“Peace & Sustainability Garden”
Henry J. Kaiser High School
A Kōkua Hawai‘i Foundation Grant

Thank you, Kōkua Hawaii Foundation, for the wonderful opportunity to help make our time in high school more meaningful and provide us with the experiences needed to lead purposeful lives. We’ll never forget your generosity nor the value of the moments spent together in the garden.

~ Wipeout Crew

Please visit the following link to learn more about the Wipeout Crew and its current projects: https://www.youtube.com/watch?v=3mbphbyZsUc&t=202s
Stages & Reflection

I. Clearing Land & Discovering History

At the end of 2016, when we first petitioned to use this site for our project, the area was overflowing with California grass (some of which was 8 feet high). It took several months to clear the land. Through several talks with Kōkua Hawaiʻi Foundation, it was determined that the project and grant should be released for the 2018 school year to give us optimal time to clear, prep and begin. This was an excellent idea as prepping the land was a hardy task in and of itself, but wasn’t possible until the land was cleared of brush. It was April of 2017 and many of our most dedicated members had been seniors and would be leaving soon, so it was prime time to get them working. We found that drowning the roots of the taller grasses in just about ½ gallon of water was enough to pry them up from the soil with a shovel. Smaller ones, however, needed no water as the roots weren’t as advanced. [We learned later how important it was to work when the ground was already soggy from a recent rain.] For the ground to be usable and the garden to be the focus of our energies, removing the root systems was imperative. To machete them down was inefficient as they just grew back within a week, especially after a rain.

As we neared the end of this stage, we began to discover rock walls, various piles of rock clearly staged with intention, and taro keiki growing under the tall grasses and along our school's property fence line. A week of inquiry around campus led to the discovery that this location had been home to a Hawaiian garden and taro patch; had been the site of Hawaiian Navigation class at Kaiser High School a decade ago; and had even included at one time an imu used for celebrations and fundraising. I contacted the teacher who had been in charge of the site, Mrs. Michelle Kapana-Baird, and she volunteered to come over and share her story.

This area of the campus had much importance to her and her past and she was happy someone was taking it over. As she walked around the now-cleared land she shared the names of the plants we had discovered now uncovered and grazing under the morning sun. The area was actually teeming with native plants, living history of the area, and stories to boot! One of the most memorable stories she shared was the planting of the kou tree. On September 11th, 2001, as America was attacked in New York City, the Dept. of Education made the decision to keep schools open to allow somewhere for students to go. On that morning, Mrs. Kapana-Baird and her husband, teachers in our Hawaiian department, decided that for those that came that morning, there should be something
special for them. That morning, they gathered their students around a small kou tree they had brought from home and reflected upon what had occurred. They asked each student to reflect upon his or her own life and what commitments they could make to living a life of peace and love. As they shared, the kou tree became a symbol of this commitment. Together that morning the students and Mr. and Mrs. Kapana-Baird planted that tree. Today, the kou tree still stands, donned with beautiful orange flowers providing shade and a wonderful memory. This story, coupled with the students own purpose and mission, is why our garden is known as “Peace and Sustainability Garden” - a tribute to the wonderful memory and significance of those that came before.

II. Preparing the Land & Agriculture Experimentation

The land we've chosen to use has a variety of challenges that make using it as much about labor as does it creative approach. Some of the soil, healthy and full of life has been easy to work with, while other areas tend to be solid, not unlike clay or even stone. Much of the preparation needed research done in regards to tools and best methodologies. We found that garden tillers worked best in tilling the land, breaking it up to provide the appropriate aeration, and allowing us to add compost and mulch to it - in essence reinvigorating the land. The Kokua grant helped in this regards immensely by allowing us to purchase tillers, shovels, and other basic landscaping and gardening supplies. Without them, we would not have been able to best use the land.

