Teaching Statement
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Teaching Statement

I have enjoyed and excelled in mathematics since I was in primary school and have aspired to teach mathematics since then. At the age of 15, I started tutoring fellow students in mathematics and physics. Initially, I helped my fellow classmates who had problems with the subject we were covering together in class but soon began tutoring students from lower classes as well. During my college years, I volunteered weekly in a tutoring center teaching a variety of undergraduate mathematics courses. Through these experiences and more, I have come to realize that teaching is one of the most rewarding careers I could choose.

It is difficult to articulate the excitement and sense of accomplishment I feel when I teach. I find it personally and professionally rewarding to witness the pride of a struggling student who finally “gets it”, and the excitement and energy from students who are intrigued and curious about learning. It truly has been my pleasure to teach, mentor, and work with hundreds of high school and college students over the past fifteen years in a subject matter I enjoy most – mathematics. At this point in my career, I am interested in teaching at the college level. My goal is to encourage and inspire students to become excited about learning mathematics. I also intend to help students recognize that there is value in education so they will make it a priority in their lives.

I have a B. Sc. and a M. Sc. in mathematics and I am presently finishing my doctoral dissertation in applied mathematics. As previously mentioned, I have tutored mathematics on a one to one basis for 15 years, but I have also taught a number of courses in front of a class room. The first mathematics course I taught was Business Calculus at New York University. During my first few classes I was extremely nervous. I wondered how I would do and if I would have an impact on my students. I had notions of what a “good teacher” should be and wondered if I would stack up to my own perception and expectations. The idea of speaking in front of a room full of people made me nervous! I found, however, that once I got up in front of the class and started to teach, I felt very comfortable. One of my objectives was to stimulate interest in the subject being discussed so that students would ask questions because they wanted to learn more. I believe it is important to be receptive to student questions and consequently, always attempted to afford ample time for questions and answers. I felt great satisfaction when students complimented me on my teaching style. When I realized I was doing a good job and motivating my students about a subject I loved, the notion of a “good teacher” became very real to me.

Since this first class, I have TA’d and taught a total of seven courses at New York University. From these experiences teaching at the college level, I have basically learned how to teach. I have learned that when teaching mathematics, communication is essential. There is no point in covering the whole syllabus, if half the class does not grasp the concepts. I have learned that every new class is a new challenge, even when the subject matter is the same and that every class goes at its own pace. In every class I try to find a balance where the slower students are able to grasp the essence of the subject while the more advanced students can still get excited and motivated by the more challenging problems. I have found that varying teaching techniques and styles keeps students interested and excited about learning. Finally, having been a student myself...
as well as from my own teaching experiences, I know how critical positive feedback and personal encouragement are. I believe it is important to know students as individuals and not just as a class of 30 or so faces. I think it is vitally important for students to know that I am interested in them individually and that I want to assist them in whatever way possible in their learning experience.

Former students have told me that my enthusiasm for education and learning is contagious. I think this is a valuable quality in a teacher. To be excited and passionate about what you are teaching and to be able to spread that enthusiasm to students facilitates learning. I consider myself bright, energetic, and positive. I love teaching and look forward to sharing my interest and enthusiasm with others. While I understand that not all students are receptive to the educational environment, one of my goals as a teacher is to reach students wherever they are in the learning process, and make them want to learn; to help them see that there is great value in an education.

Fifteen years after I first helped my friends with mathematics, I still truly enjoy the excitement of helping people learn and understand mathematics and I look forward to continuing a lifelong career in academia.

**Specific details on my teaching experience**

Although I have been tutoring since 1989, I began teaching more formal classroom courses in 1998 at the Universidad Nacional Autónoma de México. Here I taught German to both adults and teens for one and a half years. Subsequent to beginning my graduate work at New York University, I have independently taught and also assisted in teaching courses in *Calculus I*, *Business Calculus*, *Quantitative Reasoning*, and *Einstein’s Universe* (a mathematics and physics course for non-science majors). Additionally, I have privately tutored courses in *Calculus I/II/III*, *Linear Algebra*, *Abstract Algebra*, *Ordinary Differential Equations*, *Number Theory and Mechanics*.

I quote some comments from students who recommend me:

“Prof. Apfaltrer’s lessons were clearly planned out, and he truly cared about how much his students were learning. I visited his office and went to his review sessions, many times, without hesitation. Prof. Apfaltrer always remained patient and calm when explaining answers to the questions that I posed. Considering that math and science have always presented a challenge to me, I felt extremely lucky to return to school to find myself graced with a kind, intelligent and eager professor.”

*Nicole S. Reilly, Calculus I, bluesmile55_at_hotmail.com*

“While the subject matter we learned in Quantitative Reasoning was more than elementary for Felix, he did not suffer from the same problems most TAs have, that is, knowing the material but not knowing how to convey it to students. Felix did a really wonderful job of making us comfortable enough to approach him with any questions both during and after class. He was always able to explain to concepts in as many different ways as possible with immense patience for those of us who didn’t understand it the first or even second time.”

*Lisa Aslan, Quantitative Reasoning, lma244_at_nyu.edu*
“Prof. Apfaltrr is very enthusiastic in teaching the course. He knows the subject matter very well and is willing to answer any questions as clearly and fully as possible. I believe as he gets more and more experience in the teaching field, he would be a very good professor.”
Meco Chen, Calculus I, lstg2229 at hotmail.com

“Felix was very clear and organized given the amount of material that had to be covered in a short time. His energy kept me motivated in a sometimes dull course. He was also very helpful an patient with questions and problems that we had and was willing to stay long after class to help us answer and solve them. I definitely enjoyed the class and learnt a great deal from him.”
Tet Chan, Number Theory & ODEs, tc0309201 at yahoo.com

“...you taught the class in a way that made sure it would make sense for the students. You were not like most professors who assume the subject is easy for the students because you find it easy. Those professors just skip parts of the explanations. You dont forget we are novices at calculus.”
Sara Arumugan, Calculus I, 2002, ScorpGal29 at aol.com

“...you will be pleased with his enthusiasm and intelligence as you see the way he lights up the class room.”
Nicole Kushner, Math. Patterns in Nature, nk395 at nyu.edu

“Felix Apfaltrr has been an outstanding teacher. As someone for whom mathematics does not come easily, I can attest to the fact that Felix has done a superior job of breaking down difficult concepts in a clear and logical manner. Felix maintained standards that were challenging yet fair, he was always well organized and prepared for class. He was always very generous with his time, offering flexible office hours and review sessions for students. As his student I can say that Felix is the best kind of teacher, namely, one who truly enjoys his job. I will always remember Felix because of his patience.”
Ruth Aventuro, Calculus I, raventur at optonline.net

Teaching Interests

In the future, at the undergraduate level, I would love to teach Calculus I-IV, Linear and Abstract Algebra, Discrete Mathematics, Differential Equations, and Probability. Beyond these core courses I would be interested in teaching general "mathematics appreciation" courses to undergraduate non-majors. I have experience teaching undergraduate courses that use the computer as a teaching aid and I am able to develop and teach such courses. I would also be very interested in mentoring undergraduate research and would welcome the opportunity to become more involved in such programs. Finally, I aspire to teach introductory courses at the graduate level as well as more advanced courses in computational neuroscience and biomathematics, my specialty areas.