

Māla'ai Kula

Kaua'i's 1st Farm-to-School Pilot Program
2015 - 2019



Creating a culturally relevant farm-to-school solution for Kaua'i

Reported October 2019



K A W A I K I N I





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CORE ELEMENTS OF **FARM to SCHOOL**





Background

In 2014, all four Hawaiian-focused schools on Kaua'i lost their foodservice programs and were unable to offer school lunch to their students for a variety of reasons, including: 1) the schools were no longer allowed to obtain lunches from the DOE schools temporarily, 2) the key private vendor offering these services closed down because it was not financially viable, and 3) one school had never been able to offer a meal program. This forced parents to choose between their children receiving a culturally relevant education or having access to meals in school.



...charter schools will receive \$6,846 per-student this school year, the lowest rate in the nation, compared to the \$11,823 per-student allocation the State Department of Education (DOE) reported for DOE schools in 2015. Moreover, this per-student difference does not include facilities, another area that public charter schools must fund on their own, unlike DOE schools.



- Office of Hawaiian Affairs

Historically, Hawaiian-focused charter schools have been undersupported, and do not receive financial support to offer meal programs. Unlike many mainland public charter schools, the majority of Hawaiian charters are culturally based schools with little resources and scale to participate in the National School Lunch Program (NSLP). In fact, 61% of public charter schools in Hawai'i are Title 1 schools - 66% are eligible, yet two Kaua'i schools had not obtained their status as of the time of the report.

The national funding landscape is inequitable and difficult for under-resourced schools to obtain funding to begin meal programs, even though they often have the greatest need. For example, many leading farm-to-school grant programs, such as the Chef Ann Foundation, NSLP Equipment Grants, and USDA Farm to School Grants programs require schools to be *already* actively participating in NSLP in order to qualify for funding, leaving those who need funds to start a meal program ineligible for resources.

While there are many great efforts across the state for increasing farm-to-school into DOE complexes, the fight for even basic-level food access in Hawaiian charter schools remains an ongoing struggle for many across the state. Much like their unique immersive education, charter schools desire a unique cultural connection to their food. They don't simply want to serve any meal - they want to connect their youth to their culture and the 'āina in a way that not only makes a positive difference in our agricultural communities, but builds a strong foundation for youth of who they are, where they're from, and what they're capable of doing.

The challenge of offering meals to students has plagued many schools for years, due to inequitable public investment in their facilities and meal service programs, as well as the scale that operations must meet to be financially viable. Working for student food access has proven to be an ongoing, decades-long effort of social justice, advocacy, perseverance and innovation for schools. This report is a brief snapshot of our 4-year journey working with two schools on Kaua'i. We welcome you to reach out to us with further questions, as this simple report cannot begin to capture all that we've learned together throughout this process.



Māla'ai Kula Project Summary

Mālama Kaua'i began strategizing with Kaua'i's Hawaiian charter schools in 2014 at the time of their meal program loss to plan and develop solutions to this issue, eventually partnering with two schools who were ready to collaborate more deeply to see these solutions realized: Ke Kula Ni'i'hau O Kekaha and Kawaikini New Century Public Charter School in Līhu'e. The goal of the collaboration was to not only develop sustainable and culturally relevant meal programs for the schools' students, but to increase student access to 'āina-based learning by connecting the meal programs to on-campus gardening/agriculture and nutrition education. This project was guided by the belief that no parent should ever have to choose between their child receiving a culturally relevant education or getting fed at school.

Together, partners aimed to build a stronger food system and economy by building community connections and to continue the cultural revolution to build on food sovereignty, self-sufficiency, and cultural self-determination through the school environments. This included prioritizing meal ingredient purchasing from within the State of Hawai'i, and especially from indigenous producers. Sourcing locally also ensures students are served culturally appropriate and nutritionally dense meals, by easily sourcing traditional foods like 'uala (sweet potato), kalo (taro) and 'ulu (breadfruit).

To begin the project, large school gardens were established at both schools during the 2014-2015 school year (SY) to begin campus-based production and provide outdoor classrooms - Kawaikini's through a 5-week Gardening Certificate Class, and Ke Kula Ni'i'hau's through grant-funded service projects led by community members.

