

Preparing your students for the ASLO/TOS Conference

Approximately 1 month prior to the conference (by the end of January): Talk about the scientific method. They must be very comfortable with each step in the scientific method and how to plan an experiment and write up the data. Small, simple experiments are a great way to introduce students to this concept.

At the conference, the posters that the students will view are created by researchers to communicate their most current research to their peers. The posters themselves were NOT designed for students. It is important that both you and the students understand that they will likely not understand the specific scientific information on many of the posters. However, if the students are comfortable with the scientific method, and thus able to understand the organization of the posters, they will learn more than they expect about how science is done in the “real world.” The most important thing the students will learn from this experience is the breadth and depth of ocean science research. They will learn how many amazingly diverse topics exist in ocean research, and how specific and detailed certain projects can be.

Two weeks before the conference (week of February 2): Give them information about the meeting. They could view the conference web site (<http://www.aslo.org/honolulu2004/index.html>) to see abstracts and descriptions of sessions ahead of time to gather more information. I will provide you with background information on the scientists in the panels and places to go for more information.

Another fun activity to do to help prepare the students is to role-play or give examples of how to talk to researchers about their work while looking at posters. The scientists who will be there are very interested in talking with high school students. However, not all of them will be proficient at explaining their work in a way a teenager could understand. The students must be prepared ahead of time with questions they can ask, and they should be comfortable asking for clarification or explanation on a topic they do not quite understand.

I suggest having the students start talking to a scientist by saying, “Hello. I am _____ of _____ High School. I am in an introductory marine science class, and I think your research looks very interesting. Can you tell me more about it?” This lets the scientist know right away that this is a high school student who knows the basics of marine science, but not a high level of detail. Then the scientist can guide their explanation a little better. Also, the student can certainly interrupt an explanation to ask for a definition of a term or explanation of an acronym. Scientists often forget that some of the vocabulary they use is highly specific to their field, so they do not mind explaining terms they use.

One week before the conference (week of February 9):

Give them an assignment for the trip. An assignment focuses the students, gives them something specific to concentrate on, and lets them know what you expect them to gain from the conference. I have included in this packet a copy of a generic assignment modeled after the one I used in 2002. It worked well and gave the students some freedom, but also required them to think, write, and ask questions. I chose to make the research paper on a specific topic extra credit, but you may choose to make it mandatory. This can be particularly effective if each of the students gives an oral presentation on the topic they chose to research.

I also recommend having them write questions they can ask the panel participants ahead of time, and you should discuss with them what kinds of questions they could ask. They can ask specifics about the research (scientific information or about the tools they use), about the daily life of the researcher (how much time is spent in the field, in the lab, at a computer analyzing data, writing papers, etc.), or about the background of the researcher (what education did they need to get their job, what kinds of jobs have they had).

The day before the conference: Give them as much information and details about the plan and logistics for the day as possible. Also be sure they know that they must be flexible in case there is a small change in plans.