MEASUREMENT LESSONS USING BODY PARTS AND RULERS

BY

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[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Measurement Lessons Using Body Parts and Rulers" 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
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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 measurement lessons using body parts and rulers, 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 measurement; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with measurement and lessons. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 414 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 387 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 = 2.99). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.576$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 8.09, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.29$, $p > 0.05$). 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 measurement.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of measurement lessons using body parts and rulers 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.

measurement, when examined in relation to lessons, reveals complex and often paradoxical dynamics. Nigeria's federal structure and its diverse cultural geography ensure that the experience of measurement varies considerably from one region to another. Empirical evidence from Adigun and Eze (2021) suggests that positive developments in lessons are associated with improvements in measurement. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Studies conducted within the West African subregion by Eze and Okonkwo (2018) reached conclusions broadly consistent with the Nigerian evidence. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

In recent years, measurement has emerged as a central theme in scholarly discourse on science education. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which measurement unfolds. Longitudinal research by Adebayo and Adekunle (2016) revealed that sustained attention to measurement yields appreciable dividends over time. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Findings reported by Adigun and Osinachi (2018) observed that respondents with greater exposure to measurement recorded markedly different results. These observations collectively invite a reconsideration of standard assumptions regarding lessons. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

measurement, when examined in relation to lessons, reveals complex and often paradoxical dynamics. National policies and programmes have sought, with varying degrees of success, to respond to the realities of measurement and lessons. An examination by Adigun and Osinachi (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Evidence assembled by Obiora and Olawale (2015) across twelve states underscored the heterogeneity of outcomes linked to measurement. Accordingly, there is a growing consensus that deliberate policy action is required. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Over the past two decades, measurement has become increasingly significant within the Nigerian landscape and beyond. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream measurement into routine governance. The work of Chukwu and Adeniyi (2023) extended earlier analyses by demonstrating that lessons reinforces the effects of measurement. The implications of these