Throughout my academic career, I have been motivated, inspired and challenged by the educators that cared so deeply about my own personal success. When it came time to decide upon a career for myself, I could not imagine a better or more important job than to help students mature into more educated and well-rounded citizens. Science courses play a very important role in the development of knowledgeable students. The critical thinking, analysis, inquiry and research skills learned in science allow students to develop the ability to understand and engage in the world around them. It is my goal and my responsibility as an educator to build a thought-provoking and challenging environment that promotes success in students' intellectual growth.

Learning goes far beyond the ability to retain information. To ensure deeper understanding, it is key that students are provided with activities and lessons that spark student interest and promote student engagement. My goal as a science teacher is to implement inquiry-based as well as application-based activities and labs that encourage students to build upon their own observations or understanding of scientific principles in developing student constructed learning. In implementing these lessons, students better develop critical thinking skills that are not only key in science, but in all academic disciplines. In my experience, inquiry-based activities have promoted student curiosity and involvement, and gave students the chance to collaborate with peers in developing their understanding.

It is my goal as an educator to create a learning atmosphere that allows all students to feel safe and comfortable to challenge themselves and one another. I hope to encourage students to lead their own education and pursuit of knowledge, thus creating self-motivated learners. It is key that students are given the opportunities to make personal connections with the content in order to better understand the material and how it connects to the world around them. It is also important to allow students to learn and research specific scientific content they find interesting, thus inspiring students to be intrinsically motivated.

To further promote student understanding and engagement, I strive to implement the use of technology in the classroom. Students within my classes are provided with access to different lab equipment and computer software to better connect with content material as well as learn to use various modes of technology. It is my goal that students will not only be able to apply these technological skills to activities and assessments within my classroom, but will continue to grow in their understanding and use of technology throughout their life.

I believe that academic success is attainable for all students no matter the ability or individual learning style. Just as all students are unique, the way in which they process information is also unique. Having a mutual understanding of a student learning styles is key in the development of effective teaching, effective learning and effective assessment of student progress towards mastery. Differentiating assessment of the scientific content and assessment of student comprehension is essential to their learning success and growth as a self-motivated learner.

In further supplementing student understanding and engagement in their own learning process, I hope to begin implementing even more differentiated assessments. Through this, students will be able to demonstrate their learning in a way that is most beneficial or valuable to them. Over the past few years, I have implemented "blank slate" formative assessments where students are able to demonstrate their understanding through text, pictures, drawings, etc. Eventually, I envision implementing less rigid summative assessments as well; allowing students to demonstrate their level of understanding in their own way rather than taking the unit test.

In short, I am committed to providing all students with the thought-provoking learning environment that promotes student engagement and improves students' academic achievements. I believe in my students and encourage them to feel comfortable to take on challenges and engage in the classroom activities and with on another. Students are motivated to explore their interests and relate real-life applications to the scientific content. It is my goal to help my students understand their strengths and develop the critical thinking, inquiry, learning, test-taking and study skills they will need to be successful on standardized tests, in future classes and as life-long learners.