

My teaching Statement

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My dedication to teaching is inspired by the great teachers I had when I was a student. I remember how my heart beat when I discovered Lagrange's theorem during class in my first month as a freshman. Only after my excitement calmed down did I realize from the satisfied smile on my instructor's face that he had led the class step by step to the inevitable conclusion – the theorem that I thought for a minute I had discovered first. But that feeling of discovery stayed with me. I knew then that I was in the right department with the right people. And when I prepare for classes today, my aim is to recreate that same flame of excitement in my students.

Like my teachers, I disclose carefully prepared pieces of information in class and pretend to be totally unaware of where they lead. The students feel uninhibited and start making guesses. They ask questions about related facts which they then put together to come up with their own conclusions. I see the light in their eyes and think that this is the joy of teaching; finally one enthusiastic young student jumps up and announces a theorem. Never mind that it is known to the professionals in the trade, my heart beats out of control. I manage to conceal this behind a smile as I realize that it was the same excitement that was responsible for the smile on my freshman instructor's face when I jumped up with *my* theorem. Now when my students put that smile on my face, I don't know if I am paying back or being payed back.

Sometimes I see teaching as my chance to change the world forever. Each year I try to present the concepts in the lecture material in a different way; I encourage my students to discuss the material and find their ways among the unknown in a manner not used by earlier students. I dream that eventually the totality of my students will solve all the problems there are to solve. And I will know that I had a hand in that; my revenge on the inspiration fairy who did not reveal those theorems to me. She will be helpless in the face of the variety of approaches my students will employ.

It does occur to me from time to time that maybe some of my old teachers planned it this way.

I believe that teaching is not a profession you can do solely to make a living. If you do not love your subject to the point of having an urge to describe its beauty to total strangers, if you do not enjoy the company of young inquisitive minds who are going through the learning process that you and past students went through, if you do not have an infinite amount of patience, and above all if you do not have faith that tomorrow the world will be a much better place than today, and it will be your students who will make it better, then no amount of salary can keep you lecturing year after year on what seems to the uninitiated to be the same subject. Only you know that it is not the same subject. It is clearly not the same class. And certainly it is not the same you after all these exciting years of teaching.

Finally I want to admit that the more I teach, the more I learn. I think I will eventually give in to the inclination to extend my classroom to the public by writing books on what I teach. Every paragraph of explanation in the book will carry echoes of discussions I had in class in such and such a year. Each example will reflect the experiences of a different year. And the problems will include all the ones I always wanted to ask but did not have the chance. And when I retire I will read these books, instead of looking at photograph albums, and will conclude that it was a life worth living. If I had the chance I would do it all over again, and maybe this time I would do it better.