Preparing the land also gave us the opportunity to discuss our own values as we explored these new roles. We needed to discuss the approach we’d take to the certain parts of the land that would require ethical and moral commitment as well as physical. While we agreed that nothing in the garden should die due to our being there, we did, however, have to make one exception. The invasive haole koa tree with which we have vast experience from our various service projects with different non-profits has proliferated in this area. The trees serve no purpose, spread quickly and make working int the soil a difficult proposition. Uprooting the haole koa by hand is a strenuous - if not impossible - task. Some roots go as far down as 4 feet and take days of work to loosen and pull. Clearing the haole koa however was an important step in preparing the land as it allowed us to more safety and efficiently use the space. We unsuccessfully tried to use pickaxes and shovels to dig up these roots but ultimately concluded that heavier equipment was necessary. We ended up purchasing a pullerbear bar through donation and were successful in clearing multiple trees from the garden area.
Using the land even when cleared, however, provided its own set of problems. We discovered quickly that certain methods of growing food needed special care. Certain greens like kale, lettuce and cabbage were quickly eaten up by insects. Even by adding organic Neem oil certain bugs were more dedicated than others to being the first to take bites out of our greens. The grant, therefore, was helpful in providing the lumber and tools necessary to create multiple above-ground boxes. By purchasing the right kind of organic compost soil and fertilizer, and keeping it away from [most] insects, we immediately found success planting and harvesting a much greater variety. Beets, onion, lettuce, basil, green beans, sweet potato, spinach, cilantro and carrot all did exceptionally well in these boxes.

Aside from the garden boxes, we did experience success with our trellis tunnel. Having the funds to experiment with different techniques was exciting for our students. The students had a vision to create a trellis tunnel where eggplant could hang freely as it grew. While the Waimanalo Yellow Eggplants did attach to the trellis as the students had intended, the trellis was did provide a nice space for cucumber and lilikoi to grow and stretch out as it needed. The success of the trellis also invited more cage-ideas. The students found old cages under some debris in an old closet and were successful in using them to encourage tomato growth.

The most interesting element of working at this garden has been the element of surprise. The land is always changing and is always deciding what it thinks about our latest - at times, fleeting - attempts at growing food. We do research continuously online but much of the resources online are based on environments much different than Hawaii. Because of this, we've reached several times to various experts to help us determine best approach on certain projects. Kimo Franklin and his extensive knowledge of the humid climate; Keiki and Plow and their donation of banana; Haleiwa Banana Guy and his ability to diagnose some old banana trees with BBTV (Banana Bunchy Top Virus); Otsuji farms and their farming knowledge; and several others were key in being able to determine best practice.

III. Understanding Waste Responsibility

In 2017, students from the Wipeout Crew began discussing waste at Kaiser High School. Being involved in the garden meant a broadening and deepening of our awareness of and understanding of food sustainability and waste. We began talking about the issue of food waste in our meetings and soon even went so far as to collect results in a two-week span of the amount of waste collected. The students had found that students throw away
more than 90 lbs of compostable food scraps (vegetables, mostly) every 3 days. The cafeteria itself also has food that goes out that cannot be reused at the end of every lunch period. The students collected this a few times and added it to our compost can. We wanted to experiment with the kind of compost we could successfully maintain in small quantities before branching out to larger piles. The compost was successful and was used multiple times throughout this project when transplanting trees that need an abundance of nutrients.

While we unfortunately haven’t had the time to develop large compost piles, we have been able to successfully bring in large mulch piles from landscaping companies. The piles have helped to maintain nitrogen levels, stop weeds and provide adequate walkways between plots. The tools that have been purchased have allowed us to easily turn the piles and keep them well hydrated and breathing. We’ve begun to understand the importance of considering the cycle of waste. Much of what we use in the garden comes from the earth. The seeds, branches, leaves and food waste all originate and return to the earth. This cycle stops with human convenience and a negligent relationship with food. If people understood food sustainability and developed a healthy - almost social - relationship with their food, people would be much happier and the earth less contaminated. The students discussed how our throw-away culture has allowed people to be intellectually lazy about this issue and undetermined to find any solutions to problems affecting our environment today. Working with mulch has given us a better appreciation for the cycle in which we exist and has enabled us to ask much better questions as well.

IV. **Overview & Teacher Reflection**

Starting out was a true test of mettle. Having to spend months clearing land before anything could be planted was a feat. But it also provided students the self-test of investment. Some couldn’t get through those first few weeks and faded out of the project, while others became invigorated by the work and the nature of the exercise - as it was a measurement of patience, humility and teamwork. Those early days of blood, sweat and tears were as important to our own growth as the actual building and growing of food. That is to say that despite the tiresome and laborious work that kept us all hours of the afternoon - and even into the night at times - we began to really understand the stubborn but also self-preserving nature of the Earth and how important it was to appreciate the moments we spent in it. Outside of that, these early days also allowed us to approach our own learning slowly and attentively - consciously. We sought much
advice during this time; and this knowledge, coupled with our experiences and testing, became wisdom much to be regarded.

