Teaching Statement

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My experience in the past years as a student, industry personnel, teaching assistant, and graduate student mentor shaped my approach towards teaching and learning. I had opportunities for topic presentation in my high school and undergraduate education, knowledge transfer sessions as an industry personnel, lectures as a teaching assistant and discussions with graduate and undergraduate students. Most of the time I received positive feedback, especially stating that I explained concepts in a simplified manner. As I ruminated about these experiences and feedback, I understood that simplified teaching is one root to many factors that help student success. My teaching philosophy is firstly aimed towards student engagement and active participation through simplified teaching. Secondly I aim to enhance learning experience and self-development by use of active learning pedagogies. Thirdly my belief is focused on continuous improvement as an Instructor.

I strongly believe that it is important to predict the level of understanding of the audience and relate the lecture to familiar concepts and examples rather than regurgitation. This is my way of life ever since when I was in high school. This continued in my undergraduate and graduate education. As a Teaching Assistant, I had the opportunity to lecture graduate courses (Knowledge Discovery in Databases and Cloud Computing for Data Analysis) in Computer Science. For instance in Cloud Computing class, instead of just using the term Zettabyte, and Exabyte to explain the digital data size, I talk about the equivalent real time examples for the students to imagine. A zettabyte is equivalent to the volume of Great Wall of China. I received positive feedback from students, about my lecture and the way I delivered the content. I make simplifying things a habit in my day to day life so it would become my second hand.

Simplified teaching helps capture student’s attention and ultimately leads to a discussion rather than a monotone lecture. In my experience, I believe that discussion leads to critical thinking and allow students to question facts and understand better. When I help students with the assignments and activities in class, I use open ended questions which helps them work more on the subject matter and develop the habit of seeking material beyond lectures. This can be very effective in keeping students engaged and giving them a glimpse of Computer Science Research. I had a female student wanting to learn more about graduate student life as a researcher and the pathway towards such a career. I believe such an engaged learning environment, when provided in classrooms, helps invigorate students to pursue a research career.

I believe students must be motivated towards self-development to maximize achievement and life readiness. I tailor this by use of pedagogies like light-weight team work combined with project based learning that facilitates mutual respect and quest for knowledge with less anxiety. Students work on low-stake activities which put less pressure on them while still promoting their knowledge and growth. I construct the activities in a way that it
serves the purpose of student development by equal participation. This not only improves student engagement, it also allows them to be social and make friends, fostering a learning community.

I am always ready to rethink and adjust my teaching approaches in response to feedback and classroom observation. As a Teaching Assistant when I interact with students, my first intention is to listen to what they think and be open to their solutions and suggestions. This helped in gaining a good rapport with students, which ultimately created a more engaging classroom experience and supports overall learning of students. In response to student request, I created video tutorial for course topic that required more explanation which helped students in online course and avoided the need for having face to face discussion. I also have had the opportunity to explore more in the area of feedback analysis as part of my research which includes analysis of student evaluations to find meaningful patterns that can help improve both Teaching and Learning.

It is my belief that classroom is like a garden, which depends on both teacher and student engagement. A gardener is aware that they cannot make plants blossom but provide enough conditions to have colorful blossoms. Similarly I believe it is the responsibility of the Teacher to provide the conditions to stimulate positive learning environment. Also, a gardener learns from experience and observation on what impacts blossoms and how to better adjust the growing environment. In a similar way a Teacher should be ready to rethink and adjust the teaching approaches in response to ongoing feedback and observation.