Incorporating Ocean FEST Science Night into our School Curriculum
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Thanks to GEMS, Kamiloiki Elementary School was able to purchase supplies to use the inquiry-based activities from Ocean FEST to excite some 336 students about science, teaching science inquiry and introducing marine microbes to students from multiple grade levels.

Oil and Water Tubes. We used this activity with kindergarten students, who hypothesized about what would happen when we dropped the tablet into the oil and water tube. Students each conducted the experiment and made observations, and we made a conclusion as a class. We then went on to shake our tubes and hypothesize about what they would look like the next day. Through this inquiry, grade 4 students also learned about density and properties of liquids, how these properties allow scientista to clean up oil spills, and that microbes can consume oil for food. We also used it to demonstrate chemical reactions and that production of gas is the result of the chemical reaction taking place.

Penny Plop. This experiment was a great tool to integrate grade 5 Math and Science benchmarks. Students learned about a range of variables and how it is important to control these when conducting experiments.

Drowning Island. During their inquiry into global change, grade 5 used this activity as a Science Fair Project for the Honolulu District Science Fair. In pairs, students did background research, made hypotheses, wrote procedures, recorded observations and reached conclusions.

Cartesian Divers. We used this fun activity for grade 1 to teach the scientific method. The 3rd graders also conducted this experiment and recorded their hypotheses, collected and analyzed their data, and made conclusions.

Coral Sand and Vinegar. I used this activity with my 3rd and 4th grade students who have been learning about shoreline habitats (grade 3) and island formations (grade 4). We also looked at volcanic sand and sand from other areas and compared them.

Which Microbe Are You? and Make a Microbe. These activities fit well with the students' lessons on roles of various organisms in the same environment -- that organisms need specific environmental conditions to survive, and they represent a great deal of diversity. Students loved building their microbes and used a variety of skills to redesign them, using what they knew about each construction object, to try and get a neutrally buoyant microbe.

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