, they hope to inspire other students in foreign lands to celebrate their own sense of self using the Hōkūle‘a Worldwide Voyage to deliver their messages abroad. I mua a lanakila (advance to triumph)!



INVESTIGATION ONE Palehua Pa Field Experience

OVERVIEW

The first investigation explored the importance of students connecting with their culture and developing a relationship with the ‘āina (land).

They gathered information by hearing the sacred area’s history, cultural meaning, and mo‘olelo (stories of a place), and through mālama ‘āina (taking care of the land) activities in order to develop and find connections in discovering more about who they are as a person.



They used this information to develop a greater sense of meaning as a kanaka (person) of the land of Hawai‘i and instill a passion for kuleana (responsibility) towards it.

Before entering the pā, students performed traditional Hawaiian protocol by chanting mele pana (where they come from) and oli komo (asking for permission to learn and enter the sacred grounds). The cultural caretaker of the pā responded to the students’ request with his own chant. While up at the pā the students saw firsthand the landscape of the Leeward Coast by learning original place names and their relevance to mo‘olelo; analyzed the ways that early Hawaiians navigated around the islands and understood seasonal changes by the arrangement of pōhaku (rocks); found cultural connections through mo‘olelo of demigods and cultural sites; and felt the importance in kuleana (responsibility) of taking care of an area for future generations to enjoy and learn.

As they learned from these experiences, students began to develop connections to their own lives and consider the importance of values that the Hawaiians instilled in their everyday lives such as kuleana (responsibility), lōkahi (helping one another), pono (doing what is right) and mālama (to take care of). They began to consider how their community would benefit from their work.



PRODUCTS

As a result of these experiences, students broadened their thinking by pondering questions about their

identity while developing cultural connections to the place that they live.

Students took the knowledge gained from these experiences up at Palehua and began to create drafts of their literary piece (a poem for ELA and report for Social Studies) and artwork that would be presented on the exhibition night. Students organized their thoughts and questions to form discussions within class as well as experimented with different art mediums with which to create their exhibition piece.



INVESTIGATION TWO

Hōkūle‘a and Polynesian Voyaging Society Field Experience

OVERVIEW

In the second investigation, students continued to build upon their knowledge as kanaka by turning their attention to a cultural symbol of pride and power in the hearts and minds of the Hawaiian people. This investigation took them to a wa‘a (canoe), Hōkūle‘a, that was born from the artwork of Herb Kane and fueled by the rejuvenation of the Hawaiian culture. The importance of this piece in the project was connecting them not only to a people of navigation in the Hawaiian isles but also connecting the students to the vast cultural ties all around the Pacific Rim.



They gathered information from local experts in the field of navigation and artifacts aboard the Hōkūle‘a and sister canoe Hikianalia. Students examined the immense reconfiguration and restoration of Hōkūle‘a in dry dock as the young apprentice navigators stressed the importance of the work on land before the wa‘a entered the water.



Students discovered both the modern and traditional navigation techniques that would be used throughout the Mālama Honua Worldwide Voyage. They discovered that traditional tools of navigation employed by the early Polynesian people required keen observations of the elements that surrounded them. They learned that celestial bodies, wind direction, ocean currents, birds, and cloud formation all play a vital role in determining the course of the wa‘a to its destination.

Students also participated in a collaborative project developed by the Polynesian Voyaging Society, Aloha ‘Āina Peace Flags, by designing individual flags with messages of peace and stewardship to be displayed and gifted to various ports along the voyage.

They used this information to ask questions and connect their thinking back to their driving question. They were encouraged to know that crew of Hōkūle‘a would be focusing all of their attention on navigating solely by traditional means. This, in turn, helped them connect even more to their cultural roots by developing a stronger respect for their ties to the ‘āina (area that surrounds them).

PRODUCTS

Through the assistance of qualified art instructors from the Honolulu Museum of Art’s Art to Go program, students began to create their art piece that would bring together the experiences of the project so far. Art instructors introduced them to various art forms from which the students would eventually choose one to best represent themselves as a kanaka. Students would also continue to develop their thoughts in a persuasive poem through the guidance of the English teacher.



INVESTIGATION THREE

2nd Annual Kula Waena Project Exhibition Night

OVERVIEW

As the school year was winding down and the final touches of the project were in preparation to showcase, Ka Waihona was preparing to hold their 2nd Annual Kula Waena Project Exhibition Night. This was an opportunity for the students to share and communicate who they are as a



kanaka and express that in a powerful and meaningful way. Some of the students found a new light in themselves that they never knew was there, expressing themselves in ways that built confidence and respect for their diverse culture. Community and family members attending that evening were asked to listen and provide feedback to the students' symbolic art pieces and persuasive poems.