As the team began to take form, as did our roles and responsibilities. As a teacher, understanding the importance of lesson planning but also the rich reward of spontaneous discovery and empowerment, I was reserved in my approach to scheduling and roles (outside of safety expectations and general project overviews). The students naturally began their own log and I supported them by buying an expo board for them to use to take notes. The log book idea slowly phased out as there was just too much to write and not enough time. Keeping a log book, however, would be a great idea for students wishing to contribute and commit to it. It is invaluable in farming to have a knowledge of plant needs and life span. For plants like sweet potato and cassava, where you can’t necessarily visually identify when the plant is ready, having a timeline of care is helpful. In other ways, students began to take on their own roles and found things they were naturally more interested in. Some students really enjoyed pruning and clipping trees, while others enjoyed digging holes and transplanting. This freedom kept projects moving slowly but students engaged. At times, when we had larger projects that needed more effort, students worked together to get it done quickly and effectively.

The freedoms allowed to members of the Wipeout Crew who took on this project translated into the incorporation of families and friends outside our school. The garden became a small co-op of loved ones and community members. Any given Friday, our garden was filled with 5 year old siblings, extended family and out-of-towners, community members who just wanted to come and work with the Wipeout Crew, a local family of famers across the street who heard about it what we were doing and the students’ friends and co-workers who had some free-time. The garden became a place rich with love and family, where no matter who you were or from where you came, you were accepted and you were free to create, build, plant and harvest - free to nurture.

Being able to create this garden has been more than satisfying, as a teacher. I’ve been able to work alongside my students and share in our victories and failures, experiencing both as equals, then working collaboratively to find solutions. Projects like these where students commit themselves 100% are phenomenal but by nature are meant to be such. It’s when students are asked to use their imagination, innovate and have a little faith in themselves and each other in which failure and success can be as rewarding as it should be in education. The extent to which I’ve learned about myself as an educator but also as a contributor to this community is unparalleled. Early mornings spent turning the mulch and watering the garden, late Friday afternoons spent in the garden with the students and work days on holidays, weekends and during the summer have all provided
extra opportunities to see my students in action and watch them blossom into responsible and mature adults who understand the significance of their role in their community. Sharing the fruits of our labor with our student body and faculty also provided us the rich experience and knowledge of selfless contribution and nurturing. Having students box up fruits and vegetables and walk around campus giving them out to faculty was a beautiful experience that opened up the conversation to more than just the project - but in the action of giving, we understood more firmly what it was to give and to be family.

V. Other Connections

The “Peace and Sustainability Garden” has become home to a variety of other projects as well. Outside of students using it for films and school newspaper projects, students in Science classes and extracurricular clubs have found new ways to be a part of it or to use it to engage their own learning or leadership, though it is not limited to them. The garden has expanded and now working on including a Native Hawaiian Botanical Garden. A part of the land has also just recently been taken-on by a few science classes that have begun doing hands-on projects, researching and experimenting with different techniques of growing vegetables. An after school global studies class connected with Pacific Asian Affairs Council (PAAC) has begun similar work. Individuals have also begun coming forward with their own science projects.
Student Reflections

The following student reflections have helped to initiate further discussion regarding the nature and result of this grant project. Questions they can choose from are below:

● Please share your experience in carrying out this project. Include any activities, lesson plans or reflection questions you may have developed.

● How was the project received by your school community? What was most helpful? What would you change? Would you recommend the trainings, workshops or materials you purchased to other groups?

● Reflect upon how the opportunity to work in a school garden has been a benefit to you in your life. How do you think other students or schools might benefit from taking advantage of unique opportunities such as this one?

