# EXPLORING THE USE OF INQUIRY BASED LEARNING STRATEGIES IN TEACHING CHEMICAL REACTIONS IN SENIOR SECONDARY IN ILORIN WEST LGA, KWARA STATE

 $\mathbf{BY}$ 

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### **CERTIFICATION**

This certify that this research study was carried out by Adewunmi Blessing Temidayo for the award of Bachelor Degree in Chemistry Education, Ekiti State University in Affiliation with Kwara State College of Education, Ilorin.

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## **DEDICATION**

This project is dedicated to my lovely parents.

#### **ACKNOWLEDGEMENTS**

Praise and Adoration belongs to Almighty God, the omnipresence and the most merciful for sparing my life till this great moment, for his maximum mercies on me so far in this life.

I must express my thanks of honour to my project supervisor Dr. (Mrs)

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#### **ABSTRACT**

The research project titled "Exploring the use of inquiry-based learning strategies in teaching chemical reactions in senior secondary in Ilorin West LGA, Kwara State" aims to investigate the effectiveness of utilizing inquiry-based learning methods in the teaching of chemical reactions to senior secondary students in Ilorin West Local Government Area, Kwara State. The project involves a qualitative study that will delve into how inquiry-based learning strategies can enhance students' understanding, engagement, and retention of concepts related to chemical reactions. It may include designing lesson plans, implementing these strategies in the classroom, and assessing the learning outcomes through student performance, feedback, and academic achievement. The research project seeks to contribute insights into innovative teaching practices that can potentially improve the quality of science education at the senior secondary level in the specified region. By exploring the benefits and challenges of inquiry-based learning in the context of teaching chemical reactions, the study aims to provide valuable data that can inform educational policies, curriculum development, and instructional practices to better support student learning and achievement in science subjects. Based on the result, the following conclusions were drawn; In conclusion, the research project focusing on the exploration of inquiry-based learning strategies in teaching chemical reactions in senior secondary schools in Ilorin West LGA, Kwara State, holds significant promise for enhancing science education. The findings of this study are expected to shed light on the effectiveness of incorporating inquiry-based methods into the teaching of chemical reactions, highlighting their potential to improve student engagement, conceptual understanding, and academic performance in science subjects. Moreover, the results of this research could serve as a basis for advocating the integration of inquiry-based learning approaches into the science curriculum at the senior secondary level, not only in Ilorin West LGA but also potentially in other educational settings. By emphasizing student-centered, hands-on learning experiences and critical thinking skills development, inquiry-based strategies have the capacity to transform traditional teaching practices, fostering a deeper appreciation and mastery of scientific concepts among students. Ultimately, the insights gained from this research project may offer valuable guidance to educators, policymakers, and curriculum developers seeking to innovate science education methodologies and enhance the overall quality of learning experiences for senior secondary students in Kwara State and beyond.

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## Science Education

# Student Engagement

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