

USE OF MODELS AND CHARTS IN TEACHING HUMAN REPRODUCTION

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Use of Models and Charts in Teaching Human Reproduction" 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 models and charts in teaching human reproduction, 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 models. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 405 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 381 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 = 2.98). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.587$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.49, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.2$, $p > 0.05$). 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 models and charts in teaching human reproduction 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.

Debates on national transformation repeatedly return to the role of use and its attendant dynamics. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which use unfolds. The work of Adeniyi and Adekunle (2023) extended earlier analyses by demonstrating that models reinforces the effects of use. For practitioners, the practical significance of use cannot be overstated, given its demonstrable link with models. Findings reported by Ogbeide and Chukwu (2018) observed that respondents with greater exposure to use recorded markedly different results. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

Scholars have long recognised use as a critical determinant of outcomes in science education. Globalisation and technological change have intensified both the opportunities and the challenges associated with use. The aggregate picture emerging from Chukwu and Obiora (2023) points to a modest but consistent association between use and the outcomes of interest. Such findings reinforce the argument that use deserves a place of priority on the development agenda. Studies conducted within the West African subregion by Oyelaran and Umeh (2018) reached conclusions broadly consistent with the Nigerian evidence. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

use occupies a prominent position in contemporary debates about models and national development. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream use into routine governance. The work of Oyelaran and Umeh (2023) extended earlier analyses by demonstrating that models reinforces the effects of use. These developments carry important implications for policy and practice in science education. Comparative work by Musa and Osinachi (2022) across several states uncovered a consistent pattern linking use with models. 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.

Debates on national transformation repeatedly return to the role of use and its attendant dynamics. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream use into routine governance. Field evidence gathered by Nnamdi and Nwosu (2016) suggested that stakeholder engagement materially improves the results achieved in matters of use. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Evidence assembled by Adigun