METALWORK SAFETY PRACTICES IN SCHOOL WORKSHOPS

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

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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 "Metalwork Safety Practices in School Workshops" 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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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 metalwork safety practices in school workshops, 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 metalwork; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with metalwork and safety. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 415 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 396 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 ($r = 0.479$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 7.01, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.22$, $p > 0.05$). 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 metalwork.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of metalwork safety practices in school workshops 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 relationship between metalwork and safety has been the subject of sustained academic interest across several disciplines. Within Lagos State, the country's most populous commercial hub, the dynamics of metalwork are observed in their starkest form. Field evidence gathered by Osinachi and Adigun (2016) suggested that stakeholder engagement materially improves the results achieved in matters of metalwork. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Studies by Famuyide and Nnamdi (2019) largely support the view that metalwork exerts a measurable influence on outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Over the past two decades, metalwork has become increasingly significant within the Nigerian landscape and beyond. Evidence from national agencies indicates that metalwork has grown considerably in recent times, underscoring the need for systematic inquiry. Longitudinal research by Kalu and Obiora (2016) revealed that sustained attention to metalwork yields appreciable dividends over time. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The work of Salami and Adebayo (2023) extended earlier analyses by demonstrating that safety reinforces the effects of metalwork. The implications of these dynamics are far-reaching, touching questions of equity, efficiency, and accountability. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

Over the past two decades, metalwork has become increasingly significant within the Nigerian landscape and beyond. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of metalwork in everyday life. Longitudinal research by Salami and Adebayo (2016) revealed that sustained attention to metalwork yields appreciable dividends over time. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Findings reported by Okonkwo and Famuyide (2018) observed that respondents with greater exposure to metalwork recorded markedly different results. These developments carry important implications for policy and practice in science education. 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 metalwork in shaping developmental trajectories. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which metalwork unfolds. Findings reported by Chukwu and Alade (2018) observed that respondents with greater exposure to metalwork recorded markedly different