INQUIRY-BASED TEACHING IN SECONDARY SCIENCE

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Abstract

Inquiry-based science teaching shifts traditional classrooms by putting students in charge of their learning, promoting active exploration, critical thinking, and problem-solving. This approach deepens scientific understanding and cultivates a lifelong passion for science. Thus, this study aimed at establishing the status of the implementation of inquiry-based teaching in secondary science. Employing a descriptive research to 79 science teachers in the locale of this study, it is concluded that the respondents exhibit a commendable commitment to professional learning opportunities, with widespread availability and frequent utilization, underscoring a dedication to ongoing teacher development. Administrative support for inquiry-based learning is strong, characterized by a very high level of implementation, indicating active endorsement by school leadership. However, resources for inquiry instruction are moderately available, suggesting room for improvement in material accessibility and availability. Despite this supportive administrative environment and a classroom culture encouraging inquiry, teachers infrequently implement inquiry-based instruction, revealing a potential gap between administrative intent and classroom practice. In essence, while the study locale lays a robust foundation for promoting inquiry-based learning, bridging the disconnection between administrative support and teacher practice is essential for maximizing the impact of this innovative teaching approach in enhancing science education.

Keywords: Inquiry-based teaching, science teaching, secondary science.

1. Introduction

The changing world has placed science at the forefront of our society, as it plays an indispensable role in our daily lives, enhancing comfort and enjoyment. Science education is a vital pillar, especially in the developing world, where nations recognize its global importance in fostering scientific knowledge and skills among their citizens. In the Philippines, science education is mandated by RA No. 10533, aiming to produce scientifically literate citizens who actively contribute to society.

However, despite these efforts, the Philippines faces significant challenges in science education, as evidenced by poor performance on international assessments like PISA and TIMSS (Bioco & Echaure, 2021; Lopez, 2021; PISA 2012; TIMMS, 2003).

Teaching Science By Inquiry In The Secondary School

Anton E. Lawson

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Teaching Science by Inquiry in the Secondary School Robert B. Sund, Leslie W. Trowbridge, 1973 Teaching High School Science Through Inquiry Douglas Llewellyn, 2005 This is the secondary school l version of Llewellyn s strong Corwin debut Inquire Within Implementing Inquiry Based Science Standards 2000 This book focuses on raising a teacher s capacity to teach science through an inquiry based process implementing inquiry as stated by the national standards

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