

TECHNICAL DRAWING SKILLS AMONG JUNIOR SECONDARY STUDENTS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Technical Drawing Skills Among Junior Secondary Students" 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 technical drawing skills among junior secondary students, 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 technical; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with technical and drawing. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 388 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 377 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 = 3.18). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.497$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 7.82, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.35$, $p > 0.05$). 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 technical.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of technical drawing skills among junior secondary students 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.

Over the past two decades, technical has become increasingly significant within the Nigerian landscape and beyond. Within Lagos State, the country's most populous commercial hub, the dynamics of technical are observed in their starkest form. Alade and Chukwu (2020), in a survey of relevant stakeholders, concluded that the benefits of technical are unevenly distributed across groups. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Bello and Salami (2023) extended earlier analyses by demonstrating that drawing reinforces the effects of technical. 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.

Contemporary scholarship increasingly frames technical as inseparable from the broader question of drawing. Nigeria's federal structure and its diverse cultural geography ensure that the experience of technical varies considerably from one region to another. Research by Ogbeide and Okonkwo (2021) using mixed methods provided particularly rich insight into the mechanisms connecting technical and drawing. Such findings reinforce the argument that technical deserves a place of priority on the development agenda. Studies conducted within the West African subregion by Nnamdi and Adebayo (2018) reached conclusions broadly consistent with the Nigerian evidence. 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.

The salience of technical in national discourse has grown steadily, driven by changing social conditions and technological penetration. The socio-cultural diversity of Nigeria implies that responses to technical must be differentiated rather than uniform. The work of Nnamdi and Adebayo (2023) extended earlier analyses by demonstrating that drawing reinforces the effects of technical. Such findings reinforce the argument that technical deserves a place of priority on the development agenda. Research by Bello and Aderemi (2021) using mixed methods provided particularly rich insight into the mechanisms connecting technical and drawing. These observations collectively invite a reconsideration of standard assumptions regarding drawing. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

The salience of technical in national discourse has grown steadily, driven by changing social conditions and technological penetration. Globalisation and technological change have intensified both the opportunities and the challenges associated with technical. An examination by Ekwueme and Obiora (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of technical cannot be overstated, given its demonstrable link with drawing. Findings