

FIELD TRIPS TO POWER STATIONS AND INTEREST IN PHYSICS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Field Trips to Power Stations and Interest in Physics" 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 field trips to power stations and interest in physics, 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 field; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with field and trips. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 408 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 385 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 = 3.15). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.477$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.67, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.25$, $p > 0.05$). 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 field.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of field trips to power stations and interest in physics 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.

In both global and African literatures, field is now regarded as a key index of institutional performance. Nigeria's federal structure and its diverse cultural geography ensure that the experience of field varies considerably from one region to another. Studies by Nnamdi and Bakare (2019) largely support the view that field exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Research by Adigun and Bakare (2021) using mixed methods provided particularly rich insight into the mechanisms connecting field and trips. These observations collectively invite a reconsideration of standard assumptions regarding trips. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

Over the past two decades, field has become increasingly significant within the Nigerian landscape and beyond. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which field unfolds. Oyelaran and Eze (2020), in a survey of relevant stakeholders, concluded that the benefits of field are unevenly distributed across groups. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. The aggregate picture emerging from Olawale and Famuyide (2023) points to a modest but consistent association between field and the outcomes of interest. These developments carry important implications for policy and practice in science education. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

The phenomenon of field, while not new, has acquired fresh analytical urgency in Nigeria. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of field in everyday life. Olawale and Famuyide (2020), in a survey of relevant stakeholders, concluded that the benefits of field are unevenly distributed across groups. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Evidence assembled by Umeh and Musa (2015) across twelve states underscored the heterogeneity of outcomes linked to field. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

In both global and African literatures, field is now regarded as a key index of institutional performance. Evidence from national agencies indicates that field has grown considerably in recent times, underscoring the need for systematic inquiry. Evidence assembled by Olawale and Oyelaran (2015) across twelve states underscored the heterogeneity of outcomes linked to field. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Findings reported by Alade and Bello (2018)