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Assessment of the Effectiveness of Community- based Conflict Resolution Strategies in Nigeria

By Rabilu Abdu Yahaya Department of Adult Education and Community Services (PG Student) Faculty of Education Bayero University, Kano rabiluabduyahaya70@gmail.com 08062659770

Abstract

The study assesses the effectiveness of community-based conflict resolution strategies in Nigeria. Conflict is one of the major problems facing our communities today. The overall development of any community hinges on how effective conflict resolution strategies are employed in solving various conflicts affecting communities. The objectives of the study were to: assess the impacts of community-based conflict resolution strategies in Nigeria; assess the effectiveness of community-based conflict resolution strategies in reducing conflict intensity and frequency in Nigeria; and assess the roles of traditional leaders and institutions in community-based conflict resolution strategies in Nigeria. The study employed systematic review methodology to assess existing studies on the effectiveness of community-based conflict resolution strategies in Nigeria. The findings of the study reveal that community-based conflict resolution strategies have been effective in managing conflicts in Nigeria more especially in local areas where formal justice systems are often absent or ineffective; community-based conflict resolution strategies have also reduced the incidence of violence conflicts and improved relationships among communities; and traditional leaders and institutions play a crucial role in community-based conflict resolution strategies in Nigeria. The study recommends that there is need for recognition and support of community-based conflict resolution strategies through policy and legal frameworks and resource constraints need to be address through funding and resource mobilization; establish monitoring and evaluation mechanism to track progress and address challenges; there is the need of recognition and support of the role of traditional leaders and institutions in community-based conflict resolution strategies through policy and legal frameworks.

Keywords: Conflicts, effectiveness, community-based resolutions strategies

Introduction

Nigeria has struggled with various forms of conflict including ethnic, religious, and political violence which have resulted in loss of lives, displacement and destruction of properties. The Nigeria's conventional conflict resolution mechanisms such as the judicial system have been criticized for being ineffective. inaccessible biased. and In response, community-based conflict resolution strategies have emerged as an alternative approach to addressing conflicts in Nigeria. These strategies emphasize the role of local communities in resolving disputes and promoting peace through dialogue, mediation, negotiation and other nonviolent means.

Community-based conflict resolution strategies have gained increasing attention in Nigeria as a means of addressing the country's protracted conflicts. These strategies focus on harnessing the capacities of local communities to resolve dispute and promote peace. While these strategies have contributed to reducing violence and promoting dialogue, their impact is limited by factors such as lack of funding, inadequate training and poor institutional support (Umar & Mberu, 2022). Community-based conflict resolution strategies are successful strategies for resolving communal clash and farmer-herder dispute. The strategies incorporate all interested parties, place a focus on communication and reaching agreement and encourage social harmony and reconciliation. All parties involved shall cooperate to advance community-based conflict resolution as a means of resolving conflicts and promoting peace and security in affected communities.

Some scholars argue that these strategies are appropriate to address Nigeria's complex conflicts, which are often rooted in local grievances and power struggles (Albert, 2020). Others, however, raise concerns about the limitations of these strategies including their reliance on volunteerism, lack of institutional support and potential for manipulation by local elites (Oji, 2019).

Within this framework, assessing the effectiveness of community-based conflict resolution strategies in Nigeria is crucial to understanding their potentials and limitations in promoting peace and stability in the country.

Objectives of the Study

- 1. To assess the impacts of community- based conflict resolution strategies in Nigeria
- To assess the effectiveness of community-based conflict resolution strategies in reducing conflict intensity and frequency in Nigeria
- To assess the role of traditional leaders and institutions in community-based conflict resolution strategies in Nigeria

Conceptual Framework Concept of Community

The term community is not static. This explains the difficulty involved in pinning down a universally acceptable definition of a community. There have been different approaches to the definition of the concept. A community could be viewed in terms of all the people or group of people living within a specific geographical area such as village, a town, a city, a neighborhood or even a whole state. Universal Basic Education Board (2004) conceived community in two senses, firstly, as a sound unit and secondly as geographical or ecological unit. This implies that such group of people is closely knit and organized. Apparently, togetherness among the people spells out a common feeling of community (i.e oneness). Again, community can be perceived as a people or group of people who share common interest of functions such as farming group or agricultural group, education, culture or religion. This group may not include everyone within the geographical area or boundary, but only those individuals who have a particular interest or function in common. A common objective brings such people together to develop some awareness and feeling for the need to work together at solving their common problems. This is the type of community that Christenson (2005) referred to as functional community.

In a similar manner, community is also referred to as legal, political or administrative unit with a clearly defined social structure. As a legal unit, it likened to municipality, a school district or a nation unit with a clearly defined social structure. In this sense a community will feature the formulation of laws to guide the conduct of members and this is what required to ensure its existence. The regulations or laws are enforced by administrative step or structure.

Concept of Conflict

Conflict refers to some form of friction, disagreement or discord arising within a group when the beliefs or actions of one or more members of group are either resisted by or unacceptable to one or more members of another group. Conflict can arise between members of the same group, known as intragroup conflict, or it can occur between members of two or more groups and involve violence, interpersonal discord and psychological tension, known as intergroup conflict. Conflict in group often follows a specific course. Routine group interaction is first disrupted by an initial conflict, often caused by differences of opinion, disagreements between members or scarcity of resources. At this point, the group is no longer united, and may split into coalition. This period of conflict escalation in some cases gives way to a conflict resolution stage, after which the group can eventually refers to routine group interaction once again (Harvard program on Negotiation Glossary, 2013).

Conflict is the process by which people or groups perceive that others have taken some action that has a negative effect on their interest (Levi, 2013). Conflict is an interactive processes that manifest themselves in incompatibility, disagreement, or dissonance within or between social entities (Rahim, 2011).

Concept of Conflict Resolution

Conflict resolution is conceptualized as the method and process involved in facilitating the peaceful ending of conflict and retribution. Committed group members attempt to resolve group conflict by actively communicating information about their conflicting motives or ideologies to the rest of group. (e.g. intentions, reasons for holding certain beliefs) and by engaging in collective negotiating (Donelson, 2009). Dimensions of resolution typically parallel the dimension of conflict in the way conflict is processed. Cognitive resolution is the way disputants understand and views the conflicts. with beliefs. perspectives. understandings and attitudes. Emotional resolution is in the way disputants feel about a conflicts, the emotional energy. Behavioral resolution is reflective of how the disputants act, their behavior (Bernad, 2012).

The term conflict resolution may also be used interchangeable with dispute resolution, where arbitration and litigation processes are critically involved. The concept of conflict resolution can be thought to encompass the use of non-violent resistance measures by conflicted parties in an attempt to promote effective resolution (Roberts, Adam, Ash & Timothy, 2009).

Concept of Community-based Conflict Resolution

Community- based conflict resolution is a process of resolving conflicts within a community, where community members themselves take an active role in addressing and managing conflicts using local resources, &values with the aim of promoting social justice, reconciliation and sustainable peace (Beer, 2011).

Community-based conflict resolution is a grassroots approach to conflict resolution strategies that emphasizes community ownership, leadership and participation in addressing and managing conflicts, with a focus on social justice, reconciliation and sustainable peace (Ojielo, 2022).

Community-based conflict resolution is a community-led and community-owned process that utilizes local resources, values and norms to resolve conflicts, promote social cohesion and foster collective healing and transformation (Mberu, 2022).

Community- based Conflict Resolution Strategies

- Negotiation: Negotiation is a process in which two or more parties attempt to reach a mutually beneficial agreement on a particular issue or set issues (Lewicki, Saunders and Barry, 2015).
- ii. Mediation: A process where a neutral thirdparty facilities for a negotiation between conflicting parties to reach a mutually acceptable agreement (Adebayo, 2013).:
- iii. Traditional Dispute Resolution MechanismUsing traditional institutions and practices to

resolve conflicts such as elder councils or community gatherings (Ojo, 2018).

- Restorative Justice: Focusing on repairing harm and promoting heeling rather than punishing of offenders (Mbaike, 2020).
- v. Community Dialogue: Organized discussions between community members in conflict resolution skills and strategies (Okoye, 2019).
- vi. Neighborhood Associations: Communitybased organizations that address local conflicts and promote community cohesion (Ezeani, 2017).
- vii. Interfaith Dialogue: Promoting understanding and cooperation between people of different religious backgrounds (Kalu, 2018).
- viii. Community-based Reconciliation: Fostering reconciliation and forgiveness in communities affected by conflict (Okeke, 2019).

Impacts of Community-based Conflict Resolution Strategies in Nigeria

- Reduce violence: Community-based conflict resolution strategies have helped to reduce violence and promote non-violence means of resolving conflicts (Ikechukwu, 2017).
- ii. Increased community cohesion: These strategies have helped to build trust and foster a sense of community among residents, leading to increased community cohesion (Nwogu, 2017).
- iii. Improved relationships: Community-based conflict resolution strategies have improved

relationship among community members and between communities (Okoye, 2019).

- iv. Promoted traditional dispute resolution mechanisms: Community-based conflict resolution strategies have promoted the use i. of traditional dispute resolution mechanisms, such as mediation and ii. arbitration (Adebayo, 2013).
- v. Increased access to justice: These strategies iii.
 have increased access to justice for marginalized communities and individuals iv. (Nwosu, 2020).

Implications of Community-based Conflict Resolution in Nigeria to Adult Educators

- Greater community participation: Adult v. educators can influence community-based conflict resolution strategies to engage community members in the skill development vi. and encouraging active participation.
- ii. Constant knowledge enhancement and appraisal: Adult educators can participate in vii. constant knowledge enhancement, enhancing their methods for local dispute resolution and exchanging success stories with others.
- iii. Emphasis on hands-on training: Adult educators can emphasize on hands-on training such as conflict resolution, negotiation and education which are vital for community development and social unity.
- iv. Focus on equality and fairness: Communitybased conflict resolution strategies can help adult educators focus on equality and fairness and resolve root causes of conflicts.
- v. Partnership with interested parties: Adult educators can partner with interested parties,

traditional leaders and community organizations to develop and initiate conflict resolution programs.

The Roles Communities are Expected to Play in the Management of Conflicts

Avoidance: Communities can avoid conflicts by tackling fundamental issues and fostering community unity.

Advance notice: Communities can serves as alert systems, recognizing early warning signs.

Reconciliation: Communities can reconcile conflicts using community mediation programs. Empowering victims: Communities can aid those affected by conflict, including shelter, food and psychological support.

Partnership: Communities can partner with external stakeholders, such as NGOs and government agencies to manage conflicts.

Conflict resolution: Communities can engage in conflict resolution activities, encouraging peaceful and inclusive development.

Assessment: Communities can assess the effectiveness of conflict resolution strategies and identifying areas of improvement.

How Complexity of Communities in Modern Era Demands Modernized Techniques for Communal Conflict Resolution

- I. Heterogeneity: Communities are now more heterogeneous with different cultures, religions, and beliefs, requiring more sophisticated approaches to conflict resolution.
- II. Population shift: population shift has resulted to overcrowding, increasing complexity in conflict resolution.
- III. Technological innovation: Technology has transformed the way conflicts arise and are

managed, demanding contemporary methods to control online and offline conflicts.

- IV. Collaboration: Collaboration posed new problems such as conflicting values and interests, requiring more conflict resolution tools.
- V. Need for sustainability: Conflict resolution strategies shall focus on sustainability, solving the root causes of conflicts and promoting longterm pace.

Methodology

The study employed a systematic review methodology to assess the effectiveness of community-based conflict resolution strategies in Nigeria. Through an analysis of peer reviewed journals, government reports and worldwide publications, the study established important solutions. Data from these studies were extracted and analyzed using thematic content analysis.

Findings of the Study

Community-based conflict resolution strategies have been effective in managing conflicts in Nigeria, more especially in local areas where formal justice systems are often absent or ineffective; it promotes peaceful coexistence, social harmony and reconciliation among conflicting parties; it resolves the root causes of conflicts such as land disputes, resources competition and ethnic tensions. Nevertheless, community-based conflict resolution strategies experience scarce resources, over looked by the governments and formal justice systems and potential biases and inefficiencies.

- Community-based conflict resolution strategies have also reduced the incidence of violent conflicts and improved relationships among communities.
- 2. Traditional leaders and institutions play a crucial role in community-based conflict resolution strategies in Nigeria; they have significant influence and legitimacy within their communities, enabling them to effectively mediate and resolve conflicts amicably.

Conclusion

This study demonstrates the effectiveness of community-based conflict resolution strategies in resolving conflicts in Nigeria, particularly in rural communities where formal justice systems are often absent or ineffective. The findings show that community-based conflict resolution strategies have significantly reduced conflict intensity and frequency in Nigeria. Furthermore, traditional leaders and institutions play a crucial role in community-based conflict resolution in Nigeria.

Recommendations

- 1. There is the need for recognition and support of community-based conflict resolution strategies through policy and legal framework; address resource constraints through funding and resource mobilization.
- Establish monitoring and evaluation mechanism to track the progress and address challenges; encourage collaboration among community-based conflict resolution initiatives.
- Traditional leaders and institutions should be recognized and empowered to continue playing their role in conflict resolution; provide training and capacity building programs for traditional leaders.

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A Review of Literature on Koha Open Source Integrated Library Management System for Library Resources Management

By

Yahaya Aliyu Ismaila¹, Abdulsalam A. Salman², Abdul Hadi Ayodeji³, Oluwaseun Bamidele⁴ and Bello Ganiyat⁵

Kwara State University, Library

Abstract

Koha, an open-source integrated library system (ILS), has significantly transformed library management practices since its inception in New Zealand in 1999. This study aims to review and analyze the literature on Koha adoption in the management of information resources in the library for effective service delivery, and its global impact over the decade from. This paper seeks to provide a comprehensive evaluation of Koha's adoption, assessing its importance in modern library operations. The study review various literature from 2014- 2024 on aspects of Koha's adoption, implementation, and user experience dimensions. The study also examine how Koha has facilitated streamlined cataloging, circulation, acquisition, and serials management in libraries of different sizes and types worldwide. The review highlights the benefits of Koha, such as cost-effectiveness, flexibility, and community-driven development, which contribute to its growing popularity among academic, public, and special libraries. Furthermore, the study review published literature around the globe for clear understanding of the adoption of koha integrated library management system in the library operations.

Keywords: Koha, Library management System, Open Source, Library Resources, Automation

Introduction

Libraries require modern technology to operate effectively and efficiently amidst the challenges of information overload and diverse media formats, while also catering to a growing user base. The integration of library software into service operations has led to the emergence of library automation and electronic services, including systems like Koha, Dspace, database subscriptions, e-collections, open educational collections, resources, open access and institutional repositories, all aimed at enhancing service delivery to patrons Sukanta and Sagram (2021) emphasized the various modules and functionalities that Koha offers to meet the diverse needs of libraries. Koha includes essential modules such as cataloguing, circulation, acquisitions, serials, administration, reporting, tools, and an online public access catalogue (OPAC). These modules empower libraries to perform critical tasks, such as creating and managing bibliographic records, automating circulation processes, overseeing acquisitions and orders, and providing easy access to the library's collection for users.

As an open-source system, Koha enables libraries to customize and adapt the software to suit their specific needs. Libraries can configure workflows, adjust cataloguing rules, and personalize the user interface to better align with their unique requirements and preferences. Koha also offers an intuitive and user-friendly interface for both library staff and patrons, allowing users to navigate the system and perform tasks efficiently navigate the system, complete tasks, and access pertinent information, while library patrons can effortlessly search for materials, place holds, and manage their accounts through the OPAC. Koha enhances library operations and boosts efficiency by automating various processes. Functions such as cataloguing, circulation, and acquisitions can be streamlined, minimizing manual labor and saving valuable time for library professionals.

Koha also supports interoperability with other systems and standards, facilitating seamless integration with third-party services and technologies. It can connect with external databases, discovery systems, and other library software, thereby enhancing its overall functionality and resource-sharing capabilities. The system benefits from a dynamic and engaged community of developers, library professionals, and users who contribute to its continuous development, support, and enhancement. Libraries utilizing Koha can leverage this community for assistance, collaboration, and the exchange of best practices. As an open-source solution, Koha removes the need for costly proprietary licenses, allowing libraries to take advantage of its features and benefits without incurring significant expenses, making it a costeffective option for libraries of all sizes (Sukanta and Sagram, 2021).