As Exhibition Night participants got a chance to observe students' artwork inspired by mo'olelo of place and listen to their personal words inspired by the project experiences, they were asked to provide feedback through a "Likes & Wonders" exercise for capturing the intriguing thoughts that had inspired them from presentations. The purpose of this was to help assess if the students had met their target goal of answering the driving question, "How can we as

KWON haumana create a movement that spreads our cultural pride to others?"

Overall the exhibition night was a success for both the students and the community members. The platform that developed from this project inspired families to connect more with each other and open up the door to questions of cultural myths. This is a great example of how young kanaka can find inspiration from the past in themselves and others to produce a positive voice for the future of the community in which they live.



STANDARDS

Hawai'i State Standards: Social Studies

SS.7PI.3.2 European Contact and Colonization:

Analyze conflicting beliefs, values, and norms of the indigenous populations and the European explorers/settlers and explain the impact of those differences

SS.7PI.3.3 Government:

Trace the development in Oceania from pre-contact to present and explain the effects of the changes.

SS.7PI.3.6 Contemporary Issues in the Pacific Islands:

Examine current issues or problems facing contemporary Polynesia, Micronesia, and Melanesia and propose solutions to them based on research.

Common Core English Language Arts: Writing

7.W.1 Write arguments to support claims with clear reasons and relevant evidence.

- a. Introduce claim(s), acknowledge alternate or opposing claims, and organize the reasons and evidence logically.
- b. Support claim(s) with logical reasoning and relevant evidence. using accurate. credible sources and demonstrating an understanding of the topic or text.
- c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.
- d. Establish and maintain a formal style.
- e. Provide a concluding statement or section that follows from and supports the argument presented.

7.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

7.W.5 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.



7.W.6 Use technology, including the Internet, to produce and publish writing and link to and cite sources as well as to interact and collaborate with others, including linking to and citing sources.

7.W.8 Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.

Common Core English Language Arts: Reading Informational Texts

7.RI.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

7.RI.3 Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events).

7.RI.8 Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

Common Core English Language Arts: Literacy in History/Social Studies

6-8.RH.1 Cite specific textual evidence to support analysis of primary and secondary sources.

6-8.RH.2 Determine the central ideas or information of a primary or secondary source; provide an accurate summary of the source distinct from prior knowledge or opinions.

6-8.RH.6 Identify aspects of a text that reveal an author’s point of view or purpose.

Hawai‘i State Standards: Science

Standard 6 – Physical Earth and Space
Science – Nature of Matter and Energy:
Understand the nature of matter and energy, forms of energy (including waves) and energy transformation and their significance in understanding the structure of the universe

- SC. 8.6.3 Identify the characteristics and properties of mechanical waves



Standard 8 – Physical Earth and Space Science – Earth and Space science: Understand the Earth and its processes

- SC 8.8.3 Describe how the earth's motions and tilt on its axis effect the seasons and weather patterns
- SC.8.8.4 Explain how the sun is the major source of energy influence climate and weather on earth
- SC 8.8.7 Describe the physical characteristics of oceans
- SC 8.8.9 Explain the predictable motions of the earth and moon