Ke Kula Ni'i'hau has 55 students, 100% of which are Native Hawaiian with a connection to Ni'i'hau - the rarest population of Native Hawaiians in the world. The school is Community Eligibility Provision (CEP)-eligible for the NSLP, which allows them to provide free (reimbursed) breakfast, lunch and snack to *all students*. Since they already had access to a commercial kitchen in their Office of Hawaiian Affairs (OHA)-owned building, the project was able to launch their meal program in 2015 with a large multi-year county grant, followed by the implementation and integration of agricultural lessons and activities into the curriculum, expansion of school gardens, and incorporating healthier, local options in meals.

Kawaikini has 175 students as of the 2019-2020 school year (a 29% increase in enrollment since the program's inception during the 2014-2015 SY); 55% of which qualify for free/reduced student meals. From 2015 to today, the school has gone from having no meal program to 3 days per week lunch service with Auntie Lorna (haumana's tutu) acting as a vendor, to 5 days per week with a Food Program Manager operating in a commercial kitchen trailer on NSLP in 2018-2019 school year. Students also have opportunities to experience growing food through the multiple garden spaces that were developed for teachers to integrate their lessons.

Project staff participated in national networks and trainings to bring back to Kaua'i the best practices being utilized across the nation, including Edible School Yard Training with Alice Waters and Chef Anne in California, the National Farm-to-School Network Conference in Colorado, and the Native Nutrition Conference / Seeds of Native Health in Minnesota. The project was also selected to participate in a unique 2-year cohort from National Farm-to-School Network - the Seed Change in Native Communities Cohort - for ongoing networking, technical assistance, and resources related to supporting farm-to-school programming in indigenous communities.

Funding for this undertaking was difficult to secure, piecemealed from over two-dozen grants and fundraising sources over the course of four years. The bulk of the funding for the school meal programs' establishment was provided from the County of Kaua'i's Kekaha Host Community Benefits Fund and the Office of Hawaiian Affairs, with support from the AmeriCorps VISTA program staffing coming from the Ulupono Initiative.



Successes

Education

- Kōkua Hawai'i Foundation's 'ĀINA in Schools** - This standards-based nutrition and agriculture curriculum training was provided to 18 teachers at Hawaiian charter schools on Kaua'i in September 2017 to build their ability to incorporate lessons in their classrooms. Evaluation results from participants:
 - 83% strongly agreed they have an increased AWARENESS of resources and community support around farm-to-school / 'āina based initiatives.
 - 83% strongly agreed they have an increased INTEREST in teaching garden, compost, or nutrition lessons.
 - 94% strongly agreed they found the curriculum relevant to their students' learning needs.



I see that their interest in growing food has increased and that they ask sometimes where the food came from. They have always eaten lots of fruits and vegetables but now its more that they want to know where it came from or who grew it.



-Kawaikini Parent

- Major School Garden Expansions** - Kawaikini developed over 10,000 square feet of garden spaces around the campus, providing most classrooms with their own space to incorporate growing food and related projects into their curriculum. Raised garden beds, a greenhouse, an orchard, outdoor sinks/washing stations, and multiple garden sheds supplied with tools have all been incorporated into the campus. Students have been growing vegetables such as kalo (taro), 'uala (sweet potato), green onion, leafy greens, and more.

At Ke Kula Ni'ihau, a greenhouse, shaded raised bed garden area, native plant gardens, a raised kalo patch, and more transformed their campus into a variety of green learning spaces for students.

Utilizing off-island groups to support large campus garden projects both financially and through work hours was very successful, to balance out the difficulty in parents being able to support gardens. For example, Virginia Technical University students designed and installed a garden shed at Kawaikini during their spring break, WorkDay completed a corporate service event installing gardens and fruit trees at Kawaikini, and Volunteer Week events in April brought further volunteers to school campuses.

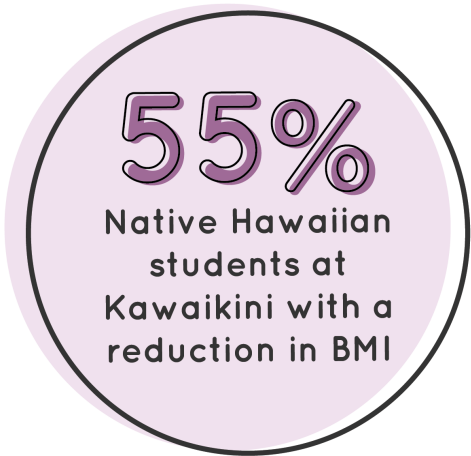


- Curricular Integration & Unique Activities** - Most recently, Kawaikini has incorporated over 300 student class-hours in the gardens from December 2018 to May 2019 for Health and Science lessons. Students participated in projects such as constructing raised beds, creating worm-bins, processing mulch, growing medicinal herbs to make essential oils, composting, cooking baked laulau, smoothie making, and more.