Review of Published Literature 2014-2024

The period from 2014 to 2024 has witnessed remarkable progress in the automation of library resources, with the Koha Integrated Library Management System (ILMS) emerging as a

pivotal force in this evolution. This review seeks to deliver a thorough analysis of the existing literature regarding the use of Koha for automating library resources during this timeframe. By investigating a range of studies, reports, and articles, we will assess how Koha has been adopted across various library environments, its effects on library operations, user satisfaction, and overall efficiency. This review will also emphasize the development of Koha's features, the challenges encountered during its implementation, and the best practices that have surfaced. Through this examination, we aim to gain a deeper understanding of Koha ILMS's role in modernizing library services and its contributions to the field of library and information science.

In their study, Asad and Khan (2020) explored the factors influencing Pakistani librarians' intentions to adopt Koha, an open-source integrated library system. Their findings indicated that the librarians' willingness to use Koha was significantly affected by perceived usefulness and perceived ease of use.

The study conducted by Aderonke et al. (2021) surveyed the adoption and use of the Koha Library Integrated System in Nigeria. The research focused on 69 libraries that had implemented Koha as of September 2021. The findings indicated that Koha is predominantly utilized in libraries located in the South-West geopolitical zone of Nigeria and has been adopted by various types of libraries across the country. Additionally, the study revealed that the primary reasons for adopting Koha ILS were its status as free software, its customizability to meet specific needs, its regular updates, and its ability to perform all essential library functions. In the study by Vimal Kumar (2019) titled "Data Migration from Legacy Systems to Koha," the University of Nebraska undertook the process of migrating data from its legacy system to Koha. While libraries are transitioning from proprietary software to free alternatives, the data migration process presents significant challenges. Issues such as vendor lock-in and improperly formatted data complicate the transition. Successful migration to the Koha Integrated Library System (ILS) necessitates improved teamwork and enhanced technical expertise.

According to Joel (2018), Koha software has emerged as a critical topic among academic libraries in Nigeria. The implementation of Koha is essential for achieving library automation goals. However, Koha cannot operate at its full potential without the necessary tools and accessories for effective application. The computerization of library processes is vital for librarians to perform their tasks efficiently and enhance services for library users. Librarians now recognize that the adoption of Koha is unavoidable in modern library settings. It is anticipated that findings from planners and policymakers will underscore the significance of Koha in library automation, enabling institutions like LAUTECH to offer scientifically-driven, need-based library and information services.

Consequently, libraries must increasingly function as information servers. To effectively address the challenges of the 21st century, it is imperative that Koha be fully integrated into library services without delay.Bhawan and Mahawar (2021) examined the adoption of the Koha Integrated Library Management System (ILMS) at the Indian Institute of Technology Bombay (IITB) and the Indian Institute of Technology Bhubaneswar (IITBBS). Their findings revealed that both institutions were previously using commercial software before transitioning to Koha. During the migration process, only IITBBS encountered data quality issues. Overall, both institutes received nearly all Koha modules positively, although they satisfaction primarily with expressed the acquisition module. The functionality of the serials module remained unclear to IITB. Nonetheless, the open-source nature, userfriendliness, accessible source code, and ease of use were compelling factors for implementing Koha, leading to an excellent overall experience with the system.

Similarly, Uzomba et al. (2021) investigated the adoption of library management software in selected university libraries in South Western Nigeria. Their study found that KOHA, VIRTUA, and SLAM were the three library software packages adopted, with a high level of usage reported. The research also highlighted challenges associated with these software packages, including inadequate funding, erratic power supply, and the costs associated with procuring the necessary hardware and software.

Tella, Dina, Olaniyi, Memudu, and Oguntayo (2017) conducted a study to assess the use of Koha library software in selected university libraries in Kwara and Oyo States, Nigeria. The researchers focused on analyzing the perceptions and satisfaction levels of library professionals regarding Koha.software in the selected libraries. The study also aimed to identify the factors influencing the use and non-use of Koha, as well as the challenges encountered during its installation. Results indicated that 90% of respondents had a positive perception of using Koha. However, the findings also highlighted significant challenges in adopting Koha, including power failures, poor management, a lack of in-house expertise, insufficient infrastructure, and inadequacies from vendors.In a related study by Ogbomo and Ogo (2020) on the selection criteria and usage of automation software among librarians in university libraries in South-South Nigeria, it was found that the automated services provided in these libraries primarily include cataloguing, circulation, and reference services. Librarians take into account factors such as cost, vendor credibility, system management, support and maintenance, software reliability, functionality, and user-friendliness when selecting automation software. The software packages currently in use in South-South Nigerian university libraries include KOHA, Strategic Library Automation Management, New Generation Library, and

Alexandria, although the extent of their usage remains low.

Jisna Jose (2017) noted that the adoption and utilization of open-source library management systems in libraries result in significant transformations in library functions and services. Koha, as an open-source library management software, is increasingly gaining global recognition. The findings indicated that many libraries in the study area faced challenges with data migration from other systems to Koha, particularly during the implementation phase. Some dedicated library professionals have developed techniques that, if included in the Koha Online Manual, could benefit future Koha libraries

Dizazuli, et.al (2022) Studied the challenges faced by the library in migrating the bibliographic record from the textual signpost definition to proper cataloguing MARC21 format using the open-source library management system, KOHA, are discussed in this case study. The study's findings highlighted the importance of introducing non-library professional workers to advanced library and information science, especially while switching from Winnebago Spectrum's textual signpost catalogue to Koha Integrated Library System's MARC21 bibliographic style. It is an experienced staff member of the German Malaysian Institute (GMI) Library without any training or experience in library science. Similarly, the study of Archana, Padmakumar & Beena (2014) catalogue

interfaces of integrated library management Systems (ILMS): experiences in a Proprietary and Open Source Software. The study found that the cataloging module of Koha is almost in par with that of proven proprietary software that has been in market for the past 25 years. Some suggestions made by this study may be incorporated for the further development and perfection of Koha. Azhar & Siddique (2024) investigated the challenges faced by library professionals regarding adoption and uses of Koha in Dr. Mahmud Husain library, Pakistan. The results of their study indicate that while most experts are happy with Koha's implementation, there are a few significant problems that need to be addressed right once in order to improve the system and services, including a lack of funding, modern technology, supervision, and maintenance costs.

Bwala and Akakandelwa (2021) explored the issues that libraries in Zambia's higher education institutions face when using Koha. The study's findings found that the main difficulty was librarians' inability to successfully use all of the Koha modules due to a lack of capabilities. The most commonly used modules are circulation and cataloging modules. Other issues noted were insufficient Internet access, a lack of technical help, and difficulty upgrading and backing up the Koha database.

Course reserve module online public access catalogue (OPAC) and web-scale library discovery services are interconnected to data

educational management and resource management systems in the library. Every divisions and units designed based on the user's requirements. This is in line with the research by Mandal (2021) designing course reserves using koha and vufind for library users. The whole integrated domain-specific interface is beneficial to the users because they could easily access the course reserve materials developed by different subject experts. As a consequence, both Koha and VuFind just provide capability of delivering the appropriate course module to the correct participants at the perfect time. The outcome of the research stand at the fact that all the modules in koha are useful for the library and the users. Similar to the research of Mnadal (2021) which same year with Karno (2021) research on the development of koha library management system: the UTM library experience. The study look into the capability of integral library management system Koha in supporting effective and systematic learning in line with the advent of future technology. The transition from commercial system to open source KOHA is seen as factors of technology transfer, cost reduction, source code enhancement, big data analysis, innovative culture and less dependency on vendors to strengthen the implementation. The study reveled that cost of technology in the implementation of the koha software is the major problem facing the UTM library.

Kekartta &Mukhopadhyay(2023) Study the enhancement of OPAC through spatial data: stack-maps and text visualization in koha.This study seeks to develop a system that enables users to locate books physically by integrating stackmaps functionalities with Koha OPAC. In addition, the study showcases how an opensource text analytics server can be incorporated inside an OPAC in Koha to generate various word-level visualizations by analyzing a text corpus, including the identification of spatial features such as place names. The research aims to contribute to the advancement of information retrieval and visualization techniques in library using OPACs experience. Inline with the submission of Kekartta & Mukhopadhyay (2023) is the work of Chuhan (2018) evaluate the use of koha library management software in OPJGU Library, India. Findings from the study, shows that OPJGU Library professionals have good perception towards koha and they also agreed with koha as free software with original source code. It is also found that OPJGU library has been equipped with good resources required to running library activities and services through koha library software. It is suggested that staff and user should be given proper orientation on benefits and outputs of koha.

Alikoba, Kiwelu, and Lwanga (2019) explored the factors that influence the acceptance and use of the Koha Integrated Library System (ILS) in Ugandan academic libraries. The study's findings reveal that nine factors influence Koha acceptance in Uganda's selected academic libraries. These include productivity, ease of use, Koha's free and open source nature, peer pressure, resource availability, subject expertise, awareness, anxiety, and levels of computer literacy. Darko-Ampem (2017) investigates the adoption of Koha at Regent University College in Ghana: А case study of alternatives, and obstacles.The opportunities, research describes Regent University College (RUC)'s automation experience with the selection and implementation of the Koha library management system. The study's findings demonstrate that administering a library automation project in a developing country such as Ghana might be difficult. Challenges such as a shortage of local library vendors experienced in delivering solutions, automation recognized local competence in library automation, and the novelty of the Koha library system are substantial impediments.

Additionally, Walewangko (2022) research on implementation of school-based mana-gement at GMIM Koha Elementary School, focusing on the roles of principals, committees, and education commissions in improving education quality. The study reveals differences in understanding of School Based Management (SBM) among principals, committees, and commissions, and suggests training and modules to improve understanding. Solutions include improved communication, understanding roles, and a culture of cooperation. Also, Gupta et.al (2022) investigated the level of digital agricultural knowledge platform (IDEAL) in using koha for national agricultural research and education system in India libraries. The findings of their research found that the Agricultural research libraries in India use Koha for their routine operations. The only area of deficiency is the acquisition module in koha where many of the staff will require additional training for it full adoption.

Libraries around the world are using the technology in best possible ways to satisfy their users through efficient and effective library services. The the study of Khan, Zahid,& Rafiq (2016) discuss the process of KOHA implementation in Government College University (GCU) Libraries Lahore, while replacing the Library Management Software (LMS) implemented in 1999. The research extensively discussed the implementation of Koha in a narrative style. In first phase koha was installed on testing basis on one computer and its different modules were evaluated as per their functions in context of the requirements of GCU Libraries. The findings of the research as identified in Pakistani libraries, was that many librarians at large find it difficult to project in a developing country such as Ghana might be difficult. Challenges such as a shortage of local library vendors experienced in delivering automation solutions, recognized local competence in library automation, and the novelty of the Koha library system are substantial impediments.

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the technology modules in the software which as affected the implementation of the software.

Bhimrao (2020) Learn about the advantages of utilizing Koha's fully functional Integrated Library System (ILS), including the cost of the license, the flexibility to modify the product, and the ability to adapt, among other things. More than 300 libraries academic, public, school, and special libraries as well as those in Africa, Australia, Canada, the United States, France, India, and, of course, New Zealand use Koha, which organizes complicated classifications. Open source software has a lot of promise for libraries and includes an interface that makes it simple for users to start their own collections within libraries. Similarly, Uzonba, Oyebola, & Izuchukwu(2015) examined the use of open source integrated library system in academic libraries in Nigeria, with the aim of highlighting the capabilities and potentials of open source software (Koha) and its practical importance to academic libraries across the globe. Nineteen (19) universities (federal, state and private), four (4) polytechnics (federal and state) and two(2) colleges of education was examined and the findings of their research found that many libraries in Nigeria and across the globe have turned more and more to free and open source software. The major challenges confronting the libraries implementations include: inadequate funding, inadequate managerial support, inadequate power supply among others.

Educational institutions employ Koha, an effective and scalable library management

system. It continues to be the free and opensource library system pioneer in the world. Its growth is aided by libraries of all shapes and sizes as well as by organizations, partners, and sponsors worldwide. The study of Ali, Ahmed, & Noor (2021) evaluated Koha ILS as an effective open-source integrated library system application that public and private libraries are eager to use globally. Unfortunately, a number of Arab schools were unable to automate their school libraries for user-friendliness through the usage of the Koha ILS application. Several concerns that have been found in public and private schools can be resolved by implementing technology in library management. This increases effectiveness, convenience, and the functionality of library services. In the study of Nayem & Islam(2022) figure out the use of koha in selected university libraries in Dhaka, Bangladesh.The findings of the research indicated that majority of the libraries in the study area were familiar with the use of koha while just few libraries were having low usage of the software. According to Uzomba. Oyebola & Izuchukwu (2015) described integrated library management software, as a system designed to enhance all library routine activities as expected by the library users. A good and reliable ILS enhances management, control and easy access to information resources that are physical in a library and outside, for example, books, CD ROM, e-journal, e-books, e-databases, and repositories, among others. It also helps to reduce time wastage in the delivery of services to the

library users. The study of Ali (2023) examines the management of Integrated Library Management Software (ILMS) in private university libraries of northern Nigeria. The major objectives of the study were to identify the types of ILMS available in the private universities under study, management procedure of ILMS in the private university under study and the challenges associated with use of ILMS in private universities in North ,Nigeria.The study revealed that, various types of ILMS were deployed and maintained by the University libraries studied, such as, Koha, Newgenlib, Dspace among others. The study also revealed the procedures used in managing the ILMS such as policies guiding the management and used of ILMS developed by the libraries, training, support, and maintenance of the software by the libraries and providers of the software to the libraries studied and identified some challenges such as poor technical support.

The use of computers in library operations gave birth to library automation and electronic library services such as database subscriptions, e-books and e-journal collections, open educational resources, open access collections, institutional repositories among others. This was inline with the study of Anyira (2020) on the need for adoption of koha integrated library management software in Nigerian academic libraries. The main objective of the research is to justify the need for Nigerian libraries which have not automated their functions to adopt of Koha ILMS as their automation software and as well examine the need for the adoption. The study revealed that lack of skilled man power as factor affecting data migration to the adoption of koha in the study libraries. Also, the study of Mama(2016). Primarily described the adoption of the Koha integrated library system in a state university library. The study reveled that adoption of the koha software is not easy because some of the library employees are not willing to use it, some still preferred the traditional practice, others are not convinced of the benefits they can get from the software, and others do not have the necessary skills and knowledge on how to use and operate the computers that run the software and at the same time is used to access the software.

Conclusion

The development and impact of Koha, an opensource Integrated Library System (ILS), on library resources has significantly altered how libraries provide their services. The investigation examined material published between 2014 and 2024. By showcasing attributes like customization, free usage, and practicality for managing library services, it highlights how wellliked Koha is in libraries all throughout the world. Furthermore, Koha integrated library software is a well-researched topic worldwide and is no longer a novel trend in librarianship

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An Assessment of the Influence of Social Media on Teaching and Learning Process in Tertiary Institutions of Nigeria

By

Kabir, Zainab Abdulkadir¹, and Ayuba, Shuaibu²

Curriculum and Instruction Department, Federal College of Education, Zaria Corresponding Author: zainabkabir08@gmail.com, ayubashuaibu33@gmail.com 08067776592, 08033835497

Abstract

This paper aimed at "An Assessment of the Influence of Social Media on Teaching and Learning Process in Tertiary Institutions of Nigeria". The research design adopted for the study was descriptive survey. The population of this study was 152 lecturers and students from Computer/Geography Department, Federal College of Education in 2022/2023 academic session. Simple random sampling technique was used to select 100 participants. The instruments used for data collection were Social Media Usage questionnaire and Technology Integration in Teaching and Learning Questionnaire. The researcher made used of independent t-test statistics to test the study hypotheses. The finding of this study revealed that Facebook have significant impact in teaching and learning process. The finding of this study revealed that Whatsapp have significant impact in teaching and learning process. The finding of this study revealed that Twitter have significant impact in teaching and learning process. It was recommended that: students should make sure that they use facebook and other social networking sites judiciously to ensure that they do not become detrimental to their academics endeavours; lecturers should always adopt whatsapp social media site as strategy to channeling assignments or discussions on social media platforms to help inculcate the habit of using these sites for academic work but not all time and; seminars should be organized in the various schools to enlighten lecturers and students more about the possible implications of twitter and other social media usage in teaching and learning process.

Keywords: Impact, social media, teaching and learning process.

Introduction

Modern Technology in communication no doubt has turned the entire world into a "Global village". But as it is, technology is a two sides of a coin, bring with it both negative and positive sides. It helps people to be better informed, enlightened, and keeping abreast with world developments. Technology exposes mankind to a better way of doing things. The world has been changed rapidly by the evolution of technology; this has resulted into the use of technology as the best medium to explore the wide area of knowledge. The evolution of internet technology has led to its use as the best medium for communication. Whereby, two-third of the world's internet population visits social networking or blogging sites, thus serving as a communication and connection tool. Social networking sites (SNSs) are online Communities of Internet users who want to communicate with other users about areas of mutual interest, whether from a personal, business or academic perspective (Agi and Ikpe, 2018). Numerous benefits have been obtained through distant communication through the use of social networking sites.

