

## **Teaching Philosophy**

I am excited about teaching science! I am driven to teach students not just the content of the class, but how to think critically about the world around them. I want to instill the desire to find out more about the subjects presented in class. My goal is for my students to know and understand the course material and ultimately develop the desire and skill of investigation. I will give my students the opportunity to develop their own questions, set up and run their own experiments, and collect and analyze their own data. This idea of a student-driven responsibility of learning will no doubt translate into higher level critical thinking skills that will be of great benefit to them long after they leave my classroom.

In order to facilitate student responsibility, lesson plans will be more inquiry-based rather than just a presentation of data for the students to memorize. Class discussions, hands-on activities, small group discussions, computerized research, some games, and other technologies will allow students to try different methods of developing ideas into scientific experiments. The use of models will help tie in subject matter to real world application. An occasional field trip can provide students with the opportunity to see science in action and will demonstrate that science is not static, but constantly evolving as technologies evolve and new discoveries are made. While developing lessons, I try to find something odd or out of the ordinary to tie to something tangible. I love when students ask me about some concept that they have never been exposed to before. This opens the opportunity for the student to do a little research on their own and report back to the class. For a behavioral adaptations lesson, I tied migrations and adaptations to the 2011 Japanese tsunami and the effects of a drastically changed environment on a species. This allowed the students to draw their own conclusions about what types of adaptations would be advantageous for a species to survive and reproduce.

To take this idea of student-driven learning further, I will present a subject in brief and ask students what they know about it and what they would like to learn about it. Following curriculum guidelines, I will press students to dig further until they come up with solutions of their own. These guided discussions will allow students to bounce ideas off each other and grow deeper understanding in a way that cannot be accomplished in rote lecture. In order to provide equity to all students, I will include music, pictures, translations, and other means of reaching all learning styles. I believe all children have the ability to learn and they have a natural curiosity. It is my job, and my duty, to find a way to reach them. Constant informal and formal assessments will be instrumental in developing teaching strategies. I will adapt my lessons according to the abilities of my students, not the other way around.

The rewards of teaching are many. There is nothing better than when you see your students finally reach their personal "Ah-ha!" moment. That is when you know that you have taught your students well and they have made that indelible connection with the knowledge from previous scaffolding. That is why teaching is so important. Teaching your students well changes their lives, and ultimately gives them the tools to succeed wherever they wish to go. For me, teaching is changing the world, one student at a time. By providing my students with a safe and uplifting classroom environment, full of excitement and wonder, I hope to inspire them to find out for themselves what magnificence is out there in the world and to make a few discoveries of their own. It is my goal to make every student a good citizen and a scientist at heart.