

ENERGY SAVING PRACTICES IN SECONDARY SCHOOLS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Energy Saving Practices in Secondary Schools" 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 energy saving practices in secondary schools, 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 energy; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with energy and saving. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 399 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 383 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 = 3.09). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.51$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 8.12, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.17$, $p > 0.05$). 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 energy.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of energy saving practices in secondary schools 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.

Scholars have long recognised energy as a critical determinant of outcomes in science education. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream energy into routine governance. Comparative work by Adeniyi and Salami (2022) across several states uncovered a consistent pattern linking energy with saving. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Bamgbose and Osinachi (2020), in a survey of relevant stakeholders, concluded that the benefits of energy are unevenly distributed across groups. Such findings reinforce the argument that energy deserves a place of priority on the development agenda. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

In both global and African literatures, energy is now regarded as a key index of institutional performance. Within Lagos State, the country's most populous commercial hub, the dynamics of energy are observed in their starkest form. The work of Adigun and Bamgbose (2023) extended earlier analyses by demonstrating that saving reinforces the effects of energy. Accordingly, there is a growing consensus that deliberate policy action is required. Evidence assembled by Ibrahim and Chukwu (2015) across twelve states underscored the heterogeneity of outcomes linked to energy. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Scholars have long recognised energy as a critical determinant of outcomes in science education. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of energy. Research by Ibrahim and Chukwu (2021) using mixed methods provided particularly rich insight into the mechanisms connecting energy and saving. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Comparative work by Aderemi and Eze (2022) across several states uncovered a consistent pattern linking energy with saving. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

energy, when examined in relation to saving, reveals complex and often paradoxical dynamics. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which energy unfolds. Bello and Eze (2020), in a survey of relevant stakeholders, concluded that the benefits of energy are unevenly distributed across groups. These observations collectively invite a reconsideration of standard assumptions regarding saving. Evidence assembled by Famuyide and Ogunlana (2015) across twelve states underscored the heterogeneity of outcomes linked to energy. Sustained