MAINTENANCE CULTURE OF WORKSHOP EQUIPMENT

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 "Maintenance Culture of Workshop Equipment" 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.

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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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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 maintenance culture of workshop equipment, 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 maintenance; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with maintenance and culture. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 391 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 = 3.0). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.529$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 6.03, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.19$, $p > 0.05$). 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 maintenance.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of maintenance culture of workshop equipment 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.

Few subjects attract as much policy interest in contemporary Nigeria as the question of maintenance. Economic pressures and resource scarcity frequently determine the pace at which maintenance advances in practice. The aggregate picture emerging from Chukwu and Chukwu (2023) points to a modest but consistent association between maintenance and the outcomes of interest. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Comparative work by Salami and Adebayo (2022) across several states uncovered a consistent pattern linking maintenance with culture. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Scholars have long recognised maintenance as a critical determinant of outcomes in science education. Evidence from national agencies indicates that maintenance has grown considerably in recent times, underscoring the need for systematic inquiry. Studies conducted within the West African subregion by Adekunle and Dauda (2018) reached conclusions broadly consistent with the Nigerian evidence. Accordingly, there is a growing consensus that deliberate policy action is required. Research by Ibrahim and Ibrahim (2021) using mixed methods provided particularly rich insight into the mechanisms connecting maintenance and culture. Such findings reinforce the argument that maintenance 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.

maintenance continues to command considerable attention among researchers, policymakers, and practitioners in science education. Globalisation and technological change have intensified both the opportunities and the challenges associated with maintenance. Findings reported by Ibrahim and Ibrahim (2018) observed that respondents with greater exposure to maintenance recorded markedly different results. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The aggregate picture emerging from Famuyide and Adebayo (2023) points to a modest but consistent association between maintenance and the outcomes of interest. These developments carry important implications for policy and practice in science education. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Scholars have long recognised maintenance as a critical determinant of outcomes in science education. The socio-cultural diversity of Nigeria implies that responses to maintenance must be differentiated rather than uniform. The aggregate picture emerging from Obiora and Chukwu (2023) points to a modest but consistent association between maintenance and the outcomes of interest. The weight of evidence therefore points toward