Social media has exploded as a category of online discourse where people create content, share it, bookmark it and network at a prodigious rate. Because of its ease of use, speed and reach, social media is fast changing the public discourse in society and setting trends and agenda in topics that range from the environment and politics to technology and the entertainment industry (Asur and Huberman, 2011). According to Ernest (2017) social media can have a great influence in teaching and learning process. The darker side within technological evolution has resulted in dilemmas such as the setback of real values of life especially among students who form the majority of users interacting through the use of social networking sites. With so many social networking sites displayed on the internet, students are tempted to abandon their homework and reading times in preference for chatting online with friends. Many students are now addicted to the online rave of the moment, with Facebook, Twitter etc. Today most youths and students possess Facebook accounts. The reason most of them perform badly in school might not be far- fetched. While many minds might be quick to blame the poor quality of teachers, they might have to think even harder, if they have not heard of the Facebook frenzy (Oche & Aminu, 2011). Olubiyi (2012) noted that these days' students are so engrossed in the social media that they are almost 24 hours online. Even in classrooms and lecture theatres, it has been observed that some students are always busy pinging, 2going or Facebooking, while lectures are on. Times that ought be channelled towards learning, academic research and innovating have been crushed by the passion for meeting new friends online, and most times busy discussing trivial issues. Hence most students' academics

may suffer setback as a result of distraction from the social media. Devi, Gouthami and Vijaya (2019), who found that Facebook has been used in university courses to facilitate teacher/student discussion, and wikis and blogs have been used to collaborate on projects and receive rapid feedback. Gon & Rawekar (2017) found that WhatsApp is one of the common communication applications in the 21st Century. It is known for sending real-time messages, and has the potential of bridging information divides between students and educators. WhatsApp is the most effective collaboration and communication tool in teaching and learning due to its benefits above other kinds of social media tools. WhatsApp is widely used among students to send videos, audios, text messages, and photos. Rahul (2019) posited that professors can use their Twitter or Facebook handles or even messaging services such as WhatsApp to hold live sessions, offer extended support to students thereby enhancing the scope of learning beyond classroom. They can organize discussions related to their subjects or class assignments on social media platforms.

According to Sivakumar (2020) social media is computer-mediated tools that allow student to create, share and exchange the information, ideas, pictures, videos for virtual communities and learners. Social media such as Facebook, Twitter, Telegram, TikTok, Instagram, Google Plus, and Flickr, as well as open social practices such as blogging, are being used in learning for the purpose of convenient communication with peer group students and potentially with others outside the class such as students of the same topic and subject experts.

Statement of Problem

The educational system in Nigeria is faced with so many challenges which have certainly brought about a rapidly decline in the quality of education. There is a deviation, distraction and divided attention between social networking activities and students' academic work. In line with this many studies observed that students devote more attention to social media than they do to their studies. Such studies include that of Abaleta (2014), and Tangalwad (2017). It is a common sight to see a student chatting in sensitive and highly organized places like church, mosque and lecture venues. Some are so carried away that even as they are walking along the high way, they keep chatting. The nature of the teaching and the wide range of student's abilities in the average classroom necessitate a high degree of teachers and experience in the method of presenting the subject matter. In recent times, social media have been a major stay in the minds of students and the world at large, thereby causing a lot of farfetching effect on students, teacher and even educational administrators at large. It is therefore, important to explore some of the trending issues affecting teaching and learning process in relation to social media usage. Students at all levels of learning and sometimes teachers have now divided attention to studies, as a result of available opportunities to be harnessed from social media. Whether these opportunities promote studies is a question that needs to be answered. Though, lots of studies had being carried out on the impact of social media on teaching and learning process, but there is no study on impact of social media specific aspects such as facebook, whatsapp, google+, 2go and twitter. Therefore, this study intends to investigate the impact of social media in teaching and learning process: A case study of Federal College of Education, Zaria.

Objectives of the Study

The objectives of the study are to:

- i. determine the influence of facebook usage in teaching and learning process in Federal College of Education, Zaria;
- ii. determine the influence of whatsapp usage in teaching and learning process in Federal College of Education, Zaria; and
- iii. determine the influence of twitter usage in teaching and learning process in Federal College of Education, Zaria.

Hypotheses

The following hypotheses were formulated.

Ho₁: There is no significant influence of facebook usage in teaching and learning process in Federal College of Education, Zaria.

Ho₂: There is no significant influence of whatsapp usage in teaching and learning process in Federal College of Education, Zaria.

Ho₃: There is no significant influence of twitter usage in teaching and learning process in Federal College of Education, Zaria.

Literature Review

Some academic experts believe that social media can be used as an effective teaching tool in higher education because of its ease of use, ready availability, and individual affordability and network effects. Facebook has been used in university courses to facilitate teacher/student discussion, and wikis and blogs have been used to collaborate on projects and receive rapid feedback (Devi, Gouthami and Vijaya, 2019). Some courses have also used in YouTube as a platform for students to create and share videos for their course. In other courses, students have used Twitter to discuss course topics during class, with Tweets being displayed on a large screen to encourage cross group communication.

Whatsapp is one of the common communication applications in the 21st Century. It is known for sending real-time messages, and has the potential of bridging information divides between students and educators. Whatsapp is the most effective collaboration and communication tool in teaching and learning due to its benefits above other kinds of social media tools. Whatsapp is widely used among students to send videos, audios, text messages, and photos (Gon & Rawekar, 2017). Gon and Rawekar (2017); Kufre and Abe (2017) summarized the benefits of using this social media platform as follows:

- Learning anywhere and anytime, including availability of facilitators.
- Suitable platform that can be effectively used for learning and teaching activity.
- Sharing of information amongst peers through the use of Whatsapp in education develops learner's manipulative skills and it can further simplify the learning process and fosters evaluation process.

• It enhances creativity, communication, critical thinking, and problem-solving skills among students.

According to Rahul (2019) the emerging role of social media in teaching-learning process cannot be ignored. It not only provides students access to useful information but also connects them with learning groups and other educational systems that make their overall learning process more interesting and engaging. Professors can use their Twitter or Facebook handles or even messaging services such as Whatsapp to hold live sessions, offer extended support to students thereby enhancing the scope of learning beyond classroom. They can organize discussions related to their subjects or class assignments on social media platforms. Social media therefore helps both teachers and students to remain connected off campus. Faculty can create groups using social media where useful information can be accessed by all. It is a good platform for sharing ideas. They can use hashtags to increase outreach of their academic posts and view submissions by students to check engagement level (Rahul, 2019).

Twitter can be adapted in the Education sector in so many ways. Morad & Marsh (2017) summarized them as follows;

 Instructors may utilise Twitter to post updates about the course, clarify expectations, direct students to additional learning materials, and encourage students to discuss course content.

- Twitter can be used to increase involvement. Integrating Twitter into learning may assist students' engagement.
- Twitter is useful for discussing content, asking questions, and sharing ideas and resources. Kabilan, Ahmad & Abidin (2010), identified a number of positive impacts of Social Networking Sites which include increased student interactions with other students and their teachers, increased students" satisfaction with the course, and improved students" learning and writing ability. Esther and Sirera (2017) revealed that students are socially connected with each other for sharing their daily learning experiences and discuss several topics. Students can easily contact each other with regards to school projects and assignments. It is also possible for them to work on group assignments from the comfort of their homes. High achievers could tutor low achievers as they build their social relationships this could help the low achievers to shed off their shyness and participates actively in discussions however; it is also possible that they may pick on a nonacademic topic that may negatively influence them at the expense of their academic work. Owusu-Acheaw (2015), the amount of time spent daily on social network sites varied greatly. However, an analysis of the data indicated most participants spent approximately thirty minutes a day socializing, mostly during the evening hours between 9p.m to 12a.m students spent an average of forty seven minutes a day on Facebook. More than 50% of college students go on a social networking sites several times a day. Quan-Haase

and Young (2011), found that 82% of college students reported logging into Facebook several times a day. Younger students tended to use Facebook more frequently than older students to keep in touch with friends from high school or from their hometown (Owusu-Acheaw, 2015). On the internet, students engage in a variety of activities some of which may be potentially addictive (Kassu, 2019). The mass appeal of social media on the internet could be a cause for concern, particularly when attending to the gradually increasing amount of time students spend online. Undergraduates spend more time on Facebook, Twitter and other social media through smartphones that are now in abundance among these youths. Many students cannot go for two-three hours without checking and updating their profiles on these social networks even at the detriment of other activities such as educational and career pursuit. Hong (2012), explain social media addiction as the excessive use of the internet and the failure to control this usage which seriously harms a person's life. In an article on the Daily Trust newspaper, Choney (2011), posits that there seem to be an alarming rate of social networking obsession among students today; a trend that could affect their academic, social and spiritual lives negatively if not properly controlled.

The theory used to support this study is the Technology Acceptance Model (TAM). TAM posits that students' interest to use the computer is influenced by perceived usefulness and perceived ease of use. The TAM model was initially developed by Davis (1989) and it is actually based on the theoretical grounding of the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1975). TRA is a well-known model in the social psychology domain, which posits that a person's behaviour is determined by an individual intention to perform a particular behaviour. In other words, TAM defines how users should accept or how to use specific technology as well as describes the function of causal relationships between perceived usefulness and perceived ease of use of ICT. The TAM assumes that user adoption and effective use result from the intention to use a system, which is in turn is affected by perceived usefulness and perceived ease of use of ICT. The basis for this form has been found in previous studies suggesting that higher interaction, usage, or interest levels produce better learning effects. TAM is further used to explain the relationship between the impact of ICT usage and the academic performance of students in F.C.E, Zaria.

Methodology

The research design adopted for the study was descriptive survey. This design is considered appropriate because it enables the researcher to generate data through the standardized collection procedures based on highly structured research instrument(s) (questionnaire) and well defined study concepts and related variables. In descriptive survey method, participants answer

questions administered through interviews or questionnaires. The population of this study was 152 lecturers and students from Computer/ Geography Department, Federal College of Education in 2022/2023 academic session. Simple random sampling technique was used to 100 select participants. Two sets of questionnaires were used for collecting data in this research. The instruments were Social Media Usage questionnaire and Technology Integration in Teaching and Learning Questionnaire. Validity and reliability of the instrument were established. The researchers submitted the copies of the questionnaires to research experts' in the Field of Curriculum and Instructions in order to determine face validity, relevance and appropriateness of the instruments in the study. Thus, their comments, observations and corrections were effected on the final draft. Cronbach alpha reliability coefficient was employed to test the reliability of the instruments. A reliability coefficient of 0.82 was found for Social Media Usage questionnaire while 0.81 was found for Technology Integration in Teaching and Learning questionnaire. The researcher made used of independent t-test statistics to test the study hypotheses.

Result Presentation

Hypothesis 1: There is no significant influence of facebook usage in teaching and learning process in Federal College of Education, Zaria.

Federal College of Education,	, Lana						
Category	Ν	Mean	Std. Dev	df	t-cal	р	Decision
Facebook usage	100	3.62	1.36				
				98	-5.86	0.00	Significant
Teaching and Learning	100	4.43	0.32				
Significant at p < 0.05							
The t-test analysis result in t	table 4.13	revealed	signifi	cant i	nfluence	of fac	cebook usage in
that a p-value of 0.00 was obt	tained whi	ch is less	teachi	ng and	learning	process	in Federal College
than $p \leq 0.05$ level of si	gnificance	e set for	of Edu	cation,	, Zaria is	rejected.	
acceptance or rejection of the	hypothesi	is. This is	Нуро	thesis 2	: There is	s no signi	ificant influence o
an indication that facebook us	sage has si	ignificant	Whats	app usa	age in tea	ching an	d learning proces
influence in teaching and lear	ning proce	ess. Thus,	in Fed	eral Co	ollege of l	Educatio	n, Zaria.
the null hypothesis which sta	01		in Fed	eral Co	ollege of I	Educatio	n, Zaria.
the null hypothesis which sta Table 2: independent t-test st	ted that that that the atistics on	nere is no			C		
the null hypothesis which sta	ted that that that the atistics on	nere is no			C		
the null hypothesis which sta Table 2: independent t-test st Federal College of Education,	ted that th atistics on Zaria	nere is no	of Whatsapp	usage	in teachi	ng and l	earning process in
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category	ted that th atistics on <u>Zaria</u> N	nere is no hinfluence Mean	of Whatsapp Std. Dev	usage	in teachi	ng and l	earning process in
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category	ted that th atistics on <u>Zaria</u> N	nere is no hinfluence Mean	of Whatsapp Std. Dev	usage df	in teachi t-cal	ng and l	earning process in Decision
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category Whatsapp usage	ted that th atistics on <u>Zaria</u> <u>N</u> 100	nere is no influence <u>Mean</u> 3.59	of Whatsapp Std. Dev 1.38	usage df	in teachi t-cal	ng and l	earning process in Decision
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category Whatsapp usage Teaching and Learning	ted that th atistics on <u>Zaria</u> N 100 100	here is no influence Mean 3.59 4.43	of Whatsapp Std. Dev 1.38 0.32	usage df 98	in teachi t-cal -5.94	ng and 1 p 0.00	earning process in Decision
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category Whatsapp usage Teaching and Learning Significant at p < 0.05	ted that th atistics on <u>Zaria</u> <u>N</u> 100 100 table 4.14	here is no influence Mean 3.59 4.43 revealed	of Whatsapp Std. Dev 1.38 0.32 signifi	usage df 98 cant i	in teachi t-cal -5.94	ng and 1 p 0.00 of Wł	earning process in Decision Significant
the null hypothesis which sta Table 2: independent t-test st Federal College of Education, Category Whatsapp usage Teaching and Learning Significant at $p < 0.05$ The t-test analysis result in t	ted that th atistics on <u>Zaria</u> <u>N</u> 100 100 table 4.14 tained whi	Mean 3.59 4.43 revealed tch is less	of Whatsapp Std. Dev 1.38 0.32 signifi teachi	usage df 98 cant i ng and	in teachi t-cal -5.94	ng and 1 p 0.00 of Wł process	earning process in Decision Significant hatsapp usage in in Federal College

Table 1: independent t-test statistics on influence of facebook usage in teaching and learning process in C T J -1 0-11 . . .

the null hypothesis which stated that there is no

an indication that Whatsapp usage has significant

influence in teaching and learning process. Thus,

Twitter usage in teaching and learning process in Federal College of Education, Zaria.

Table 3: independent t-test statistics on influence of Twitter usage in teaching and learning process in Federal College of Education, Zaria

Category	Ν	Mean	Std. Dev	df	t-cal	р	Decision
Twitter usage	100	3.32	1.39				
				98	-7.84	0.00	Significant
Teaching and Learning	100	4.43	0.32				

Significant at p < 0.05

The t-test analysis result in table 4.15 revealed that a p-value of 0.00 was obtained which is less than $p \leq 0.05$ level of significance set for acceptance or rejection of the hypothesis. This is an indication that Twitter usage has significant influence in teaching and learning process. Thus, the null hypothesis which stated that there is no significant influence of Twitter usage in teaching

and learning process in Federal College of Education, Zaria is rejected.

Discussion of the Findings

The finding of this study revealed that Facebook usage has significant influence in teaching and learning process. The finding of this study goes in line with Devi, Gouthami and Vijaya (2019), who found that Facebook has been used in university courses to facilitate teacher/student discussion, and wikis and blogs have been used to collaborate on projects and receive rapid feedback.

The finding of this study revealed that Whatsapp usage has significant influence in teaching and learning process. The finding agrees with that of Gon & Rawekar (2017) findings revealed that WhatsApp is one of the common communication applications in the 21st Century. It is known for sending real-time messages, and has the potential of bridging information divides between students and educators. WhatsApp is the most effective collaboration and communication tool in teaching and learning due to its benefits above other kinds of social media tools. WhatsApp is widely used among students to send videos, audios, text messages, and photos.

The finding of this study revealed that Twitter usage has significant influence in teaching and learning process. The finding goes in line with that of Rahul (2019) who posited that professors can use their Twitter or Facebook handles or even messaging services such as WhatsApp to hold live sessions, offer extended support to students thereby enhancing the scope of learning beyond classroom. They can organize discussions related to their subjects or class assignments on social media platforms.

