

Hui Malama Ocean Stewardship in the Classroom
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This year-long project worked side-by-side with another year-long project, “Hui Malama Ocean Stewardship in the Field.” The two projects activated the learning that middle school students do in the classroom by connecting them to students who do field work. The students who participated in the Stewardship in the Field activities went to the ocean weekly to sample water quality, collect water samples, speak to experts in the community, complete a journal entry, and bring their field work back to the students in the classroom. The students in the classroom then examined the water samples for plankton and shared their knowledge about plankton with the field work students.

The beginning of our project went just as planned, with many sessions in the classroom devoted to learning about plankton. I presented several lectures (college class style, complete with note-taking and study groups, which they loved), and I led group discussions, laying the groundwork for learning about the little creatures in the ocean. The next phase was allowing the students to research plankton on their own. The students quickly got into a rhythm of gathering in a whole group, deciding what would be done that day, and then breaking up into small groups to complete their work. They moved between the books, the computer, contacting scientists online, and checking their understanding with each other. Some of the students also participated in collecting samples from the field with the “Hui Malama Ocean Stewardship in the Field” project. The students kept an informal journal of reflections, observations and notes from sources.

We decided to adapt the project as the year progressed. The students were really enjoying the opportunity to work with each other and share their knowledge, so we decided to change the final product from individual brochures or presentations to a group presentation at the end of the year. The two groups of students (the ones in the field and the ones in the classroom) began to merge and overlap, and the distinction between the two became unnecessary. As they worked together, they began to see themselves as connected and reaching for the same goal. This was an unexpected and happy development! By the fourth quarter, the students were forming study groups and requesting materials from me to take notes on the tiny ocean creatures we were learning about.

Our research was challenged by our difficulty in accessing sources to identify the creatures we were pulling from the ocean. My very limited knowledge of what we were seeing in the microscope was immediately eclipsed. We turned this into an opportunity, though, by seeking help from C-MORE staff and depending more on ourselves. The work shifted from identifying everything we found to learning how to put specimens into broad categories based on their structures and their location. The students expressed feelings of true exploration, finding new things, and enjoyment in conducting long-term study.

Unfortunately, at the very end of the year, we suffered a huge technical problem with our laptops and we lost our pictures taken on the microscope (along with a lot of other information). My lesson in that is to always back up pictures and material in more than one spot!

In reflection, “Hui Malama Ocean Stewardship in the Classroom” provided so many invaluable supports to the students: an opportunity to relax into deep, long-term study; a validation that research and applied study is the groundwork on which work in the field is built; practice in study skills that the students will need in High School; an unexpected growth in the depth of community and group work; an increased ability to glean information from a truly wide range of sources (books, fiction books, the internet, scientists, peers, movies, etc.). For the teachers in our program, the project underscored the students’ need for “down time” in an active, Project-Based Learning education setting. They always enjoy getting out to the ocean...they also really enjoy being dedicated, self-directed learners with a mission to complete and the time to complete it.