Samantha Steenhuis, Kaiser High graduate ('18), writes:

I loved being a part of the project and developing a garden on campus. It is important to do whatever we can to live more sustainably and to be able to know how our food gets to our plates. I often brought people to the garden to share what we had been doing. We also invited other clubs to participate in gardening days. It was exciting to teach others about what we had learned about growing our own food. Most students that came to the garden were curious about what we were doing and were not familiar with some of the crops we had. Throughout the ongoing process we had lots of different ideas and questions on how to best utilize the space, many of which are still being answered. Our garden has been a giant step for Kaiser to creating a more sustainable school, and I am extremely proud of what we have accomplished thus far.

It was most helpful to have the support from other organisations that we worked with as well as student input. I had never gardened before, yet learning from students who have their own farm or garden taught me a lot about how to further the project. I would have wanted to include more flowers and dedicate more time to making the space even better. I also would have wanted to change the way that we presented the garden. By which I mean that I think it would have made more people interested in volunteering if we brought more people to it and had signs explaining what everything was. We could have been more
organized in knowing where which plant was at times. I would definitely recommend to other groups to also take on a project like this and utilize the resources that The Kokua Hawaii Foundation provides.

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Kaitlin Mann, Kaiser High senior (℅ ’19) and current Wipeout Crew Secretary, writes:  
Personally, I have always been disturbed by how most people live such a polluted lifestyle. We take many things for granted and continue to wind down such a negative path. There are forests being cut down, animals becoming extinct, coral reefs being bleached, oceans becoming a plastic museum, and etc. When I was first introduced to these problems, it shocked me quite a bit. I never realized how big of an effect I had on the environment. I discovered that the choices I make on an everyday basis have a result, most of which were negative. But, overall I came to the conclusion that I needed to change and that I wanted to develop better habits. And so the first step I took, was participating in weekly gardening sessions provided by the Wipe Out Crew. I figured that this would be a good start because I would be surrounded by like-minded people who I could learn from.

And through my years of participating in the Peace and Sustainability Garden, my most memorable memory took place on a perfect hot sunny day. It was during my lunch period and I was alone. I had just started watering the papaya trees and out of nowhere; I just looked up and stared off into the greenness of Diamond Head. I remember every detail. The two diagonal curvy lines that sprung upwards high into the sky, the air around me smelling of fresh cut grass with a hint of sweetness, and the two Monarch butterflies that flew playfully into the distance. It was like a scene from the movies, but the only difference was that this was real. And it was special to me because no one was there to make me feel this way, not even I planned for this to happen. It was a short but sweet moment that I had with nature.

I have always cherished the Wipe Out Crew and their ability to bring communities together. It’s different in a way where we not only talk about the environment but also take action. Having the sustainability and peace garden is one of the many traits that make the club unique. For me, the garden is a reminder to myself and others to strive for sustainability. I realize now that I am so very fortunate to have such a peaceful and heaven like place. I encourage others to do what they can to preserve and not abuse the Earth. Because if we don’t take action now, then what will become of the future?

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Lei Shimabukuro, Kaiser High senior (℅ ’19) and current Wipeout Crew Vice President, writes:  
Going into this Peace and Sustainability Garden, I had no experience. I had no idea we even had a garden, and to find this corner of life and happiness in the back of our school, was enlightening. Through this garden, I was able to learn from other students and friends, what they learned in their experience, and returned this new knowledge, literally back into the soil! Every friday after school, I got to get my hands
dirty, weed the plots for new plants to grow... (which by the way, is extremely satisfying), harvest a delicious papaya or vegetable from the “veggie tables,” and enjoy the company of other passionate students. I admit, we do get a little sweaty, with dirt smeared across our faces, and the pain in our backs and legs follow us, but I wouldn’t change it for the world. When I take a look at our creation at the end of the day, it is a proud moment for me. To see the butterflies fluttering, the bees buzzing flower to flower, the birds hunting for bugs after a fresh cut of grass, and the total abundance of life, I know that every living thing, enjoys this garden. I have not only learned the science of gardening, but I learned to be grateful for the simple things in life and to be grounded, and connected to nature in such a modern world with constant preaching of technology. The Wipeout Crew, truly made a space of nearly nothing, to something special, and The Kokua Hawaii Foundation has helped to make it an even more magical place.

I highly encourage students to take opportunities like this, to make a difference in the world, as little as one may think it seems. It not only changes earth’s life to be more sustainable, but it also changes yours, where you grow, with the plants together. With the help of The Kokua Hawaii Foundation, Wipeout Crew was able to expand the Peace & Sustainability Garden in ways we thought was not possible, and now, our imagination runs wild! We are able to achieve big goals for this garden, and we couldn’t be more thankful for this opportunity. If it ever comes your way, take it, you won’t regret it!