Conclusion

The result of this study indicated that social media (Facebook, Whatsapp and Twitter) usage has significant influence in teaching and learning process. These social media impact teaching and learning process as they help in timely give/submit assignments, helps in maintaining contact with among lecturers, students and lecturers with students in order to establish good rapport for effective teaching and learning process, lecturers share study materials and drop video tutorials for their students. Through social media there is effective feedback among lecturer to lecturer, student to students and lecturer to students. Social media also assist lecturers to encourage their students who find it difficult to express their selves in classes to express their ideas and feelings.

Recommendations

- Students should make sure that they use facebook and other social networking sites judiciously to ensure that they do not become detrimental to their academics endeavours.
- ii. Lecturers should always adopt whatsapp social media site as strategy to channeling assignments or discussions on social media platforms to help inculcate the habit of using these sites for academic work but not all time.
- iii. Seminars should be organized in the various schools to enlighten lecturers and students more about the possible implications of twitter and other social media usage in teaching and learning process.

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Examination of Effect Size and Direction of Bias Items on General English Language Test in **Relation to Science and Humanities**

Bv

Hassan A. Isma'il

Department of Psychology and Counselling, Kano State College of Education and Preliminary Studies Corresponding Author: hassanahmadismail01@gmail.com ORCID ID, 0009-0002-0889-5550 2347033314176

Abstract

This paper examined school related differential item functioning (DIF) of English language examination Type I of Kano state college of education and preliminary studies. Two research questions guided the study to determine the effect size of DIF pattern and direction of bias items in the GSE 211 in measuring general English language test in relation to schools. Ex-post facto research design was employed to conduct the study. The population comprised of NCEII students who sat for the examinations with the total number of 665 and they were used to serve as sample of the study. Responses of the students of General studies English language was used to answer the research questions. The instrument contained 20 multiple choice items. The correct response scored as 1 and the wrong response scored as 0. The data was analysed using logistic regression approach to find out items with magnitude level of DIF pattern and IRT base item bias analysis to determine direction of bias items. The findings of the study revealed that two items (item 4 and 7) were found to have magnitude level of DIF pattern in relation to school out of 20 items of the examination and they favour science students. The study recommended that English language GSE items developers GSE test developers should make use of IRT to estimate the characteristics of their items which will make more credible items and free of bias.

Keywords: Effect size, biased items, differential item functioning, gender, general English language test

Introduction

Achievement test is planned to measure the extent to which instructional objectives are achieved by learners. It is used to conclude level of education for which students might be prepared. They can take such test to determine if they are ready to enter into a particular programme or to be considered in moving to the next level of learning. Achievement test has to be planned is such a way that it portraits the knowledge and or skills in questions. Such tests have to measure what they are invented to measure and also give equal chance to every test taker regardless of the background or differences (Isma'il, 2023). When a test gives equivalent chance to the group of

examinees it said to be a fair test. The fundamental aim of test fairness discussion is to make tests free from bias and to contribute to testing equality. A test may be considered biased when students having the same ability perform differently. Different factors can be the basis for test bias, like content validity of a test, when the content of the test is biased to test takers from certain groups, religion or ethnicity. Other characteristics such as age, background, learning strategies and style, attitude, motivation, aptitude and intelligence can contribute to test takers' performance. When the test items of test fails to

give equal chance to the groups of examinees the test is said to be biased.

Item bias is said to be a result of "systematic errors" which have an effect on measurement results. It does not affect all the results equally owing to the description of systematic errors. The existence of items including systematic errors is a problem strongly related to the validity of the test. In validity analysis, it is important to detect biased items among the test items. This is about detection of "Differential Item Functioning" which can be determined by statistical methods. Differential Item Functioning (DIF) refers to the differences in item functioning after groups have been matched with respect to their ability. It occurs when test items function differently for students from two different comparison groups that are matched by the construct being measured. Differential item functioning refers to the violation of the invariance assumption in Item Response Theory Models, and happens when the probability of endorsing an item for test takers of equal ability level varies in different groups (Battuaz, 2017). Differential Item Functioning (DIF) occurs whenever persons of the same ability level but from different groups have differential probabilities of endorsing an item (Umar, 2024). If the factor bringing about such a difference is not part of the construct of focus in the test, then the test would be biased. If, on the other hand, the differential performance of two groups can be attributed to a true difference in their ability levels, it is called impact rather than bias (Kamata & Vaughn, 2004). For Abedi, Leon

and Kao (2007) DIF analysis is often used to examine group differences between specific racial or ethnic groups or between males and females.

Item response theory (IRT) known as probabilistic theory since it deals with probability of possible response to a test item. Hambleton and Jones (2013) defined item response theory as a general statistical theory about examining item and test performance and how performance relates to the abilities that are measured by the items in the test. It is a psychometric theory and family of associated Mathematical models that relate latent traits of interest to the probability of response to item on the assessment. A measurement models expresses the Mathematical links between an outcomes. Example a respondents scores on a particular item and the components that affect the outcome, example, quality of the respondents and or qualities of an item. A variety of models have been developed from the IRT perspective and these models differ from each other in at least two important ways. One important difference among measurement models is in terms of the item characteristics, or parameters, that are included in the models. A second important difference among measurement models is in terms of the response option format. From personal experience of the researcher, the reason for lack of information about the properties of G.S.E examination items of Kano state college of education and preliminary studies is clear. GSE examination test items of Kano state college of education and preliminary studies are

of unknown properties, item analysis was never performed on GSE, and as such the examination is of unknown psychometric properties. That is the reason why this study analysed GSE test items' psychometric properties. Moreover, GSE tests items are arranged regardless of the discipline of test takers. It is therefore likely that the background factor or discipline may affect the item response.

Studies have been conducted to examine school related Differential Item Functioning in different types of general examinations. Abba (2021) found that majority of the GSP items with the magnitude level DIF significantly favoured science-based students over their Art-based counterparts. The results from the tested hypotheses revealed that there is a significant difference in the mean DIF indices among the 2015/2016 BUK-GSP 2201, 2202, 2205 and 2206 by gender and faculty of study. Akanwa, Agommuoh and Iheche (2016) found that some items in NABTEB Agricultural Science, Biology and Physics were biased in relation to school location. The implication of this finding is that NABTEB Agricultural Science; Biology and Physics examination questions have items that are biased which could be detected. Igomu and Fan (2014) ascertained that out of 60 items in NECO Biology questions, 10 items were bias in relation to school types, eight items were bias in relation to school location. The implication of this finding is that NECO Biology examinations have incidences of differential item functioning. Faleye and Rasheed (2020) found that eight items

(item, 19, 20, 23, 28, 36, 37, 38 and 40) were biased against rural and urban students. The findings implied that there are incidences of differential item functioning in 2016 OSJPE Biology multiple choice items. Ogbebor, and Onuka (2013) who studied differential item functioning method as an item bias indicator. The study investigated items that are biased using differential item functioning approach in relation to school type (private and public schools), school location (urban and rural schools) using Examinations Council National (NECO) Economics questions, for 2010. The research findings showed that out of sixty items in NECO economics questions, 10 items were biased in relation to school type and 8 items in relation to school location. Queensoap and Orluwene (2017) found that majority of Chemistry Achievement Test (CAT) items showed medium and small size effect.

The high level of academic failure in education system has been in an increasing concern over the years. The spread of population has brought about unprecedented increase demand of teacher education. In recent times colleges of education's teaching and learning has become a subject of discussion due to the wide spread failure in general studies education (G.S.E) examination. NCE students of Kano state college of education and preliminary studies are repeatedly failing GSE 212 Basic General Mathematics and GSE 211 General English Language. This failure leads some of the students to spill over one (1) or even two (2). Students across schools and course combinations are found to be among the victims. The College has recorded a massive failure that in the school of Arts and Social Science, only 26%, 10.5%, and 6.7% passed the subjects in the 2015/2016, 2016/2017 and 2017/2018 academic sessions respectively (DEAR, 2019).

Objectives of the Study

The main purpose of this study was to determine:

- 1. The effect size of DIF pattern in the GSE 211 general English language test (Type I) in relation to school.
- 2. The direction of bias items in the GSE 211 general English language test (Type I) in relation to school.

Research Questions

This study was set to answer the following questions:

- Which items in the GSE 211 general English language test (Type I) show magnitude level of DIF pattern in relation to school?
- What is the direction of bias items in the GSE
 211 general English language test (Type I) in relation to school?

Methodology

This study is an ex-post-facto design which seeks to find out the factors that are associated with certain occurrences of already existing condition or state of affairs and searching back in the time for plausible causal factors retrospectively (Cohen, Lawrence & Marrison, 2007). In this study the ex-post-facto design employed to examine whether items in the KASCEPS GSE-2017 English Language (forms A and B) set by Kano State College of Education and Preliminary

Studies in 2017 function differently for male and female students and school type. The target population of this study consisted of all NCE II students in Kano State College of Education and Preliminary Studies. The selection of NCE II student is based on the fact that it comprises major variables of the study male and female students, Science and Arts students. This by implication means the population encompasses male and female students who sat for GSE 211 English Language examination (Type I). According to office Academic Secretary of Kano State College of Education and Preliminary Studies there were six hundred and sixty five (665) candidates who sat for GSE English language examination in 2017 (Directorate of Examination and Academic Record, {DEAR} 2019). The GSE examinations are 20 items multiple choice test with each having options A, B, C and D. The study did not use any new developed instrument for the sake of generating data; this was because the study collected existing data obtained from a constructed and administered examination by College of Education. The examination was assumed to be faced and content validated by experts in the study area. National commission for colleges of education (NCCE) specify that, each NCE II and above question paper and result, must be moderated by experts from either a university and or a recognize higher learning institution. The data collection was in form of pro forma that used to collect responses of NCE II students of Kano State College of Education and Preliminary

Studies KASCEPS GSE2017 basic general English language GSE 211 (Type I) multiple choice examination sets, administered by GSE department of the college in 2017. The examination consisted of twenty 20 items. The paper was objective type with A, B, C, D options. This cut across general English language course contents for NCE II, the correct response scored as 1 and the wrong or any undecided response will be scored as 0.

Large sample size allow researchers to better determine the averages values of their data hence avoid errors from testing small number of possibly atypical sample Borg and Gall 1996 (in Cohen, 2007) suggest that, as a general rule, sample sizes should be large where there are many variables, the sample will be broken down into subgroups the sample is heterogeneous in terms of the variables under study. Bujang M. A. (2018) recommended that for observational studies with the IRT logistic regression in the analysis, taking a minimum of sample size of 500 is necessary to derive the statistics that represent the parameter. In respect of this background, this study will use the entire NCEII students six hundred and sixty five (665) as sample of the study.

The data collection was in form of pro-forma that used to collect responses of NCE II students of the College. The correct response scored as 1 and the wrong or any undecided response scored as 0.

Two statistical analyses were used. Firstly, regression analysis was conducted answer research question one i.e. to determine items with magnitude DIF. Logistic Regression (LR) was employed using SPSS for data analysis for the detection of DIF for each item by school. Secondly, IRT-based item analysis to answer research question two i.e. determine the direction of bias items in relation to school. The researcher used the presence of the DIF in LR approach is to be determine by testing the improvement in model fit that occur when a term for group membership and a term for interaction between test score and groups membership are added to the regression model. To discover the items that exhibit magnitude amount of DIF effect size, Jodoin and Gierl (2001) classified the effect levels of DIF that are determine with logistic regression (LR) in the Following ways;

- A Level: If R²<.035, a negligible level of DIF is present
- II. B Level: If .036<R²< .070, a medium level of DIF is present
- III. C Level: If R²> .071, a magnitude level of DIF is present

Results Presentation and Discussion of Findings

Research Question 1: Which items in the GSE 211 general English language (Type I) test show magnitude level of DIF pattern in relation to school?

1) by Schools		
Effect Level	Item Numbers	Percentages
$R^2 < .035$, a negligible	1, 2, 3, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20	90.0
level of DIF		
$.036 < R^2 < .070$, a		
medium level of DIF	Nil	0.0
$R^2 > .071$, a magnitude		
level of DIF	4,7	10.0

 Table 1: Summary of Logistic Regression Analysis for GSE 211 General English language Test (Type I) by Schools

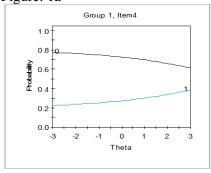
In finding out which items in the GSE 211 General English language (Type I) test show magnitude level of DIF pattern in relation to schools. The responses of the students were subjected to binary logistic regression analysis using SPSS. The outcome of the analysis was presented in the above table. The result revealed 90.0% of the items have negligible level DIF pattern, none of the items representing 0.0% was found to have moderate level DIF pattern and 2 items (4 and 7) representing 10.0% were found to have magnitude level of DIF pattern, by implication, majority of the items showed small effect size of differential item functioning. The findings disagree with the findings of Faleye and Rasheed (2020), on differential item functioning of Osun state joint promotion examination. Who found that eight items (item, 19, 20, 23, 28, 36, 37, 38 and 40) were biased against rural and urban students. The findings implied that there are incidences of differential item functioning in 2016 OSJPE Biology multiple choice items. This finding concurs with the findings of Ogbebor, and Onuka (2013) who studied differential item functioning method as an item bias indicator. The study investigated items that are biased using differential item functioning approach in relation to school type (private and public schools), school location (urban and rural schools) using National Examinations Council (NECO) Economics questions, for 2010. The research findings showed that out of sixty items in NECO economics questions, 10 items were biased in relation to school type and 8 items in relation to school location. The finding is also in line with the findings of Queensoap and Orluwene (2017) found that majority of Chemistry Achievement Test (CAT) items showed medium and small size effect.

Research Question 2: What is the direction of biased items in GSE 211 general English language test (Type I) in relation to schools?

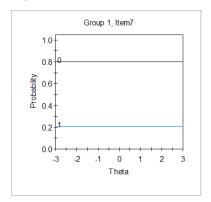
ible 2: Summary of Item Blas Analysis of GSE 211 (Type I) by Schools								
Parameter <i>b</i>								
	Item No.	Humanities	Sciences	Direction of Bias				
	4	6.22	-3.83	Favours Sciences				
	7	6.88	3.50	Favours Sciences				

Table 2: Summary of Item Bias Analysis of GSE 211 (Type I) by Schools

Table 9 above depicts the summary of item bias analysis of GSE 211 general English language test (Type I) in relation to schools performed using IRTPRO software. The outcome from the analysis indicated that items 4 and 7 are in favour of science students group with b parameter estimate of -3.83 and 3.50 as against that of humanities students' with 6.22 and 6.88 respectively. The ICCs generated from the Group 1= Humanities; Group 2 = Science Figure: 1a

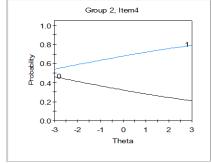


Group 1= Humanities; Group 2 = Science Figure: 2a

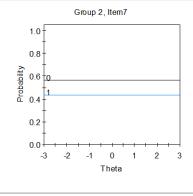


This finding agrees with the findings of Goodness and Memory (2019) who detected item bias with Scheneman Chi-square in a Chemistry Achievement Test in Nigeria. The result detected 30 items as showing DIF between the focal and reference group. The result revealed that between Ijaw and Igbo ethinic group 34 items were detected biased. analysis are presented in Figure 1 and 2. The ICCs for items 4 and 7 are not identical for both groups; the ICCs for humanities group shifted more to the right. Thus, the items could not differentiate well among the groups meaning that the items were more difficult for the humanities group. It can therefore, be inferred that items 4 and 7 were biased towards humanities group.









While 31 items of the test were identified between Ijaw and Hausa and only 22 items were detected biased between Ijaw and Yoruba. The study revealed that some items have shown biases and not all items shown DIF were flagged biased.

Also the finding agrees with the findings of Abba (2021) investigated the incidence of Differential

Item Functioning (DIF) of 2016 General Studies Programmes (GSP) Examinations of Bayero University Kano, Nigeria. Who found that majority of the GSP items with the magnitude level DIF significantly favoured science-based students over their Art-based counterparts. The results from the tested hypotheses revealed that there is a significant difference in the mean DIF indices among the 2015/2016 BUK-GSP 2201, 2202, 2205 and 2206 by gender and faculty of study. This finding agrees with the findings of Akanwa, Agommuoh and Iheche (2016), on differential item functioning methods as an item bias indicator for Big Data assessment in the 21st century. The research findings showed that some items in NABTEB Agricultural Science, Biology and Physics were biased in relation to school location. The implication of this finding is that NABTEB Agricultural Science; Biology and Physics examination questions have items that are biased which could be detected. The findings disagrees with the findings of Igomu and Fan (2014), on assessing item bias using Differential Item Functioning technique in NECO Biology conducted examination in Taraba state, Nigeria in relation to school type (private & public) school location (urban & rural) using Biology NECO questions for 2012. The research findings showed that out of 60 items in NECO Biology questions, 10 items were bias in relation to school types, eight items were bias in relation to school location. The implication of this finding is that NECO Biology examinations have incidences of differential item functioning.

