

Telling Your Stories Effectively

Now that you've spoken with the teacher and know a little about the class and what you should cover, it's time to shape your presentation.

You want to tell three stories:

1. The Story of WHOI.

It's likely older students have heard of WHOI and the teacher will already have introduced the students to WHOI prior to your arrival, but you can provide more details.

Where is WHOI? What does WHOI do? Why? Who pays for it?

How does someone become a scientist at WHOI? What are some of WHOI's accomplishments? Its discoveries? The institution's vessels and submersible technologies, for example, are interesting to audiences of all ages. Consider showing to students slides of WHOI technologies/vessels at work, such as *Alvin* or *Atlantis*.

2. The Story of Yourself.

Students will be interested in your own autobiography. One of the most important outcomes of your visit is the students' more realistic understanding of what scientists are like and what they actually do. So, tell a bit about yourself.

How, why, and when did you become an oceanographer? Does it help to grow up near an ocean? To swim well?

When you were your audience's age, what did you think of science in general, and oceanography in particular? Humanize science and help the students to identify with you and your path in life.

What do oceanographers study? How? Try to keep your explanations simple.

Where do you work? What does your day look like? Do you spend some of your year in the field or at sea?

Do you have a family? Children? Pets? Hobbies?

How long did you go to school? What did you major in? Students may ask how much money you make. Don't give your actual salary, but provide a range or approximation for people in your field in general.

3. The Story of Your Research or Topic of Discussion.

Here are some considerations for an effective presentation.

A. Core concepts.

Identify the one or two key ideas that you want students to understand. Then consider the most effective way for presenting them that is age-appropriate. As they say in politics, try to “stay on message.”

B. Hook'em early.

With audiences of any age, you want to engage learners from the outset. Like a good Hollywood movie, you need to “hook” your audience, ensuring you have its attention.

A good way to start might be to pose questions to students that they can answer. Doing so tells them you're interacting with them in a way that isn't over their heads.

Pose a scientific mystery that students might find interesting.

Present a problem or a contemporary issue that might be on the news.

Bring a prop to show the class. A large shark tooth? A piece of scientific equipment or instrumentation that might be intriguing? A harpoon?

Or start with striking visuals of WHOI and its work.

C. Explain the relevance of your work so even a 4th grader understands.

What's so important about your research or topic? While sharks or giant squids may be instantly fascinating to middle-schoolers, phytoplankton or ocean temperatures may not be without some contextualization.

Show the importance of your topic by placing it in a larger context. Explaining phytoplankton's role in the food chain, for example, particularly as the diet for the largest animals ever to live, starts building an understanding among students of this topic's vital importance.

When possible, draw the connection between your topic and marine life and humans. The bottom line is students should begin to understand, even if only on rudimentary levels, how vital oceans are to life on Earth.

D. Tell a story.

The greatest communicators of science are gifted storytellers. While most of us may not have such extraordinary abilities, try to shape your presentation into a story when possible. Here's one simple breakdown of a story, although there are many.

- i. You had a problem. In other words, there was something you needed to understand.
- ii. This problem was important. It impacted marine life or terrestrial life in vital ways.
- iii. You set out to solve your problem. You figured out what you needed to know to solve the problem and then set out on a journey to collect this information.
- iv. After ups and downs, overcoming many difficulties and obstacles, your journey ended when you were able to finally solve your problem.

This is, in effect, the hero's journey in storytelling and the journey scientists take.

E. Avoid jargon.

Avoid using acronyms or technical terms without explanation. If you do use a scientific term, write it on the blackboard so students can see it. You may want to run some of your vocabulary past the teacher beforehand.

Don't talk either above or below your audience. Ask questions of students periodically to ensure they are still following you.

F. Bring visuals & artifacts.

Whenever possible, use visuals or artifacts to amplify your content. Make sure they are age-appropriate. Younger students, for example, may not be able to interpret complex graphs or sophisticated data representations. It is effective for learners of all ages to be able to visualize your topic and concepts.

Additionally, remember that if you pass out anything, students will examine it rather than listen to you. Prepare handouts for students to review *after* your presentation.

G. Bring your sense of humor.

Nothing wins over an audience of any age faster than humor. Use humor to communicate that science is not just hard work but fun as well.