ABSTRACT

This qualitative research study documents the observed and reported experiences when kindergarten students are involved in inquiry-based science lessons that includes hands-on activities and experiments. In this study, the teacher explored the process of developing lessons and experiments that would answer inquiry questions asked by the students.

The author designed the study to provide an interactive approach to teach science concepts to a kindergarten class. The purpose of the study was to discover the effectiveness of inquiry and hands-on activities in a kindergarten setting. To allow inquiry learning to occur, the students experimented, questioned, observed, predicted, and displayed concepts learned in science notebooks. In order to establish an environment conducive to inquiry learning, the teacher served as facilitator to the learning, assisting the students as they conducted experiments to answer their questions. Through the inquiry lessons and hands-on activities, the students were able to build a solid foundation in science education.

The author found that the inquiry-based lessons were a successful strategy to teach science concepts to kindergarten students. The science notebooks allowed the teacher to see any misunderstandings that may have occurred during a lesson. Inquiry science learning engages students, fosters a desire to learn, and produces student achievement in learning the science curriculum.