Conclusion

This study was conducted to investigate school related Differential Item Functioning of General English language test of 2016/2017 examination of Kano state College of Education and Preliminary Studies. Based on the findings of this study it is concluded that GSE General English language examination test developed by the College examination team is fair to be used for the Arts and Science students. Thus, the instrument was said to be fair to serve its purpose.

Recommendations

The following are recommendation for the study:

- 1- English language GSE items developers should improve open their effort in selecting best items with appropriate words and or symbols so as to measure the target knowledge and skills under the study.
- 2- Directorate of examination and academic record should organize training for GSE English language item developers on the construction of valid, reliable and fair tests especially in the area of DIF.
- 3- GSE test developers and school should make use of IRT to estimate the characteristics of their items which will make more credible items and free of bias.
- 4- Achievement test users should estimate the differential function of intended instrument to enhance appropriate interpretation of students' results and for better counselling.

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Factors Militating against Quality Education in Public Senior Secondary Schools in Kwali Area Council, Federal Capital Territory (FCT), Abuja, Nigeria

By

Yero Musa

Nigerian Educational Research and Development Council (NERDC), Sheda, P.M.B 91, Garki, Abuja. Email: <u>veromusa1@gmail.com</u> (07057886916)

Abstract

The study was aimed at assessing factors militating against quality education in public senior secondary schools, Kwali Area Council, FCT, Abuja, Nigeria. The study was a descriptive survey research design. The population comprises of all the 120 teachers from the six public senior secondary schools in the study area. The sample for the study was sixty teachers selected from three sampled public senior secondary schools, Kwali Area Council, FCT, Abuja. Twenty teachers were sampled from each of the three sampled schools. The schools and the teachers were sampled through simple random sampling technique. The instrument used for data collection was a researcher's self-developed questionnaire titled, "Factors Militating Quality Education Questionnaire (FMQEQ)". Four research questions guided the study was analyzed using frequency and percentage. The result of the finding indicated that the socio-cultural factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja among others include: poor reading culture; poor family socialization; and loss of moral values system. The finding of the study also indicated that the institutional factors militating against quality education among others includes: examination malpractices; and mismanagement of resources. In addition, the finding of the study revealed that the political factors militating against quality education among others includes: poor/non-implementation of education policy; weak and anachronistic legal framework,. Finally, result of finding also showed that the student factors militating against quality education among others are: lack of commitment, interest and poor mindset, Based on the findings of the study, it was recommended among others that: To address the political factors militating against quality education, the government should ensure full implementation of educational policy at all levels of education, avoid politicizing appointments of chief executives and funding of education as these will positively enhance quality education.

Keywords: Factors, militating, quality education

Introduction

Education is the bedrock of development in every society and a tool for nation-building. Yero (2023) described education as an organized process concerned with the communication of knowledge, acquisition of skills and with formation of right attitudes to bring about changes, which can help an individual and the society. Education is transmission of what is individuals to make desirable to them knowledgeable (Maijidadi, 2017). Thus. education is an instrument for developing human intellect, technical skills, character and effective citizenship for self-reliance and national development.

If a nation is to rise to standard worthy enough for her to compete globally in the league of Nations, such a nation must ensure that high quality is attained and sustained in her educational system because education is an effective tool for human development and no meaningful development can take place without it (Yero, 2023). The extent to which the above expectation of the government is attained depends largely on the quality assurance of education provided to her citizens. Quality has been variously described as a measure for excellence, quality as perfection, quality as value for money, quality as customer satisfaction, quality as fitness for purpose and quality as transformation.

The quality of education in Nigeria has continued to decline leading to growing population of unemployable graduates and increasing incidence of functional illiteracy across the nation. So many efforts have been made to address the situation but the success recorded so far is insignificant compared to the level of decadence in the quality of education in the same period. Quality education encompasses of people who are healthy, well –nourished and ready to participate and learn, supported in learning by their families and communities environments which are conducive for leaning (Nicholas, Simeon and Obinwa, 2014).

Quality education is the eduction that welcomes the learner and can adopt to meet learning needs (Yero, 2023). Ochuba (2016) defined quality education as aspects of learning resources, technology, program enrolled, modules done and teaching methodology, among others. The quality of education is the evaluation of educational level and effect. The achievement in the quality of education will depend on the quality of the person who is educated.

The challenges in achieving quality education are numerous. According to Abodomu (2016), many of the schools most especially the public institutions lack infrastructures, books and other instructional materials. Onvike (2017) noted that education in Nigeria has problem of shortage of teaching aids and unmotivated teachers. Ochuba (2016) blames inspectors of schools for poor standards of education. The standard of education was continually declining due to low quality of supervision and inspection. Majidadi (2017) explained that the total absence of the application of instructional materials or poor use of it in the teaching of English language has a negative impact on learners. Lance (2014) demonstrated that inadequate materials in school's libraries lowered the grades of students' academic performance, whereas schools that have adequate materials have improved academic performance in their grades. Orkaa (2015) stressed that these challenges are because students are refusing to subject themselves to studying. He further added that, the greatest challenge to quality education is the underfunding of the educational section which is still far below standard set by the United Nations Educational Scientific and Cultural Organization (UNESCO). UNESCO stipulates a minimum of 26% of national budget.

According to Abodomu (2016) the following are the challenges against quality education in Nigeria: poor funding, unavailability of qualified teachers, failures to accommodate the rising population demands academic fraud, corruption and indiscipline, poor teachers' welfare, poor infrastructure and training facilities, among others. The problems associated with quality education in Nigeria includes: poor governance, corruption, lack of responsibility and control, poor funding, lack of teaching aids, lack of indiscipline, lack of infrastructure, poor parenting and guidance, among others (Onvike, 2017). Ochuba (2016) pointed out the following factors militating against quality education: sociocultural factor, institutional factor, political factor and students' factor. Mobegi and Oburu (2014) opined that poor family socialization, low status of teacher's education and loss of moral values were some of the socio-cultural factors that hampered quality education. Mismanagement of funds, cultism activities in schools, poor quality staffing, examination malpractices among others were some of the institutional factors that negatively influences quality education. According Ekundayo (2020),to nonimplementation of education policy, politicization of education, inconsistencies in education and weak and anachronistic legal framework, non-commitment of students to study, student's negative mindset and get-richquick syndrome are some of the students' factors that militate against quality education (Giofe, 2016). It is paramount to state here that the challenges militating against quality education in public senior secondary schools, Kwali Area Council, FCT, Abuja are numerous. Therefore, situations whereby principals fail to adopt the right possible solutions to curb the challenges militating against quality education; this may adversely have a negative effect to the education of our students. A large number of teachers in schools that have these challenges will not give their best performances in the discharge of their

duty and this will invariably lower students' academic performance. The poor situation of many public senior secondary schools in Kwali Area Council, FCT, Abuja which are matters of school management and lack of teachers' commitment seems to make it impossible for quality education to be achieved. This condition has created a lot of constraints towards the attainment of quality education and has also created a gap which must be bridged by the present study. The focus of this study therefore, is to assess the factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja, Nigeria.

Research Questions

The following questions guided the study:

- What are the socio-cultural factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?
- What are the institutional factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?
- 3. What are the political factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?
- 4. What are the students factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?

Methodology

Descriptive survey research design was adopted for this study. The population of the study comprised all the 120 teachers from the six public senior secondary schools in Kwali Area Council, Federal Capital Territory (FCT), Abuja, Nigeria. The sample for the study was made up of sixty (50%) teachers selected from three (50%) sampled public senior secondary schools, Kwali Area Council, FCT, Abuja. Twenty teachers were sampled from each of the three sampled schools. The schools and the teachers were sampled through the simple random sampling technique this is to avoid bias and to ensure that each sample had an equal chance of being selected.

The instrument used for data collection in the study was the researcher's self-developed questionnaire titled, "Factors Militating Quality Education Questionnaire (FMQEQ) ". The instrument was vetted and validated by experts in Educational Management, Measurement and Evaluation. The instrument was pilot-tested to 8 teachers from two public senior secondary schools from Gwagwalada Area Council, Abuja that were not part of the study and a reliability coefficient of 0.68 was obtained using Crombach alpha statistics. The researcher personally administered the questionnaire to the sampled school. The research data were analyzed using frequency and percentage as statistical tools for the analysis.

Results of Findings

Research Question One: What are the sociocultural factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?

S/No	Statements	Agree		Disagree			
		F	%	F	%	Total	%
1.	Poor reading culture	60	100.0	0	0.0	60	100.0
2.	Poor family socialization.	50	83.3	10	16.7	60	100.0
3.	Low status of teachers' knowledge /education.	15	25.0	45	75.0	60	100.0
4.	Generation gaps between teachers and students.	35	58.3	25	41.7	60	100.0
5.	Loss of moral value system in the society.	50	83.3	10	16.7	60	100.0

Table 1: Socio-cultural Factors Militating against Quality Education.

Results in table 1, indicates that respondents on item number 1, 2, 4 and 5 agreed and are of the view that poor reading culture; poor family socialization; generation gaps between teachers and students; and loss of moral value system in the society are the socio-cultural factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja with the highest percentage scores of 100.0, 83.3, 58.3 and 83.3 respectively. However, respondents on item number 3 disagreed that low status of teachers' knowledge/education in public senior secondary schools in Kwali Area Council, FCT, Abuja with a percentage score of 75.0.

Research Question Two: What are the institutional factors militating against quality

education in public senior secondary schools in Kwali Area Council, FCT, Abuja?

S/No	Statements Agree		gree Disagree				
		F	%	F	%	Total	%
1.	Mismanagement of resources	45	75.0	15	25.0	60	100.0
2.	Examination malpractices	0	83.3	10	16.7	60	100.0
3.	Cultism activities in schools	25	41.7	35	58.8	60	100.0
4.	Inadequate/poor quality staffing.	25	41.7	35	58.3	60	100.0
5.	Obsolete/inadequate learning facilities, workshops, laboratories						
	etc.	50	83.3	10	16.7	60	100.0

Results of findings in table 2 shows that respondents on items number 1, 2 and 3 agreed that: management of resources; examination malpractices and obsolete/ inadequate learning facilities, workshops, laboratories, etc are the institutional factors militating against quality education in public senior secondary schools, Kwali Area Council, FCT, Abuja with percentage scores of 75.0, 88.3 and 83.3 respectively. However, respondents on items number 3 and 4 disagreed that: cultism activities in schools and inadequate /poor quality staffing are institutional factors that militate against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja with percentage scores of 58.3 and 58.3 respectively.

Research Question Three: What are the political factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?

Table 3: Political Factors	s Militating against	Quality Education.

S/No	Statements		Agree		ree		
		F	%	F	%	Total	%
1.	Poor/non-implementation of						
	education policy.	50	83.3	10	16.7	60	100.0
2.	Weak and anachronistic legal						
	framework.	35	58.3	25	41.7	60	100.0
3.	Politicization of appointment of						
	chief executives at FCT level	50	83.3	10	16.7	60	100.0
4.	Politicization of funding of education	l					
	Sector .	50	83.3	10	16.7	60	100.0
5.	Inconsistencies in education policy,						
	which would jeopardize the quality						
	of educational system.	45	75.0	15	25.0	60	100.0

Table 3 revealed the result of the political factors that militates against quality education in the schools that were studied. The data revealed that factors such as poor/non-implementation of education policy with 50 (83.3%), weak and anachronistic legal framework 35 (58.3%), politicization of appointment of chief executives at FCT level (83.3%), politicization of funding of education sector 50 (83.3%) and inconsistencies in education policy which would jeopardize the quality of educational system are the political factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja.

Research Question Four: What are the students factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja?

S/No	Statements	Agree		Disag	ree		
		F	%	F	%	Total	%
1.	Lack of interest.	50	83.3	10	16.7	60	100.0
2.	Lack of commitment.	35	58.3	25	41.7	60	100.0
3.	Poor mindset.	50	83.3	10	16.7	60	100.0
4.	Exaggerated life style	50	83.3	10	16.7	60	100.0
5.	Get-rich-quick syndrome	50	83.3	10	16.7	60	100.0

Table 4. Students Fastans Militating again	at One liter Education
Table 4: Students Factors Militating again	st Quality Education.

Results of findings in table 4 shows that respondents in all the items number 1, 2, 3, 4 and 5 agreed and are of the view that lack of interest; lack of commitment; poor mindset; exaggerated life style and get-rich-quick syndrome are the students factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja with highest percentages scores of 83.3, 58.3, 83.3, 83.3 and 83.3 respectively, while the percentage scores of 16.7, 41.7, 16.7, 16.7 and 16.7 of respondents disagreed respectively on items.

Discussion of Findings

The findings on research question one attempt to seek opinions of respondents on the sociocultural factors militating against quality education in public senior secondary schools in

Kwali Area Council, FCT, Abuja. The result on table one indicates that the socio-cultural factors militating against quality education in public senior secondary schools Kwali Area Council, FCT Abuja consists of poor reading culture; poor family socialization; generation gaps between teachers and students; and loss of moral value system in the society. The findings of this study is in tandem with the assertion of Yero (2018) and Yero (2020a), who opined that poor family socialization, lack of moral value system and inadequate reading culture are some of the factors hindering quality education. Similarly, the finding supported Mobegi and Oburu (2014) who viewed that poor family socialization, low status of teachers' education and loss of values are some of the socio-cultural factors that hinders

quality education. In addition, the result of finding in table one disagreed that low status of teachers' knowledge/education is a socio-cultural factors militating against quality education. This finding supported the findings of Orkaa (2015) who asserts that teachers' low educational background is not a socio-cultural factor quality education.

The findings on research question two attempts to seek opinions of respondents on the institutional factor militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja. The result on table two shows that the institutional factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja consists of: mismanagement of resources; examination malpractices; and obsolete/ learning inadequate facilities, workshops, laboratories, etc. This finding is in agreement with the findings of Ujam (2015) and Yero (2020b) who opined that: poor utilization of resources. examination malpractices and inadequate learning resources such as libraries, workshops and laboratories are some of the institutional factors affecting quality education. Mobegi, and Oburu (2014) revealed that some of the institutional factors that prohibit quality education include mismanagement of funds, cultism activities in schools, poor quality staffing and examination malpractices. The result of finding in table two shows that cultism activities in schools is not an institutional factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja. The result of finding contradicts the findings of Yero (2018) who opined that cultism activities in schools is an institutional factors that affect the achievement of quality education.

The findings on research question three attempts to seek opinions of respondents on the political factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja. The result on table three indicates that the political factors militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja includes: poor/non-implementation of education policy; weak and anachronistic legal framework; politicization of appointment of chief executives at FCT level; politicization of funding of education sector; and inconsistencies in education policy, which would jeopardize the quality of educational system. The findings is in tandem with the findings of Nicholas, Simeon and Obinwa (2014) who opined that politicization of appointment of educational managers and funding of education; changes in educational policy and weak legal framework in education among others are some of the political factors influencing quality education in Nigeria. This findings is in consonance with Ekundayo (2020) who revealed that non-implementation of education policy, politicization of funding of education, non-students' commitment to study among others are constraints militating against quality education.

The findings on research question four attempts to seek opinions of respondents on the students' factor militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja. The result on table four indicates that the students' factor militating against quality education in public senior secondary schools in Kwali Area Council, FCT, Abuja includes: lack of interest; lack of commitment; poor mindset; exaggerated life style and get-rich-quick syndrome. This finding is in support of the findings of Okugbe (2016) who asserts that lack of student commitment; interest; negative mindset and quick-rich syndrome are some of the students' challenges that affect the attainment of quality education. The findings also agreed with Giofe (2016) who reported that, nonimplementation of education policy, inconsistencies in education policy, weak and anachronistic legal framework among others are some of the political factors militating against quality education.

Conclusion

Poor reading culture, poor family socialization, generation gaps between teachers and students, and loss of moral value system in the society are considered to be the socio-cultural factor militating against quality education. The institutional factors militating against quality education include mismanagement of resources; examination malpractices and obsolete/inadequate learning facilities. In addition, poor/non-implementation of education policy; weak and anachronistic legal framework; politicization of appointments of chief executives. funding of education and inconsistence educational policy were some of the political factors militating against quality Finally, the students' education. factors militating against quality education include lack commitment. interest. poor of mindset. exaggerated life style and get-rich-quick syndrome. Generally, it implies that, sociocultural, institutional, political and students' factors were responsible for poor quality education. Hence, by overcoming these challenges quality education will be guarantee.

