

POWER SUPPLY AND ICT LESSONS IN PUBLIC SCHOOLS

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF SCIENCE EDUCATION, FACULTY
OF EDUCATION, UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Power Supply and ICT Lessons in Public 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.

ACKNOWLEDGEMENT

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Science Education, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

ABSTRACT

This study examined power supply and ict lessons in public 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 power; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with power and supply. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 407 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 385 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 = 3.19). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.502$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 7.09, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.31$, $p > 0.05$). 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 power.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	vii
List of Figures	viii
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	7
1.4 Research Questions	7
1.5 Research Hypotheses	7
1.6 Significance of the Study	7
1.7 Scope and Limitation of the Study	10
1.8 Definition of Terms	12
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Conceptual Review	14
2.1.1 Concept of Power	14
2.1.2 Concept of Supply	15
2.1.3 Concept of Ict	17
2.2 Theoretical Framework	19
2.2.1 Constructivist Learning Theory	19
2.2.2 Technology Acceptance Model	20
2.2.3 Cognitive Load Theory	21
2.2.4 Experiential Learning Theory	22
2.3 Empirical Review	23
2.3.1 Early Studies on power	24
2.3.2 Recent Nigerian Evidence on power	25
2.3.3 Power and supply	27
2.3.4 Comparative Perspectives across Africa	29
2.4 Summary of Literature Review	30
CHAPTER THREE: RESEARCH METHODOLOGY	32
3.1 Research Design	32
3.2 Population of the Study	32
3.3 Sample Size and Sampling Technique	33
3.4 Sources of Data Collection	34
3.5 Research Instrument	35
3.6 Validity and Reliability of the Instrument	36
3.7 Method of Data Analysis	37
3.7.1 Administration of the Instrument	38

3.8 Ethical Considerations	38
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	41
4.1 Data Presentation	41
4.2 Demographic Characteristics of Respondents	41
4.3 Analysis of Research Questions	42
4.4 Test of Hypotheses	43
4.5 Discussion of Findings	44
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	49
5.1 Summary	49
5.2 Conclusion	50
5.3 Recommendations	50
5.4 Suggestions for Further Studies	51
REFERENCES	52
APPENDIX	54

LIST OF TABLES

Table 2.1: Summary of the Review of Related Literature	31
Table 2.2: Operationalisation of the Study Variables	31
Table 3.1: Population of the Study and Sampling Technique	39
Table 3.2: Validity and Reliability of the Research Instrument	39
Table 4.1: Gender Distribution of Respondents	47
Table 4.2: Age Distribution of Respondents	47
Table 4.3: Educational Attainment of Respondents	47
Table 4.4: Weighted Mean Analysis of Research Question One	48
Table 4.5: Weighted Mean Analysis of Research Question Two	48
Table 4.6: Correlation Summary between the Independent and Dependent Variables	48
Table 4.7: Independent Samples t-test by Gender	48
Table 4.8: Chi-square Test of Association	48

LIST OF FIGURES

Figure 1.1: Conceptual Framework of the Study	13
Figure 3.1: Science Education Research Context	40
Figure 4.1: Gender Distribution of Respondents	47
Figure 4.2: Age Distribution of Respondents	47

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of power supply and ICT lessons in public 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.

Contemporary scholarship increasingly frames power as inseparable from the broader question of supply. The socio-cultural diversity of Nigeria implies that responses to power must be differentiated rather than uniform. An examination by Bakare and Ekwueme (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. Such findings reinforce the argument that power deserves a place of priority on the development agenda. Empirical evidence from Ogbeide and Salami (2021) suggests that positive developments in supply are associated with improvements in power. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Debates on national transformation repeatedly return to the role of power and its attendant dynamics. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of power in everyday life. Empirical evidence from Dauda and Umeh (2021) suggests that positive developments in supply are associated with improvements in power. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Field evidence gathered by Chukwu and Bamgbose (2016) suggested that stakeholder engagement materially improves the results achieved in matters of power. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

power, when examined in relation to supply, reveals complex and often paradoxical dynamics. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of power. Longitudinal research by Chukwu and Bamgbose (2016) revealed that sustained attention to power yields appreciable dividends over time. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Ogunlana and Famuyide (2023) extended earlier analyses by demonstrating that supply reinforces the effects of power. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

In both global and African literatures, power is now regarded as a key index of institutional performance. National policies and programmes have sought, with varying degrees of success, to respond to the realities of power and supply. Field evidence gathered by Bello and Nwosu (2016) suggested that stakeholder engagement materially improves the results achieved in matters of power. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Bello and Adeniyi (2023) extended earlier analyses by demonstrating that supply reinforces the effects of power. Accordingly, there is a