

## **ABSTRACT**

This qualitative study explored the experiences of using the inquiry method in a 6<sup>th</sup> grade science classroom. Forty-six students in grade six participated in the study conducted in a suburban eastern Pennsylvania private elementary school containing approximately 400 students. Methods used to gather data include teacher observation, student surveys, and student work. Methods of analysis included coding of researcher field log based on student observation, creating of theme statements and review of student work. The students participated in inquiry-based science activities and inquiry-based scientific problem solving.

Findings suggest that using inquiry-based learning improves student motivation and engagement and has the ability to develop, improve and enhance scientific skills. Furthermore, most students are likely to improve the science content knowledge and understanding through use of hands-on inquiry-based activities. The majority of the students preferred using the inquiry method and felt they had gleaned a benefit in scientific skill and scientific knowledge when using the inquiry method.