

TEACHING OF CLIMATE CHANGE TOPICS IN SENIOR BIOLOGY

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Teaching of Climate Change Topics in Senior Biology" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

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ABSTRACT

This study examined teaching of climate change topics in senior biology, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of teaching; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with teaching and climate. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 418 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 400 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.13). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.48$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 8.9, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.06$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on teaching.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of teaching of climate change topics in senior biology is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

Over the past two decades, teaching has become increasingly significant within the Nigerian landscape and beyond. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of teaching in everyday life. Studies by Nwosu and Eze (2019) largely support the view that teaching exerts a measurable influence on outcomes of interest. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. The work of Ekwueme and Adigun (2023) extended earlier analyses by demonstrating that climate reinforces the effects of teaching. Such findings reinforce the argument that teaching deserves a place of priority on the development agenda. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

A growing corpus of literature draws attention to the pivotal role of teaching in shaping developmental trajectories. Globalisation and technological change have intensified both the opportunities and the challenges associated with teaching. A notable study by Oyelaran and Ogbeide (2017) argued that the impact of teaching is substantially mediated by the quality of institutions. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Findings reported by Kalu and Kalu (2018) observed that respondents with greater exposure to teaching recorded markedly different results. For practitioners, the practical significance of teaching cannot be overstated, given its demonstrable link with climate. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Debates on national transformation repeatedly return to the role of teaching and its attendant dynamics. The colonial and post-colonial legacies of the Nigerian state continue to influence contemporary patterns of teaching. Comparative work by Kalu and Kalu (2022) across several states uncovered a consistent pattern linking teaching with climate. These observations collectively invite a reconsideration of standard assumptions regarding climate. Evidence assembled by Kalu and Umeh (2015) across twelve states underscored the heterogeneity of outcomes linked to teaching. Such findings reinforce the argument that teaching deserves a place of priority on the development agenda. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

The phenomenon of teaching, while not new, has acquired fresh analytical urgency in Nigeria. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of teaching in everyday life. Research by Obiora and Umeh (2021) using mixed methods provided particularly rich insight into the mechanisms connecting teaching and climate. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. An examination by Ogbeide and Osinachi (2019)