PLACE-BASED EXPERIENCES & COMMUNITY CONNECTIONS

Field Experiences

Gil-Olsen Joint Ventures at Palehua Ridge

Marine Educational Training Center – Hōkūle‘a dry dock

Experts from the Community

Thomas Anuhelali‘i – Palehua Caretaker and Entry Event Guest Speaker

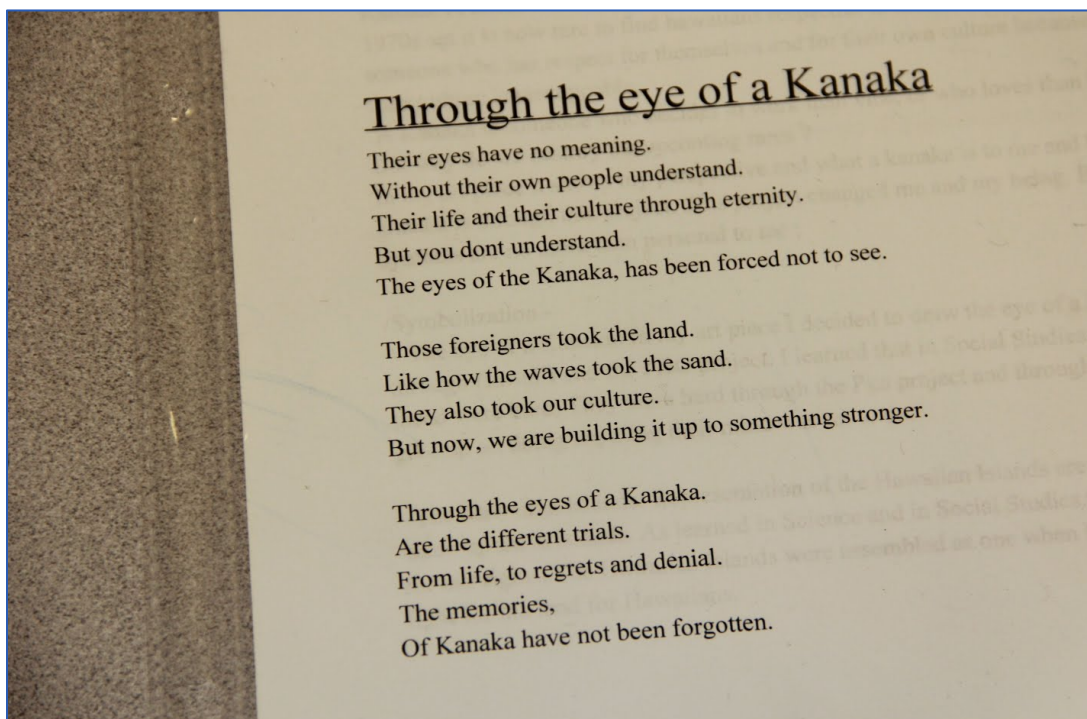
Bruce Blakenfield – Master Navigator of the Hōkūle‘a

Polynesian Voyaging Society

Kehau Kupuhea Souza – _____

Bonnie Kahapea – Kanehunamoku Voyaging Academy

Honolulu Museum of Art – Art to Go program



PALS

PLACE-BASED AFTER-SCHOOL LITERACY SUPPORT

OUR MAKAHA



Makaha Elementary
Makaha, Hawai'i

PAST, PRESENT, AND FUTURE

The Our Makaha – Past, Present, and Future project engaged children from Makaha Elementary School in the study and celebration of their community. Children explored the important mo'olelo (stories, legends of life) and oli (chants) of the area to gain an understanding of traditional ways of living and relating to community. The project culminated in a mural presented at the celebration of Makaha Elementary School's 50th Anniversary.

Our Makaha

PAST, PRESENT, AND FUTURE

SUMMARY

The **Our Makaha – Past, Present, and Future** project engaged children from Makaha Elementary School, a school located along the Wai’anae coast of Oahu, Hawaii, in the study and celebration of their community. The project engaged children in multiple paths of investigation and various creative forms. They explored the important mo’olelo (stories, legends of life) and oli (chants) of the area in order to gain an understanding of traditional ways of living and relating to community and the aina (land).

Children studied interviewing and developed both mainstream media forms of interviewing, as well as culturally- specific forms of interacting and requesting knowledge from elders. They expressed their knowing in multiple ways: using traditional literate modes as well as artistic forms of processing, representing, and expressing knowledge. Their project culminated in a mural, which was presented at the celebration of Makaha Elementary School’s 50th Anniversary, allowing the children to give back to the school they attend.

This project benefitted from extensive collaboration with community members, who shared their knowledge and supported children in pursuing their questions. Children worked with University of Hawai’i faculty to study different oli and write about their learning. They worked with and were mentored by a local high school media production company, which supported them in acquiring interviewing and video-taping skills. They met with many different kupuna (elders) to collect different mo’olelo and oli. Local artists helped students process, represent, and express their knowing, visually and through dance.



Throughout the project, children were provided with many opportunities to develop the 21st Century skills of collaboration and team work, as they pursued answers to questions and the acquisition of knowledge. Additionally, they learned lessons in personal and collective social responsibility, as well as how to acquire information. Most importantly, students ended this project with a burgeoning sense of civic/community responsibility and a deepening connection and responsibility to the natural world around them.

GUIDING QUESTIONS

What are the mo'olelo of Makaha?

What can we learn from these mo'olelo about past and present-day Makaha and how do they help us imagine the future of Makaha?

How can we share this information with the Makaha community?



