**Statement of Purpose: 5th Grade Science**

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Science is a methodical process of investigation, observation, testing of hypothesis, measuring, experimentation and theory building, which fosters knowledge of the natural world (Ohio Department of Education, 2010). Fifth grade science is one of the three main cores and houses many concepts that will be tested in state assessment in the spring. It is critical to take the curriculum and captivate students through a variety of teaching methods. The objectives tested through state-wide testing will encompass not only fifth grade curriculum, but third and fourth grade as well. Reviewing previously taught material and thoroughly teaching fifth grade objectives are essential to the success of student. Concepts will continue to be built upon in sub sequential years deepening student understanding and it’s relevance to their daily life. Students will continue to see the interdependence between the lower grade’s objective with the fifth grade objectives as well as other objectives brought about through classroom dialogues. Showing students the relevance of the curriculum to real world opportunities is also essential (Chiarelott, 2006).

Students will actively learn content in the areas of Earth and Space, Life Science, Nature of Energy, Science and Technology, Scientific Ways of Knowing, and Scientific Inquiry. These main areas of focus become the map for which students will be taught, evaluated, and assessed throughout their fifth grade year. Lessons will consist of lectures, hands-on activities, PowerPoint lessons, interactive games, journal activities, individual and group projects, and formative / summative assessments throughout the year. Students will be evaluated through: daily formative assessments, weekly written assignments, and summative assessments. The summative assessments will often be written assessment, but students will also complete hands-on assessments in conjunction with labs they will be completing.

Fifth grade science serves as the springboard from elementary (basic) concepts to more detailed oriented concepts. Students need to have the primary scientific skills to better meet their needs in upper middle school classrooms and beyond. Students must be able to take basic scientific principles and begin to see how they apply to them personally. An example of this could be identifying ways to conserve natural resources, how to better utilize renewable resources to conserve nonrenewable ones, how people impact environments (both positively and negatively) and more. Students need the opportunity to complete science labs by using the scientific process to reach conclusions and to convey those results to others. It is also extremely important for student to see the impact they can make in this world through possible careers they may choose in the field of science.

Science is a fascinating field to fall in love with. This course maintains the importance of current science standards and giving each student the opportunity to experience science not only through written text, but also through diversity lab experiences. Students will be assessed through many different methods to ensure each student is progressing and interventions will occur promptly if there are areas of concern. Students will work on independent projects, group projects, and labs completed in pairs / groups. Students will work collaboratively to ensure everyone succeeds in our science class. By promoting critical thinking, problem solving, collaboration, and integrating technology while building on core content and background knowledge, students will evolve into individuals who possess skills for the 21st century (Salpeter, 2003). It is with all this in mind that students will achieve to the best of their abilities being encouraged not only by the classroom teacher, but their peers as well.

Chiarelott, Leigh (2006). *Curriculum in content*, Wadsworth Cengage Learning, 5-6.

Ohio Department of Education. (2010). Ohio Revised Academic Content Standards for Science.

Salpeter, Judy (2003, October 15). 21st Century skills: will our students be prepared?, *Tech and Learning*, Retrieved, February 15, 2011 from http://www.techlearning.com

*By Judy Salpeter, October 15, 2003*