

Genevieve Brett

Reflection on Outreach

COSEE follow-up project

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For my follow-up project after COSEE's workshop at OSM 2014, I got in touch with a friend of mine who teaches eighth grade science. We agreed that it would be useful to her students to hear about oceanography and also about graduate school. The target audience was composed of mostly 13-14 year old students, many of whom could become the first in their families to attend college. The goal of the teacher, Miss Monaco, was to nudge her students in the direction of STEM careers, something she has discussed with students throughout the year.

Originally I was considering doing an investigation with the students akin to the fresh vs salt water melting ice experiment we did at the conference. However, with only forty minutes of active time available for each class (I spoke to four during the day), Miss Monaco and I decided that it was more important to have time for students to ask questions about college and graduate school than do a project.

I presented material using the included powerpoint for about twenty minutes, followed by twenty minutes of questions and discussion with the students. In putting together my presentation, my main tool from the workshop was story telling. I also took into consideration how students learn. In particular, I wanted to get students engaged at the beginning. I did this by asking them what they already knew about the ocean and telling them some interesting facts. Later on, I included some videos, the second of which got many students re-engaged as they did not believe what they saw. This video was of a classic experiment using dye in a very viscous fluid and showing that stirring is reversible. Miss Monaco helped with the engagement of students on that video, asking for hypotheses for what would happen.

If I were to use this presentation again, I would rearrange several of the stories I include about graduate school trips and experiments to have more clear linkages. I would also write myself a script, as one of the feedbacks I got from the teacher was that I occasionally slipped into using vocabulary that was too advanced for the students.

The question and answer session was the most fun for me. It was interesting to see what kinds of questions the students had. For the most part, the questions focused on marine biology, which is unfortunately not my specialty. However, I felt comfortable talking about Mola Mola (for a question about ugly fish) and bioluminescence. Questions ranged from fishing to Megalodon. There were also questions about how much I get paid, how much 'drama' there is in college, and what sports I play. I feel that this time was very useful for the students to get comfortable talking about a science subject and about college. I am hopeful that the students will take this experience as a push in the direction of applying that interest.