INVESTIGATION ONE

Our Wai (fresh water)

The first investigation explored the importance of wai, or fresh water, in Hawaii and in the traditional cultural life of Hawaii. Children worked with a local Hawaiian teacher to learn the many place names that contain the word wai. They discovered the prominence of water in local and ancient mo'olelo, given the centrality of fresh water as life-sustaining (ka wai ola). They learned that fresh water could not be 'owned' by ancient Hawaiians and of the kuleana or responsibility for taking care of the water for the next generation. They compared the stewardship of water in ancient Hawaii and the way it was revered, respected, taken care of and considered sacred; to the way it is wasted, polluted, and diverted into privileged recreational opportunities now. This study ignited a passionate advocacy or stewardship for water in the area.



Children also learned the chant, *Ka Wai A Kane* (The Water of Kane). This tells how Kane, the creator of all life in Hawai'i, spread water across the island chain. They mapped the many locations referenced in the chant, through the repetitive phrase, "Aia i hea ka wai a Kane?" (Where is the water of Kane?), using Google map. Finally, children worked with a local hip hop artist to process and interpret the chant; creating their own dance fusing hula and hip hop together.

INVESTIGATION TWO

Learning the Mo'olelo (stories and legends) of Makaha



In the second investigation, children took what they had learned about the wai of Makaha and Hawaii to a different level, in an effort to pursue the mo'olelo of Makaha. These stories and legends of how their ancestors lived, worked, and related to one another and to the environment, provided them new insights into their ahupua' of Makaha. To begin, they worked with a University of Hawaii professor to study the mo'olelo of Hi'iaka, Pele's sister. They traced her journey as she brought Pele's beloved, Hopoe, back from a neighbor island. They explored the various aspects of the journey as they spoke to Native Hawaiian ways of living, playing, teaching, and thinking. Children wrote their own riddle poems in response to a stanza in the poem that told of Hi'iaka's talent in solving riddles to save a man's life. As the children began to see and value the ways in which Native Hawaiian culture and knowledge were expressed,

handed down, and enjoyed, they identified different kupuna (elders) in the community and prepared to interview them. Prior to the interviews they worked with Searider Productions, the student media academy at the local high school, to learn how to develop good interview questions and how to film interviews. This was followed with an investigation in collaboration with local Hawaiian teachers, of culturally appropriate ways to interact with and interview elders. Students learned, or were reminded of, how to convey culturally expected forms of respect and appreciation for the wisdom shared. After collaboratively constructing interview questions, children talked with eight kupuna in the community to collect contemporary stories and legends.

INVESTIGATION THREE

Celebrating our Makaha – The Makaha Mural

Over the course of the year, as the project unfolded, children and community members brainstormed how to best communicate their learning, while simultaneously honoring Makaha Elementary School's fifty years of service to the community. Solomon Enos, a Makaha Elementary School graduate, offered to work with the students to create murals that represented their findings.

Children and teachers worked together to collaboratively identify themes from the mo'olelo they had collected and the learning they had constructed about Makaha. Solomon then worked with the children to create visual representations of these themes. After two art workshops, he used the drawings the students produced as the foundation for representing the themes on eight large panels which formed the mural.



Meetings were then scheduled to allow for community members to further provide their mana'o (thoughts or ideas) regarding the depiction of Makaha through the murals. Makaha Elementary opened its cafeteria for a community paint day. Solomon had sketched the murals in a 'paint by letter' scheme, in order that everyone could participate.

FINAL PRODUCT

After one day of painting, the panels were completed and the mural was presented to the school community at the end of the year ho'ike (presentation of learning to community).

Intensive work with Solomon Enos supported the children in processing their learning and conceptualizing a way of expressing their knowledge in visual form, leading to the creation an eight-paneled mural. The eight panels are broken into the eight broad elements, which express love and commitment to Makaha Elementary. The mural can be read from left to right with the Past (represented by the kalo), the sun, plants and animals (represented by a tree and `opelu), the land (with the clouds above the mountains), the ocean and people (represented by a mother and child), the moon (and it's cycles) and the future (represented by a huli). There is also a pattern that flows from both ends of the mural continuing into the center and back out again (Past-Future. Sun-Moon, Plants- Animals- People, Land-Ocean). This orientation is to articulate a non-linear perspective. As such, the murals can be read inward and outward – in both directions – like inhaling and exhaling a breath.



The mural was dedicated with aloha and with the hope of the children – that they would inspire the same love and knowledge for Makaha as they acquired through their study. It will hang outside Makaha Elementary School's administration building for the entire community to share.