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Shannon Murphy, Kaiser High graduate (% ‘18) and former President of Wipeout Crew, writes:

The creation of the Peace and Sustainability Garden is something I am very proud to be apart of. The idea of implementing a garden on the school campus sounded great but to be honest, I did not know how it would completely work! However, Mr. Balazs had a vision of the garden- even with all the tall california grass around :) . He showed us this large space on the side of campus that had potential to be transformed into a beautiful garden. Before we could get to the fun stuff of planting and growing fruits and veggies, we had to remove tall california grass, haole koa, and other weeds which was a very long and tiring process- but it was all worth it. From that point on, we started gardening every friday, created water schedules, and spent several days each week working on the garden during the summer.

The garden became a part of my life. I spent so much time after before and after school taking care of the plants- I would even talk to them and watch them grow! I became extremely proud of the garden and I wanted to share it with everyone around. I reached out to other clubs to have gardening days alongside the Wipeout Crew. Other students and teachers on campus were excited to partake in garden workdays. Overall, the community did support the garden and everyone is excited to watch the space grow and flourish over the next couple of years.

From working in the garden myself, I have learned so much about the agriculture industry. I did not realize how difficult it is to maintain a garden and to make sure all plants and veggies are healthy. I gained so much respect to local farmers and the amount of work they put into organic, sustainable
agriculture. I recently learned that every 30 seconds in India, there is a farmer suicide. This is simply because these local farmers cannot compete with commercial and industrial farming practices. If everyone chose to support local companies and farmers markets instead of large corporations, these farmers would receive an income and would be able to support themselves and the rest of the community. So the point is, by growing our own food for a garden and choosing to eat local, we are not only benefiting the Earth but we are helping many lives around us. Food is a powerful tool, and depending on how we use it, we can change the world for the better. Such a big realization from creating a small garden at Kaiser High! :-)

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Jasleen Tun, Kaiser High graduate (℅ ’18) and former Wipeout Crew secretary, writes:

Being apart of starting the high school garden is an experience that has impacted my life and one that I still take with me today. Having the opportunity to work in the garden has benefited me as I learned not only leadership skills but also the processes that go into creating a garden hands on.

Leadership skills have taught me things that I take with me in anything I do. By being apart of this project, I learned how to time manage, how to facilitate discussion, how to be beneficial in meetings, how to communicate about what needs to be done and how to create documents.

Work in the classroom are great skills but seeing them put into action establishes a kuleana. Getting your hands dirty is not only fun but gives you something to be proud of. It also develops strength and helps to keep you motivated. Seeing it being positively taken up, not just by the school and other community members, but also by other organizations, creates a sense of importance to what we are doing. That is the reason why it will beneficial for the future students.

It will be beneficial for the next generation of students by giving them an opportunity to gain not only a responsibility for themselves but a responsibility that is shared. It will also inspire them to create their own uses for the garden and give them a way to contribute to helping our community.

Responsibility is an essential tool in life. Having the garden establishes a fun and positive opportunity to reinforce that sense of duty, knowing that if they want to keep what we are doing alive and well then they have to commit to their task. It gives the individual a sense of purpose, by having a specific task. Tending to the garden is not a one man job though, what we do is a shared passion and duty. By working together, it not only teaches communication skills but can also develop a sense of aloha within the team.

The garden is not something that is only beneficial to the high school and students though. The garden contributes to the community through means of creating a farmers market or by inspiring other schools. By having a farmer’s market we can provide the community with fresh crops. It will open up the chance to meet new people from all walks of life by doing so. Some people are from other organizations or schools and ask about what is being done and realize it is something they can do too.
Even with no knowledge of how to create a garden, it is a project that can be taken up by anyone and will help to develop the skills through trial and error. The garden is also great as it shows you how you can create your own fresh untampered produce. It teaches you how to lead a less wasteful life through compost and work with fertilizer and mulch to create suitable soil. Overall, the garden not only teaches a sustainable lifestyle, but gives you a sense of purpose and responsibility and most importantly is a scenic area of relaxation.