

Ka Lā e Makani 'O Āmū- The Sun and Wind of Anahola

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To Chevron and HaSTA – Thank you for funding this project. It was an incredible learning experience that brought meaning of alternative energy to the secondary students of Kanuikapono. Your organization provided everything I needed to introduce, explore and write about alternative energy. Next year, the project continues with 2 new teachers coming on board to explore.

Kanuikapono PCS sits up on a hill above the ocean and receives nice trade winds and intense sunlight. I wanted to use these natural resources to introduce and further understand alternative energy and to show the students how this technology can help the future of the Anahola Community. To do this I had an idea to relate the old with the new by talking about the Hōkūleʻa and Hikianalia voyages and the way they are using alternative energy sources to power some of their equipment. We also have a solar facility that is being built on the end of town that will provide power to a lot of Anahola homes.

The first introduction to the equipment was a surprise for the students – they usually don't receive brand new equipment, and they usually don't get to explore with new technology that is just for them. The complexity of the instructions and experiments were a little overwhelming at first and it took breaking down the use of the equipment into chunks so they could understand. I also incorporated Science Fair into the introduction of the equipment and gave the students the opportunity to use the equipment for their projects. Several students did complete their projects with the equipment and went on to District Science Fair. The Science Fair assessment proved that the students walked away with good knowledge about how the scientific method works. We had a 95% passing rate on our constructed response test.

The Science Fair also provided a great opportunity for the secondary students of the school to show the elementary students the equipment and experiments. We had a school Science Fair and the secondary students demonstrated their projects to the younger students, teachers and parents. It was a great success and when the younger students were asked later on in the year: "What are you looking forward to when you go to secondary?" They replied: "Science Projects". I was so happy that we had made an impact on them.

The parents and community also had a chance to see the equipment in action when we had a fund-raising concert on campus. We displayed the projects and equipment and showed people who stopped by how they work. So many community members were impressed. I never knew how much impact it would have starting off with new, advanced equipment that students can work with. Starting off with the levels of knowledge high produced students who were thinking further into their own future and solving complex problems of the community (alternative energy).

The knowledge was further enhanced by being able to team up with the solar farm facility that lies within a couple of miles of school. The community knows it's there but not many people know how it can help with the energy crisis of the future. The students were able to take the knowledge that they have about solar and apply it to the larger facility. I'm hoping they will continue to be interested and possibly work there in the future.

All of this began with a discussion of how the ancient Polynesians used the sun and wind and how modern day Hawaiians are using the same resources. The students started to understand the technological parts of the equipment and with further use, I'm hoping they will become more familiar with and think about a career in the use of alternative energy.

Thank you again for this great opportunity.