STANDARDS

Reading

LA.4.3.3 Critical Stance: Explain how the author’s choice of language and use of literary elements contribute to the author’s purpose and the effectiveness of the text.

LA.4.3.4 Literary Elements: Describe the comparisons made by similes and metaphors.

LA.5.2.2 Construct Meaning: Make inferences and draw conclusions about grade-appropriate texts

LA.5.2.3 Construct Meaning: Distinguish between explicit and implied information

LA.6.2.3 Constructing Meaning: Draw and support conclusions about information or ideas in a text

LA.6.3.2 Critical Stance: Explain how an author’s background is reflected in literature, including the use of language

Writing

LA.4.4.1 Write in a variety of grade-appropriate formats for a variety of purposes and audiences: poems that provide insight into why the topic is memorable

LA.4.5.3 Clarity: Use figurative language to emphasize meaning

LA.5.4.1 Write in a variety of grade-appropriate formats for a variety of purposes and audiences: poems that use figurative language to convey a theme or impression

LA.5.5.5 Clarity: Use clear and precise vocabulary to support meaning

LA.6.4.1 Write in a variety of grade-appropriate formats for a variety of purposes and audiences: poems that experiment with poetic devices

LA.6.5.1 Meaning: Select appropriate details, examples, reasons, and/or facts to support an insight, message, or thesis

Oral Communication

LA.4.6.1 Discussion and Presentation: Participate in grade-appropriate oral group activities

LA.4.6.3 Critical Listening: Use visual structures and summarize key ideas when listening to oral messages in order to improve comprehension

LA.5.6.1 Discussion and Presentation: Use speaking and listening skills to fill a prescribed role in group activities

LA.5.6.3 Critical Listening: Recall oral messages by noting key ideas and relating them to the speaker’s purpose

Social Studies

SS .5.1.1 Use chronological order to explain causal relationships between and among people and events

SS 5.2.1 Analyze how beliefs, education, and the society one lives in shape their beliefs or point of view

Fine Arts

FA.4.1.2 How the Arts are Organized: Use a combination of visual and performing arts to create an original artwork

FA.5.1.1 How the Arts are Organized: Use the principles of art and design, including unity and harmony, in works of art

FA.6.1.2 How the Arts are Organized: Apply selected elements and principles of art and design to communicate a particular message or opinion in an original work of art

Wai'anae Elementary School (WES)
PLACES (Place-based Learning and Community Engagement in School)
Excerpts from the Evaluation Report
2012-2013

In the 2012-2013 school year, the Hawaii State Department of Education debuted a new school accountability and improvement system “designed to meet the needs of Hawaii’s students, educators, and schools” (website, 2013). The Strive Hawaii Index system “aligns and connects our key state education policies and initiatives to position students and educators for success” (website, 2013). According to the website (2013), the system replaces “outdated and ineffective” requirements of the No Child Left Behind Act (NCLB) with a system that supports college and career readiness and aligns with “Hawaii’s transformational vision of success.” The index measures school performance and progress through four main metrics including Achievement, Growth, Readiness, and the Achievement Gap. Data including HSA reading and math scores, end-of course science assessments, ACT scores, high school graduation rates, attendance rates, and college enrollment numbers are examples of data used to provide school scores. When looking at WES’s 2013 report, the Index score (237 of 400) was higher than all other elementary schools (see Figure 3) in the Nanakuli-Waianae complex, with the Growth (130 of 200 weighted points) and Achievement Gap (68 of 80 weighted points) categories rating the highest.