Recommendations

Based on the findings of the study, the following among others were recommended:

- Government and school authorities should organize conferences, seminars, workshops or lectures to educate and sensitize teachers, parents, religious leaders on topical issue on the dangers of socio-cultural factors such as poor reading culture, loss of moral values and family socialization to attainment of quality education.
- 2. Government should ensure adequate supply of teaching/learning and financial resources in schools and its judicious utilization of such resources and that examination malpractice should be checked and defaulters should be punished as deterrent to others who intend to commit such acts. These will assist in curbing

institutional factors militating against quality education.

- 3. To address the political factors militating against quality education, the government should ensure full implementation of educational policy at all levels of education, avoid politicizing appointments of chief executives and funding of education as these will positively enhance quality education.
- 4. Government and school authorities should organize symposiums, lectures, seminars or workshops for students on topical issues on the negative effects of students' factors such as poor commitment, lack of interest and poor mindset regarding their study and its effects on quality education. This will motivate students to develop interest, commitment and having positive mindset about education.

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Lifelong Education as Panacea for National Development

By

Olusanya Peter Orimogunje

Department of Adult and Countinuing Education Faculty of Education, University of Ilesa, Ilesa, Osun state, Nigeria olusanyanorimogunje@gmail.com, olusanya_orimogunje@unilesa.edu.ng

Abstract

The issue of National Development is a global concern of every Nation yearning to catch up with the fast changing World of 21ST century. The developed countries such as; USA, Britain and France still have sleepless nights drawing plans on how to conquer not only the World through lifelong education and technology but also the universe. With the challenges of the modern World and with education as the bedrock of development, in any developing nation which holds the notion that the education of her citizens should be taken as terminal issue and not as a continuous process will be doomed and not able to meet up with other nations of the world. This paper, therefore examined the concept of lifelong education as a tool for national development. The paper examined the concept of lifelong education and national development. Having done that, useful recommendations were made which include that government at all levels should be interested in what goes on in the lifelong education study centers so as to ensure they achieve the goals for which they were established and that government should assist the organizers in development.

Keywords: Lifelong education, development, national development

Introduction

It is obvious that no nation can develop if her citizens are not sufficiently educated. Hence, a country's educational plans should not be focused mainly on education that gives job opportunity alone but the one that enhance lifelong education that will prepare citizens for the life challenges. Lifelong education caters for youths, adults, skilled workers, farmers, the school dropouts, or early leavers, disabled or vulnerable, retarded, women, girl child, nomadic and the talented. It is an all-embracing and life-long education as it continues where nature create a vacuum in knowledge acquisition. It is a kind of education that carries people along not for the purpose of self-actualization alone but for national development.

Lifelong education to fill the gap affords the learners an opportunity to overcome some forms of educational backwardness and serves as a compensation for earlier inadequate learning. For any country to move forward economically, politically and socially and maintain a stable government, her citizens must be literate. It is when they are literate that they can read and understand party symbols and manifestoes and be able to decide which seems to be the best for the county. It is only then the citizens can understand and appreciate government policies.

The role of lifelong education in national development therefore cannot be overemphasized. Suffice it to say that development of any nation cannot be discussed without reference to her citizens' education as no nation can develop above the level of education of her citizens. More so, the right type of education through which you can add more value to yourself is through lifelong education to fill the gap. Preece and Harrisson (2022) opined that lifelong education refers to educational activities mostly of a part-time nature, deliberately designed and organized to meet the needs which may range from occupational and professional competency to purely personal and leadership development. Deductively lifelong education serves as tool for meeting individual educational needs that may be required for social and economic development that may therefore influence national development. More importantly, it ensures inclusive and equitable quality education and lifelong learning opportunity for all.

Concept of Lifelong Education

Lifelong education can be seen as the education that continues some forms of education which a person has had before and throughout life. It could be said that one has had a kind of education sometimes ago and now is ready to continue the education till the rest of his life. In this sense it refers to any number of systematic or relatively organized learning opportunities that are provided by a wide variety of adults who might have completed their education in schools or their equivalent agencies. Lifelong education is an educational activity, mostly of part time nature, deliberately designed and organized to meet the needs which may range from occupation/professional to purely personal and leadership development. This corroborates Singh and Suri (2022) they gave the idea that all members of society should be able to continue their education whenever they are ready to meet certain needs.

Lifelong education can be seen as the process by which men and women continue to strive to acquire more knowledge to face the future challenges and such could be advancement in education and acquisition of more skills or knowledge or in order to participate more meaningfully in the socio-economic lives of their communities or it could be way of achieving selfactualization. Lima and Carvalconte (2022) defines lifelong education as lasting education, ensuring education, persistent education, and permanent education or prolong education, education beyond what would be provided by the formal system of education. Lifelong education viewed this way could be seen as that type of education that has no end and probably continues from birth to death.

Lifelong education is a form of educational activities organized and run outside the formal system and time parallel to it, but often times beyond the purview of the school system. It is a programme needed by the learners to overcome some forms of educational backwardness. It is a programme fashioned to groom the learner in order to make up for some academic grounds lost in the past. It is for those who dropped out due to one reason or the other which could be economical, political and social.

Orimogunje (2020) Ogunlana and Oluwatayo (2022) state that lifelong education is a continued study within the area of previous professional training. It could be likened to sandwich degree courses for teachers. Lifelong education takes care of everybody regardless of the profession. For instance. medical doctors. lawyers. journalists, engineers and surveyors are all involved as they need constant refresher courses as a form of continuing education. Lifelong education therefore refers to educational activities, mostly of a part-time nature, deliberately designed and organized to meet needs which may range from occupational and professional competency to purely personal and leadership development (Zhang and Chen 2022).

Corroborating the above Preece and Harrison (2022), Ogunlana and Oluwatayo (2022) see lifelong education as a form of educational activities organized and run outside the formal school and at time parallel to it but often time going beyond the purview of the school system. Lifelong education to this end is revolutionary in nature and represents the totality of the yeaning of the populace.

Objective of Lifelong Education

The primary goals of lifelong education, are to meet the following Objectives;

1. Provide educational opportunities for all categories of individuals irrespective of whatever failure was recorded earlier.

2. Enable people to keep up with the new knowledge required to perform responsibilities in a chosen career.

3. Help individuals to master new conceptions of a stated career itself. It could be said that in various occupations these days' profound changes have occurred and the modern practitioner who does not understand this fact is in danger of becoming not need to becoming obsolete.

4. Make people keep up with changes in the relevant disciplines. Practical careers rest upon theoretical bodies of knowledge. Professional does not need to become expert in all underlying bodies of knowledge but bodies need to learn about their advances.

5. Make people become useful to society and minimize the economic wastage that is usually mad by dropouts.

6. Help an individual to prepare for the changes in the personal career line. An individual may move in one or many directions such as from generalist to specialist, from a lesser to a more responsible job of the same sort or into a complete new career.

7. Enable people to grow continuously as wellrounded individuals. In this regard the mind should never be withdraw from that practice occasionally to be stimulated by contemplating theory or seeking understanding and skill in different aspects of life, otherwise, the remainder of life treated superficially with the impact categories of thought derived from one profession; and

8. Discharge effectively the social role imposed by a profession who belongs to. A role which always exists whether or not the profession is licensed by the state, the professional must learn how to take collective responsibility, to make right choice on issues to improve and extend the delivery of services to collaborate with allied professions and to help monitor the actions of fellow professionals.

Socio-Economic Importance of Life-long Education

Lifelong education, which is a non-formal education, has played unique roles in the development of adults men and women, old and young, poor and rich in terms of knowledge acquisition of skills and basic training in Nigeria. UNESCO (2019) life-long education is a type of education organized and run by both government and non-governmental agencies for the droppedout, the internally displaced persons, and underprivileged, educationally disadvantaged and backward people. It has opened an avenue for these categories of people to develop themselves and improve their living standards as well as some literate adults.

In Nigeria, lifelong education has taken care some of the affected graduates of primary school

in Nigeria who are unable to complete their secondary school education as well as those who have no opportunity at all to attend secondary school by providing the necessary learning experiences for them to pass their SSCE or GCE examinations. More so, at present a significant number of such people who passed through lifelong education have gained admission to many tertiary institutions both in Nigeria and abroad. Lifelong education has prevented some school leavers from becoming nuisance and menace to the society. Also, this form of learning has enabled them to gain employment in both private and public sectors (Lima and Carvalconte 2022).

Orimogunje (2018), Zhang and Chen (2022) submitted that life-long education plays a complementary role to formal education, It is so because majority of the people in secondary schools in Nigeria do attend lifelong education course especially during the holiday period. The programme affords the slow learners the opportunity to catch up with other and perform better in their examinations. However, the formal school system operates within an age limit of 12-19 years. But in lifelong education such hindrances are not there because it is meant for both young and old people alive.

Lifelong education provides the opportunity for people to change to discipline of their interest for instance there were some students who had the arts or commercial bias before changing to science through lifelong education which enabled them to gain admission to study Medicine, Engineering, Physics, Mathematics, Chemistry, Micro-biology, Zoology and so on in the University. In like manner people who are fully employed also take advantage of lifelong education to update their knowledge through workshops, seminars, and conferences. This enables the learners to become more competent and worthy individuals.

Life-long education enhances economic growth and development in all ramifications. It improves social cohesion and inclusion as well as education in crime and social unrest. It improves public health and well-being of the people. More so, it increases political participation and engagement, improve environmental sustainability and cultural diversity and understanding. It improves social justice, equity and pave access to education and training for marginalized groups. More importantly, life-long education is essential for individuals, communities, and societies to thrive in today's fast-changing world.

What is Development?

The world "development" is applicable and has been applied in a wide variety of situations both human and non-human that is to say that development is no longer new and has become an old name. For instance we talk of "child development", "political development", "educational development", "agricultural development", "technical development", and so on. The emphasis however, is that development implies change or growth and that such change or growth is viewed by different people from different perspectives.

Orimogunje (2020), Singh and Suri (2022) emphasized that development touches the need for adaptation to the challenge of changes, the importance of effective community action for the solution to socio-economic problems of human resources in pivot of national development. Development in this sense enhances the progress and betterment of a society through the concerted effort of members of a community.

Ogunlana ans Oluwatayo (2022) submitted that development is absolutely an increasing process of creating and more adequately allocating resources for attaining relatively large sociopleasing objects. Deduced from this view, development has dual method extent of creating resources and effectively assigning same to social pleasing objects. Development entails social changes, growth, evolution, progress, advancement, and modernization.

Lima and Carvalconte (2022) argued that there is a value-free meaning contained in notion of development over and above the ideological and political uses of the concept. In his argument, he says that development can mean the actualization of an implicit potentiality, the simplest examples being the pattern of growth and maturity of a seed, or an initial germ cell, to the full adult form of the individual plant or animal or human being. Without stipulating this point, this can also certainly be seen to apply to man and their situation. In this sense, the implicit logic of development which Fletcher speaks of it particularly useful understanding and planning for changes in human society through the concerted efforts of members of a community. It is a transformation to the good if not better in the socio-cultural and economic well being of people and community. Orimogunje (2018) view development as a process of planning changes which have two basic elements. These are planning and action and development in this sense is a planned activity aimed at speeding up or directing the process of change which is already going on towards an identified goal. However, а thorough examination of different perspectives of development, the following facts could be established;

1. That development should give liberty to the cross section of any society from the grip of starvation, wretchedness and afflictions or torture of any kind.

2. Development provides advantages for men to be accountable for their own lives as well as in the collective life in the society in which they live.

3. Development affords them the opportunity of taking part amply in the life of the cosmic human family.

Life-long Education and National Development: A Snergy

Education is the vehicle of development and the fact therefore is that no individual or nation can develop without education. Education exposes people to knowledge, understanding and skills which are used to harness the wealth of the nation for general development. Without education it will be very difficult to ascertain the method of pulling both human and natural resources together for the benefits of the generality of people. In this regards the full development of individual intellect leads to the development of the community and the nation at large.

Suffice it to say that a highly developed country or society educationally is a highly developed nation. Education is the greatest priority in the development of any society. It is education that is used to harness other variables for overall development. It has become necessary that every citizen must be educated for meaningful development to take place. Lifelong education therefore plays a vital role in enhancing this mission. Some people for one reason or another drop out of formal school system only to seek a redress through lifelong education programme. That is, lifelong education provides educational opportunities for all the categories of individuals irrespective of whatever failure had earlier been recorded.

Education being what it is promotes peace, understanding, awareness and the spirit of participation in socio-economic lives of the community. Lifelong education to be précised opens up new frontiers for further development. It rids people of suspicion, jealousy, idleness and uncooperative attitude which are limited to the spirit of development and felt culture. World Bank (2018) UNESCO (2019) emphasized that life-long education enables people to keep up with new knowledge required to perform responsibilities in a chosen career. It helps individuals to master new conception of a stated career itself. Because in various occupations these days profound changes have occurred and the modern practitioners who does not understand this fact is in danger of becoming obsolete and continuing education in this regard is essential.

Orimogunje (2020) Preece and Harrison (2022) see development as the power of the people to solve their own problem with their own wisdom, experience and resources with a view to eliminating poverty, pestilence and starvation. For sustainable development to be attained therefore there is the need to have harmony among the people and a society free from bitterness and rancor that can pull its resources together for better growth. This can only be achieved through education. Where education manifests the people develop the spirit of trust, understanding and comradeship. It is when there is a bond of togetherness, that the effort of the people can be harnessed for positive and meaningful results.

Succinctly, there cannot be a meaningful development where the education of the people is not developed or when there are no room to meet the yearning and aspiration of the people educationally, that is education must be a continuous process. All said and done education is the bedrock of development whether for a community or nation. Thus, a nation that fails to give appropriate attention to education of her citizens does so to be perished.

From the foregoing, the following relationship can be said to exist between life-long education and National development;

1. Lifelong education encourages participation in development programmes

2. Lifelong education in all ramification helps to provide solution to problems of unemployment, illiteracy, poor health and so on which may hinder the development of a nation.

3. Lifelong education better still allows for the acquisition of new skills necessary to provide for more advancement methods of production in agriculture and industry and for great increase in the number of those able to serve the nation in the lower and higher grades of administration and in the profession.

Conclusion

In some years past, majority of Nigerians were marginalized because of their inability to go to formal school and even for those who went but dropped out for one reason or another and later found a way back through lifelong education programmes that provided skills that were relevant to their needs. The knowledge acquired thereafter them enables to contribute meaningfully to socio-economic development of Nigeria. Be that as it may and it has shown in this paper the roles played by lifelong education in National development are humongous and cannot be overemphasized as it serves as harbinger for National development.

Suggestions

Based on the conclusion drawn from this study the following suggestions are made:

1. The government at all levels; local, state and federal should be interested in what goes on in lifelong education centers. Thus, inspectors of education should visit these centers so as to ensure that they achieve the goals for which they were set up.

2. Government should assist lifelong education organizers in developing a curriculum which would embrace subjects such as, civic education, cooperative studies, citizenship education and leadership training. The implication is to promote programmes about government activities, community betterment, voting during elections and political affairs among the people.

3. Government at all levels; local, state and federal should endeavors to provide adequate funding of lifelong education centres the reason being that lifelong education as an aspect of adult education is there to bridge the gap created by the formal education system as it creates access to education for all and sundry thus enhancing national development in all ramifications.

4. Also, for effective performance of lifelong education centers, lifelong education practitioners and education stakeholders should begin to offer a helping hand in the area of expertise, finance and provision of learning facilities like, chairs, tables and modern instructional materials.

5. All the three tiers of government should continue to encourage both the proprietors and the beneficiaries of lifelong education study centers so as to achieve the main goals of nonformal education as stated in the National Policy of Education in Nigeria.

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An Examination on Sources, Forms and Implications of Conflict on the Provision and Management of Education in Nigeria

By

Janet Motunrayo Eseyin Department of Educational Foundations, Faculty of Education University of Jos eseyinjanet@gmail.com 08037030903

Abstract

The present study explores the various sources, forms, and implications of conflict on the provision and management of education in Nigeria. Conflicts within the educational sector have grown in intensity and frequency, leading to disruptions in learning, administrative inefficiencies, and dissatisfaction among stakeholders. The study aims to identify key conflict triggers within the system and evaluate how they impact educational outcomes. The methodology involved an extensive review of existing literature, drawing from conflict resolution theories, case studies, and empirical data regarding conflict trends in Nigerian education. The study concludes that managing conflicts through proactive engagement, adequate funding, and improved communication between all stakeholders is essential for enhancing the quality of education in Nigeria. Recommendations are made for government agencies, educators, and administrators to adopt more integrative approaches to resolving conflicts and fostering a conducive learning environment.

