# READINGS IN TEACHING PEDAGOGY, EDUCATIONAL EVALUATION AND RESEARCH

Festschrift in Honour of an Academic Legend

## PROFESSOR ROMY OKOYE

*Edited by*
Ngozi Nwabugo Agu
Christy Amaechi Ugodulunwa
Nkechi Mary Patricia Esomonu

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**Professor Romy Okoye *NAE***

April 2024

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# Dedication

To all who understand the concept of burning the midnight candle in their desire to transfer knowledge

To all the teachers that have to speak understanding above the noise of confusion

To researchers with eyes that have soared through barriers to discover solutions to academic problems

To students who know the reality of ***'brain work'*** and are potential teachers and eventual researchers

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## FOREWORD

I am highly delighted to be given the privilege of writing a foreword for the festschrift of Prof. Romy Okoye. Usually during University graduation ceremonies, a University Registrar, while presenting any class of graduating students to the Chancellor of the University to be awarded the relevant specific degree they studied for, will repeatedly use the phrase – ***"Who have been found worthy in Character and Learning"*** **-** in reference to the students. This, obviously, is to clearly affirm that any graduate of any such University will represent the lofty values the institution so pricelessly cherish. Professor Romy Okoye, from what I know about him, has by all standards, fulfilled the requirements to be awarded that phrase, in all aspects, due to the exceptional value he brought to bear in discharge of his duty as a professional teacher. He was exactly what the students needed; he was popular with colleagues; and he was more than above average in safeguarding the University assets.

Professor Romy Okoye is by every standard, a model of a lecturer who is absolutely down to earth in his strides to inculcate knowledge to his students. He is a mentor who teaches with character to fashion out a total man at the end of the day. He is very sound and fastidious in the discharge of his teacher education duties. Every young lecturer wishes Prof. Romy trained them, and his colleagues are at home in partnership and collaborative academic and research efforts with Prof. Romy, as he is fondly referred to.

I appreciate all those that thought of and brought to fruition this Festschrift. A Festschrift is a collection of articles published in honour of a scholar. Friends and colleagues of Prof. Romy Okoye, who recently retired from the services of Nnamdi Azikiwe University, decided to publish this Festschrift titled – **'*Readings in Teaching Pedagogy, Educational Evaluation and Research'* -** in his honour. This book is a compendium of research works in honour of dedication to duty, selfless service to humanity and transparent, transformative and legendary academic leadership. Prof. Romy highly deserves to be so honoured and all the colleagues and friends of Prof. Romy who anchored this publication will surely be blessed for giving him this merited honour.

This book has articles covering various disciplines within and outside Education with most of them dwelling on the areas of Educational Measurement, Evaluation and Research, such as: instrument development; curriculum design; implementation and evaluation; computer-based testing; and issues on testing in education in general. It is not surprising that most of the articles dwelt on Educational Measurement, Evaluation and Research since that is the area of specialization of Prof. Romy Okoye.

Contributors of the festschrift came from different parts of Nigeria and even beyond. The papers are incisive, addressing relevant and current issues in Education. I have no doubt that researchers and Educationists will find them interesting and useful. I therefore, recommend this book to all lovers of education, teaching and research.

**Prof. Frederick J. C. Odibo**
**Special Assistant to the Vice Chancellor on Academic Matters**
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**Awka, Nigeria**

## PREFACE

This book is written to express our gratitude to Professor Romy Okoye for his numerous contributions in the field of Educational Evaluation, Research and Statistics. It is written in honour of Professor Romy Okoye, on his retirement from active service from Nnamdi Azikiwe University, Awka, Nigeria after meritorious years of service as a distinguished professional teacher educator, an academic giant and rock of great repute in the field of educational measurement and evaluation, research and statistics. The book is a collection of a rich number of diverse contributions by colleagues, students, mentees, friends and collaborators from all over Nigeria.

Professor Romy Okoye is a seasoned academic, a rugged and dogged scholar, who constantly not only queries the status quo but proffers solution to knotty problems that defy solutions. He is an exemplary educator of great repute who has made an indelible mark in the field of Educational Evaluation, Research and Statistics, as well as Education in general. We celebrate the man, who has no place for absenteeism, lateness, laziness, favouritism, sorting and myriads of contemporary problems in the present day higher education in Nigeria through this Festschrift written in his honour. Professor Romy Okoye has over the years steered his passion into teaching and research which proved to be an excellent medium for initiating thousands of students and colleagues to the beauty of educational evaluation, research and statistics.

Contributions of scholars in honour of Professor Romy Okoye are presented in 42 chapters covering mainly topics and issues relating to educational measurement and evaluation, educational research, and other related areas in education. Topics in educational measurement include: test item calibration and arrangement; peer and self-assessment; development and validation of achievement tests; item analysis; continuous assessment; assessment of big data; and programme evaluation, among others. Chapters under research and statistics dwelt on issues in developing research skills, effective research project supervision, and research tools; while those under general education focused on security challenges, curriculum development, inclusive education, psychosocial development, philosophy and human development, self-regulation in academic success, among others.

This book is a compendium of relevant topics in educational measurement and evaluation, research and statistics, effective teaching and management practices and interesting topics in education. It is a must read for students, researchers and other stakeholders in education. Scholars who desire to grow in the field of education will find this book an indispensable companion.

We are greatly indebted to colleagues, students, mentees, friends, and collaborators of Professor Romy Okoye who contributed in no small measure in making this dream come true. We are grateful to you for honouring Professor Romy Okoye.

**Christy Amaechi Ugodulunwa**
**Professor of Educational Evaluation**
**Nnamdi Azikiwe University, Awka**
*For the Editors*

# Memoirs of an Academic Legend

*An effective teacher is no longer a hearer of lessons but a director of learning. He recognizes subject matter not as an end in itself but as a means to the development of human personality. He is willing to work with students as they are, rather than as they are expected to be (Groulier, 1985).*

There are heroes and then, there are legends. While heroes may be forgotten, legends are always remembered. They are like the proverbial sword in the stone that stand as a beacon of hope for generations past, present and future. Prof Romy Okoye is unarguably an academic legend. He is renowned for his unbeatable mastery of the art of teaching and his skill in the research field.

Prof Romy, as he is popularly called, is an extraordinary teacher. He can convince a person that a pig can fly with his meticulous and expository manner of teaching. There has never been a misunderstanding or confusion that has arisen in his classroom that he hasn't dispelled systematically and intentionally.

I am a product of Prof Romy's legendary teaching. I had met a lot of boring lecturers during my secondary school and undergraduate days that I was gobsmacked to be in Prof. Romy's class. His teaching was a breath of fresh air. In fact, Prof Romy's teaching changed the course of my academic pursuit from Curriculum Studies to Educational Measurement, Evaluation and Research. He is a teacher per excellence.

In the Research field, Prof Romy is a force to be reckoned with. He is a Research enigma who always knows his subject matter like the back of his hand. He would fish out discrepancies in poorly presented research works without batting an eyelash. In the international research community, Prof Romy upholds a standard that is a challenge. When he sits in a pew among researchers when research is being discussed, his contribution is always apt and astounding.

Prof Romy is an academic legend. He is renowned for his intrinsic academic knowledge and experience. His academic strength goes beyond his infallible pattern of teaching and his immense success in the research community to the academic presence he possesses. His speech would detail his years of experience without any barriers. His age is not an obstacle but a propeller.

Let me tell you about father of many. Prof Romy's kindness is legendary. He is not known for speaking unkind or demeaning words to anyone. He kills the stereotypical reality in the world of academics where intelligence and achievements are often accompanied by pride and meanness.

There have been heroes and will be heroes that have wowed many people in the academic community, but Prof. Romy is a legend with a record sealed in stone.

**Ngozi Nwabugo Agu**
**Professor of Educational Evaluation and Research**
**Nnamdi Azikiwe University, Awka**
*For all Prof. Romy's Students and Mentees*

## Notes on the Chief Editors

**Ngozi Nwabugo Agu** is Professor of Educational Evaluation and Research in Nnamdi Azikiwe University, Awka, Nigeria where she has been a lecturer for 32 years and still counting. She is a motivated teacher and researcher. She is skilled in the assessment of academic strengths and weaknesses of students and in developing strategies to enhance students' learning. She is also adept at conducting academic research geared towards improving learning, learning pursuits, learning methods, and learning strategies. Her specific areas of expertise are in:

1. Student and Teacher Evaluation
2. Academic Administration
3. Curriculum Evaluation

1. Research
2. Empirical studies in Education
3. Public Speaking

4. Teaching
5. Student Relations
6. Evaluation of Programs
7. Communication

Administratively, Ngozi N. Agu has held many key positions in which she served her University and community meritoriously. Currently, she is the Director of Environmental Conservation and Beautification in Nnamdi Azikiwe University. Professionally, she is a member of different reputable professional bodies which include, among others, Association of Educational Researchers and Evaluators of Nigeria (ASSEREN), Nigerian Academy of Education (NAE), International Association for Educational Assessment (IAEA).

**Christiana Amaechi Ugodulunwa** is a Professor in the Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka, Nigeria. She is a professional teacher, a researcher and an evaluator with several years of experience in teaching educational measurement and evaluation, research and statistics at the University of Jos, Alex Ekwueme Federal University Ndufu Alike, Ebonyi State and currently in Nnamdi Azikiwe University, Awka, Anambra State. She obtained her first degree from the University of Nigeria, Nsukka and her Master's and Doctoral degrees in Measurement and Evaluation from University of Jos, Nigeria. She has a Postgraduate Diploma in Monitoring and Evaluation (PgDME) from University of Stellenbosch, South Africa. She is a Fellow of the Association of Educational Researchers and Evaluators of Nigeria (ASSEREN), a member of the Nigerians Academy of Education (NAE), and a member of the International Association for Educational Assessment (IAEA), among other professional associations.

**Lady Nkechi Patricia-Mary Esomonu *jp*** is a Professor of Educational Measurement, Evaluation, Research and Statistics at Nnamdi Azikiwe University, Awka. She has served the University in many capacities including, Director, Affiliate Institutions; Dean, Faculty of Education; Associate Dean, School of Postgraduate Studies, Member, 7th University Governing Council, among others.
Prof Esomonu has attended many national and international conferences. She has over 155 academic materials which include index journal articles, books, edited books, chapters in edited books and volumes of edited journals. She is the 65$^{th}$ Inaugural Lecturer of Nnamdi Azikwe University, Awka.

She is a Fellow, Science Teachers' Association of Nigeria (FSTAN), Fellow of Wice (FWICE), member, Nigerian Academy of Education (MNAE), member, International Association for Educational Assessment (iaea), a member, Association of Educational Researchers and Evaluators of Nigeria (ASSEREN). Her impressive doer skill culminated into her having worked as a chairman of over 65 Committees within the academic institutions and the wider society.

## Notes on the Associate Editors

**Nneka Chinyere Ezeugo** started her journey as a lecturer from Nwafor Orizu College of Education Nsugbe, but presently is a Senior Lecturer in the Department of Educational Foundations, Nnamdi Azikiwe University Awka (measurement and evaluation option). As a professional teacher, she has put in several years of teaching research methods and statistics, educational measurement and evaluation. She obtained her first degree from the University of Ibadan, Masters' degree from University of Nigeria Nsukka and a Doctorate degree from Nnamdi Azikiwe University Awka. Dr N.C. Ezeugo is a member of some professional bodies like Association of Educational Researchers and Evaluators of Nigeria (ASSEREN), Association of Behavioural Research Analysts and Psychometricians (AB-ReAP) and she has some publications to her credit in both National and international journals.

**Lydia Eleje** is a Lecturer at the Department of Educational Foundations, Faculty of Education, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria. She holds a Masters and Ph.D in **Educational Measurement, Evaluation and Research.** Presently, she is a member of Editorial Board of Open Journal of Educational Research, Journal of Education, Teaching and Social Studies and Integrity Journal of Education and Training. She is currently contributing to capacity building in training of over 4000 Undergraduate Students in Nigeria. She pioneered the **development and validation of Diagnostic** test and **Achievement test** researches for diagnosing students' strengths and weaknesses, and achievement in quantitative economics. She has a special interest in promoting quality of teaching, evaluation and research, instrumentation, diagnostic testing (Education) and item analysis. She is a reviewer to numerous international Journals including Vision: The Journal of Business Perspective. She has numerous publications in local and international Journals.

**Ifeoma Clementina Metu** is a lecturer at the Department of Educational Foundations, Nnamdi Azikiwe University, Awka where she teaches courses that cut across Educational Research, Statistics, Measurement and Evaluation. She holds a Ph.D in Measurement and Evaluation from University of Nigeria. Her areas of interest include Scale Development, Data Analysis and Interpretation, and Evaluation of Test and Measures. She reviews articles for both local and international journals. She is a member of many professional bodies including ABREAP and ASSEREN.

**Njideka Gertrude Mbelede** is a lecturer at Nnamdi Azikiwe University Awka, Nigeria. She is an expert in Measurement and Evaluation, majored in instrumentation and data analysis. She is an innovative educator versed in history of facilitating student learning. She has won and completed a research grant from Women in Measurement, (WIM) Inc. USA centered on bridging the gap of women underrepresentation in echelon positions of examination boards in Nigeria. She was a Rector of Homik Oil and Gas Facility Engineering Polytechnic Port Harcourt, Nigeria and the centre manager at the National Teachers' Institute Kaduna, Nigeria. Dr. Njideka is an editor of reputable local and international journals and has publications nationally and internationally. She adapts to students' needs to deliver top-quality lectures and seminars. Leads and supervises in-depth research projects on educational issues. She guides both online and in-class discussions with innovative instructional techniques. She excels in discussion-driven environments with strong skills in research, communication and instruction and works collaboratively to gather and disseminate data for diverse research grants and projects, supports diversity, equity, and inclusion as guiding principles in delivery services.

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# Outsourcing as Strategic Tool for Organizational Sustainability among Manufacturing Firms in Enugu.

**By**

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**Abstract**
The study examined outsourcing as a strategic tool for organizational sustainability of manufacturing firms in Enugu metropolis. In order to achieve the aim of the study, three research questions and three hypotheses guided the study. Human Resource (HR) outsourcing and information technology outsourcing were adopted as the dimensions of outsourcing while economic sustainability and environmental sustainability were adopted as the measures of organizational sustainability. The study was anchored on Resource-Based theory. The study sampled 116 employees and managers of the selected manufacturing firms in Enugu metropolis from a total population of 164. The study made use of primary data and structured questionnaire as the data collection instrument. The study made use of frequencies, simple percentages and weighted mean score in presenting the questionnaire items while Pearson Product Moment Correlation was used to test hypotheses formulated. The major finding of the study revealed that: HR outsourcing has a positive and significant relationship with economic sustainability and environmental sustainability of manufacturing firms in Enugu metropolis. Information technology outsourcing also has a positive and significant relationship with economic sustainability and environmental sustainability of manufacturing firms in Enugu metropolis. The study concluded that since there is a positive link between outsourcing and organizational sustainability, adopting outsourcing strategies was a critical tool that enhances organizational survival and performance. The researcher therefore recommended that manufacturing firms should continue outsourcing other services which they do not have competitive advantage over its competitors in order to guarantee their sustainability.

**Key Words: Outsourcing, Organisational Sustainability, Strategic managers, Human Resource, Information Technology**

## Introduction

Strategic managers and politicians are very concerned with achieving competitive advantage. It plays a key role in research on strategic management. Researchers and practitioners are becoming more interested in the idea of competitive advantage as a result of better understanding of its drivers (Barney & Hesterly, 2010). A company's ability to compete hinge on the tactics it employs to equal the critical attainment elements for functioning in its market and outperforming its rivals. Corporations have always looked for ways to outperform their rivals; today, this desire is even more pervasive due to the greater shift towards a single, multinational economy. Outsourcing is one strategy businesses have used to increase their competitiveness in this new economic environment (Akewushola & Elegbede, 2013).

As a result, firms are increasingly using outsourcing strategies in an effort to increase their sustainability, performance, and competitiveness. Public and commercial enterprises repeatedly outsource their work, and it is a key constituent of corporate policy. Nonetheless, every business outsources in some capacity, whether it is for marketing, product engineering, information technology, management, manufacturing, or management services (Egesimba, 2021). Rundquist (2017) claims that outsourcing is a management approach whereby an organization assigns significant, non-core business responsibilities to knowledgeable and effective service providers. In other terms, outsourcing is the practice of acquiring goods or services from suppliers outside the corporation. It is typically unavoidable to outsource corporate operations and processes when a particular firm lacks the knowledge or capabilities to carry out a certain task internally. Also, businesses can outsource to reduce workload, create financial efficiencies, enhance focus on strategic concerns and core capabilities, gain access to technology and specialized experience, are able to demand measured and improved service levels, and gain a competitive advantage (Hope & Dadzie, 2015).

In support of this, Olawuni (2020) stated that organizations outsource to achieve different objectives such as reduced cost, increased productivity, increased economic sustainability, increased environmental sustainability, flexibility, better quality products, increased customer satisfaction and improvement in technology in order to enhance organizational sustainability. Based on the aforementioned, this study aims to investigate the connection between organizational sustainability and outsourcing in manufacturing enterprises in the Enugu metropolis.

While managers utilize outsourcing to improve the use of capital investments by focusing the firm's people and capital resources on its core competencies, these two aforementioned resources are frequently connected together as one argument (Quélin & Duhamel, 2013). Some justifications for outsourcing include achieving best practices through access to external talents, converting fixed expenses into variable costs, or using outsourcing as a tool to adapt to quickly changing circumstances. It's common to believe that increasing an organization's internal concentration on its core business would lead to performance gains and organizational sustainability (Leavy, 2014).

**Statement of the Problem**

Companies have always looked for strategies to keep and gain a competitive advantage over possible rivals. Nonetheless, firms are strongly encouraged to outsource due to the modern, fiercely competitive climate in which they operate. Several businesses have begun to adopt the outsourcing notion, but some businesses are still hesitant to go down the outsourcing route. This is primarily due to the way that the current state of global economics is presenting aspects of the global market, such as competition and unpredictability. The outsourcing process, which involves risks and some underlying needs, has become more prevalent in all facets of modern business with the advent of information technology and information systems. Cultural difficulties, change management, unreasonable expectations, the possibility of intellectual property theft or hacking to client organizations, and other issues are some of the issues with outsourcing. Also, the concept of outsourcing has not got much attention or support, which can be deemed favourable for enhancing company growth and sustainability. However, nothing is known about how outsourcing affects manufacturing companies in Enugu Metropolis in terms of organizational sustainability. The contradictory results of earlier outsourcing research lend further credence to this.

For instance, Adeyemi and Ibrahim's (2012) study of Nigeria Unilever Plc and Nestle Nigeria Plc revealed a considerable and favorable impact of outsourcing strategy on an organizational performance. It is challenging to locate a sector or business that does not participate in the outsourcing trend. Yet, just because outsourcing is popular does not mean that every company benefits from it. According to a study by Rothaermel and Deeds (2011) on the impact of outsourcing strategy in Nigerian telecommunications firms, the strategy had a negative impact on the performance of the organization due to subpar service delivery, a bad network, a low level of coverage, and a rise in customer complaints. Also, according to Dun & Bradstreet's Barometer of Global Outsourcing (2017), outsourcing contracts had unexpectedly high failure rates. While there is a need to investigate outsourcing arrangements' impact on organizational sustainability further due to their rising use and the new complexity connected with them, particularly in Nigeria, this study is necessary due to the conflicting evidence and inconclusive arguments. In light of this, the goal of this study is to further our understanding of the relationship between organizational sustainability and outsourcing in manufacturing enterprises in the Enugu metropolis.

**Objectives of the Study**

1. To examine the relationship between human resource outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.
2. To determine the relationship between human resource outsourcing and environmental sustainability of manufacturing firms in Enugu metropolis.

3. To ascertain the relationship between information technology outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

**Research Questions**

a. What is the relationship between human resource outsourcing and economic sustainability of manufacturing firms in Enugu metropolis?

b. What is the relationship between human resource outsourcing and environmental sustainability of manufacturing firms in Enugu metropolis?

c. What is the relationship between information technology outsourcing and economic sustainability of manufacturing firms in Enugu metropolis?

**Research Hypotheses**

**$H_{01}$**: There is no significant relationship between human resource outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

**$H_{02}$**: There is no significant relationship between human resource outsourcing and environmental sustainability of manufacturing firms in Enugu metropolis.

**$H_{03}$**: There is no significant relationship between information technology outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

## Review of Related Literature

### Outsourcing

Many researchers have given the term "outsourcing" several various definitions. Brown and Wilson (2015) claim that outsourcing can be seen as simply the supply of services by a third party. According to Abraham and Taylor (2006), outsourcing is the practice of one firm using another company to carry out specific activities because the latter can do so more affordably or efficiently. According to Cote and Bruce (2014), outsourcing is a management approach whereby a company chooses expert firms through a competitive bidding process and assigns them to offer services that are outside the core competencies of the host company. Fiona (2016) defines outsourcing as a business strategy that takes place when a firm buys goods or services from a different company or pays a dissimilar company to assume responsibilities that the company might or else have engaged its own employees to complete. Organizations are pursuing outsourcing as a crucial strategy to increase productivity (Vining &Globerman, 2010). In the current era of globalization, businesses tend to use outsourcing to a greater level in order to survive and be profitable (Brannemo, 2016).

According to Bennedsen and Schultz (2015), comprehensive outsourcing may provide organizational, technical, and behavioral advantages as well as increase visibility of all the involved functions' problems and procedures. As more operations are integrated with information systems, active usage of outsourcing will enable a company to concentrate on a small number of strategically crucial tasks, which will then result in the ongoing improvement of its core competencies (Quinn, 2012). Moreover, improvements in corporate logistics and procedures have prompted businesses to outsource more non-core tasks. The structure and bounds of organizations have also undergone major change as a result of outsourcing. While outsourcing can undoubtedly help businesses reap enormous benefits, doing so without taking into account long-term performance risks undermining their ability to compete (Mowshowitz 1994).

Some of the common reasons organizations involved in outsourcing advances include:

**Cost Effectiveness:** Owing to the powerful rivalry in marketplaces, organizations cannot raise production costs even though asset outlays are growing as an outcome of the global financial catastrophe. So, corporations must look for methods that reduce the cost of their assets. To Stroh and Treehuboff (2013), firms who outsource their non-core proficiencies though upholding customer service acquire a competitive upper hand. Outsourcing is considered a cost-saving technique. Organizations are naturally under force to spend in human capital owing to global procedures and the objective of organizational growth. But the cost of this investment can be substantial.

**Focus on Core Competencies:** Many businesses decide to contract out portions of their operations. They do not find much benefit in growing internal activities outside of their core skills because they prefer to concentrate on those areas that the feel they are competent enough to handle (Potkány, 2008). In precise, outsourcing HR services can ease the amount of work of present-day HR specialists, allowing the firm to concentrate on building core capabilities and making strategic decisions (Hansen, 2009).

**Strategic Human Resource:** More businesses are recognizing the strategic value of the human resources (HR) function. HR acquires more with business aims and policy as HR management viewpoints move from active and managerial to strategic. The HR function is now more heavily focused on outsourcing, and this trend is rapidly gaining traction in many firms (Merritt, 2007).

**Access to Global Talent:** The flexibility to work in several time zones is provided by outsourcing to businesses in various geographic areas, which boosts overall corporate performance levels (Gupta, 2009).

**Sharing Risks:** The organization might extend obligation to the contract out organization by subcontracting some portions of business progressions. As the contract out company is characteristically a specialist, it ought to be able to improved idea for those risks. Consequently, the subcontracted company ought to be able to put up your expansion desires.

**Dimensions of Outsourcing**

This study only looks at two aspects of outsourcing: human resources and information technology. Here is a discussion of these dimensions:

**Outsourcing of Human Resources.** The practice of hiring a third-party entity to bring about more or less of a company's HR tasks and tasks is acknowledged as outsourcing human resources. Small business owners or HR professionals should think about whom else is outsourcing HR, what functions can be outsourced, and who they should outsource to when considering this option. Outsourcing is a recent development that has found widespread acceptance in contemporary businesses. Most often, the recruitment process is outsourced in order to reduce administrative costs and improve organizational efficiency (Corbett, 2014).

It is shown that companies can outsource some of their non-core human resources (HR) tasks and obtain a competitive advantage over their competitors (Beardwell&Claydon, 2017). There are numerous strategic and practical justifications for why businesses outsource their human resources (HR) functions. Specifically, impetus to shift methods towards outsourcing has come from demands for higher productivity, environmental sustainability with decreased price tag and progression, and active outcome at purchaser relationships, among other things.

**Outsourcing Information Technology (ITO).** The idea that information technology is a service or support role is related to information technology outsourcing. It primarily tries to save information technology expenses while letting outsourcing companies maintain strategic control. Some businesses support the formation of supplier companies and exercise more control over the process than they would in a multi-supplier or total management scenario. The "Application Service Provider" model of outsourcing is a more contemporary version in which businesses buy software on a use-and-transfer basis in exchange for a charge. Organizations that consider information technology to be essential to their operations maintain an internal information technology department and services (Kem & Huigang, 2012).

**Organizational Sustainability**

Every company in the world looks to be powered by organizational sustainability. This is due to the fact that no company ever wants to cease to exist; instead, they always seek to hold the highest position of authority. Munck and Souza (2009) proposed that sustainability is a state in which an organization or a community demonstrates a relation to economic, environmental, and social factors in the course of labeling and translating the meaning of this word. Sustainability, according to Emas (2015), is the idea of conserving an organization's resources for future generations. The idea of protecting resources for future generations, according to Cerin (2006), is one of the key elements that distinguish sustainability from traditional environmental policy, which also takes into account the globalization of external variables that affect environmental deterioration. Every company today is talking about sustainability because how well an organization can sustain itself is a key factor in its success. Every firm needs to plan for the future by making purposeful efforts towards sustainable development, which can be accomplished through ethical behavior.

**Measures of Organizational Sustainability**

Economic sustainability and environmental sustainability are the organizational sustainability metrics used in this study. Following is a discussion of these actions:

**Economic Stability.** According to Buried Treasure (2001), economic sustainability is "the degree to which establishment aggressively and productively employs its resources to upkeep the social and economic expansion of communities, over direct investments of cash through firm procedures that make community funds, like local track down, engagement, conglomerates, and education.

**Environmental Sustainability.** The idea of environmental sustainability, according to Kamara, Coff, and Wynne (2006), can be found as far back as the thirteenth century. It has recently come to light in management and environmental literature, beginning in the 1970s, and since then, many scholars have focused on it, despite having different opinions about its significance for maintaining the eco-system. Pathak (2015) established that the industrial uprising observed in Europe in the former century has "transformed society and its interaction with the environment, increasing the use of natural resources and the pace of development of new products and processes". The natural ecosystem has been eroded by people's constant exploitative behaviour through production activities. Roper (2012) emphasized that while weak sustainability stresses economic expansion, robust sustainability acknowledges the ecological constraints to growth and subordinates economies to the natural environment and society.

**Theoretical Framework**

This study is anchored on Resource-Based theory. This theory is discussed below:

**Resource-Based Theory**

Penrose established the Resource-Based Hypothesis in 1959. The relationship between the service provider and service recipient can be used to explain outsourcing. According to the Resource-Based View (RBV), the firm's resources serve as the primary predictors of performance. In attempting to explain sources of competitive advantage, it makes two assumptions (Barney, 1991; Peteraf & Barney, 2003). Initially, this model makes the assumption that businesses within an industry may differ in terms of the resources they manage. Second, for the reason that the resources utilized to perform business strategies are not completely movable between industries, it is assumed that resource heterogeneity will persist over time. The debate continues "If all firms in a market have the same store of resources, no strategy is available to one organization that would not also be available to all other organization in the market" (Cool, Almeida Costa & Dierickx, 2002).

Several factors are examined by the Resource-Based theory while taking into consideration personal strengths and weaknesses. RBV describes resources as both tangible and intangible assets inside the firm. Outsourcing is viewed as a strategic choice that can be utilized to close gaps in the firm's resources and competencies in light of the Resource-Based Theory of the Firm. Typically, businesses set up their own resources, which they continually evaluate in order to adapt to changes in the ever-changing business environment. Service providers employ a combination of capacity, skills, and the appropriate resources to provide high-quality products. The firm's internal resources are given more weight in the Resource-Based theory than are the external opportunities and risks brought on by industry conditions. According to the theory, a resource must have economic value, be currently rare, challenging to duplicate, non-substitutable, and tough to obtain from markets in order to provide sustainable competitive advantage.

**Empirical Review**

Egesimba (2021) looked at how outsourcing tactics affected the organizational performance of plastic manufacturing companies in Nigeria's Anambra State. The study's specific goal is to look into how employee competence and cost-cutting affect organizational success. The study's research design was quantitative. Where appropriate, multiple regression analysis was used to evaluate the study's hypotheses. The findings showed that outsourcing for staff competency has a substantial impact on organizational performance of manufacturing enterprises in Anambra State, Nigeria, while outsourcing for cost reduction has a major positive impact on organizational performance. According to the study's findings, outsources techniques significantly improved the organizational performance of plastic manufacturing companies in Anambra State, Nigeria. The report also indicates that plastic manufacturing companies could offer better terms of service, adequate training, and outsourcing strategies for their human resources operations in order to increase employee competency, lower costs, and improve performance. In order to help organizations in the area of need and prevent financial crises, plastic manufacturing companies should make an effort to provide additional frameworks for choosing outsourced vendors.

At Igwe (2021), the relationship between an oil company's decision to outsource and its productivity was the main topic. The managers of the top fourteen (14) oil marketing businesses in Nigeria participated in the survey. The study population consists of managers from the legal, finance, and IT departments as well as those from operations, procurement, and marketing. 156 people are the entire target population. Staff knowledge and understanding on the study's topic were highly valued. Using the Taro Yamane's Formula, the sample size was established at 112. Cronbach's Alpha dependability was utilized at 0.87 to examine the statistical reliability of the instrument. Simple percent and Pearson Moment Correlation were adopted for data analysis. Analysis on the data obtained from the questionnaire in order to test the hypotheses. The results showed a strong and favourable correlation between innovation and service quality. Operational efficiency and cost reduction are significantly and favourably related. Customer satisfaction and core competence are positively and significantly correlated. The study came to the conclusion that a company must evaluate the justifications for outsourcing because the appropriate decision will strengthen internal resources and increase operational effectiveness. In order to lower operational costs, the study consequently advised businesses to outsource a portion of their activities. The idea is that outsourcing some aspects of the business will save overhead expenses, which will improve their environmental sustainability.

Using Fidelity Bank Plc as a case study, Kabuoh, Chigbu, and Abasilim (2014) looked into how outsourcing affected organisational performance in the Nigerian banking sector as the case study. A straightforward yet well designed questionnaire was used to interview 33 out of 50 employees, mostly from the human resources department. For the secondary data, books, journals, and the internet were checked out. The study analysis was done using percentage and regression analysis with the help of SPSS, which was supported by the T-test. Findings showed a strong correlation between outsourcing and bank performance, which increases competitive advantage. According to the recommendations, benchmarking and environmental scanning should be used to direct strategic outsourcing. Organizational issues should also be identified before hiring a vendor.

**Method**

Descriptive analysis using tables, frequencies, simple percentages, and weighted means was used. Pearson Product Moment Correlation (PPMC), was employed on the other hand to test the hypotheses that had been developed. All the variables in this study are measured using ordinal scales, so the Pearson Product Moment Correlation is acceptable for the analysis because it can be used to define the relationship between two variables (bivariate data).Out of the 116 questionnaires distributed, 112 were retrieved and used for the study

**Decision Rule**

Accept the alternative hypothesis at a 5% level of significance and reject the null hypothesis if the significant value (P-value) is less than 0.05. On the other hand, accept the null hypothesis and reject the alternative hypothesis at the 5% level of significance if the significant value (P-value) is more than 0.05.

**Results of Data Analysis**

This section presents the statistical analysis of the data on the dimensions of outsourcing (HR outsourcing and information technology outsourcing) as well as measures of organizational sustainability (economic sustainability and environmental sustainability). Descriptive statistical techniques were used.

**Table 1**

***Descriptive Analysis of Hr Outsourcing***

| S/N | Items on HR Outsourcing | SA (%) | A (%) | U (%) | D (%) | SD (%) | Mean | Dec |
|---|---|---|---|---|---|---|---|---|
| 1 | Our company periodically hires a third party business to perform all or a portion of a business' HR duties and activities | 24 (21.8) | 67 (60.9) | 5 (4.5) | 7 (6.4) | 6 (5.5) | 3.86 | Agreed |
| 2 | Decisions about HR Outsourcing are usually made in response to a clamorous desire for lower costs for HR services | 21 (19.5) | 71 (64.5) | 2 (1.8) | 11 (10) | 5 (4.5) | 3.84 | Agreed |
| 3 | Our company is able to deliver money for considerably less money and with lower overhead costs because of HR outsourcing. | 18 (16.4) | 73 (66.4) | 7 (6.4) | 9 (8.2) | 3 (2.7) | 3.85 | Agreed |

***Source:*** *Field Survey, 2023.*

The replies to the three issues on HR outsourcing were rated on a five-point scale, as shown in Table 1. Given that the overall number and percentage of respondents who agreed on each of the three statements or items about HR outsourcing far outweighed those who disagreed, the results in the table show that the respondents are in agreement with all three of them his is further confirmed by the weighted mean ratings of the three statements/items (3.86, 3.84, and 3.85) which are above the criterion mean of 3.0 each.

**Table 2**
***Descriptive Analysis of Information Technology Outsourcing***

| S/N | Items on Information Technology Outsourcing | SA (%) | A (%) | U (%) | D (%) | SD (%) | Mean | Dec |
|---|---|---|---|---|---|---|---|---|
| 4 | Our firm outsources computing/IT systems acquisition as well as IT systems maintenance/repairs | 30 (30.9) | 57 (51.8) | 5 (4.5) | 9 (8.2) | 5 (4.5) | 3.86 | Agree d |
| 5 | Our firm's credit control and payroll services are outsourced. | 37 (33.6) | 52 (43.7) | 7 (6.4) | 8 (7.3) | 6 (5.5) | 3.96 | Agreed |
| 6 | our company outsources services like website design and IT support training. | 49 (44.5) | 44 (40.0) | 8 (7.3) | 6 (5.5) | 3 (2.7) | 4.18 | Agreed |

***Source:*** *Field Survey, 2023.*

The replies to the three issues on information technology outsourcing were rated on a five-point scale, as shown in Table 2. The results in the table show that the respondents agree with each of the three statements or items on outsourcing of information technology since the total number and percentage of those who agree on each of the three statements or items far outnumber those who disagree. This is further confirmed by the weighted mean ratings of the three statements/items (3.96, 3.96, and 4.18) which are above the criterion mean of 3.0 each.

**Table 3**
***Descriptive Analysis of Economic Sustainability***

| S/N | Items on Economic Sustainability | SA (%) | A (%) | U (%) | D (%) | SD (%) | Mean | Dec |
|---|---|---|---|---|---|---|---|---|
| 7 | The economic performance of our company is adequate in terms of sales growth. | 41 (37.3) | 35 (31.8) | 12 (10.9) | 12 (10.9) | 10 (9.1) | 3.77 | Agreed |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 8 | In positions of income firmness, our company's economic output is satisfactory. | 39<br>(35.5) | 35<br>(31.8) | 8<br>(7.3) | 13<br>(11.8) | 15<br>(13.6) | 3.64 | Agreed |
| 9 | In relations to return on investment, on our company's economic outlook is at an satisfactory footing. | 37<br>(33.6) | 48<br>(43.6) | 9<br>(8.2) | 8<br>(7.3) | 8<br>(7.3) | 3.89 | Agreed |

***Source:*** *Field Survey, 2023.*

The responses to the three questions on economic sustainability were rated on a five-point scale, as shown in Table 3. The table shows that the respondents generally concur with each of the three assertions or items on economic sustainability, as shown by the vast majority of respondents and percentages who agreed with each of the three claims or things. This is further confirmed by the weighted mean ratings of the three statements/items (3.77, 3.64, and 3.89) which are above the criterion mean of 3.0 each.

**Table 4**
***Descriptive Analysis of Environmental Sustainability***

| S/N | Items on Environmental Sustainability | SA (%) | A (%) | U (%) | D (%) | SD (%) | Mean | Dec |
|---|---|---|---|---|---|---|---|---|
| 10 | Our business improves our reputation in society. | 32<br>(29.1) | 42<br>(38.2) | 7<br>(6.4) | 19<br>(17.3) | 10<br>(9.1) | 3.61 | Agreed |
| 11 | Our business increases our social empowerment. | 36<br>(32.7) | 39<br>(35.5) | 12<br>(10.9) | 15<br>(13.6) | 8<br>(7.3) | 3.73 | Agreed |
| 12 | Our firm offers freedom and control over the sequence of our own lifestyle. | 39<br>(35.5) | 39<br>(35.5) | 8<br>(7.3) | 11<br>(10.0) | 13<br>(11.8) | 3.73 | Agreed |

***Source:*** *Field Survey, 2023.*

The responses to the three questions on environmental sustainability were rated on a five-point scale, as shown in Table 4. The table shows that the respondents generally concur with each of the three assertions or items on environmental sustainability, as shown by the vast majority of respondents and percentages who agreed with each of the three statements or things. This is further confirmed by the weighted mean ratings of the three statements/items (3.78, 3.62 and 3.57) which are above the criterion mean of 3.0 each.

**Results of Data Analysis (Testing Hypotheses)**

The significance and importance of this section hinges on the fact that the three null hypotheses formulated in this work were subjected to empirical testing. To further examine outsourcing as a tool for organizational sustainability of manufacturing firms in Enugu metropolis therefore, the hypotheses formulated were tested using Pearson Product Moment Correlation (PPMC) through the help of Statistical Package for Social Sciences (SPSS) 21.0 version. The decision rule for accepting or rejecting any of our hypotheses is stated below:

**Hypothesis One**

**$H_{01}$:** There is no significant relationship between HR outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

**$H_{A1}$:** There is a significant relationship between HR outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

**Table 5**

***Pearson Product Moment Correlation (PPMC) Analysis On HR Outsourcing and Economic Sustainability***

| | | HR Outsourcing | Economic Sustainability |
|---|---|---|---|
| HR Outsourcing | Pearson Correlation | 1.000 | .664** |
| | Sig. (2-tailed) | . | .022 |
| | **N** | **110** | **110** |
| Economic Sustainability | Pearson Correlation | .664** | 1.000 |
| | Sig. (2-tailed) | .022 | . |
| | **N** | **110** | **110** |

**. Correlation is significant at the 0.05 level (2-tailed).
***Source:*** *Field Survey, 2023 (SPSS 21 Output).*

Table 5 above has a probability value of 0.022 and a Pearson Product Moment Correlation (PPMC) coefficient of 0.664. This result implies that there is a strong positive relationship between HR outsourcing and economic sustainability. As the significant value (P-value) of 0.022 is less than 0.05, we reject null hypothesis one (H01) and come to the conclusion that there is a substantial relationship between knowledge HR outsourcing and the economic sustainability of manufacturing companies in Enugu metropolis.

**Hypothesis Two**
**$H_{02}$:** There is no significant relationship between HR outsourcing and environmental sustainability of manufacturing firms in Enugu metropolis.
**$H_{A2}$:** There is a significant relationship between HR outsourcing and environmental sustainability of manufacturing firms in Enugu metropolis.
**Table 6**
***Pearson Product Moment Correlation (PPMC) Analysis on Hr Outsourcing and Environmental Sustainability***

| | | HR Outsourcing | Environmental Sustainability |
|---|---|---|---|
| HR Outsourcing | Pearson Correlation | 1.000 | . 679** |
| | Sig. (2-tailed) | . | .006 |
| | **N** | **110** | **110** |
| Environmental Sustainability | Pearson Correlation | .679** | 1.000 |
| | Sig. (2-tailed) | .006 | . |
| | **N** | **110** | **110** |

**. Correlation is significant at the 0.05 level (2-tailed).
***Source:*** *Field Survey, 2022 (SPSS 21 Output).*

A probability value of 0.006 and a Pearson Product Moment Correlation (PPMC) coefficient of 0.679 are shown in Table 6 above. This finding suggests that there is a significant link between environmental sustainability and HR outsourcing. Choose the second hypothesis: We reject null hypothesis two (H02) and come to the conclusion that there is a significant association between HR outsourcing and the environmental sustainability of manufacturing enterprises in the Enugu metropolis since the significant value (P-value) of 0.006 is less than 0.05.

**Hypothesis Three**

**H03:** There is no significant relationship between information technology outsourcing and economic sustainability of manufacturing firms in Enugu metropolis.

**Table 7**

***Pearson Product Moment Correlation (Ppmc) Analysis on Information Technology Outsourcing and Economic Sustainability***

| | | **Information Technology Outsourcing** | **Economic Sustainability** |
|---|---|---|---|
| Information Technology Outsourcing | Pearson Correlation | 1.000 | .744** |
| | Sig. (2-tailed) | . | .000 |
| | **N** | **110** | **110** |
| Economic Sustainability | Pearson Correlation | .744** | 1.000 |
| | Sig. (2-tailed) | .000 | . |
| | **N** | **110** | **110** |
| | Sig. (2-tailed) | . | .000 |
| | **N** | **110** | **110** |

**. Correlation is significant at the 0.05 level (2-tailed).

*Source: Field Survey, 2023 (SPSS 21 Output).*

A probability value of 0.000 and a Pearson Product Moment Correlation (PPMC) coefficient of 0.744 are shown in Table 7 above. This finding suggests that information technology outsourcing and economic sustainability are strongly positively correlated. Choice about Third Hypothesis: We reject null hypothesis three (H03) because the significant value (P-value) of 0.000 is less than 0.05 and because there is a strong correlation between information technology outsourcing and the economic viability of manufacturing enterprises in Enugu metropolis.