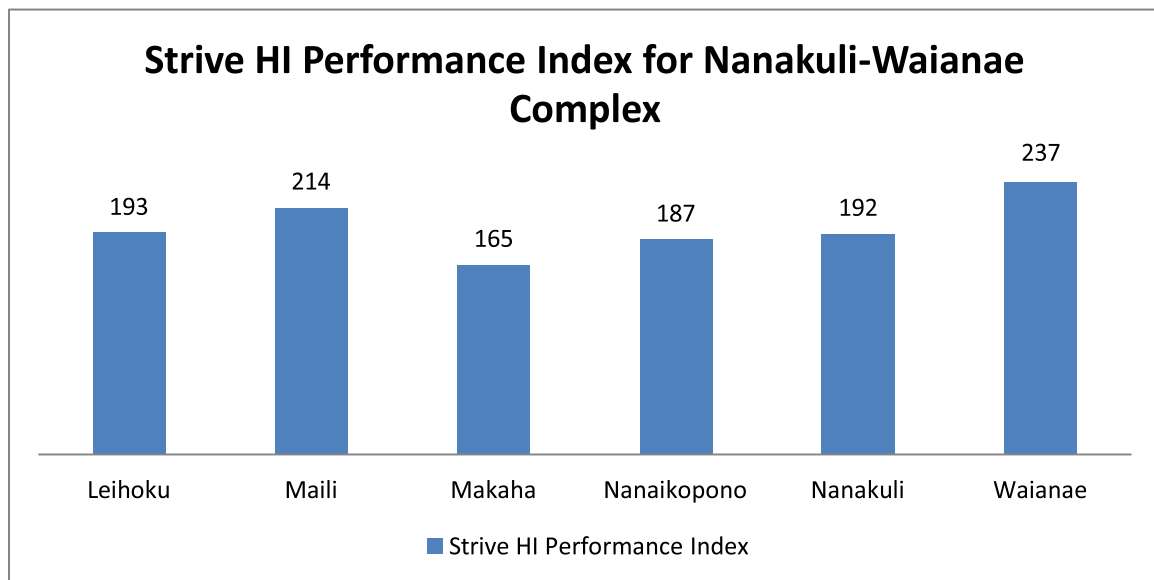


Figure 3. Strive HI performance Index scores for each elementary school in the Nanakuli-Waianae Complex.

During interviews, teacher representatives described how PBL has made a positive impact on student learning and engagement. School representatives claim the program helps students to build a “positive connection to learning and school,” to “apply learning to their

own life outside of school,” and “builds student confidence as learners.” Those involved with the program observed the impact the program makes on their teaching and how it specifically relates to the curriculum. “[PBL] integrates content areas through interesting and meaningful engagement in learning,” shared one educator. Another building representative added, “It [PBL] draws connections between local and global [learnings]” describing ways that the experiences lessen geographic and cultural isolation. One interviewee expounded on their experience, saying,

I think it’s [PBL] helping us to integrate more subject areas, have hands-on activities that are enjoyable, and can teach content in a way that gets the kids motivated to want to learn about it. Honestly, it makes it seem more fun. Learning is fun now —they’re so engaged in what’s happening during that time even though they don’t say it, that it’s fun -- I sense that they feel that way. They are definitely learning more about different content in a different way that’s combining everything in one and they don’t realize it. In social studies—[the project] might be only a social studies standard, but they’re reading about, they’re writing about it, and they’re engaging numbers about it.

WES building representatives could not be more complimentary about the program, with teachers claiming the program “levels the playing field, allowing all students to connect and contribute,” “inspires each student to be their best self,” and “helps students to identify and celebrate their unique strengths,” while positively impacting student self image. One teacher explained the impact projects have made on the students, saying,

Well, I think that the great thing that I loved about the whole thing, I personally really saw and see that the kids at a lower level can really learn. And I really like that because it really gives them the opportunity to [learn together]; they’re just like their own little learning community. They were teaching each other. They were learning and gaining so much information. They might forget everything I said about certain things, but they will never forget the solar cooker or collecting food or trying all those different foods. They’re going to remember that about their experience in third grade. They’re going to take that with them. You know you’re reaching kids with meaningful, lasting memories.

PLACE-BASED EXPERIENCES/COMMUNITY CONNECTIONS

Experts from the Community

Mr. Gigi Cocquio - community activist and founder of Hoa 'Aina O' Makaha

Miss Walter Bea Aldeguar - Makaha resident; employee of Leeward Community College; involved in community restoration projects: Kaneaki Heiau in Makaha Valley

Mrs. Korenaga - retired Wai'anae High School counselor; Makaha resident

Mrs. Jackie Spencer - Makaha resident; City & County Honolulu Parks and Recreation manager of Wai'anae District Park

Eric Enos - Executive Director, Ka'ala Cultural Learning Center

Vince Dodge - community activist; founding member Mohala I Kawai

Fran Correia - Makaha community resident; teacher at Makaha Elementary School

William Aila - Chair, Hawai'i Department of Land and Natural Resources; former Wai'anae Boat Harbor Master

Jonathon Sybert - local hip hop artist

Solomon Enos - local visual artist, Native Hawaiian artist

ku'ualoaha ho'omanuwanui - Professor of English, University of Hawai'i

Momi Kamahale - Assistant Professor of Hawaiian Studies, Leeward Community College