Ke Kula Ni'ihau was also very dynamic in their offerings, including Hana No'eau agriculture and environment career days and lessons every Wednesday, monthly Rainbow Salad Bar Days with student rewards for trying different colored vegetables, smoothie demos, and more. They utilized several of the 'ĀINA In Schools lessons in both the garden and kitchen. These activities helped to show students various 'āina-based opportunities available to them out in the world and got them to try new fruits and vegetables.

- **Improved Body Mass Index (BMI) Metrics** - 75% of Native Hawaiians are at risk of being obese or overweight¹. Healthier food access and increased physical activity that come with school meal and garden programs have proved to have positive impacts in these areas.

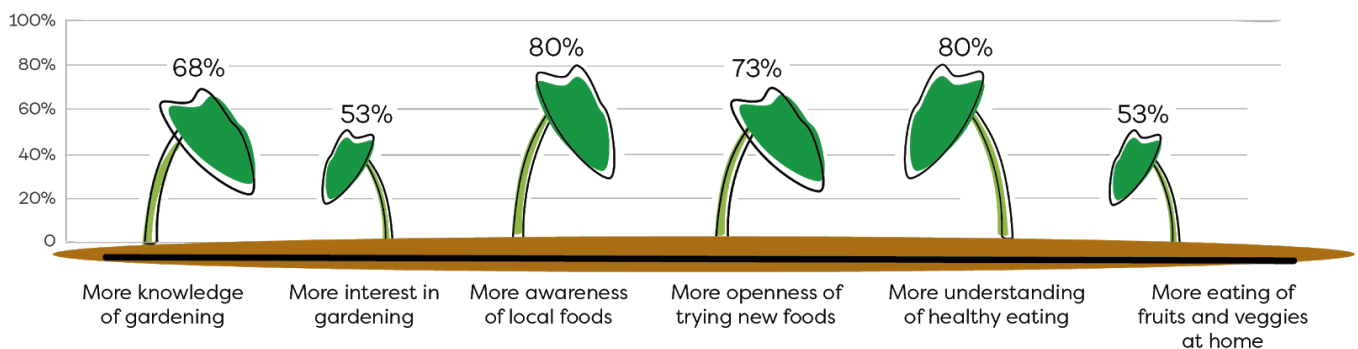
Since 2017, approximately 25% of student participants at Ke Kula Ni‘ihau experienced a reduction in BMI. While 55% of Native Hawaiian student participants at Kawaikini reduced their BMI.



- **Healthy Behavioral Changes in Students** - In addition to students gaining access to healthy meals daily and increased physical activity through gardening, longer-term impacts were seen through behavioral changes, interests, and tastes of students from the activities and educational lessons they took part in.

At Ke Kula Ni‘ihau, many students initially surveyed about their favorite green vegetables stated “none” (or more commonly “eww!”), whereas a year into the program, the most common response was “kale smoothies” - most likely due to fun smoothie demo days with Misha of Aloha ‘Āina Juice Bar! At Kawaikini, students were surveyed, as were the parents, to better understand the at-home behavioral impacts of programming since the project began; parents reported the following as of 2019:

Positive Behavior Changes in Students*



*observed by surveyed parents of student participants, 155 total

¹ OHA 2010-2018 Strategic Plan

Food Service

- Ke Kula Ni'ihau's Meal Program Sustainability** - The school's Community Eligibility Provision (CEP) status (92% qualifiers) allowed the school to access 100% free (reimbursed) meals for breakfast, lunch, and snack for all students. This made NSLP participation a successful financial model for the school, which will be able to be maintained beyond the project.



- Commercial Kitchen on Wheels Obtained** - Mālama Kaua'i was able to secure funds for a Mobile Commercial Kitchen Trailer to be placed at Kawaikini, which allowed us to operate an on-site lunch production program while the school continued to fundraise for a comprehensive multi-purpose building.


With limited access to affordable vendors or kitchen space on Kaua'i, this was critical to continue to provide lunch for the 18-19 SY. The initial goal was to have the trailer on campus while the school continued their own internal lunch service in following years, but Kawaikini did not feel ready to internalize their lunch program, or continue with the farm-to-school vendor service, and keep utilizing the trailer for the 19-20 SY.

