

Morgan Schwarz

EDUC 360

Dr. Carrie Pfeifer

19 January 2016

Teaching Science Philosophy: *Discovering the World Around Us*

Teaching science is something that scares many people and makes many educators worry. My philosophy of teaching science is to help students develop an awareness, comprehension, and a solidified appreciation of the world in which they live in and are surrounded by. I feel that students should be introduced to science in a form that engages them and helps them remember what they did by constructing their own ideas, developing their own explanations, and asking appropriate questions. The sense of feeling accomplished is something that students will appreciate which will increase their self-confidence and strive to learn more. Students should be able to ask questions, form predictions/hypotheses, follow procedures, and interact with others to discuss and work together on their findings.

HISTORICAL PERSPECTIVES: History is a story and there is a history behind everything, including science. Without the past, we would not be where we are at right now. With advancements in technology, we are able to accomplish things more efficiently and accurately. Learning and developing an awareness of the history of scientists and discoverings is essential in the learning and appreciation of the incredible world around us. Understanding that various scientists made a difference can lead to students becoming internalized as they make their goals to do the same that the previous scientists did. I will ensure that I assist my students as they develop goals and look at their historic role models within the science field.

PEDAGOGY/LEARNING: Hands-on learning will be an essential part of the classroom as science should be learned and taught through the senses. Students will not appreciate the art of science until they are exposed to it first hand. I will ensure that students are encouraged to think critically while learning to work collaboratively with their peers while developing predictions and forming conclusions.

CURRICULUM: As basic curriculum is used, I thoroughly believe in the use of technology for educational purposes in the classroom. Technology will be a tremendous tool used to create a new approach that will add a new spark of interest to ignite student interest. As the generation of students today are tech-savvy, it is important that we, as educators, recognize this and intertwine the use of technology and student learning. Students will use their books provided along with technology to research, type their responses and conclusions to labs and assignments, prepare presentations, and learn to download materials from the web. I will ensure that the curriculum is

PURPOSE OF SCIENCE EDUCATION: Science for many humans begin from the moment they are born. As a 1 year old, the child learns that if they drop their cup from the highchair, the cup will fall to the ground. This is their way of *discovering the world around them* and making generalizations unconsciously. Science is used in everyday life but to many, the term “science” means dull and boring. There are natural phenomenon in their environment and students must be aware of and understand what partakes in such case. A liberal education is vital for many students to open the horizon and understand new concepts.

ETHICS: Ensuring that all students have the right to learn the material is priority as an educator. I will incorporate all learning styles into lessons throughout the year. With this, all students will have a fair opportunity to learn and display their knowledge to the best of their ability.

INTEGRATION: Ensuring that students are engaged is an important part of the classroom atmosphere. As an educator, I will ensure that I use a cross-curricular approach to my lessons. For example, I will use a poem about science in my language arts lesson plan. It is also a possibility to use art materials such as paints and pastels to implement a lesson of the water cycle in science. There are endless opportunities that I will incorporate into my classroom to help enrich the student's knowledge of the world around them.

CLASSROOM ENVIRONMENT: Overall, a safe and positive classroom environment is vital to student success. I will encourage students to interact with one another through projects and discuss findings. Ensuring that I have the appropriate materials ready will give the students a sense of organization and confidence. The environment will be vivid and interacting to the students' interests, as well.

It is important that my students are aware of how passionate I am about science and how valuable it is to the vitality of our daily lives as well as to the future success of our planet that they will be apart of for the rest of their lives. I believe that my personal enthusiasm will be contagious to the students. If I am successful in my teaching practices, I hope that many of my students will catch the fever of science and choose a career that will better our world as they *discover the world around us*.