

PEER ASSESSMENT IN CHEMISTRY LABORATORY REPORTS

BY

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DEGREE IN SCIENCE EDUCATION

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Peer Assessment in Chemistry Laboratory Reports" 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 peer assessment in chemistry laboratory reports, 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 peer; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with peer and assessment. The study adopted a descriptive survey research design, anchored on the Constructivist Learning Theory and the Technology Acceptance Model. A sample size of 389 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 362 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 = 3.13). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.562$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 6.54, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.02$, $p > 0.05$). 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 peer.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of peer assessment in chemistry laboratory reports 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.

peer occupies a prominent position in contemporary debates about assessment and national development. In Nigeria, the intersection of peer and assessment is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Comparative work by Oyelaran and Bamgbose (2022) across several states uncovered a consistent pattern linking peer with assessment. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The aggregate picture emerging from Alade and Bello (2023) points to a modest but consistent association between peer and the outcomes of interest. 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.

The phenomenon of peer, while not new, has acquired fresh analytical urgency in Nigeria. Rapid urbanisation and demographic expansion across Nigerian cities have heightened the salience of peer in everyday life. Comparative work by Aderemi and Ibrahim (2022) across several states uncovered a consistent pattern linking peer with assessment. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. The aggregate picture emerging from Musa and Alade (2023) points to a modest but consistent association between peer and the outcomes of interest. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. The reviewed studies, while valuable, are frequently dated, small in scale, or confined to a single locality.

peer, when examined in relation to assessment, reveals complex and often paradoxical dynamics. Nigeria's federal structure and its diverse cultural geography ensure that the experience of peer varies considerably from one region to another. Musa and Alade (2020), in a survey of relevant stakeholders, concluded that the benefits of peer are unevenly distributed across groups. For practitioners, the practical significance of peer cannot be overstated, given its demonstrable link with assessment. Osinachi and Musa (2020), in a survey of relevant stakeholders, concluded that the benefits of peer are unevenly distributed across groups. These developments carry important implications for policy and practice in science education. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Scholars have long recognised peer as a critical determinant of outcomes in science education. Within Lagos State, the country's most populous commercial hub, the dynamics of peer are observed in their starkest form. Research by Ekwueme and Adeniyi (2021) using mixed methods provided particularly rich insight into the mechanisms connecting peer and assessment. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Empirical evidence from Adigun and Dauda (2021) suggests