The trailer was partially supported through a Hawai'i Department of Agriculture (HDOA) grant which would also allow Mālama Kaua'i to offer the trailer to local farmers and food producers when not in use for the school. It will now be relocated and become an asset to farm-to-school efforts islandwide as the DOE's 'Aina Pono program begins to source locally for DOE school meals. The commercial kitchen trailer will provide a centrally-located commercial kitchen for compliantly washing and processing farm produce, and possibly even for aggregation and distribution by smaller farmers working together.

- Growing & Sourcing of Local & Traditional Foods** - At both schools, campus-grown food has been incorporated into meal programs, including student-made taro burgers and the salad bar at Ke Kula Ni'ihau, and lū'au leaf for traditional dishes at Kawaikini. Various orchard owners and farms also donated produce through Mālama Kaua'i's Village Harvest gleaning program to the schools.

Since 2017, Kawaikini has procured an average of 40% locally-grown food (and an average of 53% while not on NSLP). A variety of items were regularly sourced locally including proteins from Wailua Meat Co. and Tropic Fish Kaua'i, to lū'au leaf and poi from Aloha 'Āina Poi Co.

Comparison of School Lunch Procurement Sources at Kawaikini



	Percentage of food in lunches from Hawaii state (by weight)	Percentage of food in lunches from Hawaii state (by cost)	Percentage of food in lunches from Kaua'i (by weight)	Percentage of food in lunches from Kaua'i (by cost)	TOTAL Village Harvest (in pounds)	TOTAL Grown on Campus (in pounds)
2017-2018 School Year (No assistance from National School Lunch Program)	26%	32%	19%	21%	440	112
2018-2019 School Year (Assistance from National School Lunch Program)	14%	12%	15%	15%	917	75



Challenges

Education

- Garden Maintenance & Sustainable Integration** - Maintenance of large expanded gardens and orchards without dedicated staff responsibility and ownership or deeper integration into the regular curriculum of the schools has been difficult, as is common in most school environments. Year over year, schools have become much more self-sufficient in managing their own gardens due to engaged and innovative teachers.

Schools outside of this project with dedicated garden instructors (obtained through career and technical education [CTE] integration or parent fundraising) have been more successful at consistent production and upkeep of gardens, as well as ensuring regular garden time for all students. Challenges in funding for staffing has been limiting schools from more focused expansion in this direction.



It was really fun because we got to help the 'āina and we also got to experience more gardening in school.

-Keiki Participant



- AmeriCorps VISTA Program & Staffing Difficulties** - The Volunteers in Service to America (VISTA) program, which provided full-time service members (one at each school) to coordinate capacity-building efforts was not as successful as projected, but contributed greatly by having low-cost staffing to support the project. The members were enthusiastic and very affordable compared to full-time staff costs, but we were unable to attract local candidates with a true investment in, and connection to, their community.

The drawbacks included high turnover, off-island candidates and hires, communications challenges, and difficulty in providing needed support for new graduates not acclimated to the community, especially at Ke Kula Ni'ihau. Local staff with cultural knowledge and existing community relationships would be far more effective and appropriate solutions to see these programs flourish, although finding sustainable funding for these positions for charter schools is an ongoing challenge.





...funding gaps continue in per pupil allocation, facilities, payroll, transportation and food services, causing charter schools to use already meager per pupil allocation to provide basic services that are provided through centralized services by the Departments of Education (DOE), Accounting and General Services (DAGS) and Department of Transportation (DOT) for other public schools.



