

TEACHING STATEMENT

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I have wondered as I sat in many Mathematics classes what makes some teacher more engaging than others? Answering this question seems to be impossible, as I have seen some skills and strategies applied by different professors and they did not work the same. What is the greatest evident difference? Listening to the students. A good professor, whether he is entertaining or focused on the material, is attuned to the class and listens to the reaction that his every word provokes. I consider the most difficult part of teaching that of understanding the thin line between when a student nods to an answer, but he has not grasped the concept, and when he really gets the idea. Listening and careful observation is the key factor to determining when a student is having hard time, and often the student cannot communicate their difficulty with means other than his body, by starting to draw on the sheet, looking outside, sighing loudly and many other signals.

In my experience as a teacher, whenever I see this kind of attitude, it is my immediate goal to take back their attention and make them participate, by switching the question on them and leading them to the answer, or by taking a short break with a joke or a short story.

For example, while I was teaching Calculus 3, about a month into the course, I notice that the students were less active and engaged than they had been a week or two before. I stopped and turned to the students to ask them if they liked my way of presenting the material or they would rather prefer something different. They were very surprised, but they had the courage to speak out and tell me what they felt would have involved them more and so I did change my style for that course. The participation increased dramatically and the students felt rewarded to have been heard. This also made them understand that they were part of the teaching and learning process.

My experience in teaching has spanned from being a grader, to being a teaching assistant and finally an instructor. Every single step has shown me the many facets of teaching, including the difference in how students relate with teachers and how they consider them. I am very enthusiastic during my classes and try to loosen up any residual tension, while I work on making the lecture accessible to everyone. Through three Research Experiences for Undergraduates I have also had the chance to design courses.

The professors gave me ample flexibility to instruct the students on parts of the material where they eventually would have to start researching. This meant preparing class lectures by deciding what was appropriate for the students, answering their questions outside of class and having fun with them during the long days of research. It has been a great opportunity for me, because I was able to start learning how to create a higher level course material by myself, and thus giving me the chance to shape an important part of the theory needed for this program. In particular, the past Summer I had the chance to directly mentor the students myself as the Professor of the course had to leave for 10 days; later on he assigned me to follow directly two of the students for the remaining 3 weeks giving me my first true experience in advising. My evaluations for the REU courses have been warm and positive. I always look forward to receiving my evaluations. They afford an opportunity to learn first-hand about ways to improve the learning experience for future students.

My methods of teaching are very open with respect to the students: I enjoy being available for discussions before and after class and frequently I offer extra office hours if the students need more help. Also, I encourage the students to write everything they think during the process of solving problems: this pushes them to work towards clearer statements and gives a better chance to the struggling students to get a reward for their partial solutions.

I look forward to teaching in my next position, because I have realized that teaching can be done successfully while researching. Moreover, teaching itself is capable to give an immediate personal reward, through knowing the students and reducing the distance with them.