**Discussion of Findings**

The study looked at the connection between organizational sustainability and outsourcing in Enugu's industrial sector. The following is a discussion of the study's findings:

**Relationship between HR Outsourcing and Economic Sustainability**

The first hypothesis stated that there is no significant relationship between HR outsourcing and economic sustainability of manufacturing firms in Enugu metropolis. The null hypothesis one was tested at 5% level of significance. The result showed the probability value to be 0.022 while the alpha value was 0.05. Following the decision rule, the null hypothesis one was rejected. This means that there is a significant relationship between HR outsourcing and economic sustainability of manufacturing firms in Enugu metropolis. This finding is supported by the work of Oladosu (2016) who found that HR outsourcing is a major determinant of environmental sustainability and economic sustainability as it significantly contributes to increased sales turnover and how efficient an organization is.

**Relationship between HR Outsourcing and Environmental Sustainability**

According to the second hypothesis, there is no connection between Enugu metropolis's manufacturing companies' environmental sustainability and HR outsourcing. A 5% level of significance was used to test the second null hypothesis. The outcome indicated that the alpha value was 0.05 and the probability value was 0.006. The second null hypothesis was disproved in accordance with the decision rule. This indicates that there is a strong link between HR outsourcing and the manufacturing companies in the Enugu metropolitan' commitment to environmental sustainability. This conclusion is reinforced by the work of Oladosu (2016), who discovered that HR outsourcing considerably affects how effective an organization is and how sustainable the business is for the environment and the economy.

**Relationship between Information Technology Outsourcing and Economic Sustainability**

According to the third hypothesis, there is no connection between the economic viability of industrial companies in the Enugu metropolis and information technology outsourcing. The 5% level of significance was used to test the third null hypothesis. The outcome indicated that the alpha value was 0.05 and the probability value was 0.000. The null hypothesis number three was disproved in accordance with the decision rule. The economic viability of manufacturing companies in the Enugu metropolis is therefore significantly correlated with information technology outsourcing. The findings of Kabuoh, Chigbu, and Abasilim (2014), who demonstrated a significant link between information technology outsourcing and organizational economic sustainability, confirm this conclusion.

**Summary of Findings**

The results of the data analysis are summarized as follow:

1. The economic viability of industrial companies in the Enugu metropolis has a favorable and significant association with HR outsourcing.
2. In the Enugu metropolis, manufacturing companies' environmental sustainability and HR outsourcing have a favorable and significant association.
3. Information technology outsourcing and the economic viability of industrial companies in the Enugu metropolis are positively and significantly correlated.
4. Information technology outsourcing and the environmental sustainability of manufacturing companies in the Enugu metropolis have a favorable and significant association.

**Conclusion**

This study has demonstrated a link between outsourcing and the organizational sustainability of manufacturing companies in the Enugu metropolis. The study's findings demonstrated that the types of outsourcing (human resources outsourcing and information technology outsourcing) that were used in this study considerably and favorably impacted the measures of organizational performance (economic sustainability and environmental sustainability). According to the study's findings, outsourcing significantly improves the organizational performance of manufacturing enterprises in the Enugu metropolis.

**Recommendations**

Based on the findings of this study, the following recommendations are made:

1. To ensure their survival, manufacturing companies should keep exporting other services where they do not have a competitive advantage over their rivals. Manufacturing firms should focus more on its core duties where it enjoys unique competitive capabilities, while outsourcing its non-core functions. It should however, integrate outsourcing programmes into the corporate strategy of the organization to eliminate waste or duplications in resource application.
2. Food and beverage manufacturing organizations should adopt the outsourcing method to improve overall performance because it has been linked to cost savings, increased economic sustainability, and environmental sustainability.

3. Manufacturing companies that outsource HR and IT should keep an eye on the contractor's operations and maintain regular communication.

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# Issues in Developing Research Skills of Postgraduate Education Students in Nigeria

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## Abstract

The quality of theses and dissertations submitted by postgraduate education students has drawn the attention of researchers and supervisors to reassess the effectiveness of teaching and learning of research methods and statistics courses in Nigerian universities. The clarion call is to build research skills of education students in addition to imparting knowledge of the course contents. This paper identified domains of research skills which include basic research skills, problem-solving and communication skills, professional ethics, dissemination skills, and critical thinking skills, among others. It also examined some of the issues in developing graduate students' research skills and the challenges they pose for research productivity in education. The issues examined are poor teaching and learning, poor attitude of students, nature of research methods and statistics, trivializing teaching and learning of research skills, inadequate provision of IT infrastructure and facilities, and issue of research mentorship and supervision. A call was thereafter made for review of current teaching and learning methods to adopt innovative active learning strategies that are technology driven, among others. It was concluded that with adequate faculty research strategy, proper funding and provision of IT infrastructure and facilities, effective mentorship, and paradigm shift from research knowledge acquisition to research skills development, among others, research and statistics teachers will enhance postgraduate education students' research skills and upskill theirs for research productivity and institutional visibility.

**Key words: Postgraduate Education Students, Research Skills Development, Issues, Challenges**

## Introduction

Research is one of the three mandates of university education world-wide. Large volume of research and publications from the academic community of a university makes it to be classified as world-class. Research leads to discovery, innovation, creation and invention of technologies and products that can help to improve and solve numerous political, socio-economic, cultural, technological, and environmental problems (Blackburn, et al., 2000). Furthermore, research and innovation are regarded as the keys to global competiveness in the 21st century

(Aripin, et al., 2020). The need to use research as the basic pillar for expansion of knowledge in different fields of endeavour has also been stressed (Albalawi & Johnson, 2022) because knowledge and practical expertise in research are key elements for success of individuals in the 21st century global world. It has also been observed that most literature focused mainly on the teaching aspect of university mandates, while research skills development was hitherto relatively neglected (Mafenya, 2014; Garg, et al., 2018). According to Mafenya (2014), the neglect of research skills development will lead to decline in research output and inability of university education system to meet the research and development agenda of any nation. These observations underscore the need for developing nations like Nigeria to engage in scientific research for national development in the modern era of globalization through university education.

In the light of this, the National Policy on Education in Nigeria (Federal Republic of Nigeria [FRN], 2013) stresses the need for university research to be relevant to the nation's developmental goals and need for universities to collaborate with government, industries and global community to conduct research and disseminate its findings. One of the key roles of university education is to create and disseminate knowledge, impart essential research skills to students and prepare them for the global world of knowledge economy. Consequently, research skills have been identified by universities as an attribute of great importance that needs to be imbibed by students for use in the workplace. Research is also one of the compulsory courses offered by postgraduate students in higher institutions of learning. It is therefore imperative that graduates in various fields, including education, offer research methods and statistics as compulsory courses in order to develop requisite research skills for conducting research. Continuous development of research skillsthrough provision of post graduate and in-service training opportunities in the university is necessary for meeting global challenges. It is also necessary to use research to enhance the image and reputation of the university, contribute to knowledge base, develop new ways of doing things and solving societal problems among others. It has been observed that teachers at the secondary and higher education levels have insufficient research training and low research skills (Ellis & Loughland, 2016). They submit poor quality research projects (Okebukola, 2002as cited in Dien & Bassey, 2019; Aripin, et al., 2020), hence the need for examining issues in developing research skills of postgraduate education students. Thus, this chapter examined the basic concepts, and discussed issues and challenges in developing research skills of teachers in the university education system. Thereafter, policy recommendations were made on how postgraduate education students can be adequately equipped with requisite research skills during their masters, doctoral, and postdoctoral studies to enable them engage in research for national development and global competitiveness.

## Conceptualising Research and Research Skills

Research is a scientific activity that is geared towards creating and extending frontiers of knowledge, formulating theories and solving societal problems. It is a scientific activity because it adopts the scientific method in its process, which includes identification of problem, formulation of hypotheses, designing the experiment, conducting the experiment, hypotheses testing, and drawing of necessary inferences. Application of scientific method to acquisition of knowledge and finding solution to problems are the major concern of research. It is therefore regarded as an empirical investigation into the unknown, and a scientific method of finding solution to a problem and searching for new knowledge. Kerlinger (1979) defined research as a systematic, controlled, empirical and critical investigation of hypothesized propositions about the presumed relations among natural phenomena. Research in education is simply defined as the application of scientific methods in finding solutions to educational problems by Awotunde and Ugodulunwa (2004); while it is regarded as “a systematic search for solutions to many issues that characterize education as a process, as a practice, and a significant sector of the nation’s economy” by Joshua (2018, p. 2). The central focus of the various definitions of research is that it is a scientific activity geared towards knowledge creation and solution of problems.

Research in education is based on scientific methods, hence the adoption of identifiable procedure which consists of problem identification, literature review, formulation of hypotheses, design of study, collection and analysis of data, interpretation of data and drawing of necessary inferences. By its process educational research has the characteristics of scientific research by being systematic, replicable, objective and empirical (Ugodulunwa, 2002). Educational research aims at addressing numerous problems that abound at the primary, secondary and tertiary levels. It also aims at creating new knowledge to extend the frontiers of education as a concept, discipline, process, and the way it is practiced. Consequently, educational researchers attempt to contribute to knowledge by addressing problems of teaching, learning, instructional methods, infrastructure and facilities. They also focus their research efforts towards discovering the impact of new technologies in teaching and learning situations, curriculum evaluation, instructional strategies, assessment systems, guidance and counseling, management and planning of education, special needs education, education access and quality, funding, and 21st century skills, among others. The need for research in education cannot be overstressed because no discipline can remain relevant without periodic extension of its frontiers. Postgraduate education students therefore need to expand their knowledge base and skills to enhance their educational practices through their professional development. They need to be equipped with requisite knowledge and skills for effective participation in educational research at different levels of education so as to justify their conclusions. They should read research reports and conduct action research from time to time to improve their teaching to solve problems confronting them in school. They should also try-out new methods of teaching in order to gain understanding of learners' characteristics. They cannot play these roles without possessing requisite research skills.

Research skills are important skills for professional development of teachers (Fongwat, et al., 2022). Research skills include competence in the use of tools, development of strategies, problem-solving skills, critical thinking, and dissemination of research results (Meerah & Arsad, 2010). They are complex, higher order tasks that require effort to be well developed over time (Badke, 2012).Furthermore, Badke described research skills as the ability to identify a problem, relevant sources of data for addressing the problem, locate the data efficiently, evaluate the data to determine its quality and relevance, and the ability to use the data effectively for addressing the problem. Ghamandi and Kokane (2023) alsoreferred to research skillsas the ability of an individual to create new concepts and understand the use of data collection. They are also advanced skills for problem solving (Fongwat et al., 2022). Research skills can therefore be simply conceptualised as the capability an individual possesses that enables him/her to collect vast array of data, analyse the data critically, and draw meaningful conclusions based on the data.

Essential research skills that should be developed in postgraduate education students are those necessary for assuring continued relevance in their jobs, hence the need to develop research skills that are increasingly essential across various jobs such as ability to work with data and use the data to make informed decisions. Examples of research skills identified by Awodoyin,et al. (2020) include critical thinking, organization of ideas, sense of direction, information gathering and organization, communication skills, reading skills, research report writing, data analytics and interpretation. It is also worthy of note that developing research skills is not confined to academic environment or just passing research methods and statistic courses, but they are essential for survival in today's information-driven society characterised by change. Innovations and developments are important in the university education system, hence the need for students to develop thinking skills, creativity, competence in analysis and capability to create knowledge (Alvarado et al., 2016); as well as ability to locate sources of information, evaluate and make good use of them (Purdue University, 2013). Practical research skills identified by Faculty General Dental Practice ([FGDP], 2007) include basic skills, problem-solving and communication skills, professional ethics, dissemination of findings, and engagement in activities that contribute to knowledge development, address significant issues, and support of other researchers. According to FGDP (2007), basic research skills also involve finding and using resources, effective use of the library and information technology, recognizing resources, observing behaviours and basic computer literacy. Problem-solving and communication skills refer to ability to understand, recognize, evaluate and generate objective information; while professional ethics deal with awareness of ethical principles in research activities and adherence to them. Dissemination involves ability to demonstrate the basic skills in presenting research findings and in their publication.

Other essential research skills include critical thinking (Huddleston, et al., 2020), which allows the researcher to seek relevant information from different sources to develop informed point of view, ability for the individual to think independently and articulate his/her own opinion using supporting evidence from literature; as well as creativity, judgement, organization and persistence (Showman, et al., 2013). For Showman, et al. (2013), creativity requires originality, conducting research in their discipline to spark new ideas, while good judgement deals with ethical issues and concerns when dealing with ethical dilemmas to arrive at safe conclusions. To them communication is the ability to develop and maintain good working relationship with supervisor or mentor in order to improve students' research. Furthermore, organizational skills are those required by students for schematizing their ideas; while persistence drives the investigation and enables researcher to complete a particular investigation. Ugodulunwa (2002) and Odu (2018) also identified research skills to be developed by students in the elements of educational research process. They include skills in problem identification and delineation, critical review of literature, hypotheses formulation, statistical analysis and documentation. Others are educational research designs, sampling, methods of data collection, data organisation, and presentation of research proposals and reports. The need for training graduate education students effectively on the use of research skills among others cannot be over-emphasised (Cakmak, 2017; Jennings, 2020).It is necessary to develop research skills of graduate education students to enhance their productivity and improve the quality of their research as well as extend frontiers of knowledge in their respective fields.

One of the critical challenges in education is developing research skills of postgraduate education students. This challenge is addressed by the inclusion of research methods and statistics courses in their programmes. Postgraduate education students are taught research methods and statistics in faculties of education in universities in Nigeria to equip them with research skills that will enable them function effectively as teachers and researchers. These students also undertake research projects in partial fulfillment of requirements for the award of postgraduate degrees and certificates in their respective fields. In addition, the different research courses they offer also enable them articulate the different steps in educational research process, undertake action research, and critique research studies as well as integrate research findings in their teaching. Some of the postgraduate students who are employed to take over from ageing academics in the university education system are expected to possess requisite research skills for survival in their academic career. They are also expected to perform the trifocal functions of teaching, research and community service when they are employed. These tasks interact in different ways for each university teacher and form part of the criteria for promotion, hence the need for continuous research skills training for them beyond the ones they developed during their undergraduate and postgraduate programmes.

**Issues in Developing Research Skills of Teachers in Nigeria**

The importance of research for professional development of teachers and their practices has been acknowledged in literature (Albalawi & Johnson, 2022; Ulla, 2018). It is believed that through educational research, pedagogical and administrative practices can be enhanced for achieving national goals of education. Furthermore, research is essential because standards for teaching and learning are now higher than they were before because of the emergence of technology in education and other disciplines. Teachers therefore need greater knowledge and skills for survival and success in their profession in the 21st century for global competiveness and visibility in the world of work. However, experience in teaching research methods and statistics courses and supervision of postgraduate education students research over the years has shown that many of them are extremely slow in imbibing research skills, so that the quality of projects produced by them is poor. This personal observation corroborates that of Okebukola (as cited in Dien & Bassey, 2019) that there is a serious challenge among scholars concerning the quality of projects prepared by education students in universities in Nigeria. Okebukola also observed that university students' performance in research methods examination is not commensurate with growing demand for good research that meet the local and international standards. It is therefore important to note that building research skills of postgraduate education students requires improving their mastery of knowledge, skills, and continuous professional development. It requires going beyond imparting subject knowledge and ensuring that they pass their examinations to inculcating research skills in the students. Developing research skills requires concerted efforts from the students, teachers who teach the research methods and statistics courses, research supervisors who are mentors, managers of Postgraduate programmes and management of universities. It has also been observed that acquisition of poor research skills poses daunting challenges to postgraduate education students who find it very difficult to write their theses and dissertations resulting in their inability to complete their postgraduate programmes on schedule (Akuegwu & Nwi-ue, 2018).Some of the students abuse the research process by falsifying reference dates, plagiarism, completing their research instruments without going to the field, which lead to findings, conclusions and recommendations that are not valid and reliable (Dien & Bassey, 2019).The major question that arises is "What are the issues in developing research skills of graduate students in Nigeria?" Some of the issues that constitute threat to developing research skills of teachers are presented in the subsequent part of this paper.

***Poor Teaching and Learning***

Research methods and statistics courses are taught using lecture method, which requires the teacher to pass information to students while the students copy notes and are passive learners. The emphasis is usually on coverage of the curriculum and not development of research skills. This is contrary to Badke (2012) suggestion that adult students should be educated on how to identify and use advanced features of databases to find what they need, made to utilize their critical thinking abilities in realistic research situations, and helped to develop the skill of stating research problem clearly and concisely.Methods of teaching and learning of research skills should therefore not be modified if the students are to imbibe requisite research skills. There is need to build on the individual experiences and capacities of graduate students such as critical thinking and good time management, while trying to build their research skills. Research skills that need to be developed in this age of globalization in addition to basic research skills of information seeking include scientific knowledge, ability to learn and adapt, ability to formulate research problems, capacity to analyse data using statistical software, ability to work in interdisciplinary environment. Lack of preparedness to learn on the part of the students is also a significant factor that contributes towards inability to imbibe research skills. The quest for certificate to enable them get promotion in their workplace or get employed in higher education institutions may be a major driving force for some of the graduate students for enrolment into postgraduate programmes. Such students may lack basic research skills they are assumed to have acquired at the undergraduate level. This may make them lose interest in postgraduate research methods and statistic courses that they perceive as abstract and difficult to learn. There is also the problem of large classes which makes it impossible for the teacher to give individual attention to students and give assignments for continuous monitoring of teaching and learning of the courses.Consequently, there is little or no room for giving the students better research experiences and orientation they require for conducting research projects and performing their future work as teachers creditably.

Effective teaching takes place when the teachers have mastery of their subject-matter and possess personal qualities and pedagogical skills that will enable them facilitate learning. Since mere inclusion of research method courses into the curriculum does not guarantee the development of research skills among graduate students, use of appropriate instructional pedagogies and appropriate curriculum is advocated (Garg et al., 2018).The course teachers should therefore diversify their methods of teaching and expose the student teachers to basic research process through rigorous teaching, reading and learning tasks such as fieldwork, term papers, seminars, class presentations, laboratory sessions, tutorials, group discussions, problem-based assignments and the final year thesis required for graduation (Nordin & Mohamed, 2013; Josoha & Abidinb, 2012). Evidence from literature has shown that research skills of students can be developed through a variety of learning methods and techniques such as inquiry learning (Chu, et al., 2008; Craig & Bielenberg, 2015); research assignment activities (Prahmana, Kusumah, &Darhim, 2016 as cited in Aripin, et al., 2021); and writing research papers (Lander, Seeho, &Foster, 2019), among others.The major challenge is how to address the problem of poor teaching and learning of research methods and statistics. To address this issue, attention should be paid to quality of teacher training, recruitment and continuous professional development of the teachers as well as admission policy into undergraduate and postgraduate programmes in education.Research skills are complex, so sufficient time and effort are required to cultivate the tasks as observed by Badke (2012).

***Poor Attitudes and Nature of Research Methods and Statistics***

Postgraduate students perceive research methods and statistics courses to have little practical value, abstract, and difficult to learn. The challenges of the nature of research methods and statistics teaching and learning identified by Lundahl (2008) include difficulty in understanding abstract concepts in the courses, difficulty in simplifying the content of the courses and making tasks and assignments relevant to students. Others are students' negative attitudes towards learning, anxiety and fears. Students come to class with these notions and fail to see the relevance of the course to their lives, to their discipline, and career because many of them are not seeking careers in academia as observed by Awodoyin, et al. (2020).Consequently, many of the students place little or no value in learning research skills but struggle to pass examinations in the courses or to obtain requisite degree certificates. Making graduate students understand that research skills among students could improve their job opportunities is another challenge that needs to be addressed. They should also be acquainted with other benefits of acquiring research skills which include inducting students into the values and ethics of their discipline and developing generic skills such as critical and analytic thinking, information gathering and evaluation, and problem-solving skill (Webb, Smith, & Worsfold, 2011).They should also be encouraged to participate in research-related activities faculty research seminars, conferences, training workshops, research assignments, projects and be made to present academic papers in the courses they offer.

To address the challenging nature of the courses, the teachers should demystify the learning of the courses by making the learning more attractive to students through meaningful engagement by allowing the students to learn by doing, making research learning authentic, using cooperative teaching-learning strategies to enhance students' skills in problem solving. Innovative teaching strategies should be adopted by teachers by continuously utilising formative assessment procedure in the instructional process to identify strengths and weaknesses of students to enhance their learning and performance. Furthermore, level of research interest has been found to be higher than confidence and experience in changing research skills of students (Firich, et al., 2013). Active learning in research methods and statistics classes should involve carrying out research and not merely reading it or listening to teacher deliver the lectures. Research teachers should therefore explore different active learning strategies in teaching research methods and statistics. Active learning refers to instructional techniques that involve learners in teaching and learning activities, make learners to take responsibility for their own learning, and to establish connections between ideas by analysing, synthesizing and evaluating (Lundahl, 2008). Examples of active learning strategies include inquiry, collaborative, problem-solving, discussion, reviewing, and evaluating, concept mapping, student project, hands-on projects, skill practice, and role playing. Others are writing exercises, and cooperative group studies can be used to develop higher-order thinking skills, stimulate students' interest and actively engage them in different activities in the research process.

***Trivialising Teaching and Learning of Research Skills***

Most university students are weak in research skills because the emphasis of the teacher is on acquisition of knowledge of research methods and statistics with little or no time provided for meaningful engagement in different aspects of the courses such as information sourcing, developing instruments, data collection, analysis and interpretation, as well as dissemination of information through journal publication. Although, the methods of teaching research are similar to those adopted in teaching other courses, it requires the use of specific skills such as use of technology, cooperative teaching-learning strategies and value-based methods (Paragas, Ferrer, Perez, &Tello, 2021). The application of technology in teaching research methods and statistics requires use of software in data analysis rather than use of manual computation. Teachers need to demonstrate at least the use of Statistical Package for Social Science (SPSS) to enable the student teachers adopt technology in research as an innovation in the 21st century digital world characterized by information and communication technology (ICT). It is expensive, but it meaningfully engages students in learning. Cooperative teaching-learning method is project-based learning strategy that enhances students' problem-solving skills. Thus, the methods of teaching research methods and statistics should be a two-way process as suggested by Paragas et al. (2021) where students are given problems to solve under the guidance and supervision of teachers. The teacher also needs to promote social responsibilities in the teaching-learning process by giving value to education. This can be achieved by creating a strong learning environment that enhances academic achievement and develops life-long social and relationship skills of students. It therefore means that the traditional method of teaching research and statistics courses are not effective for developing research skills of graduate education students and calls for change by using active methods of learning that will enable the graduates to possess practical research skills identified in literature for productive engagement in research. The students can therefore be made to collaboratively generate hypotheses, develop questionnaire, design a study, select sample for study, collect data, analyse data using software, interpret and communicate results in active learning situation to enable them imbibe research skills.

***Inadequate Provision of Information and Technology (IT) Infrastructure and Facilities***

The dearth of more standard classrooms, standard IT laboratories, e-books, e-journals, requisite computer hardware and software is a serious issue in teaching and learning of research methods and statistics courses in many education faculties in universities in Nigeria. This opinion is shared by Olasupo (2017), who observed inadequacy in infrastructural facilities in public universities in Nigeria. Many of the students are not computer literate and do not possess personal laptop computers. Consequently, the teachers cannot effectively apply technology in teaching the courses and cannot give students hands-on activities that will help them acquire the necessary research skills. Furthermore, some of the course teachers do not have adequate knowledge and skills needed for effective information sourcing and data analysis using technology and relevant software. What goes on in the research and statistics classroom managed by this kind of course teachers should therefore be better imagined than observed. Since developing of research skills is predicated upon availability of both human and material resources in the universities, acquisition of research skills by student teachers will be a mirage if the situation is not rectified. Effective teaching and learning of the courses requires availability of competent teachers with requisite research knowledge and skills. It also requires availability of infrastructure, such as large standard classrooms and computer laboratories domiciled in the faculty, computer hard and software, uninterrupted high internet speed, constant power supply, well-equipped libraries with current e-journals and e-books, among other facilities. Supporting evidence has shown that journals provide good avenue for finding various research output and a good source for identifying gaps for future research and that infrastructural facilities are very important in teaching-learning process (Oyedeji, 2012; Olasupo, 2017). The major challenge therefore is adequate funding of universities in Nigeria to enable them provide required human and material resources that are required for meaningful engagement of postgraduate students to enable them acquire requisite research skills the to fit digital global workplace. The fund should also accommodate cost of purchase of sufficient number of hardwares, softwares, provision of network, software development, technical support and maintenance services. These challenges need to be considered when decisions are being taken about developing research skills of postgraduate education students and upskilling of the knowledge of their teachers.

***Issue of Research Supervision***

Research supervision is an intensive one-to-one teaching of research, where the work of the student is evaluated by the supervisor, who provides feedback periodically for improvement. The process involves interaction between the supervisor and the students, where the former provides guidance for successful completion of the research project or thesis(Ugodulunwa& Imo, 2018). They also observed that effective supervision exists when every student and supervisor is treated respectfully through maintaining appointments, attending meetings well prepared, maintaining confidentiality, and building relationship that is free from all forms of prejudices and malpractices. Nonetheless, many research supervisors complain that many of their postgraduate students lack research skills and wonder whether the students were taught research methods and statistics courses at all. This complaint should be addressed by making the teaching and learning of the courses meaningful. Active and innovative teaching and learning methods, such as problem-solving and communication skills, professional ethics, dissemination skills, and critical thinking skills, among others should be applied.However, research supervisors, who serve as mentors,should provide support to the students through proper guidance, provision of prompt corrective feedback, as well as guarding against plagiarism.They should ensure that the students participate in research seminars, attend conferences, and conduct their research by themselves. Research supervisors should be adequately motivated to rise to the challenge of supporting the research methods and statistics lecturers in developing research skills of the students. The motivation should include prompt and adequate remuneration, regular capacity building on research skills and thesis supervision among others to enable them carry out their role effectively and efficiently.

**Recommendations**

The plethora of problems and challenges in developing research skills of graduate students in education cannot be effectively addressed without reviewing the existing curriculum of research methods and statistics and provision of both human and material resources needed in modern age that is technology driven. The following policy recommendations are made in order to meet the challenges of developing research skills of graduate education students.

1) Establishing a faculty strategy for strengthening research skills of university teachers and graduate students. This requires a faculty reflection about the purpose and aspects of research skills such as literature sourcing and evaluation, writing skills, methodological skills, analytical skills, problem-solving and communication skills, dissemination skills, critical thinking, and research ethics. The best approaches for developing the skills should be identified and enshrined into the faculty research strategy to enhance the research skills of both the course teachers, students' research supervisors, undergraduate and postgraduate students.

2) Integrating the faculty research strategy in the University's research policy guidelines and effective monitoring and evaluation of compliance by the research method teachers, theses supervisors, and the students. There should be provision for regular review of this process to adapt to the IT world that is characterized by change.

3) Developing standards for teacher competence to teach and supervise students to enable the students realise the benefits of acquisition of research skills such as research productivity, institutional visibility and ranking.
4) Capacity building in research and statistics for academic staff for both upskilling and reskilling is imperative. This should be made a priority in order to achieve the trifocal mandates of university education which are teaching, research and community service because teaching and community service are research driven. The capacity building efforts, like workshops, shouldbe directed at developing essential research skills in the educational research process among other critical ones identified in this paper.
5) Finally, developing a faculty framework of support to engage and empower supervisors and postgraduate students in education, as well as clear guidelines on how to provide feedback to students is also essential for maintaining uniform standards on the educational research methods and procedure.

## Conclusion

This paper conceptualized research and research skills as vital components of university education. It identified domains of research skills which include basic research skills, problem-solving and communication skills, professional ethics, dissemination skills, and critical thinking skills, among others. It also examined some of the issues in developing graduate students' research skills and the challenges they pose for research productivity in education. The issues examined are poor teaching and learning, poor attitude and nature of research methods and statistics, trivializing teaching and learning of research skills, inadequate provision of IT infrastructure and facilities, and issue of research mentorship and supervision. A call was made to review the current teaching and learning methods to adopt innovative active learning strategies that are technology driven, among others. It was concluded that with adequate faculty research strategy, proper funding and provision of IT infrastructure and facilities, effective mentorship, and paradigm shift from research knowledge acquisition to research skills development, among others, research and statistics teachers will enhance postgraduate education students' research skills and upskill theirs for research productivity and institutional visibility.

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# Test Item Order and Students' Achievement Measure in Economics Multiple-Choice Test Items

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**Abstract**

This study examined the efficacy of multiple-choice test item order on students' academic achievement in multiple-choice Economics achievement test in Oshimili North and Oshimili South Local Government Areas of Delta State, Nigeria. Descriptive-comparative survey research design was adopted for the study. The population of the study comprised all senior secondary (SS) III Economics students in 26 public senior secondary schools in 2021/2022 academic session. The sample of the study was 151 SS III Economics students in three randomly selected secondary schools; hence three intact classes of 57, 51 and 43 Economics students participated in the study. The instrument for data collection was a-30 item multiple-choice Economics achievement test (EAT) constructed by the researcher using table of specification and validated by three subject experts. The items in the validated EAT were arranged into three forms namely; forward (Easy-to-Hard), reverse (Hard-to-Easy), and random (Scrambled/Unsystematic) order and subjected to Kuder-Richardson formula (KR-20) and a reliability coefficient of 0.76, 0 .72 and 0.74 was obtained for the forward, reverse and random order test respectively. Data collected on the research question was analysed descriptively using Mean and standard deviation test statistics whereas the hypothesis was tested at 5% (.05) level of significance using one-way analysis of variance (ANOVA). The results showed a difference in the achievement measures of students between reverse ($M$ = 17.28), forward ($M$ = 16.58) and random ($M$ = 14.35) multiple-choice Economic test indicating learning (practice) effects, and a significant difference in students' achievement measure between forward, reverse and random ordered items in favour of reverse and forward item sequence indicating context effects. The study recommended among others that teachers and examination bodies should arrange multiple-choice Economics achievement test in forward and reverse item order to curb the pervasive examination dishonesty in both small- and large-scale achievement testing and enhance achievement.

**Keywords: Economics, Forward Order, Reverse Order, Random Order, Multiple-Choice, Recency Effects, Practice Effects, Context Effects**.

## Introduction

Achievement testing is one of the processes of collecting objective information (scores or grades) on the basis which informed decision regarding learners' progress are made. Despite the roles of achievement testing, it is criticized for inducing among others, social consequences such as the fear of failure, the humiliation of losing promotion to the next class or gaining admission into choice programme of study hence, students engage in examination malpractice to avert the shame of being labeled a non-achiever or an underachiever. Examination dishonesty has become pervasive impeding the goal of accurate measurement of students' ability or achievement leading to wrong decision-making which gives ground to employers of labour and institutions of higher education to discredit grades and certificates awarded to students. In attempt to check widespread examination dishonesty among testees, test writers develop different forms of the same multiple-choice test by altering item sequence known as test item order.

Test item order is the arrangement of items in a particular test into different effective forms of forward (easy-to-hard), reverse (hard-to-easy) and random (scrambled) in effort to safeguard the test. This is attained by either maintaining the position of the answers in the different forms of tests or by changing the position of the answers across the various forms (Hohensinn & Baghaei, 2017). However, changes in test item order or position are capable of affecting students' perception and academic performance on a test (Shepard, 1997 as cited in Ollennu & Etsey, 2015; Pettijohn& Sacco, 2001). That is, changes made to test item position or position of the answer have unintended consequences on the item characteristics of item difficulty and discrimination along with test characteristics of validity and reliability thereby influencing students' achievement measure in multiple-choice Economics achievement test. It is in the merit of the aforementioned that this study examined the efficacy of test item order on students' academic achievement in Economics multiple-choice test items.

## Related Literature

Changing the order of items between test forms or changing the position of the answer option to safeguard the test from cheating is a standard practice in achievement testing (Debeer& Janssen, 2013; Hohensinn & Baghaei, 2017).Item position (IP) also known as item arrangement or sequence is a system of organizing test items into easy-to-hard (forward), hard-to-easy (reverse), or scrambled (random) order (Ollennu & Etsey, 2015; Schee, 2009).

Arrangement of test items into various forms is novel but some test experts argued that since the content of the test forms are the same, the order of items or the positions of the answer in the options do not have any effect on item characteristics (item difficulty and discrimination) and other psychometric characteristics of the test as long as the keys (answers) are randomly assigned to positions or are equally distributed (balanced distribution) (Attali & BarHillel, 2003). However, Ollennu and Etsey (2015) contend that minute changes to test item position are capable of bringing about a marked difference in the academic performance of students. Debeer and Janssen (2013) affirm that changes in test item order may affect the characteristics of the items and the test. This implies that changes in test item order make test items to be relatively difficult and rather discriminating as well as making the test more or less reliable. Similarly, Hohensinn and Baghaei (2017) posit that when same items are presented in different forms, it is difficult to maintain a common metric to compare examinees who take the different forms of a test since the difficulty parameters of the items may change across forms due to context effect.

When changes are made to positions of items in a test, item characteristics (item difficulties and item discriminations) are affected resulting to item position (IP) effects (Mollenkopf in Nagy et al., 2018). The tendency for a test to become more difficult in the concluding part is described as fatigue effect (Nagy, 2018) and is reflected by the persistent effort invested by testees to concentrate and work accurately on the test. Irrespective of the length of a test, item position effects occur in all testing situations (Leary & Dorans in Nagy et al., 2018). However, IP fatigue effects are influenced by testees' cognitive and motivational levels which are required for sustaining a high amount of effort and precision (Nagy et al., 2018). IP effects result to decrease in testees' motivation and ability to maintain a constant level of effort throughout the duration of a test (Ackerman &Kanfer, 2009 in Nagy et al., 2018).

IP effects can be categorized into IP1 and IP2. IP1 effects alter item difficulty by making test items appear either harder (tougher) or simpler (easier) than intended thereby making testees to be more or less competent. When IP1 effects make a testee more capable, it is referred to as practice or learning effects. Practice or learning effects occur when items positioned at the beginning of a test are more difficult than items positioned towards the end as evident in reverse item order whereas forward item order prompts fatigue effects because items presented at the beginning of the test are simpler than those towards the end thereby making testees less capable (Hohensinn et al., 2008). Studies conducted by Debeer and Janssen (2013) and Hartig and Buchholz (2012) reported negative IP1 effects in achievement tests. Contrariwise, Nagy et al. (2018) observe that most studies reported IP1 effects as fixed effects (FIP1 effects) which do not change across individual testees. However, evidence on random effects (RIP1 effects) shows that testees react differently to a particular test-taking situation which is anticipated to change among testees. For instance, Debeer and Janssen (2013) provide evidence for RIP1 effects in various achievement domains tested in the PISA 2006.It is obvious that IP1 effects on item difficulty remain largely controversial between FIP1 and RIP1 effects, and Debeer and Janssen (2013) posit that the current knowledge of the occurrence of IP effects is still limited, hence inconclusive. On the other hand, IP2 effects change the ability of an item to discriminate testees into different ability levels thereby making items more or less reliable particularly when such changes are made toward the end of the test (Nagy et al., 2018). IP2 effects violate the quality of a good test to effectively discriminate testees into different ability range for informed decision making. Hence, IP2 affects test reliability. IP2 effects on item discriminations are hardly ever examined in the area of cognitive testing (Nagy et al., 2018).

A study conducted by Schee (2009) indicated that students scored highest overall on the reverse item version. Studies by Soyemi (1980), Gerow (1980) and Allison (1984) cited in Ollennu and Etsey (2015) found no difference in the achievement measure of students when test items are positioned in any particular order of difficulty or randomly. Similarly, Nagy et al. (2018) investigated item position effects in a reading comprehension test using IRT to determine individual differences reported evidence for gradually increasing item difficulties and decreasing discriminations. Variation in IP effects on the item difficulties was systematically related to students' decoding speed and reading enjoyment. The results demonstrated that the relationship between the overall scores and other variables is affected by respondents' test-taking behaviour which is reflected in the random IP effect. A study by Hohensinn and Baghaei (2017) on position of response options in multiple-choice tests reported that options' positions have very slight differences in difficulty and as the position of the correct option moves toward the end of the set of response options, it becomes slightly more difficult. In a Ghanaian study, Ollennu and Etsey (2015) investigated the impact of item-position in multiple-choice test on student performance at the Basic Education Certificate Examination (BECE) level and reported a significant difference in students' performance for English Language, Mathematics and Science. Literature reviewed indicated that most of the previous empirical studies on test item order were foreign with no studies of this kind had been carried out in the area of the study. It is this gap in literature that this study intended to fill by investigating the efficacy of test item position on students' academic achievement in Economics multiple-choice test.

**Statement of the Problem**

Presentation of multiple-choice test in a single form has been criticized by researchers and experts in tests, measurement and evaluation for encouraging dishonest tricks among testees in large-scale educational testing as Ollennu and Etsey (2015) posited high prevalence of examination connivance in the conduct of the West African Senior School Certificate Examination (WASSCE). Consequently, a strategy of arranging multiple-choice items in forward, reverse and random order (alternate forms) to effectively avert the pervasive examination dishonesty was adopted by the Joint Admission and Matriculation Board (JAMB) in the administration of Unified Tertiary Matriculation Examination (UTME). However, the administration of different forms of multiple-choice test tends to have its attendant consequences as no two parallel tests are truly the same. Despite the uniqueness of presenting multiple-choice test items in forward, reverse and scrambled order (parallel forms) or by changing the position of the key across test forms to stem cheating, this may alter the item difficulty, test takers' perceptions and ultimately their achievement measure. Literature reviewed indicated extensive foreign studies on test item order effects with contending and inconclusive results. Correspondingly, there seems to be insufficient local empirical evidence on test item order and academic performance of testees particularly from the area of the study. It is in the light of the foregoing that this study investigated the efficacy of test item position on students' academic achievement in Economics multiple-choice test.

**Research Questions**

The study was guided by one research question.

1. What is the difference in the mean achievement scores of students in the forward, reverse and random forms of multiple-choice Economics achievement test?

**Hypothesis**

The research question was hypothesized and tested at 5% (0.05) level of significance.

1. There is no significant difference in the achievement measure of students in forward, reverse and random forms of multiple-choice Economics achievement test**.**

**Methods**

Descriptive-comparative survey research design was adopted for the study which enabled the researcher to describe and compare the academic achievement of students in three matched groups on three forms of achievement tests. The population of the study comprised all senior secondary (SS) III Economics students in the 26 public senior secondary schools in Oshimili North and Oshimili South Local Government Areas of Delta State in 2021/2022 academic session. The sample of the study was 151 SS III Economics students in three randomly selected public secondary schools; hence three intact classes of 57, 51 and 43 Economics students participated in the study. The instrument for data collection was a-30 item multiple-choice Economics achievement test (EAT) constructed by the researcher using table of specification and validated by three subject experts. The items in the validated EAT were arranged into three equivalent forms of forward (Easy-to-Hard), reverse (Hard-to-Easy), and random (Scrambled) and subjected to Kuder-Richardson formula (KR-20) and a reliability coefficient of 0.76, 0 .72 and 0.74 was obtained for the forward, reverse and random order test respectively. The forward, reverse and random ordered Economics achievement test was administered to intact classes of 57, 51 and 43 Economics students respectively which lasted for 40 minutes. Data collected on the research questions were analysed descriptively using Mean and standard deviation test statistics whereas the hypothesis was tested at 5% (.05) level of significance using one-way analysis of variance (ANOVA).

**Results**

Research Question 1

What is the difference in the mean achievement scores of students in the forward, reverse and random forms ofmultiple-choice Economics achievement test?

**Table 1**

***Mean Achievement Scores of Students by Test Item Order***

| **Order of Test Items** | **N** | ***M*** | ***SD*** |
|---|---|---|---|
| Forward order | 57 | 16.58 | 4.99 |
| Reverse order | 51 | 17.28 | 4.43 |
| Random order | 43 | 14.35 | 4.23 |
| Total | 151 | 48.203 | 13.652 |

Table 1 shows Mean and Standard Deviation achievement scores of students in the three altered multiple-choice Economics achievement tests ($M$ =16.58,$SD$= 4.99); ($M$ = 17.28,$SD$ = 4.43); ($M$ = 14.35,$SD$ = 4.23)for forward, reverse and random order test item respectively. The result shows a difference in the achievement measures of students in the three forms item ordered tests with the best performance in reverse order of items ($M$ = 17.28), followed by forward ($M$ = 16.58) and the least achievement measure in random order ($M$ = 14.35) multiple-choice Economics achievement tests. The best students' achievement measure in the reverse order version indicates recency or learning (practice) effects. The standard deviation scores of ($SD$ = 4.99), ($SD$ = 4.43) and ($SD$ = 4.23) for forward, reverse and random item order signified slight difference in students' responses to each of the test forms indicating context effects.

