Finding Seymour Florine Nakasone

To culminate a third grade life science unit involving the understanding of "How plants depend upon Animals" < Performance indicator SC.3.3.1 ~ Describe how plants depend on animals >, students were fortunate to have had an opportunity to participate in the University of Hawaii's Grants for Education in Microbial Science (GEMS). The grant provided the funds for the purchase of a C-MORE Science kit called "Marine Mystery".

To begin the unit, students were introduced to food chain and were asked to consider ways plants depend upon animals. They were introduced to seed & plant dispersal, to bee & insect pollination, to the carbon dioxide/ oxygen cycle and to food chains from various habitats.

Following the study of the different ways plants depend on animals, The "Marine Mystery" science kit was introduced. From the kit, students were provided with vocabulary words (algae, coral, DNA or deoxyribonucleic acid, photosynthesis, symbiosis and zooxanthellae) and were introduced to present day causes of coral reef destruction (Global warming, sedimentation, algae bloom and industrial plant waste pollution). The format of the kit was presented through a marine murder mystery skit/scenario which encouraged students to discover and investigate what caused the coral "Seymour" to die. While learning about the causes of coral reef destruction, students also learned basic skills of DNA testing.

Through the skit, Students were given the opportunity to take upon different roles and were given the opportunity to solve a mystery based upon DNA facts. Leadership and team cooperation skills were also encouraged to help students focus on finding the answer to "who killed Seymour the coral?"

Due to the age of the students (8 & 9 year olds), a discussion was conducted to help students better understand each of the present day causes of coral reef destruction. Lastly, students were directed to consider what they might do to "Save The Earth" for their future.

To end the activity students were asked to share their thoughts on what was learned and enjoyed.

- ❖ I learned that global warming is not good for the earth.
- ❖ I learned about the different suspects that could have killed Seymour (coral).
- ❖ I learned that algae bloom can kill coral just by covering. When algae bloom covers the sun the zooxanthellae can't give the coral food to live.
- ❖ I learned that if water gets warm, the coral will die. I liked when the scientist tested the DNA.
- ❖ I learned that coral is fragile and that global warming affects the ocean. I also learned that algae bloom blocks sunlight, dirt covers coral, coral dies from too warm ocean, dirt goes into the ocean after construction, and that industrial plants are dangerous to the ocean.
- ❖ I liked matching up the DNA and finding out who did the crime. I learned that it is important that we prevent global warming, algae bloom, sedimentation, and pollution.
- ❖ I learned that you should take care of the zooxanthellae and keep coral safe from dieing and let coral have sun light.
- ❖ I learned that coral can die without sun light.
- ❖ I liked the mystery because we got to solve the mystery on our own.

- ❖ I learned that keeping our earth clean is important.
- The favorite part that I liked was when we had to be scientists and had to look for different DNA samples to fine the suspect that polluted the water.
- ❖ I learned that sedimentation is bad for coral because when it rains all the dirt covers the coral and the coral die.
- ❖ I liked when scene 5 came up and I went up as scout the sea horse.
- ❖ I learned that a lot of dangerous things that damage the ocean and kills coral. If we don't take care of our oceans, all of the coral could die and if coral dies − all of the fish die because fishes eat coral and if fishes die then a lot of other ocean animals will die, etc.
- ❖ I learned that global warming is killing coral.
- ❖ I had fun. It was exciting. My favorite part was when we were searching for the clues.
- ❖ I learned that global warming is a big part of killing the coral and when you do bad things, bad things are gonna (going to) happen to you.