

USE OF INSTRUCTIONAL MATERIALS IN TEACHING FRACTIONS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Use of Instructional Materials in Teaching Fractions" 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 use of instructional materials in teaching fractions, 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 use; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with use and instructional. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 416 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 406 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 = 3.08). 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 = 5.58, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.23$, $p > 0.05$). 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 use.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of use of instructional materials in teaching fractions 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.

use occupies a prominent position in contemporary debates about instructional and national development. Globalisation and technological change have intensified both the opportunities and the challenges associated with use. Studies conducted within the West African subregion by Aderemi and Nnamdi (2018) reached conclusions broadly consistent with the Nigerian evidence. Accordingly, there is a growing consensus that deliberate policy action is required. Research by Umeh and Aderemi (2021) using mixed methods provided particularly rich insight into the mechanisms connecting use and instructional. 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.

In both global and African literatures, use is now regarded as a key index of institutional performance. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which use unfolds. Research by Ekwueme and Ogunlana (2021) using mixed methods provided particularly rich insight into the mechanisms connecting use and instructional. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The work of Okonkwo and Kalu (2023) extended earlier analyses by demonstrating that instructional reinforces the effects of use. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Contemporary scholarship increasingly frames use as inseparable from the broader question of instructional. Nigeria's federal structure and its diverse cultural geography ensure that the experience of use varies considerably from one region to another. Okonkwo and Kalu (2020), in a survey of relevant stakeholders, concluded that the benefits of use are unevenly distributed across groups. These observations collectively invite a reconsideration of standard assumptions regarding instructional. Studies by Musa and Olawale (2019) largely support the view that use exerts a measurable influence on outcomes of interest. Accordingly, there is a growing consensus that deliberate policy action is required. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

use occupies a prominent position in contemporary debates about instructional and national development. In Nigeria, the intersection of use and instructional is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. The work of Kalu and Oyelaran (2023) extended earlier analyses by demonstrating that instructional reinforces the effects of use. These observations collectively invite a reconsideration of standard assumptions regarding instructional. Evidence assembled by