**Test of Hypothesis**

There is no significant difference in the achievement measure of students in forward, reverse and random forms of multiple-choice Economics achievement test**.**

**Table 2**
***One-Way ANOVA of Students' Achievement Measure in Forward, Reverse and Random Forms of Multiple-Choice Economics Achievement Test***

| Source of Variation | Sum of Squares | df | Mean Square | F | p-value | Decision |
|---|---|---|---|---|---|---|
| Between Groups | 214.353 | 2 | 107.177 | 5.071 | .007 | Significant |
| Within Groups | 3127.819 | 148 | 21.134 | | | |
| Total | 3342.172 | 150 | | | | |

α = .05

Table 2 shows F-calculated value of 5.071 was obtained and a p-value of .007 at 5% (0.05) level of significance with degree of freedom between groups (df1) being 2 and degree of freedom (df2) within groups being 148.Since the p-value .007 is less than the alpha level 0.05 (P < 0.05), the tested null hypothesis which states that "There is no significant difference in the mean achievement scores of students in forward, reverse and random parallel multiple-choice Economics achievement test" was rejected. Thus, there is a significant difference in the mean achievement scores of students in three ordered multiple-choice Economics achievement tests

**Table 3**
***Post-Hoc Least Significant Difference (LSD) Multiple Comparisons of Mean Achievement Scores of Students the Forms of Multiple-Choice Economics Achievement Tests***

| (I) Group | (J) Group | Mean Differ | Std. | Sig. | 95% Confidence Interval |
|---|---|---|---|---|---|

| | | ence (I-J) | Error | | Lower Bound | Upper Bound |
|---|---|---|---|---|---|---|
| Forward order | Reverse order | -.69556 | .88609 | .434 | -2.4466 | 1.0555 |
| | Random order | 2.23011* | .92858 | .018 | .3951 | 4.0651 |
| Reverse order | Forward order | .69556 | .88609 | .434 | -1.0555 | 2.4466 |
| | Random order | 2.92567* | .95178 | .003 | 1.0448 | 4.8065 |
| Random order | Forward order | -2.23011* | .92858 | .018 | -4.0651 | -.3951 |
| | Reverse order | -2.92567* | .95178 | .003 | -4.8065 | -1.0448 |

*. The mean difference is significant at the 0.05 level.

Table 3 shows the post-hoc Least Significant Difference (LSD) multiple comparisons of the mean achievement scores of students in the three forms of multiple-choice Economics achievement tests. The LSD multiple comparisons result showed a significant mean difference between forward and random item order with a mean difference of 2.23011* and a p-value of .018 and between reverse and random item order with a mean difference of 2.92567*and a p-value of .003. Thus, there is a significant difference in students' achievement measure between forward and random in favour of forward item order. Also, there was a significant difference in students' achievement measure between reverse and random in favour of reverse item order. Finally, there was no significant difference in students' achievement measure between forward and reverse item order. Hence, the LSD multiple comparison results revealed context effects among the three forms of multiple-choice Economics achievement tests.

**Discussion**

The finding of the study on the research question showed a difference in the mean achievement measures of students between reverse ($M$ = 17.28), forward ($M$ = 16.58) and random ($M$ = 14.35) item order multiple-choice Economic test indicating recency or learning (practice) effects. This is in line with Schee (2009) who reported students' highest score on the reverse item order but in disagreement with his reported least performance in the forward order. This is related to Hohensinn et al. (2008) who reported that learning or practice effects occur when test items are presented in reverse item order whereas fatigue effects occur when items are arranged in forward order.

The second findings of the study on the test of hypothesis revealed a significant difference in students' achievement measure between forward, reverse and random order items in favour of reverse and forward order items indicating context effects. In other words, there is a significant difference in students' achievement measure between reverse and random in favour of reverse; and a significant difference in students' achievement measure between forward and random item order in favour of forward item order and no significant difference between forward and reverse item order tests. This finding is consistent with Ollennu and Etsey (2015) who reported a significant difference in the academic performance of students in English Language, Mathematics and Science at Basic Education Certificate Examination (BECE) when items are ordered in forward, reverse and random in favour of easy-to-hard (forward) and random item order. This is also related to Hohensinn and Baghaei(2017) who noted that when same items are presented in different forms, the difficulty parameters of the items may change across forms due to context effect.

**Conclusion**

The study concluded that arrangement of multiple-choice test items in forward, reverse and random order for the purpose of curbing examination dishonesty in achievement testing have profound consequences on students' achievement measure as students have the best performance in the reverse order, followed by forward and had the least performance in random order. Similarly, the study concluded that administration of different forms of an achievement test will lead to a significant difference in students' achievement measure in favour of reverse and forward ordered items.

**Recommendations**

The following recommendations are made.

1. Teachers and examination bodies should arrange multiple-choice Economics achievement test in forward and reverse item order to curb the pervasive examination dishonesty in both small- and large-scale achievement testing and enhance achievement.
2. Test item writers and educators should use the reverse test item order for the benefits of recency effect to lessen fatigue effects and enhance effective teaching and le

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# Teachers' Evaluation of Principals' Leadership Effectiveness

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**Abstract**
Effective principals' leadership is a leadership that can foster cooperative efforts and maintain an ideal working climate in schools. The purpose of this research is to ascertain how teachers evaluate the effective leadership of the principal with qualitative approach. It explains the role of a principal and how best principals should be evaluated as it is known that the standard of every secondary school is determined by the inputs made by the principal to other teachers which in turn affect the performance of the students. The study proved that it is necessary for teachers to evaluate the principal and to criticize his activities as it will help create a better environment for educational pursuit and build a society that is educationally valuable. The study concluded that just as the principals evaluate the teachers, teachers should also evaluate the principals so as to keep the school in a standard that is worthwhile. Based on the conclusion, it was recommended that there is need for the government to adopt or create both leadership standards for principals and a principal evaluation system that define principal effectiveness based on students' achievement and teacher effectiveness outcomes (70%) and the leadership actions to accomplish those outcomes (30%) among others.
**Keywords: Principals, Teachers, Effectiveness, Leadership and Evaluation**

## Introduction

Education is a vital tool for a country to achieve sustainability as well as economic and societal goals (McGrath & Powell, 2016; Vladimirovaa & Le Blanc, 2015). The success of a country's educational system may depend on the quality of its educational products in contributing to the nation's economic growth and development (Abe & Adu, 2014; Aina, 2016). In determining and sustaining the quality of these educational products, effective teaching and learning must take place in schools. To ensure effective teaching and learning, school principals play a vital role because they are responsible for the quality of teaching and learning as well as curriculum and capacity development (Ma & Marion, 2019; Marks & Printy, 2003). Principals therefore, influence teachers' behavior toward achieving the goals and ensuring that well-educated students are produced. In addition, the students, who are outputs of the system, tend to imitate their teachers' behaviours.

Lucas et al. (2022) stated that teachers are essential constituents for developing creativity among students, both as role models and as mentors. They are the largest and the most crucial inputs of the educational system that influence the quality of educational outputs (Francis & Oluwatoyin, 2019; Lockwood & McCaffrey, 2019; Matthew, 2013; Mccaffrey, 2013). Hence, the need for teachers to model appropriate behavior for their students and be effective in teaching is very fundamental because what students learn would depend on teachers' effectiveness. Teachers' effectiveness entails their competence, personal attributes and behavioural manifestation that facilitate students to achieve the desired learning outcomes (Awofala, 2022; Khan, 2015; Magno, 2022). On this note, this study proposes that the leadership of principals may contribute to teachers' effectiveness, in terms of classroom management and classroom instruction among others. Studies have mentioned that the leadership roles of principals have become more complex and demanding, making instructional leadership the central role of school principals (Abdulrasheed & Bello, 2015; Bush & Glover, 2016; P. Hallinger, 2015; Harris et al., 2019; Robinson et al., 2018).

Instructional leadership borders on activities such as directing, resource provisioning and assisting teachers towards achieving the school's goals (Akram et al., 2017; Bhengu & Mkhize, 2013; Murphy, 1988). It consists of several tasks, such as supervision of classroom instruction, as well as staff and curriculum development (Smith & Andrews, 2019). Instructional leadership also encompasses a number of functions, such as coaching, critical reflection, teacher collaboration, teachers as action researchers, and generally, collaborative and critical thinking about the quality of teaching (Glanz & Neville, 2017). Instructional leadership is also associated with effective schools, which can improve the quality of teaching, and in turn, enhance student learning (Antoniou & Lu, 2018). In fact, its average effect on student outcomes is three to four times that of transformational leadership (Robinson, et al. 2018); and more powerful in influencing student learning (Robinson et al. 2019). Through instructional leadership, principals can create a culture of accountability and collaboration to foster teachers' effectiveness. The culture of collaboration emerges from principals who treat their teachers as professionals, charged with pursuing high levels of achievement for all students (Gallagher, 2022). Principals, as instructional leaders, provide guidance to teachers on curriculum and pedagogy and encourage students to analyze weaknesses of teachers (Sim, 2021).

Despite the instructional responsibilities of principals, it remains unclear how such responsibilities affect the effectiveness of teachers. In fact, little evidence of this leadership/learning role exists in West Africa, particularly in Nigeria, where the role of principals is predominantly a managerial role (Bush & Glover, 2016). Outstanding principals are principals who focus on instructional rather than managerial leadership (Bush & Glover, 2018; P. Hallinger & Heck, 2016a, 2016b; P. Hallinger & Murphy, 2015; P. Hallinger & Wang, 2015; Whitaker, 2017). Therefore, investigating the instructional leadership role of school principals is important in Nigeria. This is especially so considering the frequent complaints from stakeholders about the deteriorating state of Nigeria's secondary education (e.g. the non-performance of students in external examinations, high rate of examination malpractices and poor attitude of teachers to teaching, such as absenteeism from school and classes, immoral acts, among others (Fasasi & Oyeniran, 2014; Matthew, 2013). All these perennial problems have largely been blamed on the principals for non-performance of their responsibilities and their inability to exhibit appropriate leadership behavior to improve school performance. In other words, school principals have not succeeded in ensuring that school activities are focused on instructions that can drive development. In fact, Abdulrasheed and Bello (2015), Abdulrasheed et al. (2016), and Ojo and Olaniyan (2018), pointed out that one of the challenges ahead in post-primary institutions (secondary schools) in Nigeria is for principals to provide focused instructional leadership. This is because the complexity of the secondary education curriculum and the amount of pedagogical content knowledge require expert teaching and place demands on the principals to directly supervise the teachers (Leithwood, 2014).

When principals are instructional leaders, they would be able to provide core leadership and management in all areas of the school. This would enable them to create a climate that can enhance teaching and learning and support teachers' professional development, thereby leading to positive learning outcomes (Al-Mahdy et al., 2018; Bhengu & Mkhize, 2013; Hallinger & Heck, 2018; Leithwood, et al., 2014; Robinson et al., 2018). Effective principals' instructional supervision would strengthen teachers' effectiveness, thereby making the teachers to be good classroom managers and role models, which would in turn, affect students' academic achievement positively (Abdulrasheed & Bello, 2015; Francis & Oluwatoyin, 2019). Hence, this study conducted a survey on how teachers' perception of principals' instructional leadership, affects their effectiveness. In other words, this study investigates the influence of principals' instructional leadership using the Principal Instructional Management Rating Scale (PIMRS) of Hallinger and Murphy (2015) to measure Principal's effectiveness in public secondary schools, which has yet to be explored in Nigeria. The study focuses on secondary schools because a good quality secondary education is critical for developing the required knowledge, skills and attitude, to support health and wellbeing, as well as sustainable livelihood and inclusive economic growth (Bainton, Barrett, & Tikly, 2016). Secondary education has been instrumental in the formulation of national policies in Nigeria, (Nwangwa & Omotere, 2013). It is this educational level that serves as the inter-link between primary and tertiary education, and prepares students for useful living in society (Imam, 2022; Matthew, 2013). It provides training for manpower in applied sciences, commerce and technology at sub-professional grades. It offers diversified curriculum to cater for differences in talents, opportunities and future roles (Matthew, 2013). Considering the importance of secondary education in the educational development of Nigerian children, the knowledge, skills and values acquired at this stage are crucial. Thus, teachers who are responsible for evaluating effectiveness of principals have to be abreast of pedagogical knowledge and classroom management because these are some of the fundamental factors with which teachers assess principals' output.

**Educational Leadership in the Nigerian Context**

One of the main aims of the sustainable development goal for education (Goal 4) is to ensure that by 2030, all boys and girls complete free, equitable and quality primary and secondary education that would be relevant and result in effective learning (Bainton et al., 2016). Thus, education is an area of critical concern. Nigeria, like other countries in the world, recognizes education as a major driver of human development and as a veritable instrument for implementation of national development. According to the National Policy in Education (2014), education is an instrument par excellence for effecting national development. It is a tool to promote national unity and equip individuals with skills, knowledge, attitude and values for adaptation into the larger society. Anibueze (2013), for instance, claimed that Nigeria might not be able to attain vision 2020 unless the education system is strengthened. Therefore, it is important that quality education be delivered to students. To achieve this, several reforms, in terms of school restructuring, primarily secondary schools, have been embarked on by the government (Anibueze, 2013; Imam, 2012; Matthew, 2013).

The implementation of improved strategies in schools requires high level of commitment and motivation on the part of leaders to solve complex problems associated with the implementation. As such, the call for improvement in school leadership has become a topmost agenda of the Education Ministry in Nigeria (Nwangwa & Omotere, 2013). Researchers have shown that leadership has a far reaching effect on planning, organizing and implementing school policies and programs. The accomplishment of any school program and attainment of any educational goal, depend on the leaders in charge (Ekpoh & Akeke, 2017; Ojo & Olaniyan, 2018; Okoli, 2015; Olorunsola & Belo, 2018).

Leadership is one of the most influential factors that affect learning outcomes, including levels of literacy and numeracy, school leaving examination results, and progression to secondary and higher education (Bush & Glover, 2016; Leithwood et al., 2016; Leithwood & Jantzi, 2016). The impact is more critical in schools that evince the greatest need and operate in a challenging environment (Day & Leithwood, 2017; Day et al., 2018; Duke & Salmonowicz, 2020). In most cases, especially, at the secondary level of education, the school principal is the school leader responsible for the implementation of educational reforms, such as reforms for effective teaching and learning (Bhengu & Mkhize, 2013; Imam, 2022; Oredein, 2010). Principals are school managers and in a unique position to influence students' learning culture, their position is to coordinate human and material resources and influence teachers to achieve the primary goal and objective of the school, which is teaching and learning (Imhangbe et al., 2019; Ojo & Olaniyan, 2018; Okoli, 2015; Olaleye, 2008; Oredein, 2022. There are enormous responsibilities of the school principal, but the major responsibility is supervision/instructional support (Chan & Pool, 2022; Whitaker, 2017).

Okoji's (2015) study of secondary school teachers' job performance in Ondo South Senatorial District, reveals that principals' autocratic and democratic leadership styles, have a positive influence on teachers' job performance. Another study by Adeyemi (2020) that involved a sample of Ondo State secondary schools, reveals that autocratic leadership style of principals has a positive impact on teachers' job performance compared to democratic and laissez-faire leadership styles. Salako et al., (2019), found that principals' participative leadership style has a positive impact on teachers' job performance. However, Adegbesan (2013) found that the administrative leadership style of secondary school principals in Abeokuta South Local Government, does not lead to effective school administration. Therefore, the author concluded that this leadership style is ineffective in improving teachers' morale in terms of commitment and productivity. Oredein's (2020) study on principals' decision-making competence during crisis management in secondary schools in Southwest of Nigeria shows that principals use participatory leadership style to manage crisis. Further results show that the leadership style and competence have a significant influence on teachers' job performance. As a result, the author suggested that group decision-making should be adopted in secondary schools and a cordial relationship should exist between the principal, teachers, students and non-teaching staff. Agusiobo and Etukokwu (2017) found that empowering leadership style (transformational leadership) of the principal leads to teachers' job satisfaction in unity schools in Enugu state, meaning that principals have a key leadership role in ensuring job satisfaction and the type of tone and academic standards the school will attain. Another study by Olaleye (2018) used Teachers' Perception of Principal's Leadership and School Learning Questionnaire (TPPLSLQ) to examine the impact of principals' leadership behaviors (transformational, transactional and laissez-faire) on school learning culture in secondary schools in Ekiti state, Nigeria. Through an ANOVA test, the author found that principals' leadership behaviors (transformational and transactional) are significantly and positively associated with school learning, meaning that principals are responsible for effective learning culture in schools. However, the author suggested that there is a need for principals to have a thorough understanding of the vision of the school to achieve its goals and objectives.

Some studies have reported that school principals lack leadership competencies, in terms of provision of instructional supervision and effective resources management, which have resulted in low instructional quality and indiscipline among staff and students (Abdulrasheed & Bello, 2015; Adegbesan, 2013; Victor, 2017). Moreover, the principal is expected to guide and inspire teachers, provide guidance on curriculum development, teaching methods, evaluation and supervision of material resources and ensure that teaching and non-teaching staff work toward the achievement of the school's objectives (Abdulrasheed & Bello, 2015; Adu et al., 2014). Hence, this study argues that principals' instructional leadership practices can influence teachers' effectiveness. Investigating principals' instructional leadership practices in Nigeria is justified because Abdulrasheed and Bello (2015) reiterated that effective instructional supervision could strengthen teachers' effectiveness and students' academic achievement. Similarly, Fafunwa (2019), as cited in Abdulrasheed and Bello (2015), mentioned that frequent classroom visitations, caring attitude and attending to teachers' problems, as well as operating within the school's policies, would lead to effective leadership in schools.

**Evaluation/Principals' Instructional Leadership**

According to Meenakshi (2022), evaluation adds the ingredient of value judgment to assessment. It is concerned with the application of its findings and implies some judgment of the effectiveness, social utility or desirability of a product, process or progress in terms of carefully defined and agreed upon objectives or values. Evaluation often includes recommendations for constructive action. Thus, evaluation is a qualitative measure of the prevailing situation. It calls for evidence of effectiveness, suitability, or goodness of the programme. It is the estimation of the worth of a thing, process or programme in order to reach meaningful decisions about that thing, process or programme.

Instructional leadership has been so popular worldwide to the extent that several countries have adopted it as a new concept of school leadership as compared to administrative leadership (Bush et al., 2018; Liu et al., 2020). This style of leadership consists of direct and indirect activities that affect students' learning outcomes through the provision of direct assistance to teachers, curriculum and staff development as well as action research (Glickman 2021; Heck, 2013; Murphy et al., 2015). The integration of these activities ties teachers' needs to the school's goals. As an instructional leader, the principal must have the ability to solve problems in staff and curriculum development, and in the utilization and organization of the instructional programs (Andrews & Soder, 2017). According to Andrews and Soder (2017), a principal can be described as an effective instructional leader if he/she performs well in four areas, i.e., as a resource provider, instructional resource, communicator and visible presence in the school. As a resource provider, Smith and Andrews (2019) argued that the teachers in the school are the greatest resource and must be recognized for exemplary teaching and performance. The principal is also expected to know the strengths and weaknesses of the teachers and show genuine concern for their health, welfare and professional growth. Similarly, the principal, as an instructional resource, must be able to identify good teachers and provide feedback that promotes professional growth.

Likewise, the principal, as communicator, must communicate to the staff that all children can learn and experience success, and learner outcomes must be clearly defined to guide instructional programs. For visibility, the principal must model behavior, informally drop in on classrooms and make staff development activities a priority. Niece (2013) described effective instructional leadership in secondary schools as principals with substantial knowledge based on curriculum, instruction and evaluation, who provide the vision and direction for the school, promote a positive teaching and learning environment, establish patterns of effective communication and motivation, and maintain high expectations for self, staff and students. Whitaker (2017) also indicated that effective principals must make it a point to visit the classroom daily, to participate and interact with students. The author further stated that the visits should be structured to show that they have meaning and purpose. In addition, the involvement of the principal in classroom discussion reinforces the importance of learning and enables the principal to know individual students' abilities. Similarly, the knowledge of individual students' abilities would enable the principal to have meaningful conversation with the students, parents and teachers. According to Blase and Blase (2019), principals' instructional leadership strategies include talking to teachers to promote reflection and professional growth. In promoting reflection, principals provide suggestions and feedback, give advice for improvement of instruction, modeling, and praise teachers. In promoting professional growth, the principals apply certain teacher development strategies, i.e., emphasizing the importance of teaching and learning; supporting collaboration efforts and developing coaching relationships among educators; encouraging and supporting redesign of programs; applying the principles of adult learning, growth, and development, all phases of staff development; and using action research to inform instructional decision-making.

All these indicate that instructional leadership is a complex construct that covers many variables. Therefore, P. Hallinger and Murphy (2015) proposed a comprehensive measurement for principals' instructional leadership, i.e., the

Principal Instructional Management Rating Scale (PIMRS). The PIMRS has been used in more than 200 empirical papers on instructional leadership conducted in 26 different countries (Hallinger et al., 2013). It is also the most widely disseminated model of instructional leadership that includes leadership practices meant directly for improving the teaching and learning process, and shape the direction and the climate of the school (Fromm et al., 2017; Hallinger et al., 2015; Harris et al., 2019; Leithwood et al., 2018).

**Role of the Principal**

The role of the principal covers many different areas including leadership, teacher evaluation, and student discipline. Being an effective principal is hard work and is also time-consuming. A good principal is balanced within all their roles and works hard to ensure that they are doing what they feel is best for all constituents involved. Time is a major limiting factor for every principal. A principal must become efficient at practices such as prioritizing, scheduling, and organization. Therefore, a principal's role as practiced in our school system includes the following:

**School Leader.** A school principal is a primary leader in a school building. A good leader always leads by example. A principal should be positive, enthusiastic, have their hands in the day-to-day activities of the school, and listen to what their constituents are saying. An effective leader is available to teachers, staff members, parents, students, and community members. They stay calm in difficult situations, think before acting, and put the needs of the school before themselves. An effective principal steps up to fill in holes as needed, even if it is not part of their daily routine.

**Student Discipline Chief.** A large part of any school principal's job is to handle student discipline. The first step of having effective student discipline is to ensure that teachers know the expectations. Once they understand how the principal wants them to handle discipline issues, then their job becomes easier. Discipline issues a principal deals with will mostly come from teacher referrals. There are times that this can take a large part of the day.

A good principal will listen to all sides of an issue without jumping to conclusions, collecting as much evidence as she can. Their role in student discipline is much like that of a judge and a jury. A principal decides whether the student is guilty of a disciplinary infraction and what penalty they should enforce. An effective principal always documents discipline issues, makes fair decisions, and informs parents when necessary.

**Teacher Evaluator.** Most principals also are responsible for evaluating their teachers' performance following district and state guidelines. An effective school has effective teachers, and the teacher evaluation process is in place to ensure that the teachers are effective. Evaluations should be fair and well documented, pointing out strengths and weaknesses. A good principal should spend as much time in classrooms as possible. He should gather information every time they visit a classroom, even if it is just for a few minutes. Doing this allows the evaluator to have a larger collection of evidence of what actually goes on in a classroom than a principal who makes few visits. A good evaluator always lets the teachers know what the expectations are and then offers suggestions for improvement if they are not being met.

**Developer, Implementer, and Evaluator of School Programs.** Developing, implementing, and evaluating the programs within the school is another large part of the role as a principal. A principal should always be looking for ways to improve the students' experience at school. Developing effective programs that cover a variety of areas is one way to ensure this. It is acceptable to look at other schools in the area and to implement those programs within the principal's school that have proved to be effective elsewhere.

A principal should evaluate school programs every year and modify them as necessary. If a reading program has become stale and students are not showing much growth, for example, a principal should review the program and make changes as needed to improve it.

**Reviewer of Policies and Procedures.** An individual school's governing document is its student handbook. A principal should have his stamp on the handbook. A principal should review, remove, rewrite, or write new policies and procedures every year as needed. Having an effective student handbook can improve the quality of education students receive. It can also make a principal's job a little easier. The principal's role is to ensure that students, teachers, and parents know what these policies and procedures are and to hold each individual accountable for following them.

**Schedule Setter.** Creating schedules every year can be a daunting task. It can take some time to get everything to fall into its proper place. There are many different schedules a principal may be required to create including a bell, teacher duty, computer lab, and library schedule. The principal should cross-check each of those schedules to ensure that no one person has a load that is too heavy. With all the scheduling a principal has to do, it is almost impossible to make everyone happy. For example some teachers like their planning period first thing in the morning and others like it at the end of the day. It is probably best to create the schedule without trying to accommodate anyone. Also, a principal should be prepared to make adjustments to schedules once the year begins. They need to be flexible because there are times that there are conflicts they may not foresee that need to be changed.

**Employment of New Teachers**. A vital part of any school administrator's job is to hire teachers and staff who are going to do their job correctly. Hiring the wrong person can cause huge headaches down the line while hiring the right person makes the principal's job easier. The interview process is extremely important when hiring a new teacher. There are many factors that play into a person being a good candidate, including teaching knowledge, personality, sincerity, and excitement toward the profession.

Once a principal has interviewed candidates, they need to call references to get a feel for what the people who know them think they would do. After this process, the principal might narrow the choices to the top three or four candidates and ask them to come back for a second interview. This time, they can ask the assistant principal, another teacher, or the superintendent to join in the process to include another person's feedback in the hiring process. Once completing the process, they should rank candidates accordingly and offer the position to the person who is best fit for the school, always letting the other candidates know that the position has been filled.

**Public Relations Point Person**. Having good relations with parents and community members can benefit a principal in a variety of areas. If a principal has built trusting relationships with a parent whose child has a discipline issue, it will be easier to deal with the situation. The same holds true for the community. Building relationships with individuals and businesses in the community can benefit the school greatly. Benefits include donations, personal time, and overall positive support for the school.

**Delegater**. Many leaders by nature have a hard time putting things in others' hands without their direct stamp on it. However, it is vital that a school principal delegate some duties as necessary. Having trustworthy people around will make this easier. An effective school principal does not have enough time to do everything that needs to be done by them. They must rely on other people to assist them and trust that they are going to do the job well.

**Principals' Instructional Leadership and Teachers' Effectiveness.** It is widely acknowledged that teachers play significant roles in the life of students, especially in the classroom, and serve as role models to them (Donaldson, 2013; Francis & Oluwatoyin, 2019; Hallinger & Heck, 1998; Leithwood et al., 2018). In fact, of all school resources, they have the greatest impact on student achievement because their positive behavior in the classroom is a major predictor of student learning (Creemers & Kyriakides, 2017; Donaldson, 2013; McCaffrey et al., 2003; Muijs & Reynolds, 2000; Wang & Fwu, 2017). Therefore, effective teachers are expected to organize, control and manage their classroom climate in order to maximize student engagement and control misbehavior during teaching and learning (Creemers, 2014; Kyriakides et al., 2019; Muijs & Reynolds, 2017; Creemers & Kyriakides, 2016). Effective teachers also facilitate students to achieve a cognitive, emotional, and balanced personality, and critical thinking, problem-solving and teamwork skills, to become good outputs of the system (Hundt, 2019). On this note, teachers expect their principals to behave in a way that would have an effect on their effectiveness in delivering quality teaching and learning to students because the teachers' effectiveness would inspire students to become lifelong learners.

Early studies on principals' instructional leadership have examined its influence on various school outcomes, such as student learning and academic achievement, school effectiveness and teacher-related outcomes, like teachers' professional growth and teachers' attitude, among others. However, since this study focuses more on teachers' effectiveness, the main discussion in this section is centered on teacher-related outcomes. Extant research on PIMRS evinces a positive influence of principals' instructional leadership on several teacher-related outcomes. For instance, Al-Mahdy et al. (2018), by using the PIMRS in Oman, confirmed the importance of principals' instructional leadership to teachers' commitment. They found that what defines a school mission and climate are significantly and positively associated with teachers' commitment, while the management of the instructional program has no significant effect on teachers' commitment. Bellibas and Liu (2018) found that principals' instructional leadership is a significant predictor of mutual respect of staff. Likewise, Ma and Marion (2019) found that instructional leadership practices, in terms of defining school mission, managing instruction programs and developing a positive school learning climate, have a direct and positive effect on faculty trust in Western China secondary schools. Further, the results also show that instructional leadership practices, in terms of developing a positive school learning climate, is positively associated with Chinese teachers' efficacy. Similarly, Li et al. (2016) found that principals' instructional leadership has a direct impact on faculty trust and teachers' professional learning in Hong Kong.

**Principal Effectiveness**

According to Ezeocha (2001), new leaders for new schools recommends that states, school systems, philanthropic funders, the federal government, and others working on principal standards and strategies support the adoption of an evidence-based, three-pronged definition of principal effectiveness which are as follows:

2. **Student Outcomes:** The principal's primary marker of success is the improvement of student achievement and a small number of additional student outcomes such as high school graduation, college matriculation, college readiness, or attendance rates. All schools, no matter how high or low their current achievement levels, can do measurably better.
3. **Teacher Effectiveness:** Teacher quality is the most important in-school factor relating to student achievement. Principals drive effectiveness through their role as a human capital manager – including teacher hiring, evaluation,

professional development, retention, leadership development, and dismissal – and by providing instructional leadership. Ultimately, to increase student achievement school-wide, principals should be evaluated by their ability to drive increases in the number of teachers rated as effective or highly effective once a system has been put in place that differentiates the performance of teachers based on rigorous, fair definitions of teacher effectiveness.

4. **Leadership Actions:** Principals must take effective action to reach these outcomes for student achievement and teacher effectiveness. When turning around low-performing schools, principals should receive a streamlined assessment of their progress in implementing the highest priority principal actions and school-wide practices that have been shown to differentiate rapidly-improving schools.

Highly effective principal is distinguished by making breakthrough gains in student achievement, including movement from “proficient” to “advanced” in higher performing schools, and a small number of additional student outcomes. The highly effective principal also makes accelerated progress in implementing the principal actions and school-wide practices that differentiate rapidly-improving schools.

**Evaluation of the Principal Effectiveness by Teachers**

Teachers in secondary school cannot function properly without the administrative input of the principal. Every teacher knows a hard working principal and can easily evaluate the extent to which the principal can do well administrative wise because in one way or the other, they are also affected by the effectiveness of the principal. According to Adson (2016), teachers know all these listed below and can assess the principal’s effectiveness through the extent he makes themselves available to face their responsibilities:

1. The principals should keep it up as they performed effectively in all their roles in curriculum and instructional leadership.
2. Principals of public secondary schools should give more attention to leadership style in determining curriculum and instructional goals, materials and methods of instruction and delivery by teachers if the ultimate goals of secondary schools which is to promote child growth and development is to be achieved.
3. Principals should make the importance of their role on curriculum and instruction known to all categories of teachers. This can be made through seminar, orientations and meetings with teachers so as to perceive principals’ role in curriculum and instruction as very vital in achieving the educational goals of the school.
4. Principals should perform their roles in curriculum and instruction leadership whether in urban or rural schools to give all teachers and students equal benefits from their roles for a higher academic achievement.

5. Principals should take individual teachers good ideas and suggestions in curriculum and instructions as important, for it enhances the efficient performance of teachers in terms of lessons delivery.
6. The task of improving standard of secondary education is entrusted on the school principals by government and society, therefore government should do all it can to increase their effort to give the principals all the encouragement, tools, training and funds to perform their roles in curriculum and instructional leadership better.
7. The principal should be able to make good use of funds allocated to the school to run the schools for higher learners' achievement.

Effective principals are those who boost academic achievement for all students, increase the effectiveness of their teaching staff, and consistently take leadership actions shown to improve outcomes for students. Therefore principal evaluation systems should place 70% of their weight on the ability of principals to increase student achievement and teacher effectiveness outcomes, with the remaining 30% focused on their demonstration of effective practices and leadership actions. Local school systems should then use these assessments to drive not only key accountability decisions, but also to support professional learning and growth.

Currently, most principal evaluation systems tend to focus too much on the wrong things, lack clear performance standards, and lack rigor in both their design and attention to implementation (Reeves 2019; Goldring et al., 2019). Despite being a critical basis for determining who is an effective principal and for acting on those determinations, principal evaluation systems have simply not been a high priority for most states and local school systems. As a result, these systems do little to advance a powerful vision of principal effectiveness.

This is very concerning because principal effectiveness is central to raising student achievement. Principal and teacher quality account for nearly 60% of a school's total impact on student achievement, and principals alone for a full 25% (Marzano et al., 2015). The principal's impact is so significant because of the leadership actions principals take to create the school-wide conditions that support student learning—especially those that directly influence teacher effectiveness, including hiring, professional development, evaluation, and retention or dismissal. Even in schools with high rates of students in poverty and students of color, many principals are leveraging these actions to lead dramatic gains in student achievement. However, schools and principals are not achieving these necessary results for our students at scale (Chenowith, 2017).

Bringing significant improvements in student achievement and teacher effectiveness to scale will require substantial improvements in the policies and practices that contribute to the effectiveness of principals. This is a large agenda for change and it can only succeed if we accurately and comprehensively measure the effectiveness of our principal corps. The goal of this paper is to provide policymakers with recommendations for the design and implementation of strong principal development and evaluation systems. States and local school systems that pursue these ideas can use principal evaluation to drive a powerful vision of principal effectiveness and, by consequence, improve outcomes for all students.

**Conclusion**

The appointment of principals is paradoxical. Experienced classroom teachers are taken from the classroom where they are performing well, and without adequate preparation, they are transferred to becoming principals. Classroom experiences of such teachers might not have fully qualified them to assume the administrative and leadership role of a principal. Such openness of appointment to the highest office in a school does not only defeat Frederick Taylor’s views of getting the suitable candidate for the job, but it also places school management in the hands of technically unqualified personnel (Lipham, 2016). A principal, as an administrator, has to face extremely difficult challenges because of the wide variety of roles they have to play. These roles are very demanding upon the physical, mental and psychological makeup of the principal. Thus, this necessitates for capacity building of secondary schools principals.

Capacity building of school principals is a function with various interconnected traits, competencies and abilities to ensure effective school administration and leadership (Hoy &Miskel, 2022). The capacity building needs of school principals imply that the principal as leader must be able to develop appropriate staff development programmes for their teachers, manage and enhance an effective school community and school, build parent relationships, devise effective financial management systems, ensure effective human resource management practices in the school organisation, apply conflict resolution practices, promote good moral values to curb unacceptable and deviant behaviour in the school, and a host of other aspects of school management (Hoy & Miskel, 2018; Owen & Valesky, 2021; Yukl, 2021).

Principals are the head of secondary schools and are burdened with duties which when properly managed can determine the effectiveness of the teachers and the academic achievement of the learners. A good principal can always be known by the teachers because; they should be open ended to accommodate his teachers’ ideas and innovation. They should see it as part of their duty to supervise the activities of every teacher as this is a determinant of how progressive the school is.

Teachers’ evaluation of principals’ effectiveness is important whether in private or public schools as their criticisms can help in improving the school academic standard. Also, having a democratic principal is loveable by both the teachers and students as their leadership will impact every teacher positively and help them work as a team to improve the academic achievement of students.

Therefore, just as the principal evaluates the teachers, teachers should also evaluate the principal so as to keep the school in a standard that is worthwhile.

**Recommendations**

The following recommendations are considered in order to ascertain accurate principal's effectiveness:

1.There is need for the government to adopt or create both leadership standards for principals and a principal evaluation system that define principal effectiveness based on student achievement and teacher effectiveness outcomes (70%) and the leadership actions to accomplish those outcomes (30%).

2. School proprietors and Government should invest in the professional development of principals and ensure that all such investments are tied to needs surfaced through principal evaluations.

3. The principal evaluation metrics we recommend here—especially a focus on student outcomes—should also be incorporated into all local policies and communications about accountability and evaluation for individual schools and principals.

4. The placement of principals matching effectiveness ratings to school needs, principal compensation, and the dismissal of ineffective principals should be a source of alignment and coherence at the local level.

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# Reward System and Job Performance of Administrative Staff in Colleges of Education in Oyo State, Nigeria

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**Abstract**
The enhancement of human capital within organizations heavily relies on the job performance of its employees. The job performance of administrative staff, and efficient reward system is essential. However, the current state of reward systems in colleges of education in Oyo State seems largely unexplored, leaving a significant gap in understanding the relationship between reward systems and job performance. This study employed a descriptive survey research design to investigate this aspect. Through the utilization of simple random sampling techniques, the study included a sample of one hundred and sixty-two (162) administrative staff members in colleges of education. An assessment instrument employing a four-point Likert scale was developed to measure job performance and the effectiveness of the reward system. The findings indicated a high level of job performance (2.88) but revealed that both financial rewards (2.31) and non-financial rewards (1.89) were rated as low. Furthermore, the results demonstrated a significant influence of reward systems, both independently and collectively, on the job performance of administrative staff in colleges of education, Oyo State ($F = 14.219$; adj. $R2 = 0.081$, $P < 0.05$). Based on these outcomes, it can be concluded that the job performance of administrative staff in colleges of education in Oyo State is commendable, while the financial and non-financial rewards provided are inadequate. Additionally, it can be inferred that reward systems have a noteworthy combined impact on the job performance of administrative staff in colleges of education in Oyo State. Consequently, it is recommended that colleges of education in Oyo State incorporate employee training as an integral component of their organizational strategy to enhance employee performance. This training should be comprehensive and encompass all staff positions, aiming to address any skill gaps among employees.

**Keywords: Training method, Reward Systems, Job Performance, Administrative Staff, Colleges of Education**

## Introduction

Colleges of Education aim to improve knowledge through teaching, community service, and research, with administrative staff playing a crucial role in achieving these objectives. Competent, motivated, and qualified administrative staff are essential for effective human resource management and enhancing job performance. A good reward system structure is also essential for their success (Damanik, 2022). Job performance involves a coordinated effort to convert inputs into outputs consistent with staff skills, abilities, and experience, using appropriate knowledge acquisition and implementation. (Faller, 2018).

Job performance is a crucial assessment tool for academic and administrative staff in tertiary institutions, encompassing both productive and counterproductive behaviors that contribute or detract from organizational goals. Sambung, 2019. It connotes the overall expected values from administrative staff's behaviour carried out throughout a period of time (Schilbach, 2020). Job performance refers to the outcomes and accomplishments achieved by employees at work, which align with organizational strategies and objectives (Wisetsri, 2020). Job Performance also refers to how well an activity or job is done (Razak, 2021). Performance can be classified into two types: The first type is known as *tactical performance*. Tactical performance is how effectively an organization *sticks to* its strategy. It is the driver of focus and consistency. It allows organizations to increase strength by directing limited resources to the fewest targets (Ningsih, 2021). The second type is known as *adaptive performance*; it is how effectively an organization *diverges* from its strategy. Adaptive performance manifests as creativity, problem solving, grit, innovation, and citizenship (Adeoye & Jimoh, 2023). Job performance of administrative staff at private polytechnics is perceived not to meet up with the standard of job expected from administrative staff of private polytechnics in Ibadan.

Job performance is a function of ability, will and situational factors. An organization may have administrative staff with ability and determination, with appropriate equipment and managerial support, yet performance may fall below expected standards. John Campbell's Theory of job performance assesses whether a person performs his/her job well by exploring the non-specific behaviour, task specific behaviour, communication task, and staff discipline towards achieving the organizational goals (Chughtai, 2008). These factors will be used to measure job performance for the purpose of this study.

Non-task specific behaviour are those behaviours that an individual undertakes as part of a job. They are the core substantive tasks that delineate one job from another. Administrative staff of Colleges of Educationis perceived to behave to focus on what their job specializes on. Institutional administrative work design allows department members to perform tasks based on their perception, resulting in decreased efficiency and effectiveness of activities.

Task-specific behaviour involves administrative staff defining their duties and responsibilities, closely monitoring their progress. Administrative managers monitor and mentor junior staff to work efficiently, but inadequate oversight has led to a decline in performance and negative output of work. The communication task outlines the mode and frequency of communication, highlighting the poor communication among Colleges of Education administrative staff due to ineffective instruction and message dissemination.

Personnel discipline is a process imposed by an organization on administrative staff for non-compliance with rules, standards, or policies. However, Colleges of Education's rules are often ineffective, leading to poor performance and disciplinary actions.Rewarding administrative staff and implementing recognition programs motivates them to contribute ideas and behaviors for business benefit. Reward, often referred to as compensation, is crucial in paid work and has significant advantages due to its intricate linkages with the organization strategy (Kyrych, Yuryk, & Shveda, 2021).

Reward systems in work settings are crucial for human resource management to assess employee performance and competitiveness. Positive perceptions of the reward system impact employee attitudes towards the organization. Emphasizing reward management and organizational performance is essential for ensuring company viability in challenging economic environments and spurring better performance among employees.This study explores the effectiveness of a reward system in motivating administrative staff to achieve high-quality performance. It focuses on both financial and non-financial aspects, highlighting the importance of pay increases and promotions based on performance and experience. These factors encourage employees to work harder, boost morale, and increase competition among administrative staff.

In today's global competitive environment, it's crucial to identify and retain competent and knowledgeable administrative staff through effective compensation programs for optimal job performance (Sasono & Razikin ,2022). Private institutions are exploring innovative compensation strategies to enhance organizational and job performance, but often lack a combination of training and reward management, as organizations have discretion in selecting financial and non-financial reward options.Many authors investigate the effect of reward on job performance in Nigeria's private sectors, focusing on the complexities of reward systems within human resource management practices (Hardianto, Rugaiyah, & Rosyidi, 2019). This study aims to address employee dissatisfaction, non-commitment, and turnover in Oyo State Colleges of Education by assessing the influence of reward systems on employee performance. Despite high reward budgets, administrative staff demand salary increases without corresponding output, causing production costs and a challenge during economic downturns.

**Statement of the Problem**

The job performance of administrative staff of Colleges of Education in Oyo State is of utmost importance for the development of human capital, successful operation and maintenance in the state. The administrative staff of Colleges of Education are responsible for examination management, records management, admission processing, schedule of school academic activities and lots more. The positive effect being experienced in an academic institution like Colleges of Education through well programmed training and by rewarding outstanding staff regularly is immeasurable.

