

Teaching Philosophy Statement

BY AKIL NARAYAN

akil@brown.edu

Teachers have an enormous impact in shaping their students. There are few such professions where one has such a heavy influence on shaping the development of others. This reason alone is enough to demonstrate the importance of teaching and exhibits why I believe I should spend a considerable deal of effort polishing my pedagogical skills. I believe students should be the center of focus of the classroom to begin with. (After all, the students are the very reason for the class.) Because of this, I constantly attempt to adapt my teaching style to mold to the needs of the students.

Every class is comprised of a different group of students and I must be prepared to reflectively adapt teaching styles in order to effectively communicate material. The goal of any class is to impart some form of knowledge, experience, and/or practice. I always try to keep this goal fresh in my mind when beginning to teach. This helps to prevent me from falling into a mode of thinking where I begin to teach in order to gratify my own ideas and desires. During one of my teaching assistant experiences, I gave a lecture where I paid very little attention to how well the students were absorbing the material, teaching in a way from which I obstinately believed anyone should be able to learn. I regularly handed out and collected lecture evaluations for that class, and on the evaluation after that particular lecture, it was quite evident that the students were very unhappy. This experience of mine helped me to realize the importance of catering to students' needs, within reason.

Students need to feel comfortable in the classroom. A particularly simple solution to this is for the instructor to be approachable with questions during and outside of class time. I am excited about teaching, and I try to show it. I try to be animated and alert, which in turn seems to have a positive effect on their involvement. Every student is different and learns at a different pace from another. During a lecture, I believe it is important to stay abreast of how well the class is following the material. I can do this by asking questions to foster class involvement, or even by observing their facial expressions. One of the most difficult things I find about teaching is neither presenting a subject too quickly nor too slowly. I don't wish leave everyone behind in the mathematical dust as I fly ahead, nor do I wish to bore and/or patronize students. Finding the right pace for a lecture is extremely difficult, and while I try to adjust my pace to match the majority of the class, I still find that sometimes I don't quite get it right. This is one of the areas of teaching in which, through experience, I am trying very hard to improve my skills.

I find that it is very difficult for me to point out to myself what I did wrong as an instructor. Because of this, I usually implement the practice of collecting very basic teaching evaluations from students many times each semester. Sometimes I don't know that I'm not speaking loudly enough, or that students have been confused for a week, or

that the homework just takes too much time. Anonymous evaluations are so far the best way I have found to get a quick, honest answer from students about my teaching practices. When I collect these evaluations, I weigh them with a lot of importance when trying to correct my teaching style and model it to complement the students' style of learning.

Of course, there are some principles which I believe I cannot compromise when teaching. At the end of the day, my job is to teach, and there are some basic practices which I believe are necessary to learning. I believe mathematics is much more about learning a thought process than about memorizing formulas. In my own experience as a student and a researcher, I have found my reasoning skills much more valuable (and reliable) than my ability to mentally retain complicated mathematical formulae. In fact, I try very hard not to teach students about remembering equations, but rather about reasoning them out. Having said this, in the field of mathematics there are just some basic things that need to be memorized. As a student I did not like memorizing formulas on one day, only to regurgitate them on a test the next day and forget them by the following week. However, only now do I realize that memorization definitely has its virtue.

As a student, I have had many early mornings when I simply did not want to sit and listen to an hour-long monologue about mathematics. Sometimes lectures are boring. I've found that good teachers tend to have fewer boring lectures than others, but inevitably the dryness of a topic will outweigh the zeal of an instructor. Having said that, I do believe that lectures are the most effective method for explaining new material to students. Discussion groups are definitely helpful, but usually only for learning material. In order to explain new subject matter, lectures have been tried-and-true.

I see teaching as fundamental to our society. We have built ourselves upon the knowledge of the past and present, and in order to foster society's growth, teaching our current knowledge to new generations is vital. For this reason I take teaching as a very serious and important matter. The foundation of my teaching style is built upon a few practices which I always use. From there, I model the rest of my teaching around the needs of the students. Because of this dynamic aspect of teaching, I always see each new class as a challenge to test my pedagogical skills and an opportunity to improve them.

Akil Narayan

Division of Applied Mathematics
Brown University
182 George St., Box F
Providence, RI 02912
(401) 863-2230

akil@brown.edu

<http://www.dam.brown.edu/people/anaray>