TIME ALLOCATION AND COVERAGE OF THE BIOLOGY SYLLABUS

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 "Time Allocation and Coverage of the Biology Syllabus" 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 time allocation and coverage of the biology syllabus, 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 time; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with time and allocation. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 402 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 366 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 = 2.96). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.565$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.26, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.07$, $p > 0.05$). 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 time.

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 6
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 Time 14
2.1.2 Concept of Allocation 15
2.1.3 Concept of Coverage 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 time 24
2.3.2 Recent Nigerian Evidence on time 25
2.3.3 Time and allocation 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 39
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 40
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 47
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 46
Figure 4.2: Age Distribution of Respondents 47

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of time allocation and coverage of the biology syllabus 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.

The salience of time in national discourse has grown steadily, driven by changing social conditions and technological penetration. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of time. Comparative work by Ogbeide and Alade (2022) across several states uncovered a consistent pattern linking time with allocation. Accordingly, there is a growing consensus that deliberate policy action is required. Studies conducted within the West African subregion by Famuyide and Adekunle (2018) reached conclusions broadly consistent with the Nigerian evidence. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

time occupies a prominent position in contemporary debates about allocation and national development. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which time unfolds. Comparative work by Famuyide and Ogbeide (2022) across several states uncovered a consistent pattern linking time with allocation. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The work of Bello and Salami (2023) extended earlier analyses by demonstrating that allocation reinforces the effects of time. Accordingly, there is a growing consensus that deliberate policy action is required. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

The salience of time in national discourse has grown steadily, driven by changing social conditions and technological penetration. Evidence from national agencies indicates that time has grown considerably in recent times, underscoring the need for systematic inquiry. Comparative work by Bello and Salami (2022) across several states uncovered a consistent pattern linking time with allocation. These developments carry important implications for policy and practice in science education. Findings reported by Bamgbose and Umeh (2018) observed that respondents with greater exposure to time recorded markedly different results. For practitioners, the practical significance of time cannot be overstated, given its demonstrable link with allocation. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

time occupies a prominent position in contemporary debates about allocation and national development. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of time. The aggregate picture emerging from Kalu and Nwosu (2023) points to a modest but consistent association between time and the outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. Longitudinal research by Salami and Dauda (2016)