Keywords: Conflict, forms, sources, Nigeria educational system

Introduction

Conflict is a fundamental aspect of human relationships and can manifest in every aspect of society, including education. The Nigerian educational system, characterized by a range of institutions from primary schools to tertiary institutions, is no exception. The nation's educational landscape is often marked by friction between stakeholders; government, teachers, parents, and students, who may have differing objectives and expectations. While conflict is often viewed as negative, it is essential to recognize that it can also serve as a catalyst for positive change when managed effectively.

In Nigeria, conflicts in the educational sector tend to revolve around issues of inadequate funding, poor working conditions for educators, lack of infrastructure, and disagreements over policy implementation. These conflicts have far-reaching implications on the quality of education, student achievement, and the overall functionality of educational institutions. This paper seeks to examine the causes of conflict in the Nigerian educational system, analyze their implications, and propose strategies for effective conflict management.

Objectives of the Study

This study is designed achieve the following objectives:

- i. Identify the major forms of conflict in the Nigerian educational system.
- ii. Explore the underlying sources of these conflicts.
- iii. Evaluate the implications of conflicts on the provision and management of education.
- Propose strategies for managing and resolving conflicts in the educational sector.

Review of Related Literature *Understanding conflicts*

Conflict, as a term, is often associated with negative connotations such as fighting, destruction, and disruption. However, conflict can also be a driving force for innovation and reform. The word "conflict" derives from the Latin confligere, meaning 'to clash' or 'engage in a struggle,' which can apply to both physical and ideological confrontations (Miller & King, 2005). Miall et al. (1999) broaden this definition by characterizing conflict as the pursuit of incompatible goals by different groups individuals. This definition or highlights the role of differing interests and objectives in creating friction, a common scenario in Nigerian educational institutions.

Conflict, in the educational context, refers to disputes or disagreements that arise when different stakeholders (teachers, students, administrators, and government bodies) have divergent interests or goals. The complexity of Nigeria's educational sector exacerbates the potential for conflicts, with various social, political, and economic issues contributing to the disagreements (Aborisade, 2021). Recent studies by Udo and Udoh (2019) argue that conflict is inevitable in the educational sector due to varving expectations among stakeholders.

Many scholars have categorized conflict as either functional or dysfunctional (Best, 2010). Functional conflict may lead to positive changes and improvements in the education system, such as when educators demand better working conditions or reforms in curriculum. However, dysfunctional conflicts tend to disrupt the system, as is frequently observed with prolonged strikes by teachers' unions, which have a significant negative impact on students' learning and overall educational quality.

Educational systems worldwide face various forms of conflict, but the Nigerian context presents unique challenges. Issues such as the under funding of public schools, inequitable distribution of resources, the clash between traditional and modern educational values, and inadequate government policies contribute to persistent conflicts. In many cases, conflicts in Nigeria's educational sector have led to prolonged strikes by academic staff unions, the closure of schools, and disruptions to the academic calendar. As such, understanding the types and sources of these conflicts is crucial to finding sustainable solutions.

Forms of Conflict

Conflicts in the Nigerian educational system manifest in various ways. According to Aborisade (2021) and Udo (2019), common forms of conflict include:

- Teacher-Government Conflicts: These conflicts are primarily driven by disputes over pay, benefits, and working conditions, often leading to strikes by unions such as the Academic Staff Union of Universities (ASUU). For example, ASUU strikes in 2020-2021 disrupted the academic calendar for over nine months (Okorie, 2021).
- Teacher-Student Conflicts: These conflicts often stem from miscommuni-cation, disciplinary measures, or differences in expectations. For instance, conflicts over grading policies, the enforcement of discipline, or perceived favoritism can lead to

strained relationships between students and teachers (Ajayi & Akindele, 2022).

3. **Inter-group Conflicts:** Disputes often arise between different factions within the educational institution, such as between teaching and administrative staff. These conflicts frequently revolve around issues of power dynamics and resource allocation (Durodola, 2020).

Types of Conflicts in Educational Systems

Conflict is an inevitable part of human interaction, particularly in educational settings where diverse individuals interact daily. Common forms of conflict, such as Conflict with Persons, Relationship Conflict, Interest Conflict, and Values Conflict, play a significant role in educational management. These classifications, although broad, are crucial for understanding and addressing the unique conflicts that arise in education. Recognizing these types is essential for effectively managing and improving educational systems.

Conflict with Persons:

These conflicts arise between students, teachers, administrators, and parents due to misunderstandings or competing interests, such as disputes over grades or school policies. In Nigeria, this can manifest in disagreements over the implementation of governmentmandated curricula or policies (Kremer & Mcleod, 2020).

Relationship Conflict:

Emotional conflicts between stakeholders teachers, students, parents, and administrators—are often difficult to manage due to emotional involvement. These conflicts can quickly escalate in Nigerian schools, especially where school-community relationships are strained. Resolving such issues requires fostering emotional intelligence and conflict resolution skills among all participants (Owens & Ennis, 2016; Donohoo, 2017).

Values Conflict:

In Nigeria's diverse cultural and religious context, value-based conflicts are common. Disputes often arise regarding what should be included in the curriculum, such as religious education or the content of history classes. Addressing these conflicts requires creating an inclusive curriculum that respects Nigeria's cultural and religious diversity (Obanya, 2019; Bajaj & Bartlett, 2019).

Interest Conflict:

Conflicts of interest in Nigerian schools often emerge from competing priorities, such as government-imposed budget constraints versus teachers' demands for better pay or improved resources. These conflicts are exacerbated by limited funding in the Nigerian educational system, requiring transparent decision-making and equitable distribution of resources (Egbo, 2022; Bush & Saltmarsh, 2021).

Sources of Conflicts in Educational System

Educational conflicts arise from a variety of sources, including disparities in values, interests, and perceptions. Conflicts are inevitable when diverse individuals with different worldviews come together in educational institutions. These conflicts may arise over scarce resources, issues of power and control, or perceived inequities.

Resource-Based Conflicts

In many educational systems, conflicts arise from the allocation of scarce resources. These

may include conflicts over school funding, teaching materials, or infrastructure. Schools in under-resourced areas often face conflicts between administrators and teachers over how to allocate limited resources. For example, teachers may demand better classroom materials, while administrators focus on maintaining infrastructure (Aina & Oyetade, 2020). Addressing these conflicts requires prioritizing equitable resource distribution and involving stakeholders in the decision-making process.

Power and Control Conflicts

Power dynamics in education often lead to conflicts, particularly over decision-making authority. Teachers may feel marginalized when administrators make decisions without consulting them, while students may rebel against authoritarian teaching methods (Akinola & Adesina, 2021). Additionally, parents may feel excluded from decisions about their children's education, leading to conflict with school leadership. Empowering teachers, students, and parents through participatory decision-making processes can reduce such power-related conflicts (Obanya, 2019).

Identity Conflicts

Identity-based conflicts in educational settings often revolve around issues of respect, dignity, and recognition. In multicultural educational environments, conflicts may arise when one group's cultural or religious practices are not acknowledged or respected. For instance, students from minority ethnic groups may feel marginalized if their cultural history is not represented in the curriculum, leading to resentment and conflict (Dike, 2023). Educational institutions need to adopt inclusive practices that respect and celebrate diversity to mitigate identity-based conflicts.

Theories of Conflict

Several theoretical frameworks help to explain the conflicts within Nigeria's educational system. These theories not only provide insights into the root causes of conflicts but also demonstrating their relevance to the Nigerian context.

1. Human Needs Theory

Developed by Burton (1990), this theory posits that conflict arises when individuals or groups are deprived of basic human needs such as security, recognition, and participation. Recent studies, including those by Ojelabi (2019), have applied this theory to the Nigerian education system. For example, conflicts between teachers and the government over inadequate salaries, poor working conditions, and lack of professional recognition can be understood as manifestations of unmet human needs. This theory supports the study by highlighting that many conflicts in the Nigerian educational sector are driven by the deprivation of teachers' basic needs, particularly related to welfare and working conditions. By addressing these needs, the government could significantly reduce the frequency and intensity of conflicts.

2. Relational Theory

Relational theory focuses on social relationships and argues that conflicts often arise due to miscommunication, misunderstandings, or a breakdown in trust between individuals or groups. In Nigerian schools, relational conflicts frequently occur between educators and students or between

different groups of staff (Ajayi & Akindele, 2022). Misunderstandings regarding roles, expectations, and objectives contribute to the escalation of such conflicts. This theory is crucial in understanding interpersonal conflicts in educational settings. The study uses relational theory to explain how breakdowns in communication between different stakeholders (e.g., between teachers and administrators or students and teachers) can lead to more significant institutional conflicts. Improved communi-cation and relationship manage-ment could prevent or resolve these conflicts.

3. Political Theory

Political theory emphasizes the role of power, governance, and competition in conflict. According to this theory, educational institutions in Nigeria are often arenas for political struggles, with conflicts frequently occurring over control and decision-making authority (Durodola, 2020). Government intervention in school administration. appointment of heads of institutions, and funding decisions are common triggers for conflict. This theory helps explain the broader structural conflicts between government bodies and educational institutions in Nigeria. Power struggles over the administration and funding of schools often result in prolonged conflicts, such as strikes by unions demanding more autonomy and better governance. The study uses this theory to suggest reforms in governance that could mitigate conflicts in the educational system.

4. Transformative Theory

Transformative conflict theory, as proposed by Bush and Folger (1994), emphasizes the potential for conflict to bring about personal and organizational growth. Recent studies have demonstrated that conflicts over educational policy, resources, and teacher conditions, if managed properly, can lead to significant improvements in the system (Ojelabi, 2019). This theory supports the idea that conflict, when approached constructively, can lead to systemic reforms. For example, teachergovernment conflicts over salaries and working conditions have, in the past, led to salary reviews and improvements in school infrastructure. The study applies this theory by arguing that conflicts should be seen as opportunities for positive change within the Nigerian educational system.

Stages of Conflict

Robbins (2001) outlines five stages of conflict development. The first stage, potential opposition or incompatibility, occurs when people work together but pursue different goals. Structural factors like organizational size, work specialization, and reward systems, where one party's gain is another's loss, can also trigger conflict. Personal variables such as individual value systems and personality traits, especially authoritarian or low self-esteem traits, increase the potential for conflict.In the second stage, cognition and personalization, conflict becomes actualized when the conditions negatively affect something important to one or more parties. Awareness of these conditions by the affected parties is necessary for conflict to arise, as perception is a critical element. The third stage, intentions, involves decisions about how to act in response to the conflict. Intentions mediate between

perceptions and emotions and actual behavior, though conflicts often escalate when one party misinterprets the other's intent. Intentions are flexible and may shift during the conflict due to emotional reactions or reconsideration.In the fourth stage, behavior, conflicting parties engage in statements, actions, and reactions based on their intentions. However, behaviors may not always align with original intentions due to miscalculations or lack of skill in execution.Finally, functional outcomes describe the constructive side of conflict. It can enhance decision-making quality, promote creativity, foster interest and curiosity, and serve as a medium for airing problems and releasing tensions. Conflict challenges the status quo, preventing groupthink and encouraging reassessment of goals and responsiveness to change.

Conflicts in Nigerian Educational System

Conflicts in the Nigerian Educational system manifest in various ways ; the main forms of the conflicts are those that take place between government and teachers/lecturers which is most often a demand for improved conditions of service for staff and improvement in the physical conditions for teaching, learning and research. A second category is those that take place between proprietors and teachers as in the case of private educational institutions which is also most often an issue of increase in salary. A third form is the conflict taking place between parents and teachers. Aborisade (2021) and Udo (2019). In other words, conflicts in Nigerian educational system have become very common and frequent in all levels of its education. More often than not, the missing element in each

conflict situation as observed by Okebukola (2013) is in government and the authorities concern in the matter not being proactive enough to keep the striking forces in the communication loop when certain provisions in some agreement cannot be met within the timeline specified.

Implication of Conflicts on Nigerian Educational System

Conflicts within Nigeria's educational system have profound and far-reaching implications, impacting not only the academic calendar but also the overall quality of education. Disruptions caused by teacher strikes, administrative disputes, and student protests create significant interruptions that ripple through the system, leading to delays and a lowering of standards. According to studies by Okorie (2021) and Durodola (2020), these frequent conflicts have directly contributed to a decline in educational quality, making it difficult for students from public institutions to compete with their peers in private schools.

Repeated strikes, such as those led by various unions within the education sector, have been a major contributing factor to what Gotan (2012) described as "educational paralysis." He observed that due to incessant strike actions, instructional materials, as well as teaching, learning, and research equipment in public universities, have become grossly inadequate. The sorry state of public education is further exacerbated by underfunding and neglect, which has led to a shift where private institutions flourish, often at the expense of the public system. The prolonged ASUU strike of 2020-2021 is a prime example of the type of disruption that halts academic progress, leading

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to delays in student graduation (Okorie, 2021). These delays create a cascading effect on the entire education system, resulting in backlogs in admissions and prolonging the time students spend completing their programs.

The persistence of conflicts in the system inevitably results in a deterioration of quality. educational Nigerian public institutions, especially universities, have seen a marked decline in outcomes due to frequent strikes and poor funding. Udo and Udoh (2019) note that schools are poorly equipped, while staff remain demotivated, further contributing to the falling standards. This situation has opened up opportunities for investors in the private education sector, who have shifted from nursery, primary, and secondary schools to establishing tertiary institutions. While many of these private institutions boast state-of-the-art facilities, they often lack the depth in curriculum implementation needed to provide a truly quality education. According to Gotan (2012), graduates from these schools may have access to better facilities but lack the creative and intuitive skills necessary for real-world problem-solving, resulting in graduates who are often perceived as less versatile and more mechanical in their thinking.

Graduates from public institutions, in particular, face even greater challenges. The poor quality of education they receive leaves them struggling to compete with graduates from better-equipped private institutions Udo and Udoh (2019). Their degrees, often seen as holding little value, earn them the label of "educated illiterates," as they are frequently unemployable in a competitive job market. The socio-economic conditions in Nigeria do not favor self-employment for these individuals either, pushing many into unemployment or menial jobs. This situation contributes to a growing army of idle youth who are susceptible to exploitation by unscrupulous politicians, turning them into tools for violence, including thuggery, assassination, or terrorism.

Moreover, the continuous cycle of conflicts and poor working conditions has also contributed to an exodus of skilled educators from Nigeria, a phenomenon known as "brain drain" (Aborisade, 2021). This loss of qualified professionals further diminishes the capacity of Nigerian institutions to deliver quality education, creating a vicious cycle of declining standards.

The economic and social costs of these conflicts are substantial. The frequent closure of institutions leads to wasted resources, while the disruption to students' academic progress contributes to rising youth unemployment and social unrest (Ojelabi, 2019). Ultimately, the ongoing conflicts in Nigeria's educational system undermine the potential of its young people, weakening the nation's future workforce and destabilizing its social fabric.

Summary and Conclusions

Conflict is an inevitable aspect of human interaction and, by extension, an integral part of any educational system. In Nigeria, conflicts within the educational sector have had significant negative consequences, ranging from disruptions in academic activities to a decline in the overall quality of education. Frequent strikes, under funding, and governance issues have weakened the system,

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causing delays in student graduation, deteriorating educational outcomes, and creating gaps between public and private institutions. However, when effectively managed, conflict can act as a catalyst for positive change, such as policy reforms, improved working conditions, and enhanced institutional practices.

For conflict management to be successful in Nigeria's educational institutions, it requires a concerted effort from all stakeholders. including the government, educational administrators, teachers, parents, and students. By fostering open dialogue, addressing the root causes, such as inadequate funding and poor governance and engaging in collaborative problem-solving, stakeholders can mitigate the negative effects of conflict and turn these challenges into opportunities for systemic improvement.

In conclusion, while conflict in the educational system has largely been destructive in Nigeria, it also presents opportunities for growth and reform when handled appropriately. Striking the right balance—where conflict is not too excessive to cause harm nor too minimal to prevent stagnation—can stimulate creativity, improve motivation, and lead to positive changes. Ultimately, managing conflict at an optimal level creates a more dynamic, stable, and productive educational environment that fosters progress for students, educators, and society as a whole.