**- State Public Charter School Commission's
2019-2023 Strategic Vision and Plan**

Food Service

- **Procurement Challenges** - Being a small island with only one key produce distributor, with very limited options for in-state products, local procurement was challenging even with extensive existing relationships with producers. Higher costs and limited delivery options for small orders were major challenges.
- **Costly Vendors** - Outside for-profit vendors are generally too costly and do not provide the quality of food desired for school lunch service. Without a multi-school scale, or significant subsidies, it is difficult for lunch program vendor models to become financially self-sustaining while being affordable to schools.
- **National School Lunch Program Limitations** - While NSLP had a high return on investment (ROI) at Ke Kula Ni'ihau, transitioning to NSLP at Kawaikini created many issues such as increased plate waste, decrease in local sourcing, exorbitant milk costs, burdensome paperwork, additional staff time, etc. - without a high enough return in reimbursements. For example, Mālama Kaua'i observed a 26% decrease in local procurement while on NSLP (from 53% to 27%) at Kawaikini due to challenges in adjusting menu to seasonal availability.
- **Mobile Commercial Kitchen Capacity Limited** - Kitchen capacity is limited in storage and production space to an estimated ~130 meals for Kawaikini. Therefore, this could only be a potential solution for schools with enrollment numbers in that range, or with additional storage and/or preparation space available on campus.
- **School Lunch Ordering Processes** - Tracking of school lunch orders at Kawaikini is complex, as the school allows families to choose meal ordering by the day. Combined with absentee rates, frequent field trips, holidays, and school breaks, this creates incredibly inconsistent orders and an administration burden for school staff. Moving forward, the school is considering a process of monthly ordering instead of daily.
- **Securing Backup Kitchen Staff** - Backup kitchen support is needed due to the limited staffing size of one chef at each school. If the chef is out sick, issues with alternatives and backup staffing can be challenging due to the complexity of NSLP.
- **Dishwashing Equipment Challenges** - While utilizing reusable dishware cuts down on costs, including the purchase and disposal of compostable dishware, both schools had technical issues securing effective dishwashing systems. Efforts to involve students to teach them kuleana (responsibility) saw its own set of messy challenges!



...its a diet that we have gotten away from and its exciting to see poi being incorporated again in schools and kids' diet... We need to bring back and revitalize that mindset of Hawaiians that we should be eating poi. By reinstilling poi in our youth's diet as Hawaiians, we will be more conscious of every decision we make.



-Kaina Makua, Co-Founder of Aloha 'Āina Poi Co.



Programmatic Recommendations

Education

- **Garden Integration & Staffing** - Schools taking ownership for ongoing garden maintenance through dedicated 'āina-based staff or instructors along with curricula that integrate gardens into the ongoing educational programming would ensure longevity, maintenance, and programmatic sustainability. A focus on food production as a CTE subject for high schoolers could reduce food costs for meal programs significantly. Securing staffing and school scheduling logistics remain as challenges, so these changes may take another year or two to implement.
- **Quarterly 'Ohana Work Days** - Community and family work days in the garden can help to support major maintenance projects and regular upkeep, while sharing garden knowledge with families. Ke Kula Ni'ihau's implementation of regular "Mālama the Campus" days have been a successful way to increase school community ownership of their spaces. Kawaikini has had difficulty in maintaining regular support for their work days, and will be working toward a more thorough community and family engagement process.

Food Service

- **Adjusting Programming to Needs of Age Groups** - Baseline BMI statistics at both schools were fairly similar. The majority of younger elementary students at both schools were found to have underweight BMIs. Recommendations to increase this age group's healthy caloric consumption include offering activities that get them to try new foods, incorporating healthy snacks, switching recess time to *before* lunch, and extending the lunch period. High school students had much higher prevalence of overweight and obese BMIs, and may benefit from more nutrition-related education, mindful eating skills, and physical activities with confidence-boosting and body-positive messaging.
- **NSLP ROI Evaluations** - Schools with a high free/reduced status may consider NSLP, while those that do not may want to try an alternative model, as the burdens of participating may outweigh the benefits. Kawaikini determined that even with 55% of students qualifying for reimbursement, the operational and financial burden is too great to support with the limited reimbursement funding provided by NSLP. For example, Hale Kealoha on O'ahu serves eight public charter schools over 300 meals daily, with a mix of schools on and off of NSLP; NSLP has not proven to be worthy of its burden for many charter schools.
- **Increase On-Campus Production** - One of the benefits of charter schools is looser regulatory oversight on incorporating campus-grown produce into the meal program. If schools can increase on-campus production, especially of easy-to-grow staple crops such as kalo (for corm and lū'au leaf), food costs could be decreased and deeper connections made between students and their food. For schools on NSLP, reimbursement funds may be utilized to purchase seeds and food plants for growing food specifically for the school meal program.
- **Pilot Schools' Food Future** - Ke Kula Ni'ihau has been running their lunch program on their own and is fairly self-sufficient. After extensive evaluation with a financial consultant, Kawaikini's administration did not feel prepared to internalize their lunch program nor afford the unsubsidized cost of the current meal program off of OHA's previous funding. For now, lunch has been sourced through a volunteer-subsidized third-party vendor - not on NSLP. Both schools continue to struggle with consistently offering healthy lunches with localized procurement due to high food costs and minimal funding to support meals.