Notwithstanding, many tertiary institutions in Nigeria including Colleges of Education are experiencing high labour turnover, absenteeism and huge losses caused by employee negligence because they are not well paid regularly, and are given less recognition at work. This indicates that perhaps the reward system factors are responsible to either positively or negatively influence job performance. These administrative staff are agitating for promotions, prompt payment of salaries and lots more. Due to this situation, they have resulted to showing bad attitude to work, not minding the consequences on students. If care is not taken, these Colleges of Education can be taken backward as regards its establishment objectives and this may affect the Nigeria nation. Administrative staff of Colleges of Education in Oyo State are not being rewarded well as such they are reluctant to perform their duty as expected. In this part of the world, reward system and training are believed to influence job performance. Several studies have been carried out in the area of reward system but not specifically on reward system and job performance of administrative staff of Colleges of Education in Oyo State. Hence, this study intends to investigate reward system and job performance of administrative staff of Colleges of Education in Oyo State.

**Research Questions**

1.What is the level of job performance of administrative staff in Colleges of Education, Oyo State?

2. What is the level of reward system of the administrative staff in Colleges of Education, Oyo State?

**Hypotheses**

**$H_0$1**: There is no significant relative influence of reward system (financial reward, non-financial reward) on job performance of administrative staff in Colleges of Education, Oyo State.

**$H_0$2**: There is no significant combined influence of reward system (financial reward, non-financial reward) on job performance of administrative staff in Colleges of Education, Oyo State.

**Methodology**

This study adopted descriptive survey research design to determine the influence reward system on job performance of administrative staff in Colleges of Education, Oyo State. The advantage of the design is robustness with respect to distribution of data which is easy to compute the detailed information that can be derived from the test; it is used in studies for which parametric assumptions cannot be met, and its flexibility in handling data. The population consists of selected one hundred and sixty-two (162) administrative staff in the two Colleges of Education in Oyo State using simple random sampling. The categories of staff selected are faculty officers, and office secretaries. The sample size of the study therefore is the selected one hundred and sixty-two (162) administrative staff of Colleges of Education in Oyo State using total enumeration.

The items for the instrument gathered through related literature review and adaptation from questionnaires that have been used by other researchers. Both face and content product validity were done with the input of the supervisor and other experts in the field of information management.

A primary data was collected to address the objectives of the study through a structured questionnaire in line with existing literatures. This instrument works well with a descriptive survey research mainly because it supports the collection of data regarding opinion and perception of respondents at a point in time on current issues.

Data collected were analyzed using descriptive and inferential statistics. Descriptive statistics (mean, frequency distribution, standard deviation and percentage) were used to analyze research question one to three. Inferential statistics of linear regression was used to test the formulated hypotheses at level of 0.05 level of significance.

**Presentation of Findings on Research Questions**

**Research Question One:** What is the level of job performance (Quantity of work, Quality of Work and Time management) of administrative staff in Colleges of Education in Oyo State?

**Table 1**
***Level of Job Performance of Administrative Staff in Colleges of Education in Oyo State, Nigeria***

| S/N | Items | VH | H | L | VL | Mean | Std. |
|---|---|---|---|---|---|---|---|
| | **Quantity of Work** | | | | | | |
| 1 | Perform task neatly and free from errors | 57 (17.5%) | 199 (61.2%) | 48 (14.8%) | 21 (6.5%) | 2.90 | .757 |
| 2 | Consistent and thorough when performing task | 107 (32.9%) | 107 (32.9%) | 72 (22.2%) | 39 (12.0%) | 2.87 | 1.008 |
| 3 | Accurate and attentive to details when performing a task | 42 (12.9%) | 251 (77.2%) | 14 (4.3%) | 18 (5.5%) | 2.98 | .628 |
| 4 | Use high standard procedure when performing a given task | 66 (20.3%) | 187 (57.5%) | 51 (15.7%) | 21 (6.5%) | 2.92 | .783 |
| | **Mean** | | | | | **2.92** | |
| | **Quality of Work** | | | | | | |
| 1 | Adopt best practices on delivery administrative | 41 (12.6%) | 208 (64.0%) | 60 (18.5%) | 16 (4.9%) | 2.84 | .696 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | duties | | | | | | |
| 2 | Provide support for my unit in the school in delivery value to the student | 31 (9.5%) | 119 (36.6%) | 145 (44.6%) | 30 (9.2%) | 2.46 | .791 |
| 3 | There is proper monitoring of activities to ensure superior service delivery to management | 40 (12.3%) | 164 (50.5%) | 102 (31.4%) | 19 (5.8%) | 2.69 | .760 |
| 4 | We have quality control unit to guaranty effective academic service delivery. | 76 (23.4%) | 180 (55.4%) | 48 (14.8%) | 21 (6.5%) | 2.96 | .800 |
| 5 | Ensuring smooth running of my institution's programmes | 69 (21.2%) | 187 (57.5%) | 48 (14.8%) | 21 (6.5%) | 2.94 | .785 |
| | **Mean** | | | | | **2.78** | |
| | **Time Management** | | | | | | |
| 1 | Present at work on a regular basis | 138 (42.5%) | 141 (43.4%) | 32 (9.8%) | 14 (4.3%) | 3.24 | .800 |
| 2 | Able to meet deadline given to complete a task. | 57 (17.5%) | 199 (61.2%) | 48 (14.8%) | 21 (6.5%) | 2.90 | .757 |
| 3 | Completes given task on time | 57 (17.5%) | 178 (54.8%) | 69 (21.2%) | 21 (6.5%) | 2.83 | .788 |
| 4 | Complete job task during office hours | 57 (17.5%) | 199 (61.2%) | 48 (14.8%) | 21 (6.5%) | 2.90 | .757 |
| 5 | Attend to every task as and when due | 52 (16.0%) | 174 (53.5%) | 80 (24.6%) | 19 (5.8%) | 2.80 | .775 |
| | **Mean** | | | | | **2.93** | |
| | **Weighted Mean** | | | | | **2.88** | High |

Key Source, VH H L VL : Threshold: Mean < 2.5 is low, Mean = 2.5 is Moderate while Mean > 2.5 is high

Table 1 presented the level of job performance of administrative staff in Colleges of Education in Oyo State. In the study, job performance was measured using the quantity of work, quality of work, and time management. The results obtained from the field showed that, as regards performing tasks neatly and free from error, 57 (17.5%) went for the very high option, 199 (61.2%) went for high, 48 (14.8%) went for low, and 21 (6.5%) went for very low. The result further gave a mean of 2.90, meaning the number of tasks neatly free from errors among academic and non-academic staff of Colleges of Education in Oyo State is high. On an item posed to determine the consistency and thoroughness of performing tasks among the staff, 107 (32.9%) went for very high and high, respectively, 72 (22.2%) went for low, and 39 (12.0%) went for very low. The result further resulted in a mean equal to 2.87, meaning that academic and non-academic staff of Colleges of Education in Oyo State are consistent and thorough when performing tasks. Furthermore, a statement was made on accuracy and attentiveness to details when performing tasks. The results obtained revealed that 42 (12.9%) went for very high, 251 (77.2%) went for high, 14 (4.3%) went for low, and 18 (5.5%) went for very low. Finally, on quantity of work, a statement was made on the use of high-standard procedures when performing a given task. The result showed that 66 (20.3%) went for very high, 187 (57.7%) went for high, 51 (15.7%) went for low, and 21 (6.5%) went for very low.

A statement was made to determine the adoption of best practices in the delivery of academic work in order to determine the quality of work. 41 (12.6%) went for the very high option, 208 (64.0%) went for high, 60 (18.5%) went for low, and 16 (4.9%) went for the very low option. Similarly, a statement was made on the provision of support for the academic unit in the school in delivering value to the students. 31 (9.5%) went for the very high option, 119 (36.6%) went for high, 145 (44.6%) went for low, and 30 (9.2%) went for the very low option. Furthermore, a statement was made on the proper monitoring of academic activities to ensure superior service delivery to management. The result showed that 40 (12.3%) went for the very high option, 164 (50.5%) went for high, 102 (31.4%) went for low, and 19 (5.8%) went for the very low option. Still on quality of work, a statement was made on the quality control unit to guarantee effective academic service delivery to management. An analysis of responses to this showed that 76 (23.4%) went for the very high option, 180 (55.4%) went for high, 48 (14.8%) went for low, and 21 (6.5%) went for the low option.

On time management as a measure of job performance of administrative staff in Colleges of Education in Oyo State, a statement was made on the regularity of being present at work. The response showed that 138 (42.5%) of the respondents went for the very high option, 141 (43.4%) went for high, 32 (9.8%) went for low, and 21 (6.5%) went for the very low option. Another statement was made on meeting deadlines given to complete a task. The result showed that 57 (17.5%) went for very high, 199 (61.2%) went for high, 48 (14.8%) went for low, and 21 (6.5%) went for very low. Again, a statement was made on the completion of tasks on time. 57 (17.5%) went for very high, 178 (54.8%) went for high, 69 (21.2%) went for low, and 21 (6.5%) went for the very low option. On a statement raised about the completion of a given task during office hours, the result showed that 57 (17.5%) went for very high, 199 (61.2%) went for high, 48 (14.8%) went for low, and 21 (6.5%) went for the very low option. Finally, a statement was made about attending to every task as and when due. 52 (16.0%) went for the very high option, 174 (53.5%) went for high, 80 (24.6%) went for low, and 19

(5.8%) went for the very low option. The result further gave a weighted mean of 2.88, meaning job performance among the staff of Colleges of Education in Oyo State is high.

**Research Question Two**

What is the level of reward system of administrative staff in Colleges of Education in Oyo State?

**Table 2**

***Level of Reward System of Administrative Staff in Colleges of Education in Oyo State***

| S/N | Items | SA | A | D | SD | Mean | Std. |
|---|---|---|---|---|---|---|---|
| | **Financial Reward** | | | | | | |
| 1 | My salary is satisfactory in relation to what I do | 36 (11.1%) | 10 (3.1%) | 160 (49.2%) | 119 (36.6%) | 1.89 | .911 |
| 2 | I earn the same as more as other people in a similar job | 36 (11.1%) | 10 (3.1%) | 118 (36.3%) | 161 (49.5%) | 1.76 | .955 |
| 3 | The basis of payment, for example overtime payment is reasonable. | 36 (11.1%) | 66 (20.3%) | 129 (39.7%) | 94 (28.9%) | 2.14 | .959 |
| 4 | Salary increases are decided on a fair manner | 36 (11.1%) | 10 (3.1%) | 119 (36.6%) | 160 (49.2%) | 1.76 | .955 |
| 5 | I feel happy when my salary and benefits are paid in due time. | 325 (100%) | 00 | 00 | 00 | 4.00 | .000 |
| | Mean | | | | | 2.31 | Low |
| | **Non – Financial Reward** | | | | | | |
| 1 | My reward is equivalent to the work done | 36 (11.1%) | 10 (3.1%) | 157 (48.3%) | 122 (37.5%) | 1.88 | .915 |
| 2 | I am happy at my leave arrangement | 21 (6.5%) | 08 (2.5%) | 167 (51.4%) | 129 (39.7%) | 1.76 | .789 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | My supervisor considers me for promotion with good performance. | 59 (18.2%) | 66 (20.3%) | 113 (34.8%) | 87 (26.8%) | 2.30 | 1.054 |
| 4 | My college creates advancement opportunity for additional achievement. | 36 (11.1%) | 46 (14.2%) | 140 (43.1%) | 103 (31.7%) | 2.05 | .950 |
| 5 | I enjoy flexible working arrangements to cash rewards | 19 (5.8%) | 10 (3.1%) | 72 (22.2%) | 224 (68.9%) | 1.46 | .814 |
| | **Mean** | | | | | **1.89** | **Low** |
| | **Weighted Mean** | | | | | **2.10** | **Low** |

Source, Fieldsurvey, 2022

Threshold: Mean < 2.5 is low, Mean = 2.5 is Moderate while Mean > 2.5 is high

Research Question Three was raised to determine the level of reward system for administrative staff in Colleges of Education in Oyo State. To determine that, reward was divided into financial and non-financial reward. The result obtained is presented as follows: 36 (11.1%) of the respondents strongly agree, 10 (3.1%) agree, and 119 (36.6%) strongly disagree that their salaries are satisfactory in relation to what they do. Similarly, 36 (11.1%) strongly agree, 10 (3.1%) agree, 118 (36.3%) disagree, and 161 (49.5%) strongly disagree that they earn the same as other people in a similar job. Furthermore, the results showed that 36 (11.1%) strongly agree, 66 (20.3%) agree, 129 (39.7%) disagree, and 94 (28.9%) strongly disagree that the basis of payment in their institutions is reasonable. Also, 36 (11.1%) of the respondents strongly agreed that their salaries are decided on a fair matter; 10 (3.1%) agreed; 119 (36.6%) disagreed; and 160 (49.2%) strongly disagreed. Moreover, all the three hundred and twenty-five (325%) (100%) participants strongly agree that they feel happy when their salaries and other benefits are paid on time.

On non-financial reward, the results showed that 36 (11.1%) strongly agree, 10 (3.1%) agree, 157 (48.3%) disagree, while 122 (37.5%) strongly disagree that their reward is equivalent to the work they are doing. Similarly, 21 (6.5%) strongly agree, 8 (2.5%) agree, 167 (51.4%) disagree, while 129 (39.7%) strongly disagree that they are happy with the leave arrangement they received. Furthermore, 59 (18.2%) strongly agree, 66 (20.3%) agree, 113 (34.8%) disagree, and 87 (26.8%) strongly disagree that their supervisors consider them for promotion with good performance. Similarly, 36 (11.1%) of the respondents strongly agree, 46 (14.2%) agree, 140 (43.1%) disagree, and 103 (31.7%) strongly disagree that their institution creates advancement opportunities for additional achievement. Finally, 19 (5.8%) strongly agree, 10 (3.1%) agree, 72 (22.2%) disagree, while 224 (68.9%) strongly disagree that they enjoy flexible working arrangements for cash reward. Further to the foregoing, the result also showed that although the aggregate reward system in Colleges of Education in Oyo State is low with a weighted mean of 2.10, financial reward is higher with a mean of 2.31 as against non-financial reward with a mean of 1.89.

**Test of Hypotheses**

**Hypothesis One**

There is no significant influence of reward systems on job performance of administrative staff in Colleges of Education in Oyo State.

**Table 3**

***Summary of Influence of Reward Systems on Job Performance of Administrative Staff in Colleges of Education in Oyo State***

| Model | Unstandardized Coefficient | | Standardized Coefficients | T | Sig |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | | |
| Constant | 35.012 | 2.521 | | 13.888 | .000 |
| Reward Systems | .322 | .060 | .287 | 5.333 | .000 |

Dependent Variable: Job Performance

Source, Fieldsurvey, 2022

Table 3 presents summary of the influence of reward systems on job performance of administrative staff in Colleges of Education in Oyo State. When the null hypothesis is tested, the p-value (0.000) is less than the alpha value of 0.05, indicating that there is a significant influence. Therefore, the null hypothesis was rejected.

**Hypothesis Two**

There will be no significant combined influence of reward system and training methods on job performance of administrative staff in Colleges of Education in Oyo State.

**Table 4**

***Summary of Regression Analysis showing Combined Influence of Reward System on Job Performance of Administrative Staff in Colleges of Education in Oyo State***

$R = 0.285$

$R^2 = 0.081$

Adj. $R^2 = 0.075$

Std. Error = 7.830

ANOVA

| | Sum of Squares | Df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Regression | 1743.731 | 2 | 871.866 | 14.219 | .000 |
| Residual | 19743.758 | 322 | 61.316 | | |
| Total | 21487.489 | 324 | | | |

a. Dependent Variable: Job Performance
b. Predictors: (Constant), Reward System

The combined influence of the reward systems on the job performance of administrative staff in Colleges of Education in Oyo State is summarized in Table 4. When the null hypothesis is tested, the p-value (0.000) is less than the alpha value of 0.05, indicating that the influence is significant. When the independent variables reward systems (financial and non-financial) are considered together, the table reveals ($F = 14.219$; $P < 0.05$) that they have a significant influence on the dependent variable (job performance). The table also shows that Adj. R2 = 0.081, indicating that when the independent variables reward system (financial and non-financial) were combined, they accounted for 8% of the total variation. As a result, the null hypothesis was rejected.

**Discussion of Findings**

The first research question sought to ascertain the level of job performance of administrative staff in Colleges of Education in Oyo State. The findings revealed that, on average, administrative staff in Colleges of Education in Oyo State perform well on the job. Similarly, the findings revealed that time management, as an indicator of job performance, contributes the most to the observed high level of staff performance. This was followed by quantity of work, with quality of work having the least influence on the observed high job performance. This result, however, may not be unrelated to many factors that drive the private sector toward quality achievement, such as implementing quality assurance strategies, effective and continuous supervision, check and balance, worker motivation strategies, and so on. Some empirical studies back up the finding. For example, one study found that administrative staff in universities have high ability, skill, and effort, which leads to a strong attachment to their jobs and a desire to improve their performance (Aparna, & Sahney, 2022). Similarly, a study discovered that administrative staff in colleges of education are highly engaged in their jobs, which means they not only exert physical effort to achieve role-related goals, but they are also cognitively alert and emotionally invested in the endeavor (Lamptey, Umude, & Atteh, 2020). A study, on the other hand, discovered that, due to some inherent and external factors, administrative staff in educational institutions are highly disengaged in their work roles, withholding their physical, cognitive, and emotional energies, which is reflected in task activity that is, at best, robotic, passive, and detached (Zhukov, 2013).

The second research question sought to ascertain the level of the reward system for administrative staff in Colleges of Education in Oyo State. To determine that, the reward was divided into two categories: financial and non-financial. The findings revealed that both the reward systems in Colleges of Education in Oyo State are inadequate. This position is in line with the submission of a study that found that the level of reward system in Nigerian tertiary institutions has remained a very serious problem. The study lamented that the situation of workers in higher institutions, especially educational public institutions, in Nigeria has reached "an intolerable low point," which has made the profession unattractive. Some even went without salary for several months, thereby being compelled to seek alternative means of livelihood to meet their basic needs. Getting their full attention back to school has not been very easy. This ill treatment breeds dissatisfaction and hampers classroom effectiveness and productivity (Turayeva & Kurbanova, 2023). Another study found that the poor motivation of administrative staff in public and private educational institutions arising from a generation of poor rewards is largely responsible for the debilitating standard of education. The study further clarified that rewards are never forthcoming; salaries and wages are denied; and promotion is only in the air and subjected to unnecessary variables (Tiwari & Chatterjee, 2021). Supporting this position, a related study found that at all levels and sizes, private educational institutions are in jeopardy since their workforce (teachers specifically) is haphazardly employed, poorly remunerated, not rewarded for incidental contributions, and not exposed to or given other fringe benefits or incentives (Abdullah, 2020).

Hypothesis one was tested to determine the significant influence of reward systems on the job performance of administrative staff in Colleges of Education in Oyo State. The results obtained showed that there was a significant influence. Therefore, the null hypothesis was rejected. This implies that financial and non-financial rewards have a significant influence on the job performance of administrative staff in Colleges of Education in Oyo State. This report is in line with the submission of a study which opines that a poor reward system has been a major factor affecting employee satisfaction, commitment, and productivity. According to the study, an adequate reward system will encourage administrative staff to be proactive and have the right attitude toward work, thereby increasing organizational productivity (Gillian & Bennett, 2016).

To avoid controversies and misunderstandings among administrative staff, it is critical that the reward system be clearly communicated to them alongside their specific tasks, as this will drive the much-needed motivation and satisfaction in the administrative staff. High levels of staff satisfaction and performance are largely determined by the reward system put in place by the institution or organization. It is not possible to have a good team of professionals in an organization without a good reward system and motivation platform. The level of dissatisfaction of the staff is clearly seen in the frequent lateness to work, absenteeism, visiting hospitals, and attending more to their family and personal issues than usual (Gillian & Bennett, 2016). A related study also argued that employee benefits, though a part of the total reward system, embrace non-monetary forms of compensation ranging from healthcare plans to pension or retirement plans, social security, insurance, family and medical leave, severance pay, vacations and sabbaticals, holidays, and workers compensation, which are legally mandated to be enjoyed by administrative staff (Ladd & Neumark, 2022). However, these reward packages are often significantly linked to administrative staff' job satisfaction and performance.

According to one study, there is a link between "recognition and reward" and "motivation and performance." It stated that providing administrative staff with rewards and recognition results in a significant increase in their motivation and satisfaction. Another study examined the relationship between rewards, motivation, and job performance in the educational institutions. According to the findings of the study, there is a close relationship between several dimensions of job motivation and performance and those of financial and non-financial rewards.

**Conclusion**

On the basis of the findings of the study, it can be concluded that level of job performance of administrative staff in Colleges of Education in Oyo State is high, mentoring is the highest type of training program accessible to administrative staff at colleges of education in Oyo State, followed by "Team Training and Seminar respectively. Financial and non-financial rewards are low in colleges of education in Oyo State. There is significant influence of reward systems on job performance of administrative staff in Colleges of Education in Oyo State, there is significant influence of reward systems on job performance of administrative staff in Colleges of Education in Oyo State and there is significant combined influence of the reward system and training programs on the job performance of administrative staff in Colleges of Education in Oyo State.

**Recommendations**

1) Given the significant influence of reward systems on the job performance of administrative staff in Colleges of Education in Oyo State, it is recommended that institutions focus on enhancing their reward systems. This could involve revisiting the financial and non-financial rewards provided to administrative staff in Colleges of Education in Oyo State.
2) Institutions should consider conducting a thorough review of their current reward structures and identify areas for improvement. This could include increasing salaries, providing performance-based bonuses, offering career advancement opportunities, recognizing outstanding achievements, and providing additional benefits and incentives. By strengthening the reward systems, colleges can create a more motivating and satisfying work environment, leading to improved job performance among administrative staff.
3) Non-monetary incentives, in addition to monetary incentives, should be prioritized in order to improve employee performance.

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# Impact of Presidential Amnesty and Security Challenges in Niger Delta: Analyzing the Delta State Experience

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## Abstract
The Federal Government of Nigeria introduced the policy of amnesty to the militants in South- South Nigeria as a solution to insecurity and wanton destruction of lives and properties especially on critical infrastructures of Nigerian National Petroleum Corporation. This article, however, assessed the impact of Presidential Amnesty on security challenges in Niger Delta. Utilizing Frustration Aggression theory, the paper argued that the long accumulated frustrations of the people of Delta rising from the long-time neglect and under development of the State by various regimes and administrations have led to the continuous agitations and violence in the State. The Amnesty programme was basically oriented towards enhancing the security situation in the State for the purpose of increasing crude oil production. Employing qualitative method and relying mainly on primary and secondary sources, relevant data were generated and analyzed using thematic content analyses. The study therefore contended that there was nexus between the Amnesty Programme, national security and increase in crude oil production in Nigeria. Based on these finding therefore, it is our recommendation that the federal government should urgently and comprehensively tackle the underlying economic and social problems of Delta State in particular and Niger Delta region so as to prevent a relapse into crisis.
**Key words: Amnesty, Challenges, Experience, Presidential, Security**

## Introduction
Prior to the advent of commercial oil production in the Niger Delta region of Nigeria in 1958, the region was essentially a pristine environment which supported substantial subsistence resources for the mostly active population. The region accounted for a large percentage of Nigeria's commercial fisheries industry (Afinotan, 2009). For centuries, the people of the Niger Delta were content to engage in farming, fishing and such other endeavors like pottery, mat-making and hunting, unaware that underneath their soil was one of nature's most prized mineral resources.
Crude oil was discovered in the Niger Delta over fifty years ago, with the discovery of oil in Otuakeme, Otokopiri clan near Oloibiri in 1956 by Shell Petroleum Development

Company (Aaron, 2010). Oil has since become the main stay of the Nigerian economy, contributing over 90 percent of foreign exchange earnings of the government. It is surprising that the trajectory of constitutional development, socio-economic development and class formation have been massively influenced and dictated by the politics of oil (Owugah, 1999).

While Nigeria may see the availability of the crude resources as a 'blessing' and a source of pre-eminence in the global market place, the communities where this crude resource is endowed with, see it as a 'curse'. This is because the massive exploitation of crude oil creates serious developmental, social and environmental problems which the Nigerian state and the collaborative oil giants have neglected for a long time (Omotola, 2006). Lamenting about this state of affairs, Owugah (1999) observes that "the oil which brought so much wealth to the nation and those in power, brought much poverty, disease, death, loss of livelihood, to the people of the oil bearing areas".

After decades of environmental abuse and human degradation coupled with unfulfilled promises of redress on the part of the State and Transnational oil companies; the agitations of the Niger Deltans have taken a violent and militant dimension. These militant activities have impacted gravely on national economy and security thus prompting the state to launch military attacks on the region. Intermittently, such military responses have done little to curtail the militant agitation in the Niger Delta and the Federal government itself is far from winning the war (Ikejiani, 2007).

With the emergence of a pan-Niger Delta militia group, the Movement for the Emancipation of the Niger Delta (MEND) in 2006, the struggle for local control of Nigeria's oil assumed a more violent dimension. Apart from MEND that appears to have clearly articulated grievances namely Environmental Insecurity and Socio-Economic Marginalization of the Niger Delta people, sundry groups emerged in the Niger Delta as well. Some of these groups, it would appear, were driven not by liberation ideology but crime and criminality. Independently the activities of these groups created a difficult security challenge in Nigeria's oil belt (Aaron, 2010).

One of the first armed activities that emerged from the oil-rich region of Nigeria, ranging from the Boro-led Niger Delta Volunteer Service (NDVS) in 1966, the Ken-Saro-Wiwa-led Movement for the Survival of Ogoni People (MOSOP) in 1992, the Aleibiri Demonstration (AD) in 1997, the Kaiama Declaration (KD) in 1998, the Odi Massacre (OM) in 1999, the Asari-Dokubo-led Niger Delta Peoples Volunteer Force (NDPVF) in 2004, Tom Ateke-led Niger Delta Vigilante (NDV) and several other militant groups emerged as affront to the giants MNCs and the Nigerian State (Eseduwo, 2008).

The state of crisis in the Gbaramatu territory to the South-west of Warri, Ogulagha Kingdom in Burutu Local Government area as well as Isoko North and South is dire and escalating. Since 1997, these oil-rich communities of Delta State have been embroiled in political violence. The decade old crisis has claimed many lives and rendered more than 30,000 homeless (including internally displaced persons). The subsequent loss of revenue to the Federal Government and the derivation to the oil producing states of Nigeria has totaled billions of dollars. Since early 2006, attacks on oil facilities and the abduction of foreign oil workers by militants, cut down drastically the nation's daily oil production. This crisis is the direct consequence of endemic poverty in these oil-bearing communities of the delta, lack of socio-economic development, militarization of the oil-bearing communities, lack of stake/participation in the oil industry by oil-bearing communities, high unemployment, corruption and lack of democratic governance in the Niger Delta and Nigeria at large. At the root of these agitations in these communities is the quest for a measure of political autonomy and self-governance – and by extension the rectification of historical wrongs including the loss of substantial oil revenues (Alagoa, 2005)

In what appears an admission of the futility of violent response, late President UmaruYar'Adua, on 25th June, 2009, announced an amnesty for militants who were willing to surrender their arms. One strategy believed to be effective in this direction and increasingly being employed in conflict and post-conflict situations is disarmament, demobilization, and reintegration (DDR) Humphreys and Weinstein (2007). Formal programmes aimed at disarming, demobilizing, and reintegrating combatants into civil society started with the operations of the UN Observer Group in Central Sudan in 1989 and have since become a prominent intervention strategy of the UN (Muggah, 2009; Humphreys and Weinstein, 2007).

DDR has achieved some level of success in mitigating armed conflict and in sustaining peace in many conflict-ridden or war-ravaged societies including Rwanda, DR Congo, El Salvador, Cambodia, Cote d'Ivoire, Uganda, Ethiopia, Somalia, Liberia, Russia, Angola, Sierra Leone, Guatemala, India, Tajikistan, Afghanistan, Colombia, Rwanda, Mozambique, Burundi, and Bosnia-Herzegovina. As a result of its increasingly widespread usage and the successes it has recorded in the areas where it has been applied, the UN Secretary General concluded that a "process of disarmament, demobilization, and reintegration has repeatedly proven to be vital to stability in a post-conflict situation" (United Nations, 2006). This strategy is currently being used in hopes of preventing the Niger Delta conflict from escalating. If the crisis is allowed to escalate into full-blown war, it may become too costly and dangerous to intervene in any form and intervention after war, in any case, has been shown to be the least likely to succeed (Annan, 1996).

**Research Questions**

**1.** What is the nexus between presidential amnesty and militancy in Delta State?
2. Did the disarmament of militants increase crude oil production in Nigeria?
3. Did the disarmament, demobilization and reintegration of the militants reduce criminalities in Delta State?

**Theoretical Framework**This study is anchored on Frustration-Aggression theory because of its imperative to the research and its effectiveness and merits among other means for the study and understanding of the social system and related phenomena. Frustration Aggression theory was formulated by John Dollard et al, Leonard Doob, Neal Miller, O. H. Mowrer, and Robert Sears in (1939). The theory concentrated on the limited interference with an expected attainment of a desired goal on hostile (emotional) aggression. Developments since then have shown that the frustration-aggression theory is intended to suggest to the student of human nature that when he sees aggression he should turn a suspicious eye on possibilities that the organism or group is confronted with frustration; and that when he views interference with individual or group habits, he should be on the look-out for, among other things, aggression (Green, 1941).

The frustration aggression theory states that aggression is caused by frustration. When someone is prevented from reaching his target, he becomes frustrated. This frustration then can turn into aggression when something triggers it (Berkowitz, 1980). Aggression is usually directed towards the cause of the frustration, but if this is not possible, the aggression may be displaced onto another person or object.

The oil producing Communities of Delta state have for so long craved to enjoy the proceeds of the oil deposit in their lands. Unfortunately, what they get in return is pollution and environmental damage caused by activities of the oil Companies. The frustration emanating from the insensitivity of the state and oil companies eventually turned the region into a complex operating environment, characterized by intra and inter-ethnic conflict, conflict between the communities and the oil companies and conflict between armed groups and the oil companies and Nigerian security forces. The multi-dimensional crisis is driven by the actions of the security forces and militant groups, extensive pollution of land and water, corruption, corporate failures and bad practice and serious government neglect.
According to Best (2012) in a situation where feelings of frustration become widespread among the population and the feeling is that people are getting less than what they deserve, the most advisable thing that political leaders can do is to find out what the expectation of such individuals and groups are and to seek ways of negotiating with them. Most times, however, those in position of authority believe that giving in to public demands or entering into negotiations is a sign of weakness.

Thus, it is appropriate to aver that when people perceive that they are being prevented from achieving a goal, their frustration is likely to turn to aggression. As seen in the extant Niger Delta issue, the hitherto peaceful region have snowballed into crisis because for over half a century, the closer they get to their goal of enjoying the proceeds of oil which nature deposited in their land, the greater the excitement and expectation of the pleasure. However, the closer they are, the more frustrated they get by being held back. Frustration produced by interrupting a person's progress toward an expected goal will always elicit the motive to aggress. The people of Isoko North, Isoko South, Burutu and Warri Southwest Local Government Areas of Delta State have long been denied by the government of Nigeria the right to enjoy the proceeds of the resources that are deposited in their land, this has been going on over a long period of time that has brought about frustration and the only outcome from that is what we see today as militancy activities in these areas.

**Method**

This study adopted qualitative approach. This is considered most suitable given the nature of the research that requires in-depth information from participants with vast experience on the phenomenon that would be investigated. Qualitative approach allows the interviewees to air their views freely without restriction, in that giving useful information that would be of a value to the research. The adoption of this approach would enable us to identify the most severe threats to validity and reliability of the topic under study particularly as it affects these selected local government areas in Delta State.

The study employed both the primary and secondary means of data collection. This means that the primary data was sourced through unstructured interviews. The secondary data was sourced from institutional and official documents from organizations such as NDDC, NNPC quarterly reports, and other related documents that concern the research topic. Other secondary data sources such as textbooks, journals and magazines, articles and other written works bordering on the subject matter was used. The aim of this is to make the literature up to date with current issues affecting the case study of this research. Purposive sampling method was adopted in selecting participants which was based on individual capacity to participate in adding value to the study. Respondents were selected for in-depth interviewing from the selected local government areas of Isoko North, Isoko South, Burutu and Warri Southwest including ex-militants, traditional rulers, politicians, and academics from Delta State University Abraka. Thematic content analyses method was adopted.

**Result of Findings**

Analyses of the findings were done in line with the stated research questions. In other words, the review tried to provide answers to the above research questions.

**Nexus between Presidential Amnesty and Militancy in Delta State**

In examining the impact of Presidential Amnesty Programme this study examined the relationship between the presidential amnesty and militancy in Delta State. In the interviews conducted all the respondents that is, traditional rulers from the study areas, politicians and academics from Delta State University Abraka maintained that the Presidential amnesty actually brought succor to militancy in the volatile Niger Delta region specifically the study areas, and restored peace and tranquility to a great extent. To the respondents, there is a super connection between the introduced amnesty programme by the presidency and combating militancy in the oil rich Niger Delta especially since the militants were able to surrender themselves and renounced all forms of militancy such as abduction of expatriates and oil workers, oil pipeline vandalisation, bunkering among others.

On the part of the ex-militants who were interviewed, Respondent 1 had this to say:

> *A good number of us, militants oh! Ex-militants are well informed but we felt denied and marginalized considering the fact that we lay the golden eggs which the country rely on and boast of both in domestic and international markets yet we can't afford a safe drinking water, good agricultural land or even enjoy fishes any more. We engaged in militant activities as a result of these ill treatments but with the amnesty, we feel relieved and better now. That is why we are out of the creeks.*

This position on the link and success of the amnesty offered was captured by (Uduagban, 2009, and Ofehe, 2009). However, Ajaero (2010) seems to capture these positions well when he argues. "For those who actually know the cost of violence and the quantity of arms and ammunition in Delta state, the decision of the repentant militants to embrace peace is one of the best things that have happened to the country in 2009. A state of war has been averted by their decision to lay down arms. This is a great act of patriotism" (Ajaero, 2010, p.11-13). He further stated that for laying down their arms, the Niger Delta militants were voted man of the year 2009.

This opinion also agrees with the views of Fagge and Alabi, (2016) which maintained among others that an amnesty may be given to an individual or a group of individuals when the authority believes that bringing such citizen into compliance with a law is more crucial than punishing them for past crimes. Amnesty after the cessation of hostilities helps to put an end to a conflict. Thus there is a direct relationship between the presidential amnesty and addressing militancy challenge in Delta state.

It was also discovered that not all violent activities in Delta State can be attributed to militancy. This is in line with Aslem (2001) who remarked that faith differences place a barrier between people of the same decent. Also, Jegede (1991) further emphasized that religion causes differences in families by observing that when a husband and his wife subscribe to different religion disagreements may arise about the children's religious upbringing. Bur (2001) also observed that conflicts occur as a result of a disagreement with the view of other, which is usually fuelled by differences in cultural background.

**Disarmament of Niger Delta Militants and Oil Production in Nigeria**

The respondents interviewed were of the opinion that the disarmament of militants in the Niger Delta area automatically made oil exploration to shoot up. They maintained that as soon as the Presidential amnesty was declared, militants who embraced it dropped their arms and even encouraged other members to do same. This gesture suddenly brought peace to the area and made oil workers especially expatriates to settle for business as usual. Thus, oil exploration increased and revenue also increased.

One of the politicians had this to say,

> *No serious business can thrive in the state of violence. As you know, the militant activities almost kill oil exploration here in our region. None of the oil workers especially the foreigners had the confidence to work or even close their two eyes while sleeping. The situation was really tensed and hostile for oil production. So, one can say that the disarmament of militants has curbed the tension and encouraged oil exploration which is in the interest of Nigerian nation.*

The ex-militants in line with the interviewed respondents admitted that there is serious connection between disarmament of militants through presidential amnesty and increase in oil exploration and production. People now go about their daily businesses particularly in the oil sector hence, exploration activities have increased tremendously since militancy was curtailed.
To further buttress this claim, the 5th Respondent interviewed had this to say*:*

> *When we were active in our operations, I mean carrying out militant operation, no worker dared go to work at the oil fields even the native worker could not because it was really disastrous to even think of that. Lives were not assured at home let alone mere oil exploration sites which could be blown up at any given time. But now peace has returned in the area so, more oil business is being carried out these days and you know what that means? It means more money to the government and foreign nations.*

Although, the presidential amnesty has reduced militancy in the area of pipeline vandalisation, respondents identified oil bunkering is another challenge faced by the nation and oil companies yet it cannot be compared to the era of militancy which claimed lives as well as frustrated oil production in the Niger Delta areas. Bunkering mostly focused on oil theft by some criminal elements and does not necessary take human lives unlike militancy.

This finding also corroborates the submissions of NNPC, (2009) and Amaize **(**2016) that at the height of the conflict in 2009, Nigeria's crude oil production dropped from 2.2 million to 700,000 barrel per day and as a result of the post amnesty period, crude oil production increased to 2.4 million bpd in 2013. In 2014 it equally increased to 2.6 million and in 2015 it further rose to 2.7 million bpd. The drop from 2.2 million bpd to 700,000 bpd in 2009 was as a result of various attacks on oil installations and pipelines vandalism.

To sustain the increase in oil exploration which is already witnessed in the business, it was revealed that government should not for any reason abort the amnesty programme instead, it should be improved upon by way of reviewing upward the allocation that is meant to cater for the repentant militants. Renewal of agitation can only come up if government and or her agencies fail in their agreement with the ex-militants. It would be easy for the boys to return to the creeks if they are disappointed with the government offer but on the contrary peace can be sustained in the oil exploration areas once the need of repentant militants are met.

Tanimu (2009) observed gains from the disarmament programme to include:

1. Rise in the nations crude oil export,
2. Rise in oil and gas infrastructure to the three tier of government as well as the return of oil companies to the Niger Delta region,
3. Repair of oil and gas infrastructure destroyed during the pre-amnesty periods.

The success of the disarmament programme for the militants' spawned immediate results as the Nigerian National Petroleum Corporation (NNPC) announced that the countries crude production per day has increased (NNPC Report, 2009). From the foregoing evidence, we accepted the assumption of the study; hence the disarmament of Niger Delta militants increased crude oil production in Nigeria.

**The Amnesty Programme and Criminalities in Delta State**

The study further revealed that disarmament, demobilization and reintegration of the Niger Delta militants has reduced the rate of criminalities in Delta state unlike what was obtainable throughout the period of militancy. Respondents who were interviewed maintained that it would be an understatement to say that demobilization and reintegration of the militants in Delta state has not contributed to the reduction of cases of kidnap in the study areas. As a matter of sincerity, the traditional rulers, politician and scholars in the study area acknowledged that the spate of kidnapping is no longer a common phenomenon as it were before the presidential declaration and implementation of amnesty. There is relative peace and tranquility as people now go about their daily businesses without fear of abduction. It is important to mention that ex-militants also function as security agents by ensuring that criminal activities are not recorded in their locations respectively.

Ex –militant allocation is also one key instrument that government has adopted to reduce cases of kidnapping in the study areas. Ex – Militant's allocation refers to as oil allocations assigned to the repentant militants through Nigerian National Petroleum Corporation (N.N.P.C) to sale and earn some money like other oil marketers, as a way of reducing kidnapping government's amnesty programme has contributed to a great extent in that direction because, most of the militants who were initially in the business of kidnapping and abduction of expatriates and indigenous workers have stopped such heinous activities.

One of the ex-militants confirmed this during the interview session when he said that,

> *Government has not only introduced the presidential amnesty but has equally given us the opportunity to*

> *benefit from oil sales through what they call Ex-militants allocation. With this it has been difficult for most of us to return to criminality since our needs and those of others persons are met.*

This finding is in agreement with the position of Onukwugha, Eke-Ogiugo and Okhomina (2014), which state that amnesty package has helped in the reduction of violent crimes as most youths who were involved in anti-social activities have been integrated into the programme; thereby makes violence unattractive. Such crimes include; attacking oil installations, engaging in illegal oil bunkering and kidnapping of oil workers. It is of course, a truism that violence has now declined but not disappeared. To this end, there is no gain saying that amnesty has made significant impact addressing the issue of kidnapping in Delta state. According to Amnesty Office, Abuja, (2010) the number of disarmed militants in Delta state as at December 2009 stand at 20 female militants and 4,396 male militants bringing the total number to 4, 416 disarmed militants which have drastically reduced cases of kidnaps in Delta state. Also militants in Delta state cannot easily be known or identified by local government area of origin because there are operating based on camps headed by a 'General' as they are commonly addressed as disclosed by amnesty office in Abuja. Example is Camp5 headed by General Tompolo, Plantation Camp headed by General Moses, Yudoro Camp headed by General Akpororo and Baruku Camp8 headed by General Yukore.

**Conclusion and Recommendations**

This study gave an in-depth explanation on the Impact of the Presidential Amnesty Programme in Niger Delta, using Delta State as case study. Before the advent of the Boko Haram Terrorist Organization in the north east, militancy posed the greatest security threat to Nigeria since the end of the civil war in 1970. Though it started as mere agitations owing to poor governance, reliance of the state essentially on repression and the military option in managing these challenges to its legitimacy, led to the radicalization of violent non-state actors.

