Teaching Tips

- Take control of the group from the outset. Explain the rules (i.e. how things will work at this station……we will work as a team, the presenters will pick up the animals and pass them around, be gentle with the animals, etc.)

- Introduce yourself to each group. Explain to them what your major is and what your career goals are. You may also want to have everyone say his or her name for you at the beginning (but don't spend too much time on this.)

- Use student's names and make eye contact.

- Make an effort to get everyone involved. Don't call on the same person over and over. Also, don't let the same person dominate the answers and comments in a workshop.

- Don't just give answers: Ask questions……..Listen to the their answers and then add information.

- Talk WITH the students, not AT them.

- Remember that every question or answer is valid, so be open to student's ideas; be positive even if their idea is wrong.

- Be yourself: talk in a natural, informal manner but project your voice. Sound confident! Avoid stammers, stutters, filler words such as: "like," "you know," etc.

- Don't rush. However, be sure to manage your time so you can cover everything in the workshop.

- Be patient.

- Be flexible.

- I you don't know the answer to a question; simply admit that you don't know. You may try asking another person or search out the answer. **NEVER** make up an answer; it only ends up making you look bad later on.

- If you are enthusiastic about the workshop, the students probably will too!

The Art of Asking Questions

The goal of good workshop presenting is **NOT** telling **WHAT YOU KNOW**, but **USING** what you know to **ASK QUESTIONS** that engage and motivate students to become active participants in their own learning.

The key is to lead students to think for themselves so that they discover the concepts for themselves (not to give them the answers to questions). Your role is to ask questions that focus the student's thinking.

- Begin with what the students already know. Activating prior knowledge can make learning new material easier and more efficient. Try drawing analogies or suggesting examples that link new content to familiar ideas, taking an inventory of what students know about a concept before beginning instruction, or asking questions that require students to make predictions about the content.

- Questions should be CLEAR AND FOCUSED. Avoid VAGUE questions, like "Are there any questions." Try asking, "What questions about (sea urchins) do you have?" This implies that you expect students to be thinking and have questions.

- Avoid questions that only result in a yes/no answer. Begin questions with "who," "what," "when," "which," "why," and "how." You want to encourage the students to think about a situation.

- Students usually need time to think through an open-ended question and may not answer immediately. Most of us do not wait long enough before answering our own question. Be sure to allow appropriate "wait time" when asking a question (at least 5-10 seconds). By waiting, you will get better answers from the students and more of the will respond.

- Don't answer your own questions. If students are having a hard time answering a question, try rephrasing it or asking a simpler question and then lead back into the original question.

- FOLLOW-UP QUESTIONS:
  These questions help students think through and share information. Follow-up questions extend, clarify and foster participation in the discussion, helping students to shape better-quality responses. Follow-up questions ask students to REFINE their answers. They provide opportunities for students to process information for themselves, to reinforce previously learned facts, to share common experiences and to clarify and deepen their understanding of science concepts.

- TYPES OF FOLLOW-UP QUESTIONS:

  REFOCUSING QUESTIONS: refocusing is needed if learners are not doing the initiated thinking or are talking off the subject. To refocus such responses, restate what the student said and then ask the focusing question again.

  CLARIFYING QUESTIONS: "what do you mean by…." "What is an example of…?" Clarifying questions are used if the student's response is unclear, or you think that the student could have used more appropriate language (e.g. scientific terms) to express the idea.

  VERIFICATION QUESTIONS: These questions let students prove or give evidence for their ideas. E.g.…."Show me…"

  REDIRECTION QUESTIONS: These questions are designed to get students talking to each other and to bring more of them into the discussion. Redirect questions are good to get a variety of responses from different learners. E.G. "Good point. This animal has eyes that it may use to sense its food. Someone else show me another way this animal might sense its food."