Recommendations for Systemic Solutions

- Examine Viability of a Multi-Site Vendor (DOE or Private)** - Several schools on Kaua'i still do not have meal programs, and do not have the enrollment, free/reduced meal rates, and/or facilities to make operating their own meal programs financially feasible. Assessment for a Kaua'i-based vendor to serve schools that remain without lunch programs could be a worthwhile investment, especially if the vendor could administer NSLP.

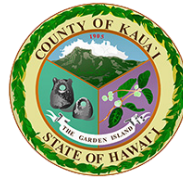
This could be the DOE vending to charters, as they have the scale of operations and administrative expertise, and are improving meal quality with their 'Aina Pono program rollout. If the 'Aina Pono program can create a menu that is more culturally relevant, their meals may be more attractive to charters. A culturally-grounded private vendor, such as Hale Kealoha on O'ahu, could be another option - they've shown by scaling to serve multiple schools, making high-quality, local, and culturally relevant meals available affordably can be realistic.

- Support the Viability of Local Food Aggregation & Distribution** - Financial support for procurement, aggregation and distribution models for local food is another much needed solution. Currently there is only one bidder on Kaua'i for all DOE food contracts, yet this business doesn't emphasize local procurement. This need is not only defined by the needs of smaller schools, but also restaurants and hospitals. Mālama Kaua'i completed research in summer 2019, which assessed local food aggregation and distribution model options for Kaua'i, and determined that the most viable option for farmers may be farmer-led regional food hubs.
- Increase Public Investment for Charter School Meals** - Strategic funding to support improved capacity of charter school meal programs could improve food access and ensure programs meet the on-the-ground needs of communities. Needs seem to vary greatly and include facilities and equipment, staffing, lunch vendor subsidies, and expertise. Close attention should be paid to individualize solutions to maintain sovereignty at the school level. Schools should not be forced to participate in NSLP to obtain funding if it is determined inappropriate for their specific situation or belief system.

During the 2019 legislative session, a pair of companion bills were introduced that would have appropriated funds to charter schools for meal service costs: SB937 and HB730; both were unsuccessful. Hawai'i Appleseed will be advocating for similar legislation again next session. Those who can support advocacy in this effort are encouraged to contact Daniela Kittinger at daniela@hiappleseed.org.

- Advocate for Higher Hawai'i Reimbursement Rates for NSLP** - Advocacy for higher nutrition program reimbursement rates for Hawai'i at the federal level is necessary to further support the high expense of school meals. For example, the maximum SY18/19 NSLP reimbursement rate for Hawai'i is \$4.06, the mainland is \$3.48, and Alaska is \$5.62. Many agencies have been advocating for Hawai'i to increase to Alaska's rate. Hawai'i Appleseed further supported this request with research proving Hawai'i's food costs are higher/similar to Alaska and may continue efforts once a new Federal-level administration is in place.
- 'Ōlelo Hawai'i Nutrition & Gardening Curriculum** - Standards-based, easily adopted 'āina-focused curricula - in Hawaiian - could be an asset to Hawaiian charters statewide. Very few nutrition and agriculture-related curricula available have a focus on traditional Hawaiian foods and plants. The best we have encountered is 'ĀINA in Schools by Kōkua Hawai'i Foundation, yet it is only developed for grades K-6 and not currently available in 'ōlelo Hawai'i, which is important for immersion school use.
- Advocate for Equity-Based Grantmaking** - Some larger grantmakers in this space, such as Chef Ann Foundation and USDA, must allow eligibility for schools not on NSLP. These entities call for equity, yet are not "walking their talk" by being equitable in their grantmaking eligibility. These eligibility processes perpetuate systemic barriers to equitable investment in indigenous communities that have a great need for funding.

Mahalos



David Spalding Boyton Educational Grant

A huge mahalo nui loa to all of the Kawaikini and Ke Kula Ni'ihau 'ohana for their commitment, love, and support for this program. This project could not have happened without the countless number of organizations, businesses, families, and the entire Kaua'i community for all of their donations, volunteer time and services, and contributions. There are so many of you that it would be impossible to list you all.

It takes a village - and we are grateful ours is so supportive!