

Teaching 3D: Dimensions of Teaching, GradStep 2011

Teaching in a Laboratory Setting

2:05-3:15 pm, January 22, 2011, 113 Wilson Hall

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For the scenarios below, think about the following questions:

What is going on here and why is it happening?

What resources might you seek to address this situation?

What course of action might you take?

If applicable, how might you have prevented this situation from happening in the first place?

First, read the scenario individually, thinking about your responses to the above questions. Then discuss the scenarios as a small group, recording your answers to the above questions on the large Post-It™ paper. After about 15-minutes we will come back together as a whole to discuss each group's "solutions."

Scenario 1: The students in your lab are interested only in getting a lab credit and make no effort to understand what they are doing, despite your very best efforts. If you explain a concept, they are more concerned with writing it down on paper instead of understanding it. As a result you find yourself with no interest to prepare for your labs. More time for your own classes and research is always good.

Scenario 2: In the lab you are a TA, and your students work in pairs. Though the pre-lab and the post-lab assignments have to be submitted individually, you see in one group that one of the students always takes center stage and does not give the partner a chance to work out the experiment. This happens frequently and the student who is not given a chance does not seem to mind. The partner is complacent with the fact that the other is able to finish the experiment and obtain results.

Scenario 3a: When you are teaching your lab, you find that there are one or two students who are continually approaching you with questions. Although you feel you have clearly explained the protocol and safety procedures during the pre-lab lecture, these students continue to ask the same questions. Although you want to help these students, you are noticing that they are taking a large majority of your time and preventing you from efficiently managing the lab.

Scenario 3b: When you are teaching your lab, you find that there are one or two students who are continually approaching you with questions. These students are highly motivated, and they ask interesting, provocative questions that sometimes even bring up subjects you feel like you need to brush up on. Although you want to help these students, you are noticing that they are taking a large majority of your time and preventing you from efficiently managing the lab.

Scenario 4. You are grading a set of lab reports and the process is lasting several hours longer than anticipated. You are taking your time, evaluating each report on its own merits. You want to give each student's work particular consideration and as much detailed, individual, specific feedback as possible, but you also have fast approaching deadlines for your own projects and reports.

Scenario 5. Your lab section this semester has an appreciable amount of students who are non-native English speakers. At the first meeting of the class, you think that some of these students might have some challenges to their success in the class.

Scenario 6: One or more of your students are not doing their pre-lab assignments, slowing down the progress of the entire group (and the class). This has happened more than once for these particular students.

Scenario 7: Your faculty advisor told you at the beginning of the year that you would be given a good deal of autonomy because you have shown yourself to be very competent in your discipline. You are excited about the accolades and this opportunity to be creative with your own section of the class. As you prepare to start TA-ing, you realize you don't have very much information at all about the class, what you should be doing, or anything related to your TA-ship at all.

Scenario 8: A particular group in your lab seems to be struggling more than the others. They are always the last group to finish the experiment (often going over the allotted lab time) and sometimes they quit working until you come over and help them. Today, they seem to be having a particularly difficult time with the set-up portion of the experiment. Realizing it would save them quite a bit of time if you were to set the experiment up for them, they ask you to do so in order that they might proceed with taking data.