

Daniel Mackay

Teaching Statement

Teaching is as an interactive process between students and teacher. Broadly, I design my classes to both encourage and manage classroom dialogue. I plan classroom dialogue to guide students into asking question and, eventually, to have students anticipate the answers to their own questions. This interaction is intended to facilitate not only factual learning, but also the ability to think and argue critically.

In practice, I divide a specific lesson, which may take one or several class periods, into three separate parts: instruction, trial, and clarification.

- The instruction segment involves both direct lecturing and interaction with students. Lecturing is straight forward and often involves step-by-step problem solving. Interaction with students involves both asking questions of the students and fielding questions from them.
- In the trial section I test students with short written assignments. Often, the written assignments will go beyond what I have formally covered in class. I ordinarily assign 14-18 problem sets per semester.
- Finally, I finish every lesson with a clarification segment. This involves my working though a homework assignment or problem set. In this way the lecture is reinforced not only though independent student work, but also through my in class example.

In a small classroom setting I customize my lessons to allow for more student participation. Smaller classes tend to yield more fruitful classroom discussions as I am able to call on students by name and students are more inclined to participate because many students seem intimidated by the large classroom, or lecture hall setting. Nevertheless, in larger lecture hall settings I have also had success in encouraging students to ask questions and participate in classroom discussion.

This instruction, trial, and clarification process has worked well in all of the classes. Many students enjoy the interactive nature of my classes. Moreover, I have noted students making outstanding analytical improvements over the course of a semester.