Recommendations

Since conflict is inevitable in every institution, it may not be possible to eliminate it completely. However, just because conflict exists is no reason to deify them. All conflicts are dysfunctional, and it is of management's major responsibilities to keep conflict intensity as low as humanly possible. A few suggestions will support this case, namely, that educational administrators in the tertiary institutions of Nigerian educational system are encouraged to do the following:

- 1. Increased Funding for Education: Adequate funding is critical for addressing the root causes of many conflicts in the Nigerian educational system, particularly regarding infrastructure and teacher welfare.
- 2. **Improved Communication Channels:** Open communication between government bodies, school administrators, and educators is essential for preventing misunderstandings and resolving conflicts early.
- 3. **Regular Policy Review:** Educational policies should be regularly reviewed and adjusted to meet the changing needs of the sector. This can help to avoid conflicts related to outdated or inadequate policies.
- 4. Capacity Building for Conflict Management: Training for educational administrators on conflict resolution strategies can help in managing conflicts within institutions more effectively.
- **5.Employ Collaboration**: Collaboration should be utilized to find integrative solutions when both parties' concerns are critical. This approach helps merge diverse insights, gain commitment by incorporating concerns into a consensus, and work through emotions that may have hindered relationships.

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Inclusion of Peace Education Scenery into the School's Curriculum: A Strategy for Building Culture of Peace in Nigerian School and Community

By

Dahiru Inuwa Modoji

Department of Education, Faculty of Education, Bayero University, Kano Dahiruim2014@yahoo.com 08030906382/0802076855

Abstract

It is a known fact that implementing peace education scenario is an important step towards building a culture of peace in the school and community, therefore, our efforts should not simply stop inside the classroom. The goal is not just to learn about peace, but to build a *culture* of peace. This paper focuses on the strategies that could help in strengthening the culture of peace in schools and communities for National development. It discusses culture of peace assessment, culture of peace dream, strategies for building a culture of peace in the school and community (i.e. education, Sustainable Economic and Social Development, International Human Rights Day, Equality between men and women, Democratic decision---making at all levels of the school, Participatory communication and the free flow of information, Understanding, tolerance and solidarity), Culture of Peace Beyond School Walls, Materials and Time Constraints, Peace Education in Non-formal and Informal Sectors it is also Adult Education. The paper also highlights areas where peace could be promoted and contributes fully towards national development as suggested recommendations and finally conclusion remarks.

Keywords: Peace, education, strategies, culture, school and community

Introduction

It is a known fact that implementing peace education scenario is an important step towards building a culture of peace in the school and community, therefore, our efforts should not simply stop inside the classroom. The goal is not just to learn about peace, but to build a culture of peace. In order to truly promote a culture of peace, it is a must to go beyond the classroom walls and extend this effort to the entire school, community, and the wider world. Although peace education efforts might start in classroom, but effort should be extended to get the whole school and community involved. According to the United Nations, "The Culture of Peace is a set of values, attitudes, modes of behavior and ways of life that reject violence and prevent conflicts by tackling their root causes to solve problems through dialogue and negotiation among individuals, groups and nations". Building a culture of peace in school means striving to manifest peace education in action and behavior in daily life. A key component of peace education is modeling these values, attitudes, behaviors and ways of life, by turning knowledge and theory into action. When students are exposed to peace education, the way they are engaged in learning should reflect the values that this education imparts (UNESCO, 2010).

For this reason, it is essential to not only teach about peace within the classroom but to also create a culture of peace in the school premises and community at large. This means that all of the values that have been defined throughout this curriculum must be incorporated into activities and interactions throughout the school. Below are various techniques for how to build a culture of peace in your school, and examples of how schools have created a culture of peace effectively, which can help guide you in determining how to implement such a culture in your classroom and in your school. Please note that although this curriculum separates the process for building a culture of peace into stages of assessment, vision, and strategies, in practice these stages do not need to take place in a linear fashion (Hofstadter, 2007). Teaching a culture of peace does not mean teaching students to evade violence by avoiding disagreements and conflict. Rather, teaching a culture of peace is about teaching students self---inquiry, mindfulness, and relationship---building, in spite of disagreements and/or conflict or theme for the school year, you can do projects throughout the year for example, use a hallway at school for a peace education poster gallery, or put on a performance of Theater of the Oppressed. Use your classroom as a demonstration and, the end of the year, propose that the whole school take on this initiative. Through your efforts, you can demonstrate the success of this project, and garner the support of others in your school community. Alternatively, you can start right away by seeking the support of other teachers or administrators. You can share this resource with them, and perhaps form a study circle or discussion group. The sooner you can get support, the faster the culture of peace will grow (Adams,2009).

Culture of Peace Assessment

An important step in creating a culture of peace in the school and community is to assess the current culture of peace. In his book World Peace Through the Town Hall, Adams, D., (2009) explains how culture of peace assessment can be carried out at the local level. He provides a comprehensive framework which can be adapted and applied to school settings. Adams (2009) emphasizes the importance of the assessment process as being community driven and community educating. This means that the assessment process should be led by community members and inclusive of all community members. Through this process all community members will come to a greater understanding about a culture of peace. In a school setting, this means that all members including students, teachers, administrators, non-academic staff, parents should be involved in assessing the current culture and imagining what an ideal culture of peace would look like.

The first step in culture of peace assessment is defining the culture of peace. One should try to answer the question: *What is it that are aiming for?* The earlier section on culture of peace explores several different frameworks that can be used to guide community members towards a culture of peace concept for their setting. Using the UNESCO model for a universally---accepted approach and applicability, Canadian Centers for Teaching Peace have developed a culture of Peace assessment tool that can be used to develop assessment indicators. This tool can be used on its own, or it can be used to develop indicators, which would then be used in another Questionnaire or data collection method.

Culture of Peace Dream

After completing the first step of culture of peace assessment, the community should envision what an ideal culture of peace would look like. Techniques used in Futures Education could be used to guide the community towards a collective vision of a culture of peace. For example, you could hold a single day workshop through which community members would imagine an ideal culture of peace. Questions about each area of a culture of peace could guide the workshop(Wells, 2003);. These are as follows;

i. What would education look like under a culture of peace?

ii. What would our school look like if sustainable development principles (such as those in the Earth Charter) were integrated?

iii. What would our school look like if human rights were respected and promoted across the community?

iv. What would our school look like with perfect gender equality?

v. What would our school look like with participatory communication and a free flow Of information?

vi.What would community-wide communi cation look like in a culture of peace?

vii.What would interpersonal communication look like in a culture of peace?

Strategies for Building a Culture of Peace in the School and community

Once you have established where you are on the culture of peace range and where you want to go, you need to develop strategies for how to progress towards a culture of peace. Here are some suggestions for how to promote a culture of peace in your school (Wells, 2003). A culture of peace can be promoted in many ways, and you should be as creative as possible. One idea for the overall promotion of a culture of peace area, and to focus activities on that area for the particular moment (for example, you could use March as Gender Equality month, in conjunction with International Women's Day).

Education. a Integrate peace education pedagogies in all subject areas.

a. Allow lots of space for student---led activities, dialogue.

b. Ensure that the materials learned are applied to students' lives.

c. Incorporate service learning, experiential learning.

d. Create a balanced, equal relationship between all community members, and all community members value the knowledge of others.

e. Develop a school charter/classroom charter with the students that adheres to the culture Of peace principles, and that everyone can agree to. Sustainable Economic and Social Development

a. Develop a school---wide sustainable

development policy, including, but not limited to, recycling.

b. Celebrate Earth Day (April 22) and World Environment Day (June 5).

c. Start an Environment Club.

d. Integrate the Earth Charter into the curriculum Human Rights

International Human Rights Day (December 10)

a. Ensure that your school is accessible to people of different abilities.

b. Promote free speech in conjunction with participatory information and the free flow of information.

c. Hold workshops/events on diversity, equality, discrimination, and other human rights related themes.

d. Incorporate the Convention on the Rights of the Child (CRC) into the curriculum (see Appendix).

Equality between men and women

a. Celebrate International Women's Day (March 8).

b. Mainstream gender equality in the curriculum.

c. Ensure that girls are receiving equal access to education and resources (for example, if you live in an area where girls' enrollment is low, work towards increasing girls' enrollment).

d Promote gender equality in staff (such as gender parity, equal pay). Democratic participation

Democratic decision-making at all levels of school (i.e., student body, have student representatives on committees).

a. Promote the democratic participation of students in their learning process.

b. Take a field trip to local government offices for students to learn about the democratic process in action in their community.

Participatory communication and the free flow of information

a. Develop varied methods of communication within your school

b. Promote student involvement in communications, such as through a student web site, newsletter, newspaper, radio show, etc.

c. Integrate nonviolent communication training and skill---building for all community members.

Understanding, tolerance and solidarity

a. Integrate multicultural understanding programs as part of the curriculum or extracurricular activities.

b. Promote solidarity by finding a "sister school" in another part of the world (can be done through a pen pal exchange between students, or if computers are accessible, online).

c. Integrate anti---racism education into the curriculum.

Culture of Peace Beyond School Walls

Reports from the United Nations in Wells, (2003). that focus on creating a culture of peace emphasize the importance of placing students together who are typically separated by society. This can be through giving girls and boys equal opportunities or by placing students from groups that are in conflict (example: Israelis and Palestinians) in the same location. The idea is that when students work together within a school setting they will create a peace that will emanate into the larger society. The United Nations recommends that any projects in which students must work together(like group work) can promote a culture of peace. These activities can range from planting trees together or to planning trips, especially to areas that experience conflict (whether that conflict is completely different or incredibly similar to what the students experience in their home community). One example can be seen in a group of youth from Northern Ireland (both Protestant and Catholic youth) who traveled to the Middle East to meet with Arab and Israeli youth and share experiences and solutions to the violence that they see in their lives (GYSFP, 2006).

While building a culture of peace in your school is the first step, it is important that this project or program does not just stop at the school walls, but rather extend to the greater community. Many of the projects listed above included the participation of members of the wider community. Once you have started to build a comprehensive culture of peace program at your school, you can begin to extend this program to the outside community. However, this does not have to be a linear process, and the sooner you can include the wider community, the better. One way to start is to create a Peace Zone (PZ) around the school, perhaps using a one-block or o-block (100-200 meter) radius. A peace zone would be more than a weapons-free zone, but rather a zone

where nonviolence, justice, equality, and environmental sustainability are promoted. The school can also use service learning opportunities to introduce culture of peace principles to the community. For example, the school could host a community event for promoting human rights or environmental sustainability, or students could promote international understanding and solidarity by holding a fundraiser for a marginalized or at risk community. There are many ways that the school can be a catalyst and model for a community culture of peace (Tillman, 2001).

Peace Education in Non-formal and Informal Sectors

According to Hofstadter, (2007). Peace education is not just for the formal education sector. Although this program has focused on peace education for primary and secondary formal school settings, peace education can also happen in the non-formal and informal settings, and this is important for building a community culture of peace, and bringing peace education to all community members. Non-formal education refers to education that explicitly occurs outside the formal school system. For example, this could include computing classes at a local library, language classes at a language center, or music classes at a cultural center. In non-formal education, the educating itself is still explicit, but it takes place outside the realm of state supported schooling. An example of non-formal peace education in your community might be offering a workshop for adults on peace education. Informal

education refers to education that takes place outside of the formal and non-formal sectors, and is education that is neither intentional nor planned. Perhaps the three most common realms of informal education are the family, peers, and the media. It is important not to underestimate the power of the informal sector in education. Educators should always be thinking of ways to engage the informal sector. For example, You could issue a press release to attract the local media to your peace education efforts, and this exposure would in turn educate the local community about peace education. One could also try to partner with a local radio station to interview you and your students about peace education (Hufstader, 2007).

Adult Education

As peace education is intended to be a path for lifelong learning, it is important to consider the role of adult education in building a community culture of peace. While formal education plays an important role in values formation and skill building for peace, children may return to their homes where they witness physical or verbal violence. Whenever possible, the parents of the children should be consulted and Included in the curriculum. There are a few ways this can be done. One way would be to hold workshops, either in the evenings or on the weekends, for parents to develop similar skills to those that their children are being taught. Another way would be to create a peace education newsletter, which would serve as a means to inform the parents, and could also be a form of empowerment for the

students by putting the newsletter design in their hands. You could also start a parents peace education study group that would be parent run. There are many ways that the parents can be included and, ultimately, you should think about different ways that you can engage parents in supporting their children's peace education. What about the other adults in the community who do not have school aged children? Eventually, it would be ideal to include programs that are Available to all community members (UNESCO.2010).

Materials and Time Constraints

Challenges to creating a culture of peace and how to address them. One problem that peace educators encounter is that traditional textbooks or other materials ignore the contributions of peace makers and the ideas of peace. Most history books focus on battles and conflict, not peace. Additionally, school curricula may require teachers to focus on violent parts of human history. This entire curriculum is designed to provide teachers with the resources needed to help address the lack of books and information. With regards to curriculum, teachers must work to be creative in determining how to connect peace to what the students are learning. The advocates for Human Rights have shown great success in connecting their human rights curricula to various State Standards. One of the biggest impediments to all education is students' basic needs such as access to adequate, nutritious food, clean water and basic safety are not met. This can be especially true for peace education

since violence is a common result of poverty, and poverty is often the result of structural violence (see Negative and Positive Peace). When students encounter barriers to fulfilling their basic needs, teachers must work to empower students. Within peace education, teachers can work with students to create change regarding the situations that they face (Wells, 2003).

The Living Values Education Program (LVEP) was started to teach peace to children in refugee camps and it was implemented in a Karen refugee camp. There were concerns expressed that teaching peace to the refugees would encourage them to choose nonviolence, which could endanger their lives. Therefore, peace education in the context of violence was framed with regards to rebuilding the country when the conflict was over. The Living Values Education Program (LVEP) should train teachers to go and teach a culture of peace to members of their camps. The teachers were trained to lead children in reflection activities in a safe environment and to experience peace, love and respect within the classroom. The students also discussed conflict and how it comes about, both from their personal perspectives and International perspectives (Hufstader, 2007).

Conclusion

Ultimately, the goal of peace education should be the transformation of society to a culture of peace, which will require the education and participation of all members of society. By expanding the culture of peace beyond school walls, one can build a movement within the community and beyond to the wider world.

Recommendations

1.Sustainable Economic and Social Development should be promoted by the government agencies at all level

2.Democratic decision making at all levels of the school (i.e., student body, have student representatives on committees) must be strengthened

3.Students' basic needs such as access to adequate, nutritious food, clean water and basic safety are to be met.

4. The Living Values Education Program (LVEP) should be promoted and enough fund should be allocated to it.

5. This entire curriculum should be designed well and authorities should provide teachers with the resources needed and help in addressing the problem of lack of books and information.

6..Traditional textbooks or other materials should not ignore the contributions of peace makers and the ideas of peace

7.Participatory communication and the free flow of information should be promoted among all the stakeholders

8. There should be peace education in non-formal and informal sectors and agencies

9.Educators should always be thinking of ways to engage the informal sector's participations in advocacy and awareness campaign.

10.Curriculum planners should integrate multicultural understanding programs as part of the curriculum or extracurricular activities.

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Effect of Flipped Classroom and Asynchronous Instructional Strategies on the Learning outcomes of Senior Secondary 11 English Language Students in Rivers State

By

Gabriel Chibuzor Job

Dept. of Educational Foundation, Faculty of Education, National Open University, Abuja, Nigeria E-Mail: gjob@noun.edu.ng, <u>Mobile Phone: +234</u>8033397290

Abstract

The paper investigated the effects of two e-learning instructional strategies – Flipped classroom and Asynchronous strategies. The unprecedented dismal academic performances of students in English language from external examinations have necessitated uncountable research works dealing both on the Curriculum and instructional strategies. Quasi experimental method that employed pretest, post-test, control group design was adopted. Two research questions and two hypotheses were formulated, which were all tested at 0.5 level of significance. Multiple choice questions were used to collect data from 246 English language SS2 Students that formed the sample of the study. A reliability coefficient of 0.76 was obtained using the Kuder Richardson formula 20. Analysis of Covariance together with Scheffe and Bonferroni post hoc techniques were used for the data analysis. The findings of the study showed that students taught English Language using asynchronous instructional strategy achieved significantly better results than those taught English Language using flipped classroom and convectional instructional strategies. Also, Students taught English Language using flipped classroom instructional strategy achieved significantly better than those taught using conventional instructional strategies. There existed no significant effect of flipped classroom instructional strategies on students' academic performance based on Gender in Obio/Akpor LGA. Based on the findings, it was recommended that secondary school teachers should be encouraged to adopt e-Learning modes - Asynchronous and Flipped classroom to teach. The Government and relevant authorities should motivate, encourage and reinforce English language teachers to develop, produce and use e-Learning modes and software to supplement their teachings.

Keywords: e-Learning, asynchronous strategy, flipped classroom, and conventional strategy.

Introduction

The digital transformation in all human endeavours is now a reality and has seeped into today's fast growing educational system. This consequently has resulted in archetypal shift in education resulting in a teacher centered learning approach to learners' centered approach. The traditional classroom which mostly provides