Teaching Statement

The best teachers are those who satisfy the students' curiously and tell them not just 'what' but 'why' as well. My grandfather, an engineer, was such a teacher and I was fortunate to have been taught by him for many years. He believed that in order to make the student develop interest in the subject you should teach starting from the fundamentals and never tell them any theorem without proving it first. He taught me never to take anything for granted. To always question why it is so. To some point it is this attitude which makes me successful not only as a teacher but a researcher as well.

I started teaching when I joined the PhD program at the University at Buffalo and was appointed a Teaching Assistant. I am not counting the numerous times I have taught intricate concepts to my siblings and peers in elementary school and college. The class I was a TA for was Computer Organization and Design. My duties were to teach recitations twice a week, conduct office hours and grade exams and projects. A recitation supplements the classroom lectures by teaching extra material related to the projects which is not covered in the lectures. In my first recitation, the professor had not given me any material to teach. I was to just introduce myself and get to know the students. Since there was a lot of time left, I started explaining basic computer science concepts to them on the blackboard. Time flew and before I knew it the fifty minutes were over and it was time to leave. I got into the habit of teaching recitations twice a week and taking office hours once a week. After a month, I started wondering how well I was doing. I distributed feedback forms to everyone in my next recitation. To my delight, almost all of the feedback was extremely positive. The students said that I explained concepts clearly and they were benefiting greatly from coming to class.

Since then I have been a TA for 4 more semesters. Three times for Operating Systems, once for Distributed Systems and this semester I have Computer Organization again. My duties remained the same - taking recitations, office hours and grading. As far as recitations are concerned, I believe I do a great job. I explain concepts clearly always starting from the fundamentals. Moreover, I am able to communicate effectively with students. I take time preparing my lectures and at the end of the class put the respective set of slides on my webpage for the students to refer to later. I have also had the opportunity to teach some class lectures to graduate as well as undergraduate students during my time here as a TA. This was when the professors were away due to travel purposes.

I always go the extra mile for the students, be it to help them learn or to regrade their projects when they feel they deserve more marks. For distributed systems I graded some students' projects as many as three times because they were still not satisfied with their grade. This was because I care about my students and I understand that their future depends on their grade. Also, recitations are typically reserved for undergrads. However, last semester while I was a TA for Operating Systems, some graduate students came to me and told me that they needed help with the projects too. So I arranged extra help sessions for them for both the projects. For the second project, I had an extra help session for undergrads too. For undergrads, I also had an extra coding session for three hours in which they would sit together, program and discuss concepts related to the project. About 10 students showed up for the session and they told me that it was very beneficial. The other sessions went well as well and the graduate students were grateful to me.

Also, I had to take demos from each and every one of the 160 students in the class for the first project. I allotted 10 min slots for each and proceeded with asking them to demo their project to me. Some first year students were not familiar with basic things like using vim, winscp, linux commands etc. I patiently and enthusiastically taught them those as well and they went away having learned something that would help them a lot later.
As far as office hours are concerned, I put a tremendous amount of effort in them too. Many students come to me asking me to debug their projects. I attempt to fix everyone's errors. Also some of them have questions regarding the project specifications and the classroom material. I help eagerly with those too. Lastly, I have very strong work ethics and promote the same in my students. I do not look upon any form of dishonesty kindly at all.

To summarize, I believe that I am a good teacher and this fact has been corroborated by many of my students as well. Many of them have sent me emails thanking me and telling me that they learned a lot from me. This is very rewarding and is part of the reason why I am in this profession in the first place.