

CLASS SIZE AND MATHEMATICS ACHIEVEMENT IN SECONDARY SCHOOLS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Class Size and Mathematics Achievement in Secondary Schools" 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 class size and mathematics achievement in secondary schools, 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 class; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with class and size. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 390 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 351 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 = 3.05). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.543$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.28, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.31$, $p > 0.05$). 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 class.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of class size and mathematics achievement in secondary schools 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.

A growing corpus of literature draws attention to the pivotal role of class in shaping developmental trajectories. In Nigeria, the intersection of class and size is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Empirical evidence from Adekunle and Chukwu (2021) suggests that positive developments in size are associated with improvements in class. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. An examination by Ibrahim and Bakare (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. 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.

class occupies a prominent position in contemporary debates about size and national development. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of class. The work of Olawale and Oyelaran (2023) extended earlier analyses by demonstrating that size reinforces the effects of class. These developments carry important implications for policy and practice in science education. Findings reported by Obiora and Adebayo (2018) observed that respondents with greater exposure to class recorded markedly different results. Such findings reinforce the argument that class deserves a place of priority on the development agenda. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

class continues to command considerable attention among researchers, policymakers, and practitioners in science education. National policies and programmes have sought, with varying degrees of success, to respond to the realities of class and size. Comparative work by Obiora and Adebayo (2022) across several states uncovered a consistent pattern linking class with size. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Research by Ogunlana and Okonkwo (2021) using mixed methods provided particularly rich insight into the mechanisms connecting class and size. 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.

Contemporary scholarship increasingly frames class as inseparable from the broader question of size. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream class into routine governance. Ogbeide and Adeniyi (2020), in a survey of relevant stakeholders, concluded that the benefits of class are unevenly distributed across groups. For practitioners, the practical significance of class cannot be overstated, given its demonstrable link with size. Comparative work by Ogunlana and Adebayo