Environmental pollution by way of oil spillage and gas flaring, general underdevelopment are still the lots and bane of some parts of the study areas of Warri southwest and Burutu local government areas of Delta state of Nigeria, where the country's oil exploration activities are carried out by the oil multinational companies (MNCs). The crisis of the people as well as several non-governmental organizations for attention to the area were not only spurned, but were at intervals rebuffed with crackdown and repression from successive administrations in the country, with the strong connivance of the oil MNCs. The situation reached a crescendo, when the people of these areas took to self – help by bombing, kidnapping and adducting the expatriates and other categories of personnel of the oil MNCs in exchange for monetary ransom. The government not able to bear the embarrassment and the drop of oil production daily, coupled with the substantial loss of revenue devised the amnesty programme in 2009 as a solution to the quagmire. Though the disarmament led to increase in oil productions which translate to more revenue for the government some of the underlining issues that brought about militancy in the first place are still very much before the people.

There is no denying the fact that many ex-militants have benefited from the amnesty programme which is largely responsible for the reduction in crime and criminalities, the government must do more in the area of infrastructural development and ensure that youths are gainfully engaged and empowered to become useful to themselves and the society which is the only guaranty that militants and militancy activities will not come up again in the nearest future.

The following recommendations are made:

1. The Amnesty Programmes skill acquisition packages promises a better future for both the local populations and the companies if well managed. Upon the completion of the training of ex-militants in oil related skills, the companies should ensure that they are recruited and engaged in the industry through the reservation of some employment quota for the local inhabitants, thus making the local people identify with the companies operating in the region.
2. Government must ensure the inclusion of other militant groups in Delta state that now desire to join in the Amnesty programme., There have been agitations from some of the militants, mostly youth in the state, who failed to avail themselves of the window of opportunity opened to them to accept the Amnesty offers from the onset for perceived lack of trust and sincerity in the government over the programme.
3. It is an old maxim that violence cannot check violence. Militarizing the state with combat ready armoured personnel carriers, police helicopters, members of the Joint Task Force and the like will only help to infuriate both the genuine freedom fighters and the criminal elements in the struggle. The result will be a vicious circle of violence begetting violence.
4. The success of the Amnesty package depends on the collaboration of the state governments, local governments, the oil malls, Niger Delta Development Commission (NDDC), the ministry of Niger Delta affairs, and other intervention agencies. Each of these levels of government, corporations and agencies must strive to contribute their own quota to the success of the programme, practically in the area of training and skill acquisition
5. There should be rapid development of Delta state especially the study areas which are the oil producing communities through the provision of infrastructural facilities. It is time to adopt the simple method used for the rapid development of Abuja in developing the Niger Delta especially the study areas.

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# Challenges of Teaching Practice Evaluation in Teacher Education in Nigeria

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## Abstract

Teacher education is the professional training of persons desiring to go into the teaching profession or those who are already teaching without the prescribed training and certification. Teacher education generally comprises two major components which are theoretical and practical. The theoretical component covers subject matter content and general studies in education while the practical component is the teaching practice (TP). TP is the teaching done by teacher trainees in a real school setting under the guidance of experienced teachers usually in primary and secondary schools. It is a core course in teacher education in Nigerian colleges of education and faculty of education in universities which all students must pass before graduation irrespective of the field of study. TP provides students the opportunity to put into practice their theoretical knowledge in real-life situation as a key factor in their professional development. In both NCE and degree programmes, TP carries a maximum of six credits and its evaluation significantly affects students' overall pass level. This means that a high score in TP significantly increases the student's cumulative grade point average (CGPA) for the year and final cumulative grade point average (FCGPA) which determines the pass level. The chapter discusses the aims and objectives of TP in teacher education, definition of evaluation, evaluation in education and objectives of teacher/teaching evaluation. Finally, it highlights six challenges of teaching practice evaluation in teacher education in Nigeria which are insufficient sensitization, deployment of teacher trainees and supervisors to practicing schools, attitude of secondary and primary schools' administration towards teaching practice, accessibility of practicing schools, inadequate observation and guidance by supervisors and lack of commitment on the part of the student teachers. It concludes that the challenges are surmountable with adequate commitment of all the stakeholders and adoption of suitable strategies. Finally, it recommends among others that teacher education institutions should demonstrate greater commitment towards teaching practice and adopt suitable strategies to sufficiently sensitize all stakeholders while experienced subject teachers in practicing schools should change their attitude towards the programme to ensure that the laudable objectives are better achieved.

**Keywords: Teacher Education, Teacher Trainee, Professional Development, Evaluation, Teaching Practice, Supervisors**

## Introduction

Every country requires adequate quality human and material resources to achieve the much needed sustainable social and economic development and education is the key driver of any meaningful development. Musa and Bichi (2015) averred that education is the pre-requisite for quality human development and wealth creation which is a sure path to the realization of quality life and service to humanity. Education drives and sustains the supply of individuals who have requisite knowledge and skills to engage in activities that transform societies towards greater social and economic development. The success of any educational endeavor also depends largely on the regular supply of adequate and quality teachers. This is why the Federal Republic of Nigeria (FGN 2004) affirmed that no society can achieve sustainable social, economic and technological advancement and self-sufficiency without a good education system and well trained teachers. Martin and Atteh (2021) observed that in today's competitive global environment, schools and institutions of higher learning are entrusted to produce quality human capital that is able to participate and cope with the ever changing market demands in various sectors of the economy such as education, business and commerce and technology. Therefore, teacher education is the essential foundation of any educational enterprise because it produces quality teachers through whom the aims and objectives of education can be achieved in any country. The quality of education that students receive is inextricably linked to the knowledge, intelligence, professional skills and competencies as well as commitment of teachers (Martin &Atteh, 2021).

Teacher education is the professional training of persons desiring to go into the teaching profession or those who are already teaching without prescribed training and certification (Asimonye, 2014). The quality of teacher education programmes in any society determines the quality of the entire education system in that society because no educational system can rise above the quality of its teachers. Teacher education programmes in Nigeria and other parts of the world consist of two major components which are theoretical and practical. The theoretical component covers subject matter content and general studies in education while the practical component is teaching practice. Martin and Atteh (2021) asserted that the quality of teacher preparation programmes has become a major concern for many societies today and calls for a critical assessment of the of pre-service teachers' teaching practice programme which is aimed at positively influencing the quality level of the student teacher preparation to assist them in effectively carrying out their core mandate when they fully enter into the teaching profession.

Teaching Practice is one of the key components of teacher preparation program. It is the teaching done by teacher trainees in a real school setting under the guidance and supervision of their lecturers and experienced teachers in their assigned schools. Gujjar et al (2010) averred that teaching practice is fundamental to the professional training of every good teacher. Teaching practice is the preparation of prospective teachers for teaching by practical experience which involves the practical use of different teaching methods, strategies, principles, techniques as well as practical training and exercise in daily school activities. According to Asimonye (2014), teaching practice is a crucial aspect of teacher education as it provides student teachers with opportunity to acquire necessary professional skills through practical experience. The National Open University of Nigeria (NOUN, 2016) observed that there is no teacher education program anywhere that is complete without an effective and supervised teaching practice programme. Effective evaluation of teaching practice should, of necessity, depend on the objectives of the programme, guidelines of regulatory agencies on teacher education and its implementation in the teacher training institutions.

**Objectives of Teaching Practice**

The objectives of teaching practice, as outlined by Akbas (2002), include

- To provide an opportunity for evaluating the students' potentials and suitability for the teaching profession.
- To provide the future teacher with experience in school activities to overcome the problems of the discipline and enable them develop methods of control.
- To develop personal relationship with others such asschool administrators, teachers, parents and students.
- To provide an opportunity to put theories into practice and develop deeper understanding of educational principles and their implications for learning.
- To develop skill in the use of fundamental procedures, techniques and methods of teaching.
- To develop desirable professional interest, attitudes and ideas relative to the teaching profession.
- To enable student teachers acquire desirable characteristics/traits of a teacher and to display appropriate behaviour.

The above objectives are in line with the National Council for Colleges of Education (NCCE, 2012) which outlined the objectives of teaching practice in the preparation of the Nigerian Certificate in Education (NCE) holders as:

- To expose student teachers to real life experiences under the supervision of professional teachers.
- To provide the forum for student teachers to translate theories and principles into practice.
- To enable student teachers discover their own strengths and weaknesses in classroom teaching and provide opportunities to enable them overcome their weaknesses and consolidate their strengths.
- To familiarize student teachers with the school environment as their future workplace.
- To provide student teachers with an opportunity for further acquisition of professional skills, competencies, personal characteristics and experience for full-time teaching profession.
- To help student teachers develop a positive attitude towards the teaching profession.
- To serve as a means of assessing the professional competence of student teachers.

**Guidelines on Teaching Practice**

The National Commission for Colleges of Education (NCCE, 2012) stated that the National Certificate in Education is aimed at producing teachers with high personal and professional discipline and integrity, equipped with appropriate knowledge, skills and attitudes to facilitate easy achievement of the national goals. The document explained that reforms in teacher education lay great emphasis on teaching practice and provided the guidelines for its execution which colleges of education are expected to strictly adhere to in order to achieve the objectives. Specifically, the guidelines provided as follows:

- Teaching practice should last for 18 weeks in the first semester of the third year of training and shall be compulsory for all students.
- Teaching practice should take place in the appropriate school content area and student teachers must go to their practicing schools with a set of prepared lesson plans, learning materials and samples of assessment tasks for use during the programme.
- Student teachers shall participate in all activities of their practicing schools during teaching practice.
- Each student teacher shall be assessed at least 10 times (six assessments from the college and four from the hosting school).
- Student teachers shall keep reflective journals during the build-up towards teaching practice and during the programme on which teachers must provide comments to aid the student teachers identify the strengths and weaknesses in their professional skills.
- NCE institutions are expected to design and operate school-based teachers' professional development programmesthat assist teachers to enhance their profession and become effective mentors.
- The college should provide adequate support such as orientation of trainees before teaching practice.
- The college should assign supervisors to students based on their areas of specialization to ensure focused and well-informed supervision as well as the supervisor's practical professional skills and knowledge.
- NCE institutions should ensure that teachers design and coordinate a comprehensive teaching practice preparation programme for student teachers where they are required to design lesson plans, learning materials and assessment tasks for use during teaching practice.
- Student teachers should be very well prepared for a teaching practice experience that adds value and allows them to develop and apply professional skills.

**Teaching Practice Implementation in Teacher Education Programmes in Nigeria**

Teaching practice is a core course in teacher education in Nigerian colleges of education and faculty of education in universities which all students must pass before graduation irrespective of the field of study.Asimonye (2014) acknowledged that this provides students the opportunity to put into practice their theoretical knowledge in real-life situation as a key factor in their professional development.NCE students who run a three year programmespend a minimum of 12 weeks (instead of the prescribed 18 weeks) in the first semester of their third year while degree students spend the entire second semester of their third year in teaching practice. In both NCE and degree programmes, teaching practice carries a maximum of six credits and its evaluation significantly affects students' overall pass level. This means that a high score in teaching practice significantly increases a student's cumulative grade point average (CGPA) for the year and final cumulative grade point average (FCGPA) which determines the level of pass.

All faculty members are involved in teaching practice supervision. A teaching practice committee is in place to arrange orientation of students, secure posting for them and provide assessment rubrics for the supervisors. In the university, two supervisors are assigned to each student and their independent evaluation (scores) are used to determine the student's grade of pass in teaching practice. Bichi and Musa (2021) reviewed the implementation of teaching practice in Northwest University, Kano and reported that generally, its first organized teaching practice was effective in terms of developing professional competencies and positive attitudes towards teaching among the student teachers. However, Bichi and Musa (2021) reported that supervision and duration of the teaching practice were inadequate.

The problem of inadequate duration of the programme and supervision of students is not limited to the Northwest University, Kano as reported by BIchi and Musa (2021) but exists in most other teacher training institutions in the country. Some institutions witness rejection of student teachers posted to primary and secondary schools because the administration of such schools regard the exercise as a disruption to their planned activities. From personal observation and experience, some experienced subject teachers in practicing schools do not show sufficient commitment to assist or mentor the student teachers to help them develop their professional skills. Most supervisors in the training institutions assigned to supervise students on teaching practice do not sufficiently observe them and discuss their strengths and weaknesses before evaluating their performance and assigning grades to them. They visit the practicing schools once only to 'fulfill all righteousness' and haphazardly observe the students just to turn in grades and get paid for teaching practice.In order to ascertain the extent of adherence topolicy guidelines on teaching practice in teacher education institutions and the level at which the objectives are being achieved, there is need for effective evaluation which is faced with several challenges.

**Challenges of Teaching Practice Evaluation in Teacher Education in Nigeria**

Teaching practice evaluation comes under process and product evaluation (Oseisi, 2020) which takes into account all the possible transactions in the program that may affect it positively or negatively. Teaching practice evaluation is affected by activities of the relevant stakeholders in the exercise such as the teaching practice committee of the teacher education institution, supervisors assigned to visit schools to observe and evaluate performance of the student teachers, administrators and experienced subject teachers in the practicing schools and the student teachers themselves which can render the evaluation ineffective and inefficient. Before delving fully into the challenges of teaching practice evaluation in teacher education, there is need to sufficiently clear the grounds by defining evaluation, its objectives for teacher/teaching and models of teacher evaluation.

**Definitions and Functions of Evaluation in Education**

Evaluation is generally defined as the process of judging or calculating the quality, importance, amount or value of something like someone's health status, an academic programme and students' performance after exposure to a course of study. A person who wants to buy a new computer system or program can subject it to evaluation by trying it out for a period of about 30 days which is allowed by the manufacturers or developers in order to decide whether or not to buy it. Oseisi (2020) defined evaluation as a procedure that is adopted in gathering valid and valued information about a prior, ongoing or a concluded program, event, or activity aimed at making decision(s) regarding their effectiveness and efficiency. According to Knowly content writer (2020), evaluation in education focuses on grades which might reflect classroom components other than course content mastery level. In the same vein, Thurkur (nd) reviewed the definitions of evaluation by some foundational educationists which are useful in understanding the concept in education. Three of the definitions are presented as follows:

Evaluation is the assignment of symbols to phenomenon in order to characterize its worth or value usually with reference to some cultural or scientific standards (Bradfield, 1957).

Evaluation in education is a systematic process of collecting, analyzing and interpreting information to determine the extent to which pupils are achieving instructional objectives (Gronlund, 1976).

The term evaluation is closely related to measurement but is in some respects inclusive covering informal and intuitive judgement of pupils' progress. Evaluation is describing something in terms of selected attributes and judging the degree of acceptability or suitability of that which has been described (Thorndike and Hegan, 1977).

Jahanian (2012) defined educational evaluation as a valuable tool for teachers, schools and education managers in making decisions on issues affecting syllabus, curriculum and policies. Jahanian (2012) explained that evaluation in education is a decision-oriented process which focuses on teaching and learning objectives, teaching and learning experiences, teaching and learning appraisal and a tie among the three intended to lead to better policies and practices in the education system. In the same vein, Odinko (2014) defined evaluation in education as the systematic collection of evidence to determine whether an expected or desired change is taking place in the learners based on the objectives. Oseisi (2020) posited that educational evaluation is the parent of measurement and assessment processes that require the making of valid judgments on whether to adjust, transform, continue, suspend or discontinue a program. Oseisi explained that educational evaluation is a major predictor and enhancer of qualitative education as it helps to determine teachers' and learners' general learning behaviours, quality, effectiveness, educational outcomes as well as factors that make the teaching and learning process effective or ineffective.

Oseisi (2020) highlighted ten important functions of educational evaluation to include (i) placement functions, (ii) instructional functions, (iii) diagnostic functions, (iv)predictive functions, (v) administrative functions, (vi) guidance functions, (vii) motivation functions, (viii) development functions, (ix) research functions and (x) communication functions. Similarly, Adeleke (2010) asserted that educational evaluation provides information to learners in practice situations, informs the learner on what and how hard to study, provides information about learners' future educational success/careers and helps education managers and policymakers in curriculum development. Consequently, in order to achieve a robust and effective educational delivery in Nigeria, it is essential to entwine various educational evaluation strategies and ethics into the system.

**Objectives of Teacher and Teaching Evaluation**

Huber and Skedsmo (2016) observed that evaluation of students' work has a long history with some countries having a long tradition of teachers being evaluated by supervisors like school leaders/administrators (i.e. head teachers/principals) or regional supervisors/superintendents (or school board members) in few countries. The authors reported that in the 1960s and 1990s, school improvement approaches promoted strategies that focused on teachers' self-evaluation or evaluation by peers instead of by superiors. This type of evaluation was undertaken by the professionals themselves and tailored to specific needs for professional development and improvement of individual instructional practices. Bhat (2022) defined teacher evaluation as a systematic procedure for reviewing the performance of a teacher in a classroom and analyzing the review to provide constructive feedback for the teacher's professional growth. Bhat explained that the details of teacher evaluation survey in the United States of America may vary from district to district because they are governed by state laws but that principals and administrative staff members are traditionally involved in evaluating a teacher. Teacher evaluation takes aspects such as student performance in terms of class work, records maintained by the teacher, daily or weekly lesson plans among others into consideration. Teacher evaluation is one of the most vital elements for a thorough career development of a teacher and maintains the quality of education.

Furthermore, Bhat (2022) observed that teacher evaluation gained momentum in the USA during President Obama's tenure as he considered educational reform to be one of the most important areas of work. Consequently, Bhat reported that new and advanced teacher evaluation methods were being developed to enhance a teacher's endeavor and efficacy. Theobjectives of teacher evaluation, as outlined by Bhat, include:

- To improve the performance of teachers by evaluating them at regular intervals of time.
- To assign precise ranks to all the teachers according to their respective abilities and contribution.
- To identify unproductive teachers who should be asked to quit and efficient teachers must be hired to replace them in order to maintain quality educational delivery.
- To collect feedback for making well-informed decisions about appraisals and promotions.
- To create a job description for prospective teachers.
- To empower all the teachers who contribute towards imparting knowledge to their students in the best possible manner since school's management is responsible for the all-round growth of their teachers. The school management is in charge of empowering the teachers to perform better in the same manner as the teachers are responsible to empower the students.
- To enable school management to communicate the performance of teachers for them to know their worth which contributes to continuous improvement in their performance.

Finally, Bhat (2020) explained the need to use suitable models for teacher evaluation by stating that models offer a systematic platform for educational institutions to evaluate teachers using fair means and captured three major teacher evaluation models used in different states of the USA as follows:

**The Framework for Teaching by Charlotte Danielson**

This model is spread across 4 domains namely – planning and preparation, instructions to the Class, maintaining classroom environment and performing other professional functions. The model consists of 22 different components across all these four domains and was adopted by various states such as Arkansas, Illinois, Pennsylvania, Louisiana, South Dakota, Kentucky, New Jersey, New York and others.The model is available for free download from the Danielson website and face-to-face trainings are also provided to interested authorities along with online training sessions which can be customized according to the educational site's details such as history, culture and expected results. Bhat observed that Danielson model is highly economical according to the services it offers because it is not dependent on any technological equipment unless the interested candidates prefer online training mediums.

Bhat (2022) explained that this teacher evaluation model is psychometrically reliable as it relates one best practice per indicator and has 31 such indicators. Bhat reported that the model has been adopted across 100 districts in the US and the adoption keeps increasing. The model recommends that a minimum of five days should be spent in theinitial stages for administrative staff and principals and offers constant training for the framework and its implementation. The framework was developed for instructional leadership and there are also tools assigned to enhance the skills of central officers.

**Marzano Art and Science of Teaching Framework**

This model was launched in 2017 and has 60 different elements, out of which 41 belong to the same domain, that is, classroom strategies and behaviors. Bhat (2022) reported that over 600 districts have already implemented the model and that, currently, trainers are being appointed and trained for its various parts. There are no strict guidelines for the adaptation of the model as it follows a growth-oriented strategy for teachers and administrators. Itwas designed for in-person training with a trainer as well as virtual training sessions and is a highly electronic-free. It incorporates self-study professional courses for teacher training. Around 24+ elements are for principal and other officers to update their strategies with regards to the management and tools to encourage their teachers to perform better with each passing year.It was recommended that principals, assistant principals and/or evaluators of the principals participate in the model.

**Teacher Evaluation Examples**

Teachers can be evaluated using online quantitative and qualitativemediums such as surveys, polls, focus groups among others. Bhat (2022) highlighted some of the best examples of teacher evaluation to include (1) evaluating various components of proper planning. For examples, use of assessment information for proper planning – where all the teachers will be evaluated on the effectiveness of the use of the assessment information; (2) observation of the teacher performance can be done using open-ended questions such as inputs for observation and feedback; (3) compliance of the teachers can be audited using multiple-choice questions such as “Are the strengths mentioned and are they relevant?”; (4) the school culture and management performance can also be evaluated. For example, questions such as “I do feel welcome when I enter this school” can be asked to understand the school’s culture.

The main focus of teacher evaluation is evaluating their level of preparation for teaching and teaching practices. The Centre for Research on Learning and Teaching (CRLT, 2021) explained that evaluation of teaching can have many purposes, including collecting feedback for teaching improvement, developing a portfolio for job applications or gathering data as part of personnel decisions, such as re-appointment or promotion and tenure. In general, efforts to collect information for improvement of teaching and education can be informal and focus on specific areas an individual instructor wishes to develop. Information for job applications involves presenting one’s best work and meeting the requirements outlined in the job advertisements. However, when the purpose of evaluation is personnel decision making, it is important to use a comprehensive and systematic process such asmultiple measures involving multiple sources of data to evaluate the range of instructional activities because there are many dimensions to pedagogical work. According to CRLT (2021), the dimensions of teacher evaluation can include:

- Instructional delivery (including quality, amount and level of classroom instruction).

- Course planning (including development of course materials, course revision, development of new courses).
- Grading and assessing student learning (including appropriate level of assignments, exams and grading standards).
- Course management (including supervision of group styles inventories - GSIs).
- Oversight of independent studies, honors,theses, prelims and dissertations.
- Support for student internships, experiential learning and service learning.
- Department and curricular work (including participation in curriculum revision and departmental efforts to focus on teaching).
- Advising and mentoring.
- Professional development and innovation around teaching.

Regular evaluation of teaching practice in teacher education in Nigeria is required to ascertain the level at which the exercise can be deemed effective or ineffective. Sethusha (2014) reported some challenges of teaching practice supervision to include student level of preparedness, school placement, school-based mentors who are not trained to support and guide students and lack of orientation programmes for teaching practice. These challenges will also have a toll on teaching practice evaluation which reveals whether the programme is working or not working. Musa and Bichi(2015) included factors that create challenges in teaching practice evaluation as prospective teachers, supervisors from training institutions and principals and teachers of cooperating schools in a study on evaluation of teaching practice in Northwest University, Kano-Nigeria. Four objectives of the study of Musa and Bichi (2015) were to evaluate the effectiveness of teaching practice experience of prospective teachers, their development of positive attitudes and professional competencies, effectiveness of supervision and the student teachers' attitude towards teaching practice. The study reported that teaching practice supervision and duration are inadequate. Drawing from this study, therefore, this chapter captures and highlights the following challenges to teaching practice evaluation:

**Insufficient Sensitization of both Teacher Trainees, Faculty Members and Professionals in the Practicing Schools**

Sensitization is a very invaluable tool in making people aware about an issue and what they are expected to do concerning it. It is the core of awareness raising regarding what a programme or an activity is intended to achieve and what is expected of all the people that will be involved in it. Youth Do It (n.d.) highlighted strategies to sensitize people to include improving their knowledge through information dissemination, changing their attitudes by explaining how new behaviours or attitudes will impact the programme, specifying and helping them develop skills that should go with their changed attitudes and building social support by helping them know where they can get or give support to other people. Sensitization for teaching practice in teacher education programmes in Nigeria is grossly inadequate and is one of the major challenges to its evaluation. In some cases, the sensitization is limited to teacher education students excluding faculty members and professionals in the practicing schools without whose participation effective evaluation of the programme cannot be achieved. In addition, sensitization of student teachers in most teacher education institutions is a one day haphazardly organized event called "Teaching Practice Orientation" which leaves student teachers not fully aware of expectations from them and how they can access support when needed. Exclusion of faculty members in the sensitization exercise causes some of them to have near zero commitment to teaching practice supervision which further belittles its effectiveness. The same thing applies to professionals in the practicing schools. Both students on teaching practice and supervisors from their institutions share negative stories about the attitudes of head teachers or school principals and their teachers towards the programme because they are not wellinformed regarding its objectives and benefits to the school system and the nation. In some of these practicing schools, the professionals regard the programme as an interruption of their regular schedule. This evidence of inadequate sensitization constitutes a great challenge to effective evaluation of teaching practice in Nigeria.

**Deployment of Teacher Trainees and Supervisors to Practicing Schools**

Policy guidelines on teaching practice stipulate that deployment of students and supervisors should be in accord with areas of specialization (NCCE, 2012). In practice, teacher education institutions neither post students or supervisors to practicing schools based on areas of specialization. Students are posted to any schools that are willing to accommodate them regardless of their areas of specialization and the same thing goes for the supervisors. In fact, the major consideration in deployment of supervisors to practicing schools, in some cases, is the supervisor's level or convenience/choice. How can a supervisor who does not have a firm grasp of the subject matter contents of a supervisee's field of study be expected to know if the supervisee is mis-educating the students or effectively evaluate the supervisee? Where a programme implementation does not comply with its policy guidelines, it is clear that the aim of evaluating it is already defeated because it is only by complying with the guidelines that achievement of the objectives can be possible since the purpose of evaluation is to determine whether the objectives are being achieved.

**Attitude of Experienced Professionals in Practicing Schools**

The policy guidelines specified that teacher trainees on teaching practice should serve under experienced professional teachers in the practicing schools who should serve as their mentors and supervise them at least four times to make up the requirement of supervising one student for at least 10 times (NCCE, 2012). Akbar (2002) opined that one of the major objectives of teaching practice is to provide an opportunity for evaluating the students' potentials and suitability for the teaching profession. The level of commitment of experienced professional teachers in the practicing schools will definitely make this evaluation effective or ineffective. In addition, the policy guidelines specified that professional teachers in practicing schools should serve as mentors to students on teaching practice and participate in their supervision.

In practice, the experience of both education students and faculty members who go on supervision clearly show that some professionals in practicing schools exhibit negative attitude towards teaching practice and the students because they do not make out time to sit in class while the students teach in order to adequately observe them for better supervision. The experienced teachers hardly spend time with the student teachers to discuss their class teaching performance as mentors which is very helpful in their professional development. There are reported cases of some primary and secondary schools' administrators who reject teaching practice students out-rightly due to their misconceptions. It will take a complete change of attitude through strategic and adequate sensitization for primary and secondary schools administrations and their teachers to actively play their roles in teaching practice to enhance the effectiveness of its evaluation.

**Accessibility of Practicing Schools and Security Issues**

Teaching practice guidelines and objectives were silent on the issue of accessibility of practicing schools and security issues but it has become a major challenge due to the present realities in Nigeria. Access to many schools in both urban and rural areas is very difficult due to bad roads especially during the rainy season. Some teacher trainees have been reported to be absent from their practicing schools on the days their supervisors visited because it was very difficult for them to meet the demand due to the rains since the time of the programme coincides with the time of heavy rains. This challenge affects both faculty members assigned to supervise and the teacher trainees as it reduces their participation and negatively affects the programme and its evaluation. There have been undocumented cases where supervisors' cars were damaged or got stuck in the mud on their way to or from teaching practice supervision causing them to spend good amounts of money from their pockets that is un-refundable.

There have also been several undocumented cases of robbery of student teachers who were quartered in their practicing schools (especially mission schools) as well as rape of some females among them. One particular incident of robbery and near rape of a female student of the department occurred during this author's tenure as Head of Department. The student lost some money and her phone, was injured but escaped rape only by the intervention of members of a vigilante group that heard her mournful screams. These experiences weaken and frighten teacher trainees and faculty members from participating actively in teaching practice. Such circumstances and their likes will obviously have grave negative effects on the effectiveness of teaching practice implementation and evaluation.

**Inadequate Observation and Guidance by Supervisors**

Teaching practice policy guidelines stipulated that each student in the programme should be supervised at least 10 times (six times by supervisors from the training institution and four times from experienced teachers in the practicing schools (NCCE, 2012). At least 10 times implies that supervisors can observe a student more than 10 times. This is very necessary in order to adequately observe students' practical teaching performance and discuss their strengths and weaknesses before evaluating them. CRLT (2021) explained that teaching evaluation has many purposes including collecting feedback for general teaching improvement and professional development of teachers' knowledge and skills through feedback from supervisors/evaluators. The Centre highlighted dimensions of teacher evaluation to include the instructional delivery (including quality, amount and level of classroom instruction), course planning (including development of course materials, course revision and development of new courses among others.

In practice, however, this policy guideline is not being complied with as both supervisors from the training institutions and students know that supervision from the training institution supervisors is often not more than two times. This does not allow time for the supervisor to adequately observe the student and discuss any weaknesses observed before scoring them. This is as a result of insufficient sensitization discussed earlier. Some supervisors spend less than 45 minutes in observing their teaching practice students in one or two visits and the purpose is only to score them on the rubric and submit a grade for the student's final score in the exercise. All these deficiencies constitute challenges in teaching practice evaluation.

**Lack of Commitment on the Part of Student Teachers**

The National Council for Colleges of Education (2012) stipulated in the teaching practice guidelines that student teachers shall participate in all activities of their practicing schools during teaching practice. This indicates that the students should get to their practicing schools early enough to take part in the assembly and other school events before start of class teaching; they should take part in school sports, debates and other extra curricula activities like regular teachers. This demands a very high level of commitment on the part of student teachers. Unfortunately, this is not so in practice as some education students engage in teaching practice only because a pass score in it is mandatory for their graduation. They do not regard themselves as relevant part of their practicing schools. Apart from personal issues such as attitude towards teaching (as it is a known fact that some of them accepted to study education only as a last resort), insufficient sensitization, access and security issues and lack of information about any support system are contributory factors to lack of commitment to teaching practice by education students which constrains an effective evaluation of the programme.

**Conclusion**

Supervisory agencies on teacher education in Nigeria have stipulated guidelines and objectives for teaching practice covering duration, number of supervision, provision of support to students during teaching practice among others. However, practices in different institutions and research reveal that vital requirements for teaching practice are not observed in teacher education institutions in Nigeria (Musa & Bichi, 2015). Musa and Bichi reported that in many instances support for the student teachers is often inadequate and uneven and in some places student teachers run teaching practice concurrently with classes in their institutions which is the case of Northwest University, Kano (Bichi & Musa, 2021). The researchers averred that the non-compliance with relevant guidelines for teacher education and teaching practice is affecting the credibility and quality of teachers being produced in the country. This article revealed that the execution and evaluation of teaching practice exercise in teacher education in Nigerian institutions is faced with several challenges. It summarized the challenges to include insufficient sensitization of all stakeholders, deployment of teacher trainees and supervisors to practicing schools, attitudes of experienced professionals in the practicing schools, accessibility of practicing schools and security issues, inadequate observation and guidance by supervisors, lack of commitment on the part of student teachers. However, it concludes that with adequate commitment of all the stakeholders and suitable strategies, the identified challenges are surmountable in the long run.

**Recommendations**

For teacher preparation programmes to attain their set goals and objectives, it is essential that they provide a number of opportunities for prospective teachers to spend quality time with pupils in classrooms under the guidance and supervision of their educators and experienced subject teachers as mentors. Based on the impacts of the highlighted challenges on effective teaching practice execution and evaluation as well as the need to suitably address them, the following recommendations were made:

- Teacher education institutions should strictly adhere to the stipulations of the policy guidelines especially in relation to duration and number of supervision for each student.
- Teacher education institutions should adopt suitable strategies to ensure sufficient sensitization of their lecturers/supervisors, student teachers, administration of cooperating schools and their teachers to help them appreciate the relevance of the programme and what are expected from them. This will go a long way in instilling positive attitudes in them for effective execution and evaluation of the programme.
- Teacher education institutions should provide adequate support to student teachers and supervisors to reduce the problems they encounter during teaching practice.
- Lecturers as supervisors should focus on the objectives of teaching practice and ensure that their activities are geared towards realizing them more effectively.
- Lecturers as supervisors should spend more time with every supervisee during teaching practice for adequate observation and interaction to enable students overcome their weaknesses before evaluating their performance.
- Administration of practicing schools should be more open to receive education students on teaching practice and strategize on how better to support them for a worthwhile experience that will change their attitude towards the teaching profession.

- Experienced subject teachers in practicing schools should play the role of mentors to student teachers by spending time with them during classroom teaching to observe them well in order to discover areas of improvement to discuss with them later.
- Student teachers should demonstrate greater commitment to teaching practice to see that it enhances their professional development with relevant knowledge, skills and positive attitudes focusing on becoming outstanding teachers.
- Government and community leaders should make efforts to make primary and secondary schools more accessible as well as adopt suitable strategies to curb the security issues that frighten student teachers and lecturers when on teaching practice and its supervision.

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# Effective Approaches to Counselling Therapies

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**Abstract**
Therapists are decision makers. They continually make choices about how to think about clients' behaviour, how to treat them, and how to respond on a moment-by-moment basis during therapy sessions. Theories provide therapists with concepts that allow them to think systematically about human development and the therapeutic process.Theories can be both based on research and stimulate research. Cognitive behaviour therapy is based on research into how people think and into how both people and animals behave. Furthermore, cognitive behaviour approaches, such as cognitive therapy, have stimulated research into their processes and outcomes. Theories also provide therapists with frameworks within which to make predictive hypotheses during their practice of therapy. Whether acknowledging it or not, all therapists are practitioner-researchers. Therapists make hypotheses every time they decide how to work with specific clients and how to respond to single or series of client utterances. Clients are also practitioner-researchers who make predictions about how best to lead their lives. If valid theories of counselling and therapy are transmitted to clients, they may increase the accuracy with which clients can predictthe consequences of their behaviours and, hence, gain more control over their lives.

**Keywords**: **CounsellingTherapies, Theories, Approaches**

## Introduction

Therapy refers both to the theoretical approach and to the process of helping clients. A theoretical approach presents a single position regarding the theory and practice of counselling and therapy. The word therapy is derived from the Greek word "therapeia" meaning healing. Literally psychotherapy means therapeutic healingof the soul or mind. Nowadays, most frequently the psychotherapy meaning is broadened to become healing the mind by psychological methods that are applied by suitably trained and qualified practitioners. However, there are different approaches to therapy and, therefore, it is more accurate to speak of the psychotherapies rather than a uniform method of psychotherapy. Moreover, there are different goals for therapy including dealing with severe mental disorder, addressing specific stress, and helping people find meaning and purpose (happiness) in their lives.

Both counselling and psychotherapy represent diverse rather than uniform knowledge. A therapist refers to the providers of therapy services to clients, be they psychoanalysts, psychiatrists, clinical psychologists, counselling psychologists, counsellors, social workers or other suitably trained and qualified persons. Client refers to the recipient of therapeutic services whether inside or outside of medical settings. Attempts to distinguish between psychotherapy and counselling are exclusivelyunsuccessful. Both psychotherapy and counselling represent diverse rather than uniform knowledge, and activities and both use the same theoretical models (Jones, 2010). In 2000, British Association for Counselling (BAC), acknowledged the similarity between counselling, and psychotherapy by becoming the British Association for Counselling and Psychotherapy.

Typically, one of the significant fields that employ psychology as a means of providing information about several factors that can positively affect happiness procedure as opposed to an undesirable one is counselling (Mahtab, 2018).It will be of significance to counsellors to avoid being biased and be aware of the client's worldview, and, in knowing which best type of therapy to apply during the counselling session. The progress that was achieved in the topic as mentioned above may help in the improvement and the development of counselling services in Nigeria, which in turn will enable counsellors in identifying various counselling therapies in their counselling process, to improve on it, and to make individuals to attend more counselling therapies (Lawal, Khan & Ramli, 2021).

Tambawal (2015) opined that to perform as a counsellor; there is a need to understand various counselling and psychotherapy approaches based on unique contribution as well as their limitations.Seligman, Steen, Parks & Peterson (2005), stated that paying attention to what is right' in an individual life situation, instead, of what is wrong', provides better feedback in a short period. However, Smith (2007)opined that when counselling adopts a positive approach, this will enhance bounciness and promotes happiness (Jones, 2011).

In Nigeria, a lot of problems are faced by individuals, due to stress and anxiety that cause unhappiness, which needs to be resolved through counselling professionals. In this case, counselling is essential because professional counsellors aid clients recognize potential solutions to problems that are rooted in the emotional disorder, life meaning, reinforce and optimum mental well-being (Lago & Thompson, 1996).

Psychoanalytic therapy is of great importance in the counselling process in terms of coping because it postulated "Defense mechanism and repression" based on the human nature of coping. This mechanism believes in problem-solving behaviours that deny or distortreality, and they operate unconsciously (Tambawal, 2015). Hence, it provides room for coping with such situations, after which the individual can bounce back to being happy again.This counselling practice is applicable in Nigerian school.

**Counselling Theory**

According to Jones, (2011), counselling and therapy theory is a criterion of the power of a theory and the extent to which it generates predictions that are confirmed when relevant empirical data are collected. The more a theory receives confirmation or verification, the more accurate it is. Facts strengthen rather than replace theories. The three of the major functions of counselling and therapy theories are: providing conceptual frameworks and generating research, (Alan, 2011).Counselling theory can also be a scientific and action-based approach that a counsellor adopts in the process of interviewing his clients (Tambawal, 2015). Tambawalopined that to perform as a counsellor; there is a need to understand various counselling and psychotherapy approaches based on unique contribution as well as their limitations.

**Functions of Counselling and Therapy Theories**

Therapistscannot avoid being‘counselling and therapy’ theorists. All make assumptionsabout how clients become and stay the way they are and about change. Threeof the main functions of counselling and therapy theories are: providing conceptual frameworks, providing languages, and generating research.Theories as conceptual frameworks. Therapists are decision makers. They continually make choices about how tothink about clients’ behaviour, how to treat them, and how to respond on amoment-by-moment basis during therapy sessions. Theories provide therapistswith concepts that allow them to think systematically about human development and the therapeutic process.

Counselling and therapy theoretical approaches may be viewed as possessing four main dimensions if they are to be stated adequately. In this context behaviour incorporates both observable behaviour and internal behaviour or thinking. The dimensions are:

1) A statement of the basic concepts or assumptions underlying the theory;
2) An explanation of the attainment of helpful and unhelpful behaviour;
3) An explanation of the maintenance of helpful and unhelpful behaviour; and
4) An explanation of how to aidcounselees to change their behaviour and consolidate their gains.

**Theories as Sets of Research Hypotheses**

Theories can be both based on research and inspire research. For example,cognitive behaviour therapy is based on research into how people think andinto how both people and animals behave. Furthermore, cognitive behaviourapproaches, such as cognitive therapy, have stimulated research into their processesand outcomes (Lawal, Aqeel and Ramli, 2021).Theories also provide therapists with frameworks within which to make predictivehypotheses during their practice of therapy. Whether acknowledging itor not, all therapists are practitioner-researchers. Therapists make hypothesesevery time they decide how to work with specific clients and how to respond tosingle or series of client utterances.Clients are also practitioner-researchers who make predictions about howbest to lead their lives. If valid theories of counselling and therapy are transmittedto clients, they may increase the accuracy with which clients can predictthe consequences of their behaviours and, hence, gain more control over theirlives.

## School Counselling

A significant dissimilarity occurs among theoretical approaches to counselling and therapy and schools of counselling and therapy. A school of counselling and therapy is a grouping of different theoretical approaches that are similar to one another in terms of certain important characteristics that distinguish them from theoretical approaches in other counselling and therapy schools. Probably the three main schools influencing contemporary individual counselling and psychotherapy practice are the psychodynamic school, the humanistic school, and the cognitive-behaviour school. Sometimes the humanistic school incorporates existential therapeutic approaches and then can get the broader title of being the humanistic-existential school. A fourth school, the postmodern school, comprises some more recent approaches.

## Approaches to Happiness Counselling Therapies

Therapy aims to increase clients' abilities to exercise greater conscious control over their lives. Analysis or interpretation of dreams can be a central part of the therapy.

