

I believe that learning should be rooted in experience. Students learn the most by relating science to their lives, or by experiencing science themselves. I also know that science is all around us all of the time, and it affects us in more ways than we can imagine. No matter a student's eventual career goals, science is relevant and important to their future. Scientifically literate students can help to build our community up as educated voters and consumers, and hopefully some of my students will pursue fulfilling careers in the sciences. Most of all, I think that learning about science should be fun! While it can't all be the exciting stuff like explosions and multicolored reactions, our curiosity about the world around us- and the world within us- can make studying any science related subject an adventure.

It is my goal to give students as many new experiences, stories, and bits of interesting knowledge as possible, as well as to spread to them my enthusiasm about the glimpses of science that we learn in the classroom in our everyday lives. It is also my goal to communicate the importance of learning, and specifically of learning science, to my students, and to incorporate kinesthetic activity wherever possible, with particular emphasis on student-powered inquiry and application sequences. Through the use of the high-leverage practices that I learned at MSU, my main focuses for planning and executing lesson plans are: (1) Identifying content that is meaningful and beneficial for students as well as in line with district, state, and national educational standards, (2) Supervising academically productive scientific discussion so that students are comfortable and engaged in the process of scientific discovery, (3) Assessing understanding with frequent formative assessment to tailor instruction for students and to allow them to seek help as they monitor their own learning, (4) Supporting inquiry and application through kinesthetic activity sequences that engage students whenever possible, (5) Analyzing and revising my instruction during the semester as well as from year to year based on the analysis of student performance, and (6) Creating and maintaining a comfortable and safe academic learning community where students can perform to their full potential.

Through the use of the 6 aforementioned high-leverage practices, I strive to consistently improve student achievement in the classroom and on standardized tests, to equip students with a working knowledge of science that will prepare them for their future careers and lives, and to spark an interest in science that will hopefully keep students curious about the world around them far into the future.