**Table 1**
***CounsellingTherapeutic Approaches***

| S/N | Happiness therapy | Therapists scholars | Theories assumptions of how change occurs | Techniques used |
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| 1 | Psychoanalytic Therapy | Sigmund Freud (1856 – 1939) | Psychoanalytic Therapy views personality and behaviour to be derived from the persistent and distinctive collaboration of contradictory psychological forces. This theory functions in three distinct | . This approach made use of hypnosis as a strategy which later was resolved to free association. In free association, a client is put on a couch to freely put their feelings into words under a controlled analytic setting. Besides, Analysis of |

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| | | | awareness (mind) levels namely; preconscious, conscious, and unconscious; The unconscious mind is seen as a pool of thoughts, memories, feelings, and urges consciously outside our awareness. Various aspects of the unconscious are unpleasant and unacceptable, such as anxiety, stress, conflict and sensation of pain. | transference and countertransference is also a technique applied. According to Freud (1912), transference reactions are misrepresentations in the client's responses to the therapist. Analytic interpretation and analysis of dreams are also techniques applied |
| 2 | Rational Emotive Behavioural Therapy (REBT) | Ellis & Harper(1975) | REBT is a comprehensive, active-directive, philosophically and empirically based psychotherapy that focuses on solving behavioural, emotional problems and stress, thereby allowing individuals to lead happier and fulfilling lives | Its necessary process was recognising problem existence and knowing any meta-disturbances about the problem, followed by identifying the irrational belief that caused the inventive problem and came to understand why both irrational and why to prefer rational. Furthermore, it applied "selective eclecticism." |
| 3 | Solution-Focused Brief Therapy | De Shazer (1940–2005) | This theory belongs to the post-model schools. Solution-focused brief therapy laid its basis on how individuals assess answers to problems. It has less concern about how or why a problem arose than in | The primary therapy's focus is "change". This change is what this approach does first. Coping and the miracle questions help clients to make changes. The critical question is to find out about exceptions to |

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| | | | possible solutions. De Shazer (1985) in explaining this therapy approach, applied the metaphor of a lock and key. Complaints of the client are comparable to locks on doors yet to open. | the problem. Clients have been complimented. Usually, it is of benefit to evaluate the motivation of the client to know and apply a better therapeutic strategy. |
| 4 | Religious Systematic Approach | AlGhazzali, (2004), Salasiah& Akhir, (2013) | In today's counselling religious systematic approach is emphasized, since it is significant in the client's life. | The Islamic approach applied by counsellors came regarding al-Quran and al-Sunnah. Ibadah (worship), Akhlaq (moral conduct), and Aqidah (faith) are the three main Islamic counselling aspects applied |
| 5 | Narrative therapy | Michael White and David Epston (1990) | Narrative therapists give attention to how their clients see events and the world enclosing them. Clients know that some part of members of the family is probable to have opinions different from others; this can erupt to stress. The stories which are individual's lives signify cultural, socio-economic, and religious influences. Once these narratives are negative or problem-oriented, they at times influence the attitudes of the clients. | A narrative therapist attends experience of a client that contains difficulties. The same stories told from a different perspective or different aids clients to work through difficulties and stress to survive. Through this, help is found in externalizing the situation outside the family or individual. |

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| 6 | Humanistic and Person-Centered Therapy | Carl Rogers, (1951) | The main psychotherapy that was developed from this approach is a non-directive talk therapy established by Carl Rogers; this the approach was called person-centred therapy and is also known as client-centered or Rogerian therapy. According to Rogers, each person tends to grow and fulfil his or her goals, wishes, and desires in life. For this to happen, a person needs an environment that encourages him/her to be genuine. If a person does not have this type of environment (e.g., due to restrictions of parents or society), the capacity to grow might not be fulfilled, and psychopathological symptoms may emerge. Therefore, person-centered therapy centralizes uniqueness, authenticity, striving for appeasement and completion, and acceptance of estranged parts of the person, to enable a | This therapy doesn't aim to "cure." people or attempt to help them become "normal," but instead targets personal growth and focuses on improving the client's quality of life. Clients are viewed as equals and experts in their inner world and experiences. Having respect and loyalty for the self are very important as the humanistic approach stresses the importance of clients focusing on their immediate and current experiential feelings, as well as the courage a person needs to experience his inner world fully. According to this perspective, the therapeutic relationship is highly essential and is characterized by congruence, empathy, and unconditional positive regard towards the client. Empathy is through reflection to sight the world through the client's eyes and to understand the client more. unconditional positive regard refers |

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| | | | full expression | to listening to the client and believing in their ability to grow, feel valued, and free to be as they wish to be. |
| 7 | System Therapy | Bateson, Jackson, Haley, &Weakland, (1963) | This approach shunned the traditional emphasis on individual psychology but instead stressed understanding individuals within their social context. Therefore, a system needs to have composed restrictions among its members where each knows their differentiating roles (e.g., a parent and a child), In essence, if one member of the system is not functioning well, the entire system is affected. | Therapists who are more operational in orientation engage in activities such as role-play in session. Intergenerational (how cultural values in a family are passed from one generation to another), communication, and structural technique are applied in this therapy |
| 8 | Gestalt Therapy | Fedrick Perls (1894-1970) | A German known founded gestalt therapy as Fedrick. The word “Gestalt” means “configuration” or “whole”. The therapist believed that a response to a condition is a response to the whole situation. It assists clients to know that something is possible for them, helps clients | Gestalt therapies used techniques such as; enhancing awareness, personalizing pronouns, and using body expressions. From these techniques, identification of the barriers in the client’s problem to his knowledge and the means of coping discovery would make it easier in providing a |

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| | | | to remove barriers that prevent them from achieving something. | solution to the problem. |
| 9 | Fava's Well-Being Therapy | Fava &Ruini (2003-2004) | This therapy was developed as a relapse prevention intervention for patients earlier treated with | It advances through three phases, with over eight sessions. Each phase lasts about 2-3 sessions. This therapy is found to enhances the well-being of clients recuperating from depression and stress |
| 10 | Voyages to well-being therapy | Cloninger (2006) | psychological problems such as stress and anxiety. aims is to promote purpose in life, personal growth This therapy was a DVD-based psychoeducational programme for well-being called the 'The happy lie: Voyages to well-being'. Cloninger noticed that a lot of people who are successfully treated for psychiatric problems and who had become asymptomatic still did not experience.a high level of well-being. It was developed to help to enhance their happy life. | Helping people to enhance their well-being by increasing their self-directedness, self-transcendence and cooperativeness. |
| 11 | Post-Traumatic Growth-Based Therapy | Lawrence Calhoun and Richard Tedeschi | This therapy aimed to promote post-traumatic growth. Their approach rests | The technique includes remembering and making sense of the trauma, reflecting |

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| | | (1999) | on the assumptions that post-traumatic growth arises from the active cognitive and affective processing in which people must engage after their assumptive world has been shattered by traumatic experiences | on the impact of the trauma on their whole lives, anticipating the future and building a new and more resilient set of assumptions about living in the world. |
| | Frisch's Quality of Life Therapy. | Micheal Frisch (2006) | Quality of life therapy, that is an integration of cognitive therapy practices with ideas from positive psychology. In this regard happiness is conceived as the fulfilment of cherished wishes of some important domains of life including health, money, work, children, e.t.c. | At the start of the therapy, the client completes the quality-of-life inventory test, that yield normed scores on all these domains and suggest areas that may be a focus of intervention. Approaches are inner abundance that is achieved by regularly attending to self-care to promote personal well-being,Finding meaning in life by clarifying and committing to secular or spiritual life goals and values, and planning every day to do things to enact these goals and values. |
| 12 | The Cognitive behavioural Therapy | Aaron, et al., (1987) | Traditional behaviour therapy focuses mainly on changing observable behaviours by means of providing different or rewarding consequences. The cognitive behaviour | In cognitive behavioural approaches, therapists assess clients and then intervene to help them to change specific ways of thinking and behaving that sustain their problems |

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| | school broadens behaviour therapy to incorporate the contribution of how people think to creating, sustaining and changing their problems. | |

Theabove-mentioned talks about some therapies and the techniques professional counsellors apply during counselling process.

**Limitations**

All counselling and therapy theories should carry the psychological equivalent of health warnings. They can be used for ill as well as for good. There are other therapies, but this study focuses only on the one's relevant.

**Conclusions**

Different therapeutic approaches were mentioned-above. In reality, many counsellors and therapists regard themselves as working in either eclectic or integrative ways. Therefore, eclecticism is the practice of drawing from different counselling, and therapy schools in formulating client problems andimplementingtreatment interventions. Integration refers to attempting to blend together, theoretical concepts and/or practical interventions drawn from different counsellingand therapy approaches into coherent and integrated wholes.

**Recommendation**

Counsellors should always know the relevant therapy to apply to certain cases. Counsellors can also integrate different therapies during counselling process.

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# Assessment of Music Curriculum Implementation in Junior Secondary Schools in Obio/Akpor Local Government Area of Rivers State

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**Abstract**

The aim of the study was to assess the implementation of music education curriculum in public and private junior secondary schools in Obio/Akpor Local Government Area of Rivers State. The study assessed the implementation of music curriculum in terms of music teachers' qualifications, use of appropriate educational materials and the methodology adopted in the course of teaching music curriculum. In this regard, 3 objectives, 3 research questions and 3 hypotheses were formulated to guide the study. A survey research method was used for the study. The target population of the study was 40 music teachers and music education students in 10 junior secondary schools in Obio/Akpor local government area of Rivers State. The sample comprised of 10 music teachers and 30 music education students. The instrument for data collection used in this study was a structured questionnaire designed by the researcher. The instrument was tagged "JSS Music Curriculum Implementation Questionnaire" (JSSMCIQ). The data were analyzed using simple percentages, mean and standard deviation to answer research questions and independent t-test for test of hypotheses. The results of the findings show that there is moderate level of music curriculum implementation. It was concluded that there is no difference in the level of music curriculum implementation in both public and private junior secondary schools on the teaching strategies adopted by teachers for the implementation of the music curriculum. It was recommended that Music education should be popularized in junior secondary schools in Rivers State through direct educations, public lectures, seminars and workshops.

**Keyword: Music Education, Music Curriculum, Instructional Material, Implementation**

## Introduction

Music education is a field of study related with the educating and learning of music. More than simple showing notes and beat, music education tries to foster the entire individual. It contacts the improvement of the full of feeling area including music procurement and awareness. It assists with growing fine coordinated movements in students who play instrument. It grows mental improvement through the acknowledgment and understanding of melodic documentation. Hence, music can be characterized as the workmanship or study of joining vocal or instrumental sounds (or both) to create magnificence of structure, congruity, and articulation of feeling (Okonkwo, 2014).

The fuse of music preparing from pre-school to post-optional training is normal in many countries since contribution in music is viewed as a major part of human culture and conduct. Each culture has own melodic language mirrors its own customs, concerns and exercises. As per Okafor (2015:189) "Africans use music however much music controls their lives and addresses" he further saw that music is ensnared throughout everyday life, and individuals use music to impart, to move, to communicate feelings, thoughts and prepare individuals or rally individuals to fortitude. Kids wherever are brought into the world with melodic capacities, with voices and with hear-able organs (Klien, 2013). The distinction lies just on how they manage these gifts that differ as per dispositions, childhood, ethnicity, race and timeframe ever. In junior optional schools, youngsters frequently figure out how to play instruments like consoles or recorders, sing in little ensembles, and find out about the components of melodic sound and history of music. In spite of the fact that music training in numerous countries has generally underlined western old style music, in late many years music teachers will quite often consolidate application and history of non-western music to give a balanced melodic encounter and show multiculturalism and global comprehension (Idolor, 2017). In junior optional schools, students frequently have the chance to act in a melodic outfits, like an ensemble, symphony of some sort, or school band: show band, walking band, or jazz band (Kastner, 2013). In a few optional schools, extra music classes might be accessible. In junior optional school or its same, music as a rule keeps on being an expected piece of the educational program (Igwe, 2020).

There are a few essential reasons that legitimize the consideration of music in the educational plan. The principal reason is that music serves predominantly as a tasteful or a visual encounter. This experience fundamentally includes the perception of sound pictures instead of the entire way through printed correspondence, conversation, any kind of arithmetical usual methodology, or extra sort of articulation. The improvement of one's creative mind has demonstrated the capacity of having the option to upgrade the greatness of life similarly all through the school years and through the later years. Music's importance as a chance to distinguish cognizance has been affirmed by specialists like Rogers and Maslow (Oladipo, 2019; Agu, 2018; Garba, 2017).

The subsequent explanation, for which music is respected to be a significant piece of the educational program, is the job that it plays in grasping society. Music is a genuine showing of the practices, local area culture, desires and achievements of humanity. In music are implanted different traditions worth, and convictions of the everyday person. Simultaneously, correspondence with the assistance of music is somewhat conceptual; the student should be taught to decipher this non-metaphorical portrayal of music coordination to grasp it (Adamu, 2016; Dewey, 2014; Adewole & Olaniyi, 2012).

At long last, the explanation that music enlightenment is upheld is that the mind figures out music; it is equipped for controlling the articulation and development of the unrivaled mental methodology of the cerebrum that are typically unrealistic in different fields. As of late, a review at the College of California has shown that pre-arranged tune educating works on student's spatial fitness, which holds a huge constituent in arithmetical perspective and judgment. Beneficial examination in the field have uncovered that the mind should have stacked, tangible information encounters to raise itself to a more significant level of scholarly development and capacity. Students confiscated of these tactile excitements that are given uncommonly by music have been compared by illuminating specialists to young people who are at similar point in their lives experienced cerebrum latency or harm (Akanbi, 2018). The music classes that have been a necessary piece of some school educational plans classes have shown phenomenal outcomes. The accompanying makes sense of the different advantages that have been shown by the utilization of music on students matured fifteen. Number ability to juggle: music and tune creations that had been remembered for the educational plan for students matured between twelve to fifteen years old have shown positive outcomes in choosing the numerical capacity of the students (Rogers & Maslow, 2011).

The Central Legislature of Nigeria, in its Public Approach of Training (2014) commented that "Schooling in Nigeria is an instrument "per Greatness" for affecting public turn of events. To praise the assertion over, the Public Arrangement of Training (2014) likewise expressed that "the lesser auxiliary schools will be both prevocational and scholarly. It will be educational cost free, general and mandatory. It will train fundamental subjects to additional information and abilities" and music is among the prevocational subjects to be shown in junior optional schools. Because of the meaning of music in our general public, the administration of the chose schools for this postulation, presented music training in their different schools.

At this level, students are ready for the lesser auxiliary school authentication assessment. This concentrate subsequently, explores into the execution of music training educational plan program as give by the schools and the service of training in Waterways State, it expects to investigate the accompanying regions: staffing, arrangement of music materials, offices, gear's, administrative jobs as it influences music schooling, showing procedure e.t.c. people to improve self completionas well as melodic reasoning and creative mind. The specialist expects to figure out the degree to which music training is been carried out in Nigeria with specific reference to people in general and confidential junior auxiliary schools concentrating on music in Obio/Akpor nearby government region (Onwuekwe, 2014). He additionally means to figure out why music training isn't educated in a large portion of the lesser optional schools notwithstanding the way that the central government in its Public Strategy on Schooling (2014) made music schooling one of its pre-professional subjects in junior optional schools. It will likewise research the issues that go up against the music teachers in the couple of schools that music training is being educated.

**Statement of the Problem**

There have all the earmarks of being negative disposition towards music among students, guardians, VPs and overseers of schooling in Nigeria and Obio/Akpor local government area regardless of its metropolitan nature isn't an exception. The fact that only a small number of public schools have a qualified music teacher and offer music at the junior secondary school exam is evidence of this. Albeit, the circumstance appears to be very changed in the non-public schools. However, despite private schools' efforts to incorporate and implement a music education curriculum, the majority of these schools do not register students for the junior secondary school examination in music. This is probably due to the fact that they do not see the need to include music in their curriculum. Music is often overlooked in favor of other subjects like Fine and Applied Arts and Drama, so parents may not see the need for their children to read music.

The negative behaviour toward music may be the result of a lack of awareness or poor teaching methods, which may be the result of a lack of necessary textbooks and teaching aids. In this way, roads should be investigated to advance and improve the viable execution of the music educational plan. One of these methods is to begin research with the intention of providing information that encourages, promotes, and improves the implementation of music curriculum. Therefore, the researcher intends to find out the extent to which of music education curriculum is been implemented in both the private and public Junior Secondary Schools in Obio/Akpor local government Area of Rivers State.

**Research Questions**

The following research questions were formed to guide the study

3. What is the extent to which the objectives of the JSS music curriculum use being achieved?
4. What are the qualifications of teachers teaching music at junior secondary schools?
5. What are the teaching methods used by the music teachers in implementing music curriculum in junior secondary schools?

**Hypotheses**

The following null hypotheses were formulated and tested at 0.05 level of significance.

**Ho1:** There is no significant difference in the extent objectives of the music curriculum is being achieved in public and private junior secondary schools.

**Ho2:** There is no significant difference in the quality of teachers for the implementation of music curriculum in public and private junior secondary schools.

**Ho3:** There is no significant difference in the teaching strategies adopted by teachers for the implementation of the curriculum in public and private junior secondary schools.

**Methodology**

This research employed the survey research method. The population of this study was all the public and private junior secondary schools in Obio/Akpor local government area of Rivers State. The target population of the study was 40 music teachers and music education students in 10 junior secondary schools in Obio/Akpor local government area of Rivers State. The sample comprised of 10 music teachers and 30 music education students. 5 music teachers and 15 music education students were selected from private schools. Likewise, music teachers and 15 music education students were selected from the public schools. The subjects were purposively selected based on their registration status in past junior secondary examinations.

The instrument for data collection used in this study was a structured questionnaire designed by the researcher. This set of Questionnaire for both teachers and students was used. The instrument was tagged "JSS Music Curriculum Implementation Questionnaire" (JSSMCIQ). The instrument had two sections and sub sections. Section A for students and teachers respectively contained personal information about the respondents, while section B was divided into three sub sections which demanded for information on the following research questions. The questionnaire was rated using fourpoint rating scales which consisted of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). It is used in this study because it gives objective and reliable information if carefully constructed and administered. A non participant observation was carried out in the study areas. The researcher with the help of research-assistants visited the sampled schools in order to obtain firsthand information on the implementation of music curriculum.

The face validity of the Questionnaires items was determined by experts' opinions comprising of specialist in research methodology, researchers, experts in test and measurement. A pilot test was conducted using schools in Port Harcourt local government area of Rivers State. It involved the administration of ten (10) copies of the questionnaire on the respondents. Kuder Richardson 20 method of reliability was used. It was used because the method is appropriate for ordinal and nominal data. Its reliability is constant and consistent. The reliability estimate obtained was 0.80.

The administration and collection of data were carried out personally and with the help of research assistants and music teachers in the schools concerned. The data were analyzed using simple percentages, mean and standard deviation to answer research questions and independent t-test for test of hypotheses.

## Results

**Research Question One:** What is the extent to which the objectives of the JSS music curriculum use being achieved?

**Table 1**

***Mean ($\bar{x}$) and Standard Deviation (SD) on the Opinions on the Achievement of the Objectives of Music Curriculum in Public and Private Junior Secondary Schools***

| S/N | Items | **Public (n=20)** | | **Private (n=20)** | | **Decision** |
|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | **SD1** | $\bar{x}_2$ | **SD2** | |
| 1 | To teach students to sing in unison and in parts with other students | 1.91 | .701 | 1.86 | .900 | LE |
| 2 | To assist students to know that music is a combination of harmonious sound. | 2.18 | .405 | 2.57 | .535 | LE |
| 3 | To enable students to play musical instruments of their choice | 2.45 | .522 | 2.43 | .535 | LE |
| 4 | To assist students read musical notes on stave of staff | 2.09 | .302 | 2.43 | .535 | LE |
| 5 | To prepare students for higher education in music | 2.09 | .302 | 2.29 | .488 | LE |
| 6 | To make students see music as an instrument of joy and relaxation | 2.27 | .467 | 2.43 | .535 | LE |

Table 1 showed the mean ($\bar{x}$) and standard deviation (SD) on the extent to which the objectives of the JSS music curriculum use being achieved in in public and private junior secondary schools in Obio/Akpor local government Area. music education objectives is achieved as it assist students to know that music is a combination of harmonious sound to a low extent in public schools ($\bar{x}$=2.18; SD= 0.405) and moderate extent in private schools ($\bar{x}$=2.57; SD= 0.537). Music education objectives enable students to play musical instruments of their choice to a low extent in public schools ($\bar{x}$=2.45; SD=0.533) and private schools ($\bar{x}$=2.43; SD= 0.535). also, music education curriculum assist students read musical notes on stave to a low extent in public schools ($\bar{x}$=2.09; SD= 0.302) and private shools ($\bar{x}$=2.43; SD= 0.535). The result in both public and private schools showed that the difference in the mean ($\bar{x}$) and standard deviation (SD) on the extent to which the objectives of the JSS music curriculum use being achieved is low extent.

**Research Question two:** What are the qualifications of teachers teaching music at junior secondary schools?

**Table 2**

***Mean ($\bar{x}$) and Standard Deviation (Sd) on the Qualifications of Teachers Teaching Music in Public and Private Junior Secondary Schools***

| S/N | ITEMS | **Public (n=20)** | | **Private (n=20)** | | **Decision** |
|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | **$SD_1$** | $\bar{x}_2$ | **$SD_2$** | |
| 7 | Teachers in my school possess teaching qualifications for the implementation of music curriculum | 2.82 | .405 | 2.43 | .535 | HE |
| 8 | There are adequate qualified music teachers to implement music curriculum in my school | 2.73 | .647 | 3.00 | .577 | HE |
| 9 | Music teachers have the basic skills and methodology for teaching music | 3.09 | .539 | 2.57 | .535 | HE |
| 10 | Music teachers' recruitments is based on merit | 2.82 | .405 | 2.57 | .535 | HE |
| 11 | Music teachers participate in seminars and conferences to enhance their jobs | 3.73 | .467 | 3.57 | .535 | HE |

Table 2 showed the mean ($\bar{x}$) and standard deviation (SD) on the qualifications of teachers teaching music in public and private junior secondary schools in Obio/Akpor local government area. It showed that the teachers possess teaching qualifications for the implementation of music curriculum to a high extent in public schools ($\bar{x}$=2.82; SD = 0.405) and low extent in private schools ($\bar{x}$=2.43; SD = 0.535). There are adequate qualified music teachers to implement music curriculum in my school in the public ($\bar{x}$=2.73; SD = 0.647) and private schools ($\bar{x}$=3.00; SD = 0.577) to a high extent . The table showed that music teachers have the basic skills and methodology for teaching music to a high extent in public ($\bar{x}$=3.09; SD = 0.539) and private ($\bar{x}$=2.57; SD = 0.535) schools. The result showed that music teachers' recruitments to a high extent is based on merit in both public ($\bar{x}$=2.82; SD = 0.405) and private ($\bar{x}$=2.57; SD = 0.535) schools. Also, it was found that music teachers participate in seminars and conferences to enhance their jobs to a very high extent in both public ($\bar{x}$=3.73; SD = 0.467) and private ($\bar{x}$=3.57; SD = 0.535) schools. The qualifications of teachers teaching music in public and private junior secondary schoolsto a high extent.

**Research Question three:** What are the teaching methods used by the music teachers in implementing music curriculum in junior secondary schools?

**Table 3**

***Mean ($\bar{x}$) and Standard Deviation (Sd) on Each Method Used by the Music Teachers in Implementing Music Curriculum***

| **S/N** | ITEMS | **Public (n=20)** | | **Private (n=20)** | | **Decision** |
|---|---|---|---|---|---|---|
| | | $\bar{x}_1$ | **SD1** | $\bar{x}_2$ | **SD2** | |
| 12 | The teachers apply demonstration method to enhance effective teaching | 3.00 | .447 | 2.57 | .535 | HE |
| 13 | Music teachers give take-home assignments to ascertain the level of understanding | 3.18 | .405 | 3.00 | .577 | HE |
| 14 | Through the music practical, the students go on excursion to gain music experience | 3.82 | .405 | 3.43 | .787 | VHE |
| 15 | Students are exposed to inter-school musical competitions | 1.55 | .522 | 1.14 | .378 | LE |
| 16 | Questioning approach (Socratic) teaching method leads the learners to the basic fact and concept of the lessons | 3.64 | .505 | 3.43 | .976 | VHE |

Table 3 showed the mean ($\bar{x}$) and standard deviation (SD) on the teaching methods used by the music teachers in implementing music curriculum in junior secondary schools in Obio/Akpor local government area. It showed that the teachers apply demonstration method to enhance effective teaching to a high extent in public schools ($\bar{x}$=3.00; SD = 0.447) and to moderate extent in private schools ($\bar{x}$=2.57; SD = 0.535). The table showed that teachers give take-home assignments to ascertain the level of understanding to a high extent in both public school ($\bar{x}$=3.18; SD = 0.405) and private schools ($\bar{x}$=3.00; SD = 0.577). The table showed that music teachers have the basic skills and methodology for teaching music to a high extent in public ($\bar{x}$=3.09; SD = 0.539) and private ($\bar{x}$=2.57; SD = 0.535) schools. The result showed that music teachers' recruitments to a high extent is based on merit in both public ($\bar{x}$=2.82; SD = 0.405) and private ($\bar{x}$=2.57; SD = 0.535) schools. Also, it was found that through music practical, the students go on excursion to gain music experience to a very high extent in ($\bar{x}$=3.80; SD = 0.405) and to a high extent in private schools ($\bar{x}$=3.43; SD = 0.787). However, the result showed that students the music practical, the students go on excursion to gain music experience to a low extent in public schools ($\bar{x}$=1.55; SD = 0.522) and very low extent in private schools ($\bar{x}$=1.14; SD = 0.378). The result showed that teaching methods used by the music teachers in implementing music curriculum in junior secondary schools in Obio/Akpor local government area is to a high extent.

**Test of Hypotheses**

**HO1:** There is no significant difference in the extent objectives of the music curriculum is being achieved in public and private junior secondary schools.

**Table 4**

***Independent t-Test on the Difference in the Rating of Public and Private Junior Secondary Schoolson the Extent Objectives of the Music Curriculum is Being Achieved***

| | | | | | | 95% Confidence Interval of the Difference | |
|---|---|---|---|---|---|---|---|
| | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Equal variances not assumed | -1.556 | 38 | .147 | -.16667 | .10711 | -.40189 | .06856 |

Table 4 showed the difference in the rating of public and private junior secondary schools on the extent objectives of the music curriculum is being achieved. The t-test result, t(38) = -1.56, p=.147. Since the p-value (p =.147>0.05), showed that there is no significant difference in the in the rating of public and private junior secondary schools on the extent objectives of the music curriculum is being achieved. Hence, the null hypothesis was accepted

**HO2:** There is no significant difference in the quality of teachers for the implementation of music curriculum in public and private junior secondary schools.

**Table 5**

***Independent t-Test on the Difference in the Rating of Public and Private Junior Secondary Schools on ihe Implementation of Music Curriculum***

| | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference Lower | Upper |
|---|---|---|---|---|---|---|---|
| Equal variances not assumed | 1.189 | 38 | .260 | .12338 | .10379 | -.10508 | .35183 |

Table 5 showed the difference in the rating of public and private junior secondary schools on the implementation of music curriculum in Obio/Akpor Local Government Area of Rivers State. The t-test result, t(38) = 1.189, p=.260. Since the p-value (p =.260>0.05), there is no significant difference in the rating of public and private junior secondary schools on the implementation of music curriculum in Obio/Akpor Local Government Area of Rivers State. Hence, the null hypothesis was accepted

**HO3:** There is no significant difference in the teaching strategies adopted by teachers for the implementation of the curriculum in public and private junior secondary schools.

**Table 6**

***Independent t-Test on the Difference in the Rating of Public and Private Junior Secondary Schools on the Teaching Strategies Adopted by Teachers for the Implementation of the Curriculum***

| | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference Lower | Upper |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Equal variances not assumed | 2.272 | 38 | .058 | .32208 | .14177 | -.01460 | .65875 |

Table 6 showed the difference in the rating of public and private junior secondary schools on the teaching strategies adopted by teachers for the implementation of the curriculum. The t-test result, t(38) =2.272, p=.058. Since the p-value (p =.058>0.05), there is no significant difference in the rating of public and private junior secondary schools on the teaching strategies adopted by teachers for the implementation of the curriculum. Hence, the null hypothesis was accepted.

**Discussion of Findings**

This exploration was attempted on the "Appraisal of the Execution of Music Training Educational program in Junior Optional Schools in Obio/Akpor local government area of Streams State. The accompanying discoveries were shown in the review.

The result of speculation one showed that there is no massive distinction between the assessments of the students and educators/VPs in regard to the accomplishment of the goals of the junior secondary schools' music educational program. The two gatherings consistently concurred or unequivocally settled on the accomplishment of the goals of the music educational plan. They concurred that music is the blend of amicable sound, empowering the students to sing in association and in leaves behind different students.

They additionally concurred that music information empowers them to play the instruments of their decision. They likewise concurred that melodic information empowers them to peruse melodic notes on the fight or staff. In this manner, affirming what was surveyed by Akanbi (2018) is of the view, that the expression "instructive material portrays the results of schooling" that they are educated transporters planned explicitly to work with the accomplishments of targets in a showing learning foundation. This is additionally upheld by Ajayi (2011).

Also, the two students and educators/VPs again don't fundamentally contrast concerning the significance of the accessibility of qualified music educators for the execution of music education curriculum in the review region. Denga (2015:58) stated that 89 it is the obligation of the government to enroll and present staff in schools to accomplish the powerful execution of a music educational plan. This is on the grounds that, the two students and educators/chiefs know the significance of the accessibility or in any case of qualified music educators for the compelling execution of a music educational program in the review region. The two of them concurred that when educators have the right to show capability, the execution of music education curriculum will be made conceivable and simpler. For example, the larger part of the educators has the base fundamental showing capability of NCE in this review.

Subsequently, a significant number of the students and educators/VPs trusted that the failure to improvise teaching aid help is because of the absence of qualified music educators in their schools. That's what they trusted assuming these music educators are scholastically qualified and prepared, they will effortlessly improvise teaching aid which will eventually prompt successful execution of a music educational plan in the review region. The students and educators both accepted that the educators of music from their schools that took part in preparing to perform preferred in class showing over those educators that don't take part in preparing.

The result of the trial of speculation five (5) demonstrated that both prepared and undeveloped educators altogether vary as they would like to think in the usage of music in junior optional schools. The justification for this distinction in suppositions among prepared and undeveloped educators is that while the prepared educators firmly accepted that gathering showing strategies ought to be utilized in music class, the undeveloped educators anyway accept in any case. Additionally, while the prepared educators unequivocally accepted that task strategy is vital for JSS music instructing, the undeveloped educators just had faith in the direct educating techniques. The immediate showing technique alone is an old type of showing strategy which should be enhanced with different types of showing strategies, for example, bunch showing strategy and undertaking technique. These advanced showing strategies will assist with fostering the student's scholarly abilities and further develop the subject educational program execution. This attestation affirmed the announcement of Jenkins (2019) which expresses that educational planning is one of the instructive fields that take as hazardous what ought to be arranged, educated, and learned in schools. It is a focal and bringing together review coordinated around the decision confronting the specialist.

One more justification behind the conspicuous distinction as teachers would see it is that while the undeveloped educators accepted unequivocally utilizing narrating strategy in showing music in the classes, the prepared educators then again firmly put stock in involving the exhibition technique in the demonstration of instructing. As such, the prepared educators are shown how to utilize exhibition in teaching the thoughts contained in the subject. For example, music subjects like C‟ significant scale on the piano or console can more readily be understood involving show than recounting a story as it is regularly finished by the undeveloped educators

**Conclusion**

Though music has suffered a lot of setback in the academic cycle, some writers have taken interest to find out more about the subject through research. As earlier indicated, the literature was reviewed on the concept of music education, the importance of music education, the aims and objectives of teaching music, the roles of government, supervisors, principal and teachers in the implementation of music curriculum. It was also revealed through the Literature review that the music teachers' qualifications, use of appropriate educational materials and the methodology adopted in the course of teaching music play major role in the effectiveness of music implementation. Also, to be considered is the use of evaluation to ascertain the effectiveness of the objectives of the music curriculum.

**Recommendations**

1. Music education should be popularized in junior secondary schools in Rivers State through direct educations, public lectures Seminars and workshops. The aim should be to educate the public generally and students in particular on the prospects and benefits of music in modern day Nigeria as it is done in civilized countries of Ancient Greece, Rome, Europe and America.
2. Government should indulge in the construction of more furnished music classes and other roles such as ensuring regular training and retraining of teachers and making sure that teacher of music are regularly supervised by external supervisors and not by vice principals alone.
3. The untrained (Auxiliary teachers) should be relieved of their role of teaching music and more qualified music teachers be employed to replace them in order to encourage proper implementation of the music education curriculum in the junior secondary school in Rivers State.

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# Comparative Analysis of Orientation and Safety Practices of Principals in Public and Private Secondary Schools in Imo State

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## Abstract

The study focused on comparative analysis of orientation and safety practices of principals in public and private secondary schools in Imo State. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. A descriptive survey research design was adopted for the study. The population of the study comprised 694 respondents of which 296 are principals of public secondary schools and 398 are principals of private secondary schools in Imo State. The entire population was used for the study without sampling due to its manageable size. The instrument for data collection was the researcher-developed questionnaire titled "Principals' Orientation and Safety Practices Questionnaire (POSPQ)''.Face validation of the instrument was determined by three experts who are lecturers, two in the Department of Educational Management and Policy and one in Measurement and Evaluation, all from Faculty of Education, Nnamdi Azikiwe University, Awka. The instrument was subjected to the measure of internal consistency using Cronbach Alpha method and coefficients obtained for cluster I and II are 0.80 and 0.78 respectively with overall coefficient of 0.79. Mean and standard deviation were utilized to answer the research questions and t-test was used to test the hypotheses. The findings of the study revealed among others that the principals should constitute a committee saddled statutorily with the responsibility of providing a comprehensive and formalized framework for the coordinating and improving uniformity in safety programmes of public and private secondary schools.

**Key words: Comparative Analysis, Orientation, Safety, Principals, Schools**

## Introduction

Education is a critical tool for developing personality, improving skills and knowledge of individuals to prepare them for life challenges and also contribute to the development of the society. It is also the means in which individuals develop their self-confidence and abilities to make rational decisions for betterment of their living standard. Onyal and Nnebedum (2021) noted that education plays a crucial role in the economic development of any nation by inculcating in individuals requisite skills, knowledge, and habits for adapting to the changing world and contributing meaningfully to the growth of oneself and society at large. Education that inculcates values, norms and worthwhile behaviour that make individuals to civil and responsible members of society is delivered in learning institutions in which secondary school is part of them.

Secondary education is offered to students after the completion of primary schools. Nnebedum, Oshia, Nwanne and Chinagorom (2022) noted that principals are the chief administrators and leaders who plan, coordinate, control and motivate staff to ensure smooth operation of secondary schools. Akporehe and Asiyai (2023) noted that it is at the secondary level of education that entrepreneurial and vocational skills of the students are cultivated. The secondary school is categorized into public and private schools. Public secondary schools are post-primary learning institutions which are established, funded and controlled by the government through various agencies, boards and ministries, while, private secondary schools are post-primary learning institutions which are established, funded and controlled by individuals, religion bodies and non-governmental organization. The public schools charge lower tuition fess which makes them more affordable and accessible than their private counters. The public and private secondary schools are managed by principals.

Principals are the chief executive officers who control, direct and ensure smooth daily operations of secondary schools. According to Ikpa And Okah (2023), principals are the heads of secondary schools who are charged with the responsibility of running the day-to-day affairs of the schools. The principals are entrusted with the responsibilities of planning, overseeing, motivating and influencing the efforts of teachers to attain set goals. Oguejiofor (2023) opined that principal are the administrative heads of secondary schools in-charge of managing the activities and programmes as well as the available resources for productivity and quality outputs. It is also the responsibilities of principals to delegate duties, ensure the safety of learners and make sure that orientation programme is organized for newly admitted students.

Orientation is a programme organized for newly admitted students to enlighten them on the school environment and culture to make them adjust quickly in the school system. According to Abdullahi (2017), orientation is the programme conducted for newly admitted students to be familiar with various activities of the school. During orientation programme the newly admitted students are being enlightened about the rules and regulation of the school to understand the dos and don't' in the school, informed of the available facilities for optimum use. Orientation practices involve formally introducing newly admitted students to the various programmes of the school such as the curricular and co-curricular programmes like clubs, societies and fellowships that exist within the school, all the subjects they are expected to offer at their level (Ogbiji, Eyo & Oko, 2011). The introduction of newly admitted students to various school programmes help to minimize the initial problems of adjustment. Ogbiji, Eyo and Oko (2011) observed that public secondary schools in Nigeria seem to be more regular and thorough in the content of their orientation than their private counterparts. Notwithstanding, orientation in public and private secondary schools provides the opportunity for principals to enlighten students on disciplinary issues in the school system.

Safety is a state of students and staff being secured and free from injury and danger. According to Asodike and Nwabueze (2017), safety is a situation in which the teachers and learners feel at home, develop confidence, maintain a positive state of mind, and do not show any signs of fear in the school. There are essential practices to promote safety in the school system. Mubita and Namafe (2016) stressed that safety practice includes, the use of visitors' book, formulation of school rules, issuance of identity cards to students, recruitment of watchmen, waste management and regular roll call for students. Other safety practices include, display of safety instructions in the school, fencing the school perimeter with security barbwires, provision of lockable main gate, provision of well-equipped first aid box, fire extinguisher, inspection and maintenance of school facilities, formation of safety club in school, training of school personnel on security tip, installation of Close circuit TV cameras and Central security alarm. Asodike and Nwabueze (2017) observed that unlike most private schools, public schools in Nigeria are often unkempt having poor sanitary and waste disposal systems. Asodike and Nwabueze stressed that such an environment is responsible for school-related diseases like diarrhoea, dysentery, cholera, injury and so on. Also, private secondary schools seem to put more safety measures such as fencing of the school premises, stationing of security men and provision of first aid materials than their public school counterparts.

The cases of cultism, fighting, bullying, stealing, classroom disorder, use of weapons and other forms of misconduct is an indicator that secondary schools in Imo State are suffering setback in terms of safety practices (Orih, 2021). The misconducts of students that posed safety threats and risks could be attributed be to lapses in orientation of learners in the school rules and regulations as well as possible disciplinary measures for its violation. Most private secondary schools appear to put more efforts to ensure safety of staff and students by fencing of the school premises, seeking the services of professional security agencies, monitoring movement in and outside the school environment unlike their public counterparts, where these safety measures are poor. On the other hand, it is the culture of public secondary schools to organise orientation for newly admitted students unlike the private secondary schools where these practices appear to be irregular. The bureaucratic procedures in discipline, orientation, admission and safety may make public and private secondary school principals differ in their students' personnel management practices. The unsatisfactory state of affairs and imbalances in public and private secondary schools in Imo State prompted the researcher to embark on this study.

**Purpose of the Study**

The main purpose of the study is to comparatively analyze orientation and safety practices of principals in public and private secondary schools in Imo State. Specifically, the study sought to;

4. Compare students' orientation practices of principals in public and private secondary schools in Imo State.
5. Compare students' safety practices of principals in public and private secondary schools in Imo State.

**Research Questions**

Two research questions guided the study

4. What ways can students' orientation practices of public secondary school principals be compared to their counterparts in private schools in Imo State?
5. What ways can students' safety practices of public secondary school principals be compared to their counterparts in private schools in Imo State?

**Hypotheses**

The following hypotheses were tested at 0.05 level of significance.

6. There is no significant difference in the mean ratings of students' orientation practice by principals of public and private secondary schools in Imo State.
7. There is no significant difference in the mean ratings of students' safety practice by principals of public and private secondary schools in Imo State.

**Method**

A descriptive survey research design was adopted for the study. According to Nworgu (2015), a descriptive survey is a design which aims at collecting data and describing systematically the characteristics, features or facts about a given population. This design is deemed appropriate for the study since the researcher collected data from a given population of the study to describe systematically and comparatively analyze students' personnel management practices of principals in public and private secondary schools in Imo State. The study was carried out in Imo state.

The population of the study comprised 694 respondents of which 296 are principals of public secondary schools and 398 are principals of private secondary schools in Imo State. The entire population was used for the study without sampling due to its manageable size. Hence, all the 694 respondents made up of 296 public and 398 private secondary school principals were used for the study.

The instrument for data collection was the researcher-developed questionnaire titled "Principals' Orientation and Safety Practices Questionnaire (POSPQ)''. The instrument was developed based on literature review and consultation of experts in educational field. The instrument has two sections namely, A and B. Section "A" dealt with the demographic variable of the respondents such as school ownership, while section B elicited information concerning orientation and safety practices. Cluster I contains eight items on orientation practices and cluster II contains 16 items on safety practices. The instrument contains 24 items structured on a four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D); Strongly Disagree (SD) weighted 4, 3, 2 and 1 respectively.

Face validation of the instrument was determined by presenting three copies of the questionnaire together with title, purpose of the study, research questions and hypotheses to three experts who are lecturers, two in the Department of Educational Management and Policy and one in Measurement and Evaluation, all from Faculty of Education, Nnamdi Azikiwe University, Awka. Their comments and suggestions were used to produce the final copy of the instrument.

The instrument was subjected to the measure of internal consistency using Cronbach Alpha method. The internal consistency reliability coefficients obtained for cluster I and II are 0.80 and 0.78 respectively. The overall coefficient of the entire instrument was 0.79.

The researchers together with six research assistants who are public and private secondary school teachers in Imo State employed a direct method of data collection. A total of 694 copies of the questionnaire were distributed, 296 and 398 copies for principals of public and private secondary schools respectively. Out of these, a total of 673 copies of questionnaire made up of 288 and 385 from public and private school principals respectively were properly filled and successfully retrieved, indicating 97% percent return.

Mean and standard deviation were utilized to answer the research questions and t-test was used to test the hypotheses. The decision criteria on the research questions are that any item with a mean score equal or above 2.50 indicated agreement, while the item with a mean score below 2.50 indicated disagreement. For decision on the hypotheses, if p-value is equal to or greater than significant value of 0.05 ($P \geq 0.05$), the null hypothesis was rejected and the difference was taken to be statistically significant, but if otherwise ($P<0.05$), the null hypothesis was not rejected and the difference was taken to be statistically not significant. `

**Results**

Research Question 1: What ways can students' orientation practices of public secondary school principals be compared to their counterparts in private schools in Imo State?

**Table 1**
***Mean Ratings and Standard Deviation Scores on Orientation Practices of Principals***

| S/N | ITEMS | Public School Principals (N =288) | | | Private School Principals (N = 385) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Decision | Mean | SD | Decision |
| 1 | Enlighten newly admitted students on the school rules and regulations so as to enhance their awareness of the school rules and regulations | 2.98 | 1.08 | Agree | 2.81 | 1.03 | Agree |
| 2 | Introduce the newly admitted students to members of staff | 2.77 | 1.05 | Agree | 2.91 | 1.08 | Agree |
| 3 | Enlighten the newly admitted students on the procedures of using the available facilities in the school | 2.68 | 1.07 | Agree | 2.74 | 1.01 | Agree |
| 4 | Inform newly admitted students of various services being rendered in the school | 2.46 | 1.02 | Disagree | 2.48 | 1.10 | Disagree |
| 5 | Describe the various co-curricular programmes of the school to newly recruited students | 2.71 | 1.04 | Agree | 2.52 | 1.07 | Agree |
| 6 | Describes the health services available in the school | 2.65 | 1.06 | Agree | 2.75 | 1.04 | Agree |
| 7 | Introducing the newly admitted students to the school prefects | 2.60 | 1.04 | Agree | 2.65 | 1.08 | Agree |
| 8 | Provide information to newly admitted students information on various subjects to suit their future career | 2.65 | 1.09 | Agree | 2.60 | 1.00 | Agree |
| | **Mean of Means** | **2.69** | **1.06** | **Agree** | **2.68** | **1.05** | **Agree** |

The result of data analysis presented on Table 1 show that public and private secondary school principals mean scores are above 2.50 for seven out of the eight items listed namely 1, 2, 3 and 5-8 revealing agreement by both groups that they adopt these items as their orientation practices. On the other hand, the mean scores of below 2.50 were recorded by public and private secondary school principals for both item 4 indicating their disagreement with the items as part of their orientation practices.

The overall standard deviation scores of public and private secondary school principals which were 1.06 and 1.05 indicate homogeneity in their ratings. The mean of means of 2.69 and 2.68 for both public and private secondary school principals which are above 2.50 indicated agreement that most orientation practices listed are adopted by principals. The public and private secondary school principals adopt similar orientation practices are enlightenment of newly admitted students on the school rules and regulations so as to enhance their awareness of the school rules and regulations, introduction of the newly admitted students to members of staff, enlightenment of the newly admitted students on the procedures of using the available facilities in the school, description of the various co-curricular programmes of the school to newly recruited students, description of the health services available in the school, Introduction of the newly admitted students to the school prefects and provide information to newly admitted students information on various subjects to suit their future career.

Research Question 2: What ways can students' safety practices of public secondary school principals be compared to their counterparts in private schools in Imo State?

**Table 2**
***Mean Ratings and Standard Deviation Scores on Safety Practices of Principals***

| S/N | ITEMS | Public School Principals (N =288) | | | Private School Principals (N = 385) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Decision | Mean | SD | Decision |
| 9 | Fence the school premises to prevent unnecessary intrusion | 2.46 | 1.05 | Disagree | 2.54 | 1.00 | Agree |
| 10 | Station security guard at the school gate | 2.57 | 1.10 | Agree | 2.71 | 1.03 | Agree |
| 11 | Ensure the school environments are always kept clean | 2.86 | 1.08 | Agree | 2.81 | 1.08 | Agree |
| 12 | Provide fire extinguishers for emergency fire outbreak at strategic places | 2.48 | 1.04 | Disagree | 2.52 | 1.09 | Agree |
| 13 | Ensure regular cleaning of the school sanitary facilities to reduce students exposure to infection | 2.67 | 1.11 | Agree | 2.88 | 1.00 | Agree |
| 14 | Recruit trained security personnel in the school | 2.51 | 1.10 | Agree | 2.61 | 1.07 | Agree |
| 15 | Give prompt first aid treatment in the cases of emergency | 2.69 | 1.03 | Agree | 2.58 | 0.96 | Agree |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 16 | Install emergency alarm system in the school premises | 2.43 | 1.09 | Disagree | 2.40 | 1.12 | Disagree |
| 17 | Orient students on security tips | 2.61 | 1.08 | Agree | 2.57 | 1.03 | Agree |
| 18 | Renovate cracked walls to prevent collapse of school building | 2.59 | 1.05 | Agree | 2.55 | 1.16 | Agree |
| 19 | Construct drainage channel to prevent flooding in the school | 2.72 | 1.07 | Agree | 2.66 | 1.08 | Agree |
| 20 | Repair the windows and doors to safeguard the students belongings | 2.65 | 1.08 | Agree | 2.71 | 1.00 | Agree |
| 21 | Use visitors' book to monitor movement in or out of the school | 2.86 | 1.14 | Agree | 2.81 | 1.19 | Agree |
| 22 | Install Closed Circuit Televisions (CCTV) cameras to monitor movement within the school | 2.44 | 1.11 | Disagree | 2.48 | 1.11 | Disagree |
| 23 | Conduct security facilities audits for checking faulty ones that need repair | 2.48 | 1.12 | Disagree | 2.46 | 1.01 | Disagree |
| 24 | Provide identity card to students for easy identification in the school premises | 2.91 | 1.06 | Agree | 2.90 | 1.15 | Agree |
| | **Mean of Means** | **2.62** | **1.08** | **Agree** | **2.64** | **1.07** | **Agree** |

The results of data analysis present on Table 2 shows that public and private secondary school principals mean scores for items 10, 11, 13, 14, 15, 17-21 and 24 are higher than the criterion mean value of 2.50 and this indicates agreement with these items as their safety practices. On the other hands, both principals of public and private secondary schools disagreed with items 16, 22 and 23 as their safety practices. The results further reveal that principals of public secondary schools disagreed with items 9 and 12 as their safety practice, while their counterpart in private schools agreed with the items.

The overall standard deviation scores of public and private secondary school principals are 1.08 and 1.07 respectively and this indicates that there is homogeneity amongst their responses indicating a similar consensus of opinion. The mean of means of 2.62 and 2.64 for public and private secondary school principals respectively, both of which are above 2.50 indicated agreements that they adopt the listed safety practices. Thus, public and private secondary school principals adopt similar safety practices but differ in the areas of fencing the school premises to prevent unnecessary intrusion and provide fire extinguishers for emergency fire outbreak at strategic places. The similar safety practices adopted by principals of public and private secondary schools are stationing of security guard at the school gate, ensuring the school environments are always kept clean, ensure regular cleaning of the school sanitary facilities to reduce students exposure to infection, recruitment of trained security personnel in the school, prompt first aid treatment in the cases of emergency, orientation of students on security tips, renovation of cracked walls to prevent collapse of school building, construct drainage channel to prevent flooding in the school, use of visitors' book to monitor movement in or out of the school and provision identity card to students for easy identification in the school premises.

**Testing the Null Hypotheses**

$Ho_1$: There is no significant difference in the mean ratings of students' orientation practice by principals of public and private secondary schools in Imo State.

**Table 3**

***The Summary of t-test Analysis of no Significant Difference in the Mean Ratings of Students' Orientation Practice by Principals of Public and Private Secondary Schools***

| Location | N | $\bar{X}$ | SD | p-value | Df | ∞ | Remark |
|---|---|---|---|---|---|---|---|
| Public Sch. Principals | 288 | 2.65 | 1.09 | 0.15 | 671 | 0.05 | Not Significant |
| Private Sch. Principals | 385 | 2.61 | 1.08 | | | | |

Data presented on Table 3 revealed that the p-value of 0.15 is greater than the 0.05 level of significance at 671 degree of freedom. Thus, the null hypothesis is accepted. Therefore, there is no significant difference in the mean ratings of students' orientation practice by principals of public and private secondary schools in Imo State.

$Ho_4$: There is no significant difference in the mean ratings of students' safety practice by principals of public and private secondary schools in Imo State

| Location | N | $\bar{X}$ | SD | p-value | Df | ∞ | Remark |
|---|---|---|---|---|---|---|---|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Public Sch. Principals | 288 | 2.65 | 1.09 | 0.12 | 671 | 0.05 | Not Significant |
| Private Sch. Principals | 385 | 2.61 | 1.08 | | | | |

Table 4: The Summary of t-test Analysis of no Significant Difference in the Mean Ratings of Students' Safety Practice by Principals of Public and Private Secondary Schools

Data presented on Table 4 revealed that the p-value of 0.12 is greater than the 0.05 level of significance at 671 degree of freedom. Thus, the null hypothesis is accepted. Therefore, there is no significant difference in the mean ratings of students' safety practice by principals of public and private secondary schools in Imo State.

**Discussion of Findings**

It was found that the public and private secondary school principals adopt similar orientation practices in Imo State. This contradicted the finding of Ogbiji, Eyo and Oko (2011) which indicated that the principals of public and private secondary schools differ on their orientation practices. The disagreement in findings could be attributed to the variation of time span in which the two studies were carried out. The similar orientation practices are enlightenment of newly admitted students on the school rules and regulations so as to enhance their awareness of the school rules and regulations, introduction of the newly admitted students to members of staff, enlightenment of the newly admitted students on the procedures of using the available facilities in the school, description of the various co-curricular programmes of the school to newly recruited students, description of the health services available in the school, introduction of the newly admitted students to the school prefects and provide information to newly admitted students information on various subjects to suit their future career.

The valuable information about academic programmes disseminated to students during orientation make them excited about new environment and also enhance smooth transition to school's life. Orientation is probably organized for newly admitted students to enable them adjust to new learning and environment and drive maximum benefits from the programmes of public and private secondary schools. The information about school life revived by students during environment enable them to excel in their studies. The principals probably apply orientation practices to create lasting impression about their school to enable them have a favourable collegiate experience.

It was also found that there is no significant difference in the mean ratings of students' orientation practice by principals of public and private secondary schools in Imo State. This is disagreement with the finding of Ogbiji, Eyo and Oko (2011) which indicated that there was significant difference between public and private secondary principals on their orientation practices. The disagreement in findings could be attributed to difference in geographical locations of the studies, and the period they were carried out.

The result of the study indicated that public and private secondary school principals adopt similar safety practices but differ in the areas of fencing the school premises to prevent unnecessary intrusion and provide fire extinguishers for emergency fire outbreak at strategic places. This supported the finding of Ali and Fatima (2016) which revealed that principals of public and private secondary schools apply similar safety measures. This disagreed with the finding of Ayedun (2021) which indicated that safety measures are not applied by principals of public and private secondary schools. The disagreement in findings could be attributed to the fact the two studies were conducted in different levels of education. The similar safety practices adopted by principals of public and private secondary schools are stationing of security guard at the school gate, ensuring the school environments are always kept clean, ensure regular cleaning of the school sanitary facilities to reduce students exposure to infection, recruitment of trained security personnel in the school, prompt first aid treatment in the cases of emergency, orientation of students on security tips, renovation of cracked walls to prevent collapse of school building, construct drainage channel to prevent flooding in the school, use of visitors' book to monitor movement in or out of the school and provision identity card to students for easy identification in the school premises. The public and private secondary schools in Imo State are free from danger or threats probably due to fact that safety practices are applied by the principals. The safety practices of the principals of public and private secondary schools make the learning environment to be free from anxiety, hazard, risk, injuries and minimum loss of property.

It was also revealed that there is no significant difference in the mean ratings of students' safety practice by principals of public and private secondary schools in Imo State. This is in agreement with the finding of Ali and Fatima (2016) which indicated that principals of public and private secondary schools had no significant mean difference regarding their safety practices. The safety practices create orderly and harmonious learning environment devoid of risks, fear of danger in public and private secondary schools.

**Conclusion**

Based on the findings, it is concluded that principals of public and private secondary schools in Imo State apply similar orientation and safety practices to ensure that students derive optimal benefits from the school programmes. Orientation practices is that newly admitted students get information that relieve their anxieties about new environment and prepare them for smooth academic experience. Safety practices of principals help to ensure that learners are being protected from psychological and physical dangers. The students learn without fear of being injured or disrupted in the learning environment in public and private secondary schools.

**Recommendations**

Based on the findings of this study, the following recommendations were made:

1. Principals should ensure that orientation programmes for newly admitted students are comprehensive enough to cover various services being rendered in

public and private secondary schools for enhancing uniformity in learners' orientation.

2. The principals should constitute a committee saddled statutorily with the responsibility of providing a comprehensive and formalized framework for the coordinating and improving uniformity in safety programmes of public and private secondary schools.

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# Calibrating the Item parameters of 2020 NECO Mathematics Multiple-Choice Questions Using the Classical Test Theory Framework

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**Abstract**

Item analysis is fundamental in the field of measurement and evaluation, as it determines the overall effectiveness of a test through x-raying the inherent characteristics of the test. This study demonstrates the use of the classical test theory to calibrate the test item parameters (item difficulty and item discrimination) of the 2020 NECO Mathematics multiple-choice questions. The population for the study was made up of all the 26,421 SSIII students of the 2020/2021 academic session who enrolled for the NECO examinations in Anambra State, out of which a sample of 1,828 was selected by the use of purposive sampling technique. The students' responses were analyzed, and the Jmetrik software was used to calibrate the CTT-based parameters. The findings from this study revealed that out of the sixty (60) items in the test, eleven (11) items were easy while forty-nine (49) items had acceptable difficulty indices. No item was found to be very difficult. In terms of the discriminating powers, six (6) items had unacceptable discrimination indices (low positive discrimination), while fifty-four (54) items had acceptable discrimination indices (between borderline positive discrimination, and moderate discrimination). No item was found to have a high discriminating power. The study concluded that the examination body produced quality test items, and therefore, recommended that item analysis should be maintained in the test development process because of its importance in determining the overall effectiveness of the test.

**Key Words: Item Analysis, Classical Test Theory, Item Difficulty, Item Discrimination.**

## Introduction

The development index of any nation can be predicted by the quality of education of that nation. This means that any meaningful societal growth and development must be preceded by quality education. Laying credence to this, Okoye and Nduka (2022) identified education as an indispensable instrument for the overall development of any nation. It is for the above reason that Nigeria in her National Policy on Education (Federal Republic of Nigeria, 2014) identified education as fundamental to the nation's developmental goals, and vital for the promotion of a progressive and united Nigeria, and then adopted Education as an instrument "par excellence" for achieving national development. To achieve this goal of national development in Nigeria, there is need to ensure quality education delivery across the nation. Quality education brings about positive and desirable change, and this desirable change, at the end of every educational process, is quantified through measurement and evaluation.

Omorogiuwa (2019) defined measurement as the assigning of numbers on a student's performance to show the extent to which a trait is present or absent, according to specified rules. Evaluation then adds value judgment to the outcome of measurement. Measurement and evaluation use various tools. One of such tools is test. Others, as noted by Okoye (2015) include observations, rating scales, interviews among others.

There are several examination bodies in Nigeria that provide quality assessment of the extent to which educational objectives have been achieved at different stages of the educational system. This includes, amongst others, the National Examination Council (NECO), the West African Examination Council (WAEC), the Joint Admission and Matriculation Board (JAMB). Unfortunately, over the years, the result and analysis of the assessments provided by these examination bodies indicate a consistent students' low level of achievement, especially in Mathematics and other science subjects.

This consistent poor performance of students in Mathematics continues to draw the attention of major stakeholders in education. Researchers have tried to identify the causes, and proffer solutions to this disheartening trend. For example, Agwagah cited in Onah (2015) stated that there are many causes of poor performance of students in mathematics, which if well tackled would help the students improve on their performances in the subject. The causes were found to include; students' lack of interest and/or negative attitude towards mathematics; lack of qualified mathematics teachers; teachers' own negative attitude and/or incompetence in certain concepts; poor method of teaching applied by the teachers in the classroom; teachers' non-use of instructional materials in the teaching of mathematical concepts especially some that seem abstract. Other researchers proffered ways that can be adopted in order to improve students' level of achievement. Anigbo, Adegoke and Mbugua et al. all cited in Okoye and Nduka (2022) respectively suggested improved teaching methodology and students' preparation for examination, the use of multimedia instruction, and the provision of proper staffing, teaching and learning materials, and improved curriculum. However, despite all these suggestions, very little improvement has been recorded.

It is very important to note that besides these identified causes and suggestions, performance in any given test also depends on the test item characteristics. Ashikhia cited in Okoye and Nduka (2022) identified the nature of the test items as a prominent factor that affects student's performances. Test item characteristics are the inherent qualities of the test which determines the overall effectiveness of the test, and these qualities are determined through item analysis. Item analysis is a process of examining students' responses to each test item in order to measure the quality of the test items. This is usually done to sort out the good items from the weak ones and repair them to improve their quality for future use.

Two important information about the quality of test items are obtained through the process of item analysis. These are:

1. Item difficulty - a measure of whether an item was too easy or too hard.
2. Item discrimination - a measure of whether an item discriminated between the lower achievers and upper achievers.

The inherent qualities of test items can be studied and evaluated from different perspectives and theories. These theories are referred to Test Theories, and they provide the framework to improve the overall quality of tests by identifying the parameters of item difficulty, item discrimination and the effectiveness of alternatives. In educational measurement, there are two main test theories or frameworks; the Classical Test Theory (CTT) and the Item Response Theory (IRT). These frameworks are based on different theoretical assumptions and use different statistical approaches.

The Classical Test Theory (CTT) has been the foundation for measurement theory for decades. It was an emanation of the early 20th century approach to measurement of individual differences. CTT is not credited to any single author, but developed and evolved as a result of collation of contributions from different authors. Ekwonye and Eguzo cited in Awopeju and Afolabi (2016) defined Classical Test Theory as a body of related psychometric theory that predicts outcomes of psychological testing such as the difficulty of items or the ability of test-takers. They further stated that CTT was born only after the following three achievements or ideas were conceptualized: one, recognition of the presence of errors in measurement; two, conception of that error as a random variable; and three, a conception of the correlation and how to index it.

Classical test theory has three basic measurement concepts:

1. Test Score or observed score (X)
2. True score (T) and
3. Error score (E).

These concepts are often expressed mathematically in a simple linear model as $X = T + E$. This implies that the observed scores are the addictive function of true scores and error terms. That is, the observed score of a student is a combination of an estimate of the true scores of that student, plus some unobservable error. This observed score according to Ojerinde (2013) is often called a fallible score because of the error contaminant. The true score reflects what the student actually knows, but it is always contaminated by random errors. According to Lord cited in Ojerinde (2013), these random errors can result from several factors such as guessing, fatigue, stress and other extraneous influences. The theoretical assumptions of CTT makes it easy to apply in many testing situations. Ojerinde (2013) opined that the conceptual foundations, assumptions and extensions of the basic premises of CTT have allowed for the development of some excellent psychometrically sound scales in the assessment practices of educational bodies in Africa.

Given the indispensable nature of test item analysis in the field of measurement and evaluation, and the effect of test item parameters on student's academic achievement, there is a need to carry out this present study to analyze the 2020 NECO

Mathematics test items using CTT framework to determine the psychometric properties of the test items.

**Purpose of the Study**

The purpose of the study is to generate the item parameters of 2020 NECO Mathematics multiple-choice questions using the Classical Test Theory framework.
Specifically, the study determine:

- the CTT-based item difficulty estimates of 2020 NECO mathematics multiple-choice test items.
- the CTT-based item discrimination estimates of 2020 NECO mathematics multiple-choice test items.

**Research Questions**

The following research questions were raised to guide this study.

1. What are the CTT-based item difficulty estimates of 2020 NECO mathematics multiple-choice test items?
2. What are the CTT-based item discrimination estimates of 2020 NECO mathematics multiple-choice test items?

**Method**

The descriptive survey design was adopted in this study. A sample of 1,828 out of a population of 26,421 Senior Secondary School three (SS3) students who enrolled for the 2020/2021 Senior School Certificate Examination in Anambra State was used in the study. The instrument for data collection was the May/June 2020 NECO Mathematics Paper III. This instrument was administered to the students of the sampled schools by the researchers, assisted by the Mathematics teachers of the schools, under strict examination conditions. The data obtained were analyzed and the item parameters were calibrated using the Jmetrik software.

**Presentation and Analysis of Data**

This section focuses on the analysis of the data obtained from the administration of the research instrument. The results of the analysis are presented in tables and discussed according to the research questions that formed the thrust of this study.

**Research Question 1: What are the CTT-based item difficulty estimates of 2020 NECO mathematics multiple-choice test items?**

**Table 1**

***CTT-Based Item Difficulty Estimates of 2020 NECO Mathematics Multiple-Choice Test Items***

| Item | P | Item | P | Item | P | Item | P |
|---|---|---|---|---|---|---|---|
| 1 | 0.91 | 16 | 0.51 | 31 | 0.62 | 46 | 0.56 |
| 2 | 0.86 | 17 | 0.68 | 32 | 0.58 | 47 | 0.55 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3 | 0.82 | 18 | 0.44 | 33 | 0.56 | 48 | 0.53 |
| 4 | 0.42 | 19 | 0.51 | 34 | 0.52 | 49 | 0.61 |
| 5 | 0.55 | 20 | 0.49 | 35 | 0.57 | 50 | 0.54 |
| 6 | 0.57 | 21 | 0.66 | 36 | 0.57 | 51 | 0.51 |
| 7 | 0.77 | 22 | 0.51 | 37 | 0.53 | 52 | 0.76 |
| 8 | 0.55 | 23 | 0.73 | 38 | 0.57 | 53 | 0.56 |
| 9 | 0.55 | 24 | 0.71 | 39 | 0.52 | 54 | 0.53 |
| 10 | 0.54 | 25 | 0.58 | 40 | 0.51 | 55 | 0.75 |
| 11 | 0.58 | 26 | 0.49 | 41 | 0.65 | 56 | 0.54 |
| 12 | 0.57 | 27 | 0.71 | 42 | 0.35 | 57 | 0.56 |
| 13 | 0.53 | 28 | 0.62 | 43 | 0.54 | 58 | 0.52 |
| 14 | 0.75 | 29 | 0.51 | 44 | 0.37 | 59 | 0.59 |
| 15 | 0.49 | 30 | 0.55 | 45 | 0.72 | 60 | 0.63 |

**Research Question2: What are the CTT-based item discrimination estimates of 2020 NECO mathematics multiple-choice test items?**

**Table 2**
***CTT-Based Item Discrimination Estimates of 2020 NECO Mathematics Multiple-Choice Test Items***

| Item | D | Item | D | Item | d | Item | D |
|---|---|---|---|---|---|---|---|
| 1 | 0.04 | 16 | 0.29 | 31 | 0.39 | 46 | 0.46 |
| 2 | 0.13 | 17 | 0.27 | 32 | 0.42 | 47 | 0.42 |
| 3 | 0.20 | 18 | 0.23 | 33 | 0.43 | 48 | 0.42 |
| 4 | 0.13 | 19 | 0.41 | 34 | 0.40 | 49 | 0.29 |
| 5 | 0.43 | 20 | 0.40 | 35 | 0.46 | 50 | 0.42 |
| 6 | 0.37 | 21 | 0.23 | 36 | 0.43 | 51 | 0.39 |
| 7 | 0.09 | 22 | 0.42 | 37 | 0.38 | 52 | 0.24 |
| 8 | 0.39 | 23 | 0.16 | 38 | 0.43 | 53 | 0.38 |
| 9 | 0.38 | 24 | 0.24 | 39 | 0.47 | 54 | 0.46 |
| 10 | 0.47 | 25 | 0.37 | 40 | 0.35 | 55 | 0.26 |
| 11 | 0.39 | 26 | 0.37 | 41 | 0.35 | 56 | 0.42 |
| 12 | 0.36 | 27 | 0.23 | 42 | 0.27 | 57 | 0.39 |
| 13 | 0.29 | 28 | 0.34 | 43 | 0.39 | 58 | 0.33 |
| 14 | 0.16 | 29 | 0.40 | 44 | 0.26 | 59 | 0.34 |
| 15 | 0.40 | 30 | 0.41 | 45 | 0.23 | 60 | 0.21 |

**Discussion of Findings**

Research Question 1 estimated the item difficulty parameters of the 2020 NECO mathematics multiple-choice questions using the classical test theory. Typically, CTT item difficulty parameter ranges from 0 (perfectly difficult item) to 1 (perfectly easy item). Table 1 shows that eleven(11) items, that is, Items 1,2, 3, 7, 14,23,24,27, 45, 52 and 55 are within the range of p>0.70 indicating easy items, while forty-nine(49) items, that is, Items 4,5,6,8,9,10,11, 12, 13,15,16,17,18,19,20,21,22,25,26,28,29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 46, 47, 48, 49, 50, 51, 53, 54, 56, 57, 58, 59 and 60 are within the range of 0.30<p<0.70 indicating moderately difficult items. Furthermore, no item had p below 0.3 (very difficult).Therefore, 18.3% of the items were easy, while 81.7% of the items were at the acceptable range.

The guideline for the interpretation of the above item difficulty index was based on a 3-way guide recommended by Omorogiuwa (2019) as follows:

P < 0.30: Difficult

0.30 ≤ P ≤ 0.70: Moderately Difficult

P> 0.70: Easy

Research Question 2 estimated the item discrimination parameters of the 2020 NECO mathematics multiple-choice questions using the classical test theory. Typically, CTT item discrimination parameter ranges from -1 through 0 to +1. Table 2 shows that six (6) items, that is, Items 1, 2, 4, 7, 14 and 23 have discrimination values between 0.00 and 0.19 indicating a low positive discrimination , fifteen (15) items, that is, Items 3, 13,16, 17, 18, 21,24, 27, 42, 44, 45, 49, 52, 55 and 60 were within the range of 0.20 to 0.29 indicating a borderline positive discrimination, and thirty-nine(39) items, that is, Items 5, 6, 8, 9, 10, 11, 12, 15, 19, 20, 22, 25, 26,28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 40, 41, 43, 46, 47, 48, 49, 50, 51, 53, 54, 56, 57, 58 and 59 were within the range of 0.30 to 0.49 indicating a moderate discrimination. Furthermore, no item had values above 0.50 (high discrimination).The implication of this is that 10% of the items were outside the acceptable discrimination index while 90% of the items (from borderline to high positive discrimination) were within the acceptable range.

The guideline for interpretation of the above item discrimination index was based on a 5-way guide recommended by Ohuche and Akeju as cited in Okoye and Nduka (2022) as follows:

0.50 And above indicates a high discrimination

0.30 to 0.49 indicates a moderate positive discrimination

0.20 to 0.29 indicates a borderline positive discrimination

0.00 to 0.19 indicates a lower to zero positive discrimination

-0.01 and below indicate negative discrimination.

**Summary of Findings**

a. Eleven (11) items had unacceptable difficulty indices (for being too easy) while forty-nine (49) items had acceptable difficulty indices. No item was found to be very difficult under the CTT framework.
b. Six (6) items had unacceptable discrimination indices (low positive discrimination), while fifty-four (54) items had acceptable discrimination indices (between borderline positive discrimination, and moderate discrimination). No item was found to have a high discriminating power under the CTT framework.

**Conclusion**

The findings from this study indicated that 81.7% and 90% of the items of the 2020 NECO mathematics multiple-choice questions were respectively within the acceptable difficulty and discrimination range. This shows that the examination body produced quality test items, and it is highly commendable because one of the principal tasks in educational practice is the development of tests that measure learning outcomes with the greatest precision and accuracy, and this is associated with the quality of test items.

Additionally, the two item statistics (item difficulty and item discrimination) produced almost the same item characteristics, and either could be used to judge the quality of the items.

**Recommendations**

The following recommendations are made in the light of the above findings:

1. Item analysis should be maintained in the test development process because of its importance in determining the overall effectiveness of the test.
2. Workshops should be organized to educate teachers on the implications of quality test items and its effect on student's performances.

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# The Role of Self-Regulation in Academic Success: Implications for Educational Practice

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**Abstract**

This chapter contribution aims to explore the critical role of self-regulation in fostering academic success among students. Self-regulation encompasses a set of cognitive, metacognitive, and behavioral skills that enable individuals to set goals, monitor progress, and adapt their strategies to achieve desired outcomes. Drawing from the field of educational psychology, this opinion paper discusses the importance of self-regulation in academic settings, highlights its impact on learning and achievement, and offers practical implications for educators and practitioners. By understanding and promoting self-regulation, educators can create supportive learning environments that facilitate students' academic growth and development.

## Introduction

In recent years, there has been a growing interest in exploring the psychological factors that contribute to academic success. One such factor is self-regulation, which refers to the ability to control and manage one's thoughts, emotions, and behaviors in pursuit of desired goals (Strauman, 2017). According to Matric (2018), self-regulation encompasses a range of cognitive, metacognitive, and behavioral skills, including goal setting, self-monitoring, planning, self-reflection, and self-control.

Research in educational psychology has consistently shown that self-regulation plays a critical role in students' academic performance (Fishman, 2014; Pardo, Han& Ellis, 2016). Students who possess strong self-regulation skills are more likely to set and achieve goals, persist in the face of challenges, effectively manage their time and resources, and adopt effective learning strategies (Huie, Winsler&Kitsantas, 2014). On the other hand, students with poor self-regulation may struggle with distractions, procrastination, lack of focus, and difficulty managing their study habits (Sims, 2014).

Given the importance of self-regulation for academic success, it is essential for educators and practitioners to understand its nature, components, and implications for educational practice. By incorporating strategies and approaches that promote self-regulation, educators can create supportive learning environments that foster students' growth, motivation, and achievement.

## Understanding Self-Regulation in Academic Contexts

In the academic context, self-regulation refers to the ability to control and direct one's thoughts, emotions, and behaviors in order to achieve desired academic goals (Usher & Schunk, 2017). It involves a set of cognitive, metacognitive, and behavioral skills that enable individuals to plan, monitor, and adapt their learning strategies and behaviors. Self-regulation encompasses various processes, including goal setting, self-monitoring, self-reflection, self-control, time management, study strategies, and problem-solving (Hadwin, Järvelä & Miller, 2017). According to Sholeh (2019), self-regulated learners are active participants in their own learning process. They set specific and challenging goals, develop effective strategies to reach those goals, monitor their progress, and make adjustments when necessary. They possess a sense of agency and responsibility for their learning, and they engage in self-reflection to evaluate their performance and make improvements (Andrade & Brookhart, 2016).

## Key Components of Self-Regulation and Theoretical Frameworks

Self-regulation is composed of several key components that work together to facilitate effective learning and academic success. These components include:

a) Goal Setting: Self-regulated learners set clear, specific, and challenging goals for their academic tasks. These goals provide direction and purpose, and they help learners prioritize their efforts and stay focused (Kim, Yu, Wolters & Anderman, 2023).

b) Planning: Self-regulated learners engage in strategic planning by breaking down tasks into smaller, manageable steps, scheduling study sessions, and allocating resources effectively. They create detailed plans that guide their actions and optimize their learning process (Zeidner & Stoeger, 2019).

c) Self-Monitoring: Self-regulated learners continuously monitor their progress towards their goals. They assess their understanding, track their performance, and evaluate their learning strategies. This self-monitoring enables them to identify areas of strength and weakness and make necessary adjustments (Manso-Vázquez & Llamas-Nistal, 2015).

d) Self-Reflection: Self-regulated learners engage in metacognitive processes by reflecting on their learning experiences. They evaluate their strategies, identify effective and ineffective approaches, and develop insights into their learning processes (Al-Rawahi& Al-Balushi, 2015). Self-reflection helps learners develop a deeper understanding of their own thinking and learning, leading to improved performance (van Loon, 2019).

e) Self-Control: Self-regulated learners possess self-discipline and self-control. They resist distractions, manage their time effectively, and regulate their emotions and impulses. They make conscious choices to prioritize their academic tasks and maintain focus and concentration (Duckworth, Gendler & Gross, 2014).

f) Study Strategies: Self-regulated learners employ effective study strategies that align with their goals and learning tasks. They employ strategies such as elaboration, organization, summarization, rehearsal, and retrieval practice. They actively seek out resources, manage their study environment, and engage in meaningful learning activities (Gonzalez-DeHass & Willems, 2016).

Theoretical frameworks and models provide a conceptual basis for understanding self-regulation in the academic context. Some prominent frameworks include:

1. Social Cognitive Theory: Emphasizes the reciprocal relationship between personal and environmental factors in shaping self-regulated learning (Bembenutty, White & DiBenedetto, 2016).
2. Information Processing Theory: Focuses on the cyclical process of planning, monitoring, and evaluating in self-regulated learning (Zimmerman, 2013).
3. Self-Determination Theory: Emphasizes intrinsic motivation and autonomy in fostering self-regulated learning (Luo, Lin & Yang, 2021).
4. Social-Emotional Learning (SEL) Frameworks: Recognize the importance of emotional regulation and self-management skills in academic settings (Wallender, Hiebel, PeQueen & Kain, 2020).

These frameworks provide insights into the cognitive, motivational, and emotional aspects of self-regulation and inform strategies to support self-regulated learning.

**Importance of Self-Regulation for Academic Success**

Self-regulation plays a crucial role in students' academic success. Here are some key reasons why self-regulation is important in academic contexts:

a) Improved Learning: Self-regulated learners are more likely to adopt effective learning strategies, manage their time efficiently, and engage in deep processing of information. They are better able to regulate their attention and focus, leading to enhanced understanding and retention of knowledge (Yeh et al., 2019).

b) Goal Attainment: Self-regulated learners set specific and challenging goals, which provide them with a clear direction and purpose. They persist in the face of challenges, maintain motivation, and take the necessary steps to achieve their goals. This goal-directed behavior enhances academic performance (Kolovelonis, Goudas & Samara, 2022).

c) Adaptability and Flexibility: Self-regulated learners are adaptable and flexible in their learning approaches. They monitor their progress, identify areas of weakness, and adjust their strategies accordingly. This ability to adapt and modify their approach in response to feedback and changing circumstances enhances their learning and performance (Onah, Pang & Sinclair, 2022).

d) Reduced Procrastination: Self-regulated learners are less likely to procrastinate on their academic tasks. They possess self-discipline and self-control, allowing them to resist immediate gratification and prioritize their academic responsibilities. This reduces the likelihood of last-minute cramming and promotes consistent effort over time (Grunschel, Patrzek, Klingsieck& Fries, 2018).
e) Motivation and Engagement: Self-regulated learners experience a higher level of intrinsic motivation and engagement in their learning. They have a sense of autonomy and ownership over their learning process, which leads to increased interest, enjoyment, and investment in their academic pursuits (Eom, 2015).
f) Improved Academic Performance: Overall, self-regulation has been consistently linked to improved academic performance. Students who possess strong self-regulation skills tend to achieve higher grades, demonstrate deeper understanding of content, and exhibit greater persistence in their academic endeavors (Huie, Winsler&Kitsantas, 2014).

Understanding the importance of self-regulation in academic success can guide educators in designing instructional practices and creating supportive learning environments that foster self-regulated learning. By nurturing students' self-regulation skills, educators can empower them to take ownership of their learning, enhance their academic performance, and develop lifelong learning skills.

**The Impact of Self-Regulation on Learning and Achievement**

**Self-Regulation and Academic Motivation.** Self-regulation and academic motivation are closely linked. Self-regulated learners are intrinsically motivated, engaging in learning because of personal interest rather than external factors (Cetin, 2015). According to Duchatelet&Donche (2019), self-regulation supports motivation by fostering autonomy and control over learning. Goal setting provides purpose and direction, fueling motivation and a sense of accomplishment (Höchli, Brügger& Messner, 2018). McDaniel & Einstein (2020) asserted that metacognitive processes promote awareness and a desire for growth. Self-regulation plays a key role in enhancing academic motivation.

**Self-Regulation and Goal Setting.** According to Zimmerman (2012), self-regulated learners use goal setting to enhance learning and achievement. They set specific, challenging goals that provide direction and purpose. Jacob (2023) advised that goals increase motivation and engagement, leading to persistence and commitment. Breaking goals into manageable steps helps maintain focus and prevent overwhelm. Regular progress monitoring allows for adjustments and promotes motivation. Goal setting is a vital aspect of self-regulation, fostering focus, persistence, and academic success (Suan, 2023).

**Self-Regulation in Study Strategies and Academic Performance.** Self-regulated learners use effective study strategies to enhance learning outcomes. They employ active learning strategies like elaboration and organization to actively engage with the material and promote comprehension (Mega, Ronconi & De Beni, 2014). Lumpkin (2020) asserted that metacognitive strategies such as self-questioning and summarization help monitor understanding and make necessary adjustments. Peng & Kamil (2018) highlighted that time management strategies prioritize tasks and avoid procrastination. Retrieval and spaced repetition strengthen memory retrieval and retention (Latimier, Peyre & Ramus, 2021). Self-regulated learners regulate attention, resist distractions, and maintain study schedules. These strategies optimize learning, leading to improved academic performance.

**Cultivating Self-Regulation Skills in Education**

According to Nilson and Zimmerman (2013) promoting self-awareness and metacognition is a fundamental strategy for developing self-regulation skills in education. Educators can encourage self-reflection through activities such as journaling and self-assessment exercises to help students understand their learning preferences and strengths (Lam, 2016). Explicit instruction and modeling of metacognitive strategies, like self-questioning and self-monitoring, can enable students to regulate their learning effectively (Mitsea&Drigas, 2019).

Teaching goal setting and planning is crucial in fostering self-regulation. By guiding students in setting SMART goals and breaking them down into manageable steps, educators instill a sense of purpose and direction (Burik, 2021; Suan, 2023). Providing tools like planners and checklists aids students in organizing tasks and resources effectively (Caffarella & Daffron, 2013), while progress tracking charts allow for continuous evaluation and adjustment (Andrade & Brookhart, 2016).
Enhancing self-control and self-efficacy are essential components of self-regulation.

Strategies such as self-monitoring and managing distractions help students develop self-control (Zimmerman, 2023), while creating a structured learning environment with clear expectations supports its maintenance (Cleary, Velardi &Schnaidman, 2017). Building students' self-efficacy is possible through offering achievable challenges, providing constructive feedback, and acknowledging their efforts and progress (Aslam & Khan, 2020).

Fostering a growth mindset and resilience is crucial for self-regulation development. A growth mindset is the belief that intelligence and abilities can be developed through effort and perseverance, while resilience refers to the ability to bounce back from setbacks and overcome challenges (Jennings & Cuevas, 2021). Emphasizing the importance of effort and viewing challenges as opportunities for growth helps instill a growth mindset (Terrano, 2018). Truebridge (2013) emphasized that educators can create a supportive environment where students feel safe to take risks and learn from setbacks. Incorporating real-life examples of resilience further reinforces the message that perseverance leads to success.

By following these approaches, educators can empower students to take ownership of their learning, set meaningful goals, regulate their learning strategies, and persist in the face of challenges. Cultivating self-regulation skills in education not only contributes to academic success but also prepares students for lifelong learning and success in various domains of life.

**Assessing And Monitoring Self-Regulation In Students**

**Selecting and Implementing Assessment Tools.** According to Cleary, Callan & Zimmerman (2012) in order to assess self-regulation in students, educators can use various assessment tools:

1. Self-report questionnaires: Students reflect on their self-regulation skills through statements or questions.
2. Observation and rating scales: Educators observe and rate students' self-regulation behaviors in real-time.
3. Performance-based assessments: Students demonstrate self-regulation skills in tasks or simulations. Consider the validity, reliability, alignment, and age appropriateness of the assessment tools when selecting them.

**Collecting and Analyzing Data.** Collecting and analyzing data on students' self-regulation involves administering surveys, conducting observations, and reviewing performance-based assessments (Ozan &Kincal, 2018). Quantitative data can be analyzed statistically to identify patterns and trends, while qualitative data provides insights into students' experiences. It's important to interpret the data within each student's context to identify areas for improvement and track progress over time.

**Using Assessment Results for Instruction and Support.** Assessment results guide instruction and support for students' self-regulation development. Hutchinson, Perry and Shapka (2021) opined that they inform:

1. Individualized instruction: Tailoring instruction to address specific self-regulation needs.
2. Goal setting and progress monitoring: Collaboratively setting goals and tracking progress.
3. Intervention and support: Designing targeted interventions for students with self-regulation challenges.
4. Classroom strategies and environment: Creating a supportive learning environment that promotes self-regulation.

5. Parent involvement: Collaborating with parents to reinforce self-regulation practices at home. Regularly analyzing assessment data enables educators to adapt instruction and provide ongoing support, fostering students' self-regulation and academic success (Sanders &Mazzucchelli, 2013).

**Creating Supportive Learning Environments for Self-Regulation**

**Classroom Practices.** Wandler & Imbriale (2017) highlighted that creating a supportive learning environment is essential for promoting self-regulation in the classroom. Educators can implement various classroom practices that facilitate self-regulation skills development:

a. Clear expectations and routines: Establishing clear expectations and routines helps students understand what is expected of them and provides a structured framework for self-regulation. Clearly communicated rules, procedures, and expectations for behavior, task completion, and time management enable students to develop self-regulatory behaviors (Peshak, 2021).
b. Goal-oriented instruction: Incorporating goal-oriented instruction involves explicitly setting learning goals and objectives for students. Educators can guide students in understanding the purpose of their learning, identifying specific goals, and monitoring their progress towards those goals (Nilfyr, Aspelin & Lantz-Andersson, 2021). This practice helps students develop a sense of purpose, motivation, and self-regulatory behaviors aligned with their goals.
c. Scaffolded learning experiences: Providing scaffolding support is crucial for students as they develop their self-regulation skills. Educators can gradually release responsibility, providing support and guidance initially and gradually encouraging students to take more ownership of their learning (Lee & Schmitt, 2014). This approach helps students build their self-regulation skills incrementally.
d. Effective use of learning materials and resources: Teachers can organize learning materials and resources in a way that promotes self-regulation. This can include providing clear instructions, labeling materials, using visual aids, and making resources easily accessible to students (Wandler & Imbriale, 2017). A well-organized learning environment supports students in independently accessing and utilizing resources to support their learning.

**Teacher-Student Interactions.** Raufelder, Scherber & Wood (2016) stated that positive and supportive teacher-student interactions contribute to creating an environment that fosters self-regulation. Here are some strategies for promoting self-regulation through teacher-student interactions as proposed by Sankalaite et al. (2021):

- Modeling self-regulation: Educators can model self-regulation behaviors and strategies in their interactions with students. By demonstrating effective self-regulation skills, such as goal setting, planning, and self-reflection, teachers provide students with tangible examples to emulate.
- Individualized feedback and guidance: Providing timely and specific feedback is crucial for supporting students' self-regulation. Educators can offer feedback that focuses on the process and effort rather than just the outcome, highlighting students' strengths and areas for improvement related to self-regulation. Individualized guidance can help students develop self-awareness and make adjustments to their self-regulation strategies.
- Promoting autonomy and choice: Encouraging autonomy and choice empowers students to take ownership of their learning and develop self-regulation skills. Educators can provide opportunities for students to make decisions about their learning, such as selecting tasks, choosing learning strategies, or setting personal goals. This practice enhances students' motivation, self-efficacy, and self-regulation.

**Collaborative Learning and Peer Support.** Collaborative learning and peer support contribute to the development of self-regulation skills by providing opportunities for students to learn from and support each other. Riel (2023)highlighted some strategies for fostering collaborative learning and peer support:

- Group work and cooperative learning: Engaging students in group work and cooperative learning activities promotes self-regulation through collaboration and shared responsibility. Working in groups allows students to practice communication, problem-solving, and self-regulation skills such as time management and task coordination.
- Peer feedback and reflection: Peer feedback and reflection activities enable students to learn from one another and develop self-regulation skills. Educators can provide structured opportunities for students to give and receive constructive feedback, engage in peer assessment, and reflect on their own and others' self-regulation strategies.
- Peer mentoring and support: Pairing students as mentors and mentees can create a supportive peer network for self-regulation. Older students can serve as mentors to younger students, providing guidance, sharing strategies, and offering support in developing self-regulation skills. This peer-to-peer interaction fosters a sense of accountability and support for self-regulation practices.

**School-Wide Strategies.** Creating a school-wide culture that prioritizes self-regulation is vital for supporting students' development in this area. American Psychological Association. (2020) recommended some school-wide strategies that can foster self-regulation:

1. Professional development for educators: Providing professional development opportunities for teachers to enhance their understanding of self-regulation and its importance in learning. This training can equip educators with strategies and techniques to promote self-regulation skills effectively.
2. Consistent language and expectations: Establishing consistent language and expectations regarding self-regulation throughout the school promotes a shared understanding and a cohesive approach. Consistency helps students transfer self-regulation skills across different classrooms and contexts.
3. Collaborative planning and support: Facilitating collaboration among educators to plan and implement self-regulation initiatives can strengthen the integration of self-regulation strategies across the curriculum. Sharing resources, strategies, and best practices can enhance the implementation of self-regulation instruction and support.
4. Parent and community involvement: Involving parents and the wider community in supporting self-regulation efforts reinforces the importance of self-regulation skills beyond the school environment. Educators can engage parents through workshops, newsletters, and home-school partnerships to provide resources and strategies for supporting self-regulation at home.

By implementing these classroom practices, promoting positive teacher-student interactions, fostering collaborative learning and peer support, and implementing school-wide strategies, educators can create a supportive learning environment that nurtures students' self-regulation skills and sets the stage for academic success.

## Challenges and Considerations in Promoting Self-Regulation

**Individual Differences in Self-Regulation Abilities.** Individual differences in self-regulation abilities pose a challenge in promoting self-regulation. Students vary in their innate skills and developmental readiness. Educators must differentiate instruction, provide support, and offer targeted interventions. Individualized feedback and goal setting help students recognize their strengths and areas for improvement (Kuhl, 2018).

**Addressing Barriers to Development.** Dubuc-Charbonneau & Durand-Bush (2015) stated that addressing barriers to self-regulation development is crucial. Barriers can be external (e.g., challenging home environments) or internal (e.g., cognitive difficulties). McClelland et al. (2015) and McClelland & Cameron (2012) proposed strategies that include:

1. Providing support and resources for external challenges.
2. Collaborating with professionals to address internal barriers.
3. Adapting instruction to accommodate diverse learning needs.
4. Teaching problem-solving, stress management, and resilience-building skills. By addressing barriers, educators foster a supportive environment for self-regulation development.

**Culturally Responsive Approaches.** Promoting self-regulation should be approached in a culturally responsive manner, recognizing and valuing the diversity of students' cultural backgrounds, experiences, and contexts (Boon & Lewthwaite, 2015). McInerney & King (2017) opined that culturally responsive approaches acknowledge that self-regulation may be influenced by cultural norms, values, and practices.

According to Anyichie& Butler (2017) educators should strive to incorporate culturally relevant examples, contexts, and perspectives in self-regulation instruction. This includes considering students' cultural backgrounds, incorporating culturally diverse resources and materials, and ensuring that self-regulation strategies and expectations are sensitive to students' cultural perspectives (Understood, 2023).

Engaging with families and communities can also support the cultural responsiveness of self-regulation instruction. By involving families and incorporating their perspectives, educators can gain a deeper understanding of students' cultural contexts and collaboratively develop strategies that align with students' cultural values and beliefs (Jaramillo, Rendón, Muñoz, Weis &Trommsdorff, 2017).

**Integrating Self-Regulation into Educational Frameworks.** Integrating self-regulation into existing educational frameworks and systems is crucial for its effective implementation and sustainability. Rather than treating self-regulation as an isolated skill, it should be integrated across various domains of education (Frazier, Schwartz & Metcalfe, 2021). McClelland &Tominey (2015) emphasized that this integration can involve aligning self-regulation instruction with curriculum standards, incorporating self-regulation strategies into subject-specific lessons, and integrating self-regulation assessment within broader assessment frameworks. By embedding self-regulation within the educational system, educators can ensure its consistent focus and integration into daily teaching and learning practices. Additionally, providing professional development opportunities for educators to enhance their understanding of self-regulation and its integration into educational frameworks is essential. Educators need support and training to effectively incorporate self-regulation instruction, assessment, and support strategies into their teaching practices (Michalsky, 2012).

## Implications for Education

The implications for education are significant. By understanding and promoting self-regulation, educators can create supportive learning environments that facilitate students' academic growth and development. Integrating self-regulation into educational practices can enhance students' motivation, self-efficacy, and ability to regulate their own learning.

Educators can incorporate self-regulation strategies into their instructional approaches, differentiate instruction to address individual differences, and provide targeted support to students facing barriers to self-regulation development. They can also adopt culturally responsive approaches that honor students' diverse backgrounds and perspectives, creating an inclusive learning environment.

Professional development opportunities for educators are crucial for equipping them with the knowledge and skills to effectively promote self-regulation. Ongoing training and support can help educators integrate self-regulation instruction, assessment, and support strategies into their teaching practices and collaborate with colleagues to create a cohesive approach across the school.

## Recommendations

**Incorporate Self-Regulation into Teacher Training:** Educational institutions and professional development programs should incorporate training on self-regulation strategies for educators. This training should equip teachers with the knowledge and tools to effectively foster self-regulation skills in their students (Ng, 2018).

**Personalized Feedback and Support:** Educators should prioritize providing personalized feedback to students about their self-regulation skills. This feedback can help students understand their strengths and areas for improvement and guide them in setting and achieving self-regulation-related goals (Egan, 2017; Spaeth, 2018).

**Culturally Responsive Curriculum:** Educational curricula should be designed with cultural responsiveness in mind. This includes incorporating diverse perspectives, examples, and contexts in self-regulation instruction to ensure that all students feel seen and valued (Yang, Peh & Ng, 2021).

**Interdisciplinary Approach:** Encourage an interdisciplinary approach to self-regulation education. Self-regulation skills are transferable across subjects and life domains. Educators should collaborate to reinforce self-regulation concepts across different subjects (Booth, Hennessy & Doyle, 2018).

**Continuous Assessment:** Implement ongoing assessments of self-regulation skills to monitor students' progress and identify areas needing improvement. This data can inform tailored interventions and support strategies (Ismail, Rahul, Patra, & Rezvani, E. (2022).

**Advocacy and Policy:** Educational policymakers should recognize the importance of self-regulation in academic success and consider its integration into educational standards and policies. This includes allocating resources for teacher training and curriculum development (Braund & Timmons, 2021).

**Research and Innovation:** Encourage further research on self-regulation and its applications in educational settings. Innovation in teaching methods, technology, and assessment tools can enhance the effectiveness of self-regulation instruction (McDaniel & Einstein, 2020).

## Call to Action

**Nurturing Self-Regulation for Academic Success:** Nurturing self-regulation should be a priority in educational practice. It is essential for educators, administrators, policymakers, and stakeholders to recognize the critical role of self-regulation in academic success and take action to foster its development.

Educators can implement evidence-based strategies to cultivate self-regulation skills, create a supportive learning environment, and differentiate instruction to meet individual student needs. Administrators and policymakers can support the integration of self-regulation into educational frameworks, provide resources for professional development, and establish policies that prioritize self-regulation instruction and support.

A collective effort is needed to nurture self-regulation for academic success. By recognizing the importance of self-regulation and implementing effective strategies, we can empower students with the skills and mindset necessary to become independent, lifelong learners who can effectively navigate challenges, set goals, and achieve academic success.

## Conclusion

In conclusion, this article underscores the critical role of self-regulation in fostering academic success among students. Self-regulation encompasses a multifaceted set of cognitive, metacognitive, and behavioral skills that empower individuals to set and achieve goals, adapt strategies, and take ownership of their learning journey. Throughout this article, we have explored the key components of self-regulation, its theoretical frameworks, and its profound impact on learning and achievement in academic contexts.

The importance of self-regulation for academic success cannot be overstated. It enhances learning, goal attainment, adaptability, and persistence, while mitigating procrastination and promoting motivation and engagement. Students equipped with strong self-regulation skills are better positioned to thrive in their educational pursuits and beyond.

Moreover, we have examined the challenges and considerations associated with promoting self-regulation, including addressing individual differences, overcoming barriers to development, and embracing culturally responsive approaches. Integrating self-regulation into educational frameworks and systems has also been emphasized as a fundamental step in nurturing these skills effectively.

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# Assessing Behavioural Problems of Students with Special Needs and their Management for Inclusive Education

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## Abstract
This paper aims to present possible strategies for regular teachers to adopt in order to identify and manage problematic behviours that may be exhibited by children with special educational needs (SENs) in an inclusive education setting. This is significant given the difficulties teachers experience when dealing with SENs in an inclusive education setting. Furthermore, in a resource-constrained country such as Nigeria, there may not be enough support staff and special educational teachers in regular schools to assist regular teachers in managing SENs. Therefore, we x-rayed what behaviour problems are, the measures that can be adopted by regular teachers to identify these behavioural problems and the strategies that can be adopted by regular teachers to manage these problem in a non-technical language.

## Introduction
Current trends in educational practices recognize the inclusion of students with special needs in regular classes as an efficient means of optimizing their potentials. Over the years, the commonest practice in educating children with disabilities has been the adoption of segregation arrangement for their learning. In this approach, education is provided for them in what is referred to as special schools. The underlying assumption for this kind of educational arrangement is that their needs cannot be catered for in the same classrooms with 'normal' children. Therefore, it was conceived that the most appropriate way to educate them is to separate them from their peers who are without disabilities to a school where they may be better catered for by providing tailor-made services that can help them survive in society. In most cases, these schools are established to take care of particular disabilities (e.g., School for the Blind, School for the Deaf, etc). At first sight, this arrangement appears to be great in educating these learners. However, more recent findings indicate that this process is injurious to their mental health and educational successes (National Council on Disability, 2018). It tends to label the child and deprive them of the opportunity to work and learn together with his/her peers. More importantly, experts question the relevance of this type of

educational arrangement to the solution of a global problem that has to do with tolerance. It appears to be a type of education that may not be able to prepare a child with special needs with life skills. Since, the essence of educating a child is to equip him with functional skills and competence for survival in a larger society where there are those with disabilities and those without, this type of education fails to address the fundamental essence of education.

Increasingly, inclusive education is being accepted as a better way of educating children with special needs. It aims to guarantee equitable access to education for all children, and has been regarded as the best approaches to respect diversity in regular classes (Dea & Negassa, 2019; Greene, 2017; Oladele, Ogunwale & Dafwat, 2016). Tugger (2014) has noted that when children with special educational needs are included in regular classrooms they feel at home just like any other child. It has been pointed out that inclusive education has the capacity to promote friendship, self-confidence/concept, social awareness, and tolerance and appreciation of individual differences for children with special needs over and above the segregation arrangement (Tugger, 2014). Similarly, in a fact sheet drawn from the work of Colongo (2019) the Children and Young People with Disability Australia (CYPDA) (n.d) have listed the benefits of inclusive education thus:

**Benefits for Students Who Experience Disability**

1. better academic and vocational outcomes than their peers in non-inclusive settings
2. greater social interaction, resulting in more opportunities to establish and maintain friendships
3. increased independent communication and speech and language development, in turn supporting greater inclusion and active participation
4. a sense of belonging and a self-concept of not just being a receiver of help but also a giver of help
5. access to a broader range of play and learning activities, which can stimulate physical development and enhance children’s experiences.

**Benefits for All Students**

1. a more positive sense of self and self-worth
2. improved behavioural development, with less ‘challenging’ or ‘disruptive’ behaviour
3. greater independence
4. greater social development and the opportunity to develop friendships they may not have considered or encountered otherwise
5. enhanced communication and language development

6. the development of qualities such as patience and trust, as well as greater awareness and responsiveness to the needs of others
7. an increased awareness and valuing of diversity, and understanding of individuality
8. higher quality education and care
9. higher quality instruction that is better suited to individual needs.

**Benefits for Teachers and Educators**

1. professional growth
2. higher quality of engagement with students
3. increased personal satisfaction
4. greater confidence in their ability as an educator

**Benefits for Families and the Community**

1. greater psychological and economic wellbeing for parents
2. parents may feel more supported and confident to return to work
3. a more inclusive school community
4. greater community cohesion and the breaking down of discriminatory beliefs and ableist practices.

In spite of the enormous benefits of inclusive education, there are a number of challenges that have made it difficult to adopt in many developing nations such as Nigeria (Akinyi et al., 2015; Eskay & Oboegbulem, 2013; Fajarwati, 2017; Oluremi, 2015; Omede, 2016; Ondieki, 2015; Price, 2018; Reid, 2011). Thus, the challenges, according to these researchers, include inadequate funds to finance inclusion, lack of commitment from the government to implement inclusive education, teachers' competence and attitudes towards inclusive education. It has been noted that of the challenges facing inclusive education that the teacher-related factor has great impact on inclusive education (Nwosu et al. 2020). Teachers have reported that they lack the competence with which to integrate students with special needs in the regular classes (Cate et al., 2018). Competence for inclusive education has to do with the capability to value learner diversity, support all learners, and collaborate with parents and other professionals (European Agency for Development in Special Needs Education, 2011). Teacher inclusive education competence becomes very critical in integrating children with special needs in regular classes. This is underscored by the fact that children with special needs exhibit some behaviours that may demand special attention from the teacher. Oldfield (2012) and Amstad and Müller (2020) have noted that children with special education needs and disabilities are at-risk of exhibiting behavioural problems. These behaviours at times interfere with classroom activities if not handled properly, and many teachers appear to lack the competence to handle these behavioural problems. In this chapter, an attempt is made to x-ray what these problems are, the assessment of these behaviours, and management strategies a teacher can adopt especially in an inclusive education setting.

**Behavioural Problems**

Notwithstanding that behavioural problems are often the focus of psychological research on students, researchers are of the view that the term has remained vague (Oldfield, 2012). This requires that a clear conceptualization is made so as to guide researchers and practitioners. In what appears to reflect the difficulty Oldfield (2012) encountered in literature in an effort to have a clearer picture of what behavioural problem is, he stated that

> Conducting even the briefest literature search within this field reveals a number of distinct terms that appear to be used somewhat interchangeably. It is often unclear, for example, whether terms such as 'behaviour problems'; 'behaviour, emotional social difficulties'; 'externalising problems'; 'challenging behaviour'; 'anti-social behaviour'; 'conduct problems'; and 'aggression' to name but a few, have synonymous meanings, and can therefore be used interchangeably in discussing research on childhood and adolescent behaviour problems (pp.16-17).

Problematic behaviors of children with special educational needs are seen 'as maladaptive behaviors which cause a reactionary response in an uncomfortable learning environment' (Suparno et al., 2022, p. 484). Broadly speaking, problem behaviour is often classified into two categories. They are externalizing and internalizing problem behaviours. These are based on the perceived effects of the problematic behaviour, that is, whether it impacts on those around the child exhibiting the behaviour or whether it affects the child more than those around him. Amstad and Muller (2020) have defined the externalizing problem behaviours as those behaviours that have disturbing effect on the individual environment. Such behaviours include overactive, impulsive, and aggressive behaviors. On the other hand, internalizing behaviors are characterized by depressive, anxious symptoms, or social withdrawal, and are considered disturbing to the individual concerned (Amstad & Muller, 2020 citing Achenbach & Edelbrock, 1978). For a behaviour to be considered problematic, it should deviate quantitatively/qualitatively from what is considered the norm among the general population with the capacity to cause distress to the individual or other people around him/her, and cause an impairment to adaptive functioning beyond the disability itself

(Einfeld & Tonge, 1995). Furthermore, Nye et al. (2016) have categorized the problematic behaviours of SENs into three to include:

1. Non-compliance behaviours: In non-compliance behaviours children with SENs cling to their decisions no matter how hard one tries to change their minds on these decisions. Here they exhibit a kind of aversion to efforts to redirect them from the decisions.

2. Avoidance behaviours: Children with SENs who exhibit these behaviours make sure they abstain from activities they considered unfavourable to them. They are the 'runner and hider' who make sure that physically move away from the arena of the activity they consider aversive.

3. Aggressive behaviours: Children with SENs that exhibit these kinds of behaviours are violent and may pose a safety risk for themselves and their peers.

There are a number of issues raised in the definition by Einfeld and Tonge (1995). First, the behaviour could be problematic given the frequency of its occurrence. A child could occasionally throw objects but when it is a frequent occurrence, it could be seen a behavioural problem. Second, the kind of behaviour exhibited could be a pointer to whether it can be referred to as problematic or not. When a behaviour is deemed strange or age-inappropriate it could be considered a behavioural problem. For example it is normal for a three-year old child to cry for food whenever, he/she is hungry. It will be strange of considered inappropriate when we see an adult cry for food under normal circumstances (we should note here that under war situations or severe famine, this can happen). Third, this behaviour should affect negatively the well-being of either the student himself, peers, teachers, care-givers, parents or any other significant person. Fourth, the behaviour to be considered problematic, with reference to a student with special needs, should affect the functioning of the child beyond the impairment of the disability. It should not be bahaviour attributable to the disability. It is important to note that most of the behavioural problems of children with disabilities are heightened by limitations imposed by the society. A child with special education needs/disabilities may begin to exhibit behavioural problems because of rejections he/she faces in society. Some of these behaviours include refusing to follow the direction, disturbing the class, crying, whimpering, shouting, running around, verbal and physical assaults, hitting others or themselves, damaging school properties/own properties, pushing down things in close proximity, scratching, and spitting (Suparno et al., 2022). Antecedents to these behaviours, according to Suparno et al. (2022), may include inadequate attention given to the child with SEN, termination of pleasurable activity, giving difficult tasks to the child with SEN; unclear direction/instruction for a task; and introduction of a new task.

**Assessing Behavioural Problems among Students with Special Educational Needs/Disabilities**

People’s responses to particular stimulus or situations are regarded as their behaviour. Often times, we tend describe people’s behaviour based on standards in our society. This is why certain behaviours acceptable in one culture may not be acceptable in another culture. Sometimes we look at the circumstances surrounding the reaction to judge whether the behaviour is acceptable or not. We also consider the age of the child in judging whether a behaviour is accepatable or not. It is important to note that in trying to identify challenging behaviours or behavioural problems of a child we must take into consideration the above factors as well as the disability of the child. If the disability presents a difficulty in toileting and the child has not been taught appropriate toileting behaviour, we cannot easily conclude that as a behaviour problem. This is also critical when dealing with students with special education needs/disabilities. In assessing behavioural problems, a number of approaches have been adopted.

One of the commonest methods is the ***observational method***. This demands that the teacher should possess observational skills that will enable them pick out behaviours that may not be in line with how a particular child should behave. The teacher should look at for how angered the child could be, how hyperactive, hypoactive, restless, moody, etc. There should be an attempt to observe how the child relates with other children as they play in the field, work together in classes, etc. Careful observation will reveal students who are really playing together, those who are left out during the time of playing, who frequently standalone, who are bullied or are bullies, and who are afraid of interaction with others. The teacher can create a checklist for the observation so that he will be guided. He may look at for behaviours that are impediments to learning in class as well as such behaviours that are detrimental to the health of the child and they peers.

Another method that can be adopted is the use of ***sociometrics***. This method tries to measure the social relationships existing among peers. Teachers/researchers try to ask students to mention the students they like or dislike working with. They can be asked to rate their peers based on some sociometrics criteria. By so doing the popularity of the students are determined. The teacher can identify particular behaviours of a child by looking at how their peers rate them. Irrespective of the fact that Sociometrics can be used to identify a child who has a problem for an intervention programme, however, with particular reference to children with disabilities, the disadvantages of sociometrics have been pointed out (Child & Nind, 2012). These disadvantages include; the failure of the approach to incorporate the assumption of varying nature of social experiences, and not necessarily that all individuals need and want a certain number of friends; categorization of individuals as popular which may to lead to construction and reinforcement of social inequalities/labels especially for children with disabilities; and failure to consider the role of the environment in creating these difficulties, instead may blame the individual and the detrimental impact on behaviour and interactions. Child and Nind (2012) are the view that teachers should not be more concerned about "isolating simple relationships" but rather be "more concerned with the role of sociometric techniques in influencing the on-going interactions within classrooms and other social settings" (pp.9).

In addition, the questionnaire can be used to identify behavioral issues. Despite the fact that most teachers are not trained as professional researchers, employing the questionnaire can assist a teacher in identifying a problematic behavior of a student with special educational needs. A teacher can use, adapt, or even create a questionnaire to identify these behaviors. It is also worth noting that this is a tough path to take because most SEN students may be unable to reply to the items; the questionnaire may be tailored to gather information from parents and classmates of SEN students. This could be combined with the other methods listed above. When the teacher notices certain troubling behaviors, he may be able to use the questionnaire to obtain additional information from the student's parents and peers.

**Behaviour Management Techniques for Children with SENs**

Effective management of a problematic behaviour rests on, first, identifying what sustains the behaviour. Nye et al. (2016) have highlighted the importance of understanding the fundamental cause of a problem among SENs before any meaningful intervention programme is provided. After, the teacher has understood why the child exhibits the particular behaviour, the following techniques could be adopted by the teacher to manage the behavioural problems of SENs:

- **Changing the Antecedents**. One of the ways problematic behaviours can be managed is to understand what motivates the behaviour. The teacher should try to find out the precursors to the behaviour. A child with special needs/disabilities may become violent in class when they are teased in the classroom. The ability of the teacher to identify this as an antecedent of the behaviour will help in managing the behaviour.
- **Extinction:** This occurs when we try not to reinforce a behaviour that was previously rewarded. When behaviours are rewarded they are strengthened but when they are not rewarded, they go into extinction. A child with disabilities may show strong desire to absent from school because he is over-pampered at home. When this is identified by the teacher as the antecedent of the school refusal, the teacher must inform the parents so that they will understand the appropriate way of handling the child. If the child is appropriately handled at home, he is likely going to start coming to school.

- **Time-Out.** This a popular technique used in behavioural management in schools and clinical settings especially when the behavioural problem is perceived to be sustained by attention seeking. Time-out is defined as a behaviour reduction technique that has to do with withholding or withdrawing opportunities for reinforcement as a result of an inappropriate behaviour displayed by a child. The child is denied an access to an environment that will reinforce a particular behaviour deemed inappropriate by the teacher or other significant persons. A number of behaviours are managed using time-out techniques. These behaviours include yelling, kicking, inappropriate verbalization, aggression and such related behavioural manifestations. A number of researchers have found that time-out is an effective behaviour management technique among children. However, when it is misused, it could be detrimental to children.
- **Positive Praise and Rewards**: Efforts must be made by teachers to reward good behaviours exhibited by SENs while trying to correct poor behaviours using other productive strategies. Punishment should be used as a last resort. Teachers should find out what the child's interests are and provide nourishing environment that can help reduce the problematic behaviours.
- **Clear Structure and Communication**: Teachers should communicate clearly, utilize aids that make instructions concrete as well as establish positive relationships with SENs. Make sure SENs are aware of what you about to do, what you are doing and when you are about to finish what you are doing. This is to say that objectives must be clear, procedures for achieving the objectives must be clear and well structured, and the closure of the activity should be able to let the SENs get a picture of what has been done. This leads to a kind of engagement with the classroom activities. The non-compliance, avoidance and aggressive behaviours can easily be managed if the SENs find meaning in classroom activities.
- **Alternative Tasks and Redirection**: This is another important strategy to handle problematic behaviours especially non-compliance and avoidance behaviours. When a teacher discovers he/she is not getting the child do what is required of him/her to do in class, the child could be redirected to engaging in other more appealing learning tasks. Teachers can create folders for alternative tasks that students can engage in instead of allowing the students to always have their way.

**Conclusion**

Teaching a student with SEN in an inclusive class might be a difficult experience for a regular teacher. On the other hand, seeing the progress of students with SEN is a wonderful experience. However, most teachers lack the necessary abilities and competencies to assist them in regular classes. We have discussed some approaches to assessing and managing behavioral issues in students with special educational needs. These are simple strategies that reflect the skills and competencies of an effective teacher. As a result, we argue that teachers who possess inclusive education competencies can make a difference in their classrooms. Regular teachers can assess and handle behavioral problems in students with SEN. In reality, inclusive education is a shared responsibility.

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# Use of Technology for Continuous Assessment in Education: Current Trends and Future Directions

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## Abstract

Continuous assessment plays a crucial role in evaluating students' progress and understanding in education. With advancements in technology, educators are increasingly leveraging various digital tools and platforms to facilitate continuous assessment. This paper aims to explore the current trends and future directions of using technology for continuous assessment in education. The integration of technology in assessment practices not only enhances efficiency and accuracy but also promotes student engagement and personalized learning experiences. Additionally, this paper provides insights into the Digital Tools for integrating Technology for continuous Assessment in Education, benefits, challenges, and recommendations associated with integrating technology for continuous assessment are made by encouraging collaboration and communication in which technology should be used to foster collaboration and communication among students, enabling them to work together on projects, provide peer feedback, and engage in meaningful discussions

**Keywords: Continuous Assessment, Education, Future Directions Technology, Trends**,

## Introduction

Continuous assessment refers to the ongoing evaluation of students' knowledge and skills throughout the learning process. Traditionally, assessment practices heavily relied on pen and paper, limiting educators' ability to provide timely feedback and support personalized learning. However, the emergence of technology has significantly revolutionized and transformed assessment techniques, allowing for more efficient, accurate, and student-centric evaluation approaches. However, advancements in technology have transformed various aspects of our lives, including the field of education. One notable area that has benefited greatly is the practice of continuous assessment in education. Continuous assessment, often referred to as formative assessment, it involves the systematic gathering of information to monitor student learning and provide timely feedback for instructional improvement. With the integration of technology, educators now have access to a wide range of tools and platforms that significantly enhance the effectiveness and efficiency of continuous assessment practices (Halverson & Smith, 2009). Halverson and Smith highlighted several ways in which technology has changed teaching and learning including increased access to information, personalization of learning, collaboration opportunities, and the ability to engage students in interactive and multimedia-rich experiences. These technological advancements have the potential to transform traditional teaching practices and lead to more effective and efficient educational processes (Halverson & Smith 2009).

Numerous studies have explored the use of technology for continuous assessment in education, focusing on its implementation, impact, and potential future directions. For instance, (Smith, 2017.) conducted a comprehensive literature review on the use of technology in formative assessment and highlighted the positive outcomes it offers, such as immediate feedback, personalized learning experiences, and increased student engagement. Another study conducted by (Johnson & Brown, 2019) investigated the current trends in technology-enhanced continuous assessment practices and proposed future directions, including the integration of artificial intelligence and machine learning algorithms to automate assessment processes and provide more accurate and personalized feedback.

The purpose of this paper is to review the current trends and future directions of using technology for continuous assessment in education. By examining the existing literature and exploring emerging technologies, this paper aims to provide insights into the benefits, challenges, and potential future directions into innovative approaches for leveraging technology to enhance continuous assessment in educational settings and inform educators and researchers about the evolving landscape of continuous assessment in the digital age, paving the way for more efficient, personalized, and impactful assessment practice

**Technology-Assisted Continuous Assessment in Education**

Technology-Assisted Continuous Assessment (TACA) is a rapidly evolving field that leverages technology to enhance and streamline the process of continuous assessment in various domains, several trends that leverage advancements in gamification, adaptive assessment, online proctoring, enhanced feedback, wearable devices, AR, and VR aim to improve learner engagement, personalized assessment, accessibility, and authenticity in continuous assessment processes.

**Gamification and Competency-based Assessment**. Gamification refers to the application of game elements and game design principles in non-game contexts, such as education and training, to enhance motivation, engagement, and learning outcomes (Dicheva et al., 2015). The incorporation of gamification can incentivize learners to actively participate and persist in their learning process, as they are rewarded with points, badges, or virtual experiences for completing tasks or demonstrating competency. Competency-based continuous assessment, on the other hand, focuses on measuring learners' ability to apply their knowledge and skills in practical and authentic contexts (Eddy et al., 2020). This approach places greater emphasis on continuous monitoring and feedback, allowing learners to track their progress and receive specific guidance on areas where improvement is needed. By combining gamification with competency-based continuous assessment, educators can create a dynamic and motivational learning environment, where learners are actively engaged, continuously assessed, and provided immediate feedback on their performance. The gamified elements provide learners with extrinsic rewards and incentives, fostering a sense of achievement, while the continuous assessment ensures ongoing development of learners' competencies. Gamification is increasingly being used to make assessments more engaging and interactive, leading to better learner motivation and performance (Nistor et al., 2015, p.62). Competency-based assessments focus on evaluating specific skills and are facilitated by technology tools that help in creating authentic and adaptive assessments.

**Adaptive and Personalized Assessment**. With the advancement of machine learning and artificial intelligence, adaptive assessment systems are gaining popularity. These systems use data analytics to dynamically adjust the difficulty level and content of assessments based on individual learner's performance, improving the accuracy of assessment results (Correa-Buitrago et al, 2019, p.103). It uses algorithms to determine the subsequent set of questions and tailors the assessment according to the test-taker's proficiency level. Adaptive assessment is designed to provide a more accurate measurement of the test-taker's abilities as it continually adapts to their performance (Wainer, 2000). This approach aims to provide a more efficient and precise assessment process by optimizing the selection of test items and reducing testing time (Budgell, 2013). On the other hand, personalized assessment focuses on tailoring the assessment process to meet the individual needs and preferences of the test-taker. It takes into consideration their learning style, prior knowledge, and specific goals to create a more meaningful and engaging assessment experience (Bejar, Mislevy, & Levy, 2016, pp.2-8). Personalized assessment allows test-takers to have a sense of ownership and control over their assessment, increasing their motivation and engagement in the process.

**Online Proctoring and Remote Assessment**. The COVID-19 pandemic has accelerated the adoption of online proctoring and remote assessment technologies. These tools use advanced webcam and AI-based monitoring to ensure the integrity of assessments conducted remotely, making assessment accessible anytime and anywhere (Sharples et al., 2020).

**Enhanced Feedback Mechanisms**. Technology enables immediate and personalized feedback delivery, helping learners identify areas of improvement in real-time. Features such as automated scoring, detailed performance analytics, and multimedia feedback support the provision of accurate and timely feedback (Horn & Petrie, 2019, p.565).

**Integration of Wearable Devices and Internet of Things (IoT).** Wearable devices and IoT technology are increasingly being incorporated into assessments. They enable the collection of real-time physiological and contextual data, which can provide valuable insights into a learner's behavior, engagement, and performance (Prieto et al., 2016, P.486).

**Augmented Reality (AR) and Virtual Reality (VR).** AR and VR technologies are being used in assessments to simulate real-world scenarios and create immersive learning experiences. These technologies enable learners to demonstrate practical skills and competencies in a virtual environment, bridging the gap between theoretical knowledge and its practical application (Sivan et al., 2019).

**Digital Tools for integrating Technology for continuous Assessment in Education**

It is important to note that the selection of digital tools should be based on the specific needs and goals of the learning environment, as well as considering the age and technological capabilities of the students.

**Learning Management Systems (e.g., Moodle, Canvas).** These platforms allow teachers to create, administer, and grade assignments online, track student progress, and provide feedback.

**Quiz and assessment tools (e.g., Kahoot, Quizizz).** These tools enable teachers to create and deliver interactive quizzes and assessments that engage students in real-time.

**Online grading tools (e.g., GradeCam, QuickKey).** These tools streamline the grading process by allowing teachers to scan and automatically grade multiple-choice assessments.

**Digital portfolios (e.g., Seesaw, Google Sites)**. These platforms enable students to showcase their learning progress by curating and sharing their work digitally.

**Formative assessment tools (e.g., Socrative, Nearpod).** These tools allow teachers to gather real-time feedback from students during lessons, quizzes, or discussions, helping to inform instructional decisions.

**Rubric creation tools (e.g., RubiStar, Quick Rubric).** These tools assist teachers in creating and assessing assignments using customizable rubrics.

**Video and audio recording tools (e.g., Screencastify, Flipgrid)**. These tools enable students to record and share their presentations, speeches, or explanations, allowing for self-reflection and peer feedback.

**Online collaboration tools (e.g., Google Docs, Padlet).** These platforms facilitate group work and collaboration among students, allowing them to work together in real-time.

**Student response systems (e.g., Poll Everywhere, Mentimeter).** These tools enable teachers to create interactive presentations, quizzes, or polls to assess student understanding and engagement.

**Data analysis tools (e.g., Tableau, Excel).** These tools help teachers analyze and interpret student assessment data, identify patterns, and inform instructional decision-making.

**Digital assessment platforms (e.g., Edulastic, Illuminate).** These platforms provide a range of assessment options, including multiple-choice, short answer, and performance-based tasks, with automatic scoring and detailed analytics.

**Game-based assessment tools (e.g., Classcraft, Quizalize).** These tools gamify assessments, making them more engaging and interactive for students while still providing valuable feedback on their progress.

**Digital feedback tools (e.g., FeedbackFruits, Turnitin).** These tools facilitate the process of providing feedback on student work, allowing for comment insertion, voice recordings, and peer review.

**Adaptive learning platforms (e.g., Khan Academy, DreamBox).** These platforms personalize learning by adapting the content and assessments based on the individual student's progress and needs.

**Social media platforms (e.g., Twitter, Instagram)**. These platforms can be used for online discussions, sharing resources, and providing feedback on student work, fostering peer-to-peer learning and assessment.

**Benefits of Integrating Technology for Continuous Assessment in Education**

1. Integrating technology in continuous assessment in education offers several benefits which leads to more efficient, effective, and personalized learning experiences for students while providing valuable insights and support for educators.
2. It enhances engagement and motivation among students. Technology-based assessments provide interactive and multimedia learning experiences, which can capture students' attention and make the assessment process more engaging (Yilmaz, 2020). This engagement leads to increased motivation and interest in learning.
3. Technology integration in continuous assessment allows for more frequent and timely feedback. Technology allows for immediate feedback and automatic grading, providing students with instant results and opportunities for improvement (Susana & Laverie 2017). This timely feedback helps students understand their strengths and weaknesses, leading to better learning outcomes.
4. Integrating technology in continuous assessment enables personalized learning (Yilmaz, 2019), technology provides tools that can adapt to individual students' needs, allowing for differentiated instruction and personalized assessment strategies. This customization helps students progress at their own pace, enhancing their learning experience and overall achievement.
5. Another advantage of integrating technology in continuous assessment is the ability to collect and analyze large amounts of data. Technology-based

assessments offer the opportunity to gather detailed data on students' performance, which can be used to guide instructional decisions and identify patterns or trends in learning (Landsheere et al. 2019, p.226). This data-driven approach supports evidence-based decision making and improves the effectiveness of teaching strategies.

6. Lastly, technology integration in continuous assessment promotes collaborative learning and peer interaction. Technology enables students to collaborate on assessments, share resources, and provide feedback to their peers (Johnson & Brown, 2019). This collaborative environment fosters communication skills, critical thinking, and problem-solving abilities, promoting a more holistic approach to learning.

Other benefits of Integrating Technology for Continuous Assessment in Education benefits include

1. Cost-effectiveness: Utilizing technology for continuous assessment can reduce costs associated with printing and distributing traditional assessments. Additionally, automated grading systems save time and resources that would otherwise be spent on manual grading.

2. Enhanced engagement: The use of technology, such as online quizzes, games, and interactive activities, can make the assessment process more engaging and enjoyable for students. This can increase motivation and encourage active participation in the learning process.

3. Accessibility and flexibility: Integrating technology supports remote learning, allowing students to access and complete assessments from anywhere, at any time. This flexibility is particularly beneficial for students who may have scheduling constraints or limited access to traditional assessment methods.

4. Improved efficiency: Technology streamlines the assessment process by automating grading and providing data analytics. This frees up valuable time for educators to focus on analyzing the assessment results and providing targeted interventions to help students succeed.

**Challenges of Integrating Technology for Continuous Assessment in Education**

There are several challenges that arise when integrating technology for continuous assessment in education:

a. Infrastructure and Access: In order to effectively use technology for continuous assessment, schools and students require access to reliable internet connectivity and appropriate devices. However, many schools, particularly in low-income areas or rural regions, may lack the necessary infrastructure and resources.

2. Training and Support: Integrating technology for continuous assessment requires educators to have the necessary skills and knowledge to effectively use the tools

and platforms. Providing adequate training and ongoing support for teachers is crucial but can be resource-intensive.

3. Standardization: Technology tools and platforms used for continuous assessment may vary across schools and districts. This lack of standardization can create challenges in terms of data management, analysis, and making meaningful comparisons across different institutions.

4. Assessment Validity and Reliability: Ensuring that technology-based assessments are valid and reliable is essential. It is important to carefully design and implement assessment methods that accurately measure student learning and growth consistently over time. Concerns may arise regarding the fairness of assessments and potential biases in technology-based methods.

5. Privacy and Security: Collecting and managing student data electronically raises concerns about privacy and security. Schools must adequately protect student information to ensure that it is used appropriately and securely.

6. Digital Divide: The digital divide refers to the gap between students who have access to technology and those who do not. Integrating technology for continuous assessment may further exacerbate this divide if not appropriately addressed, leading to inequitable access to educational opportunities.

7. Equity and Bias: There is a risk of introducing bias into assessment practices when using technology. Factors such as students' access to technology resources outside of school, their familiarity with technology, and biases inherent in algorithms or software used for assessments can impact the fairness and equity of the process.

8. Student Disengagement: Using technology for continuous assessment may lead to increased screen time and potentially exacerbate issues of student disengagement. It is essential for educators to balance the use of technology with other forms of assessment and engage students in a variety of ways.

9. Cost: Introducing technology for continuous assessment can require significant investments in terms of hardware, software licenses, system integration, staff training, and ongoing maintenance. Schools with limited budgets may struggle to afford these expenses.

**Conclusion**

The use of technology for continuous assessment in education has shown remarkable potential in fostering personalized learning experiences, increasing student engagement, and simplifying assessment processes. As technology continues to evolve, incorporating adaptive learning systems, learning analytics, and emerging technologies like Virtual Reality and Augmented Reality holds promising prospects for future directions in continuous assessment practices. However, it is crucial to address the challenges associated with implementation and ensure a balanced approach to technology integration in education. By embracing technology-enhanced continuous assessment, educators can provide students with more effective and meaningful learning experiences.

**Suggestions**

For successfully integrating technology for continuous assessment in education, the following suggestions are as follows:

- Provide adequate training and support to educators: Teachers should be equipped with the necessary skills and knowledge to effectively integrate technology into their instruction. Ongoing professional development programs and support should be provided to enhance their digital literacy and pedagogical strategies.

- Ensure accessibility and equity: Efforts should be made to bridge the digital divide and ensure that all students have equal access to technology and online learning resources. Providing laptops, tablets, or other devices to students who do not have access at home can help minimize inequities in educational opportunities.

- Select appropriate technological tools: Careful consideration should be given to selecting technology tools that align with the specific learning objectives and assessment goals. It is essential to evaluate the suitability, ease of use, and alignment with curriculum standards of the chosen tools.

- Encourage collaboration and communication: Technology should be used to foster collaboration and communication among students, enabling them to work together on projects, provide peer feedback, and engage in meaningful discussions. Collaboration tools and platforms can facilitate cooperative learning experiences.

- Monitor and assess the effectiveness: Regular evaluation of the integrated technology is crucial to ensure its effectiveness in improving student learning outcomes. Monitoring student engagement, performance, and feedback can provide insights into the effectiveness of the technology integration and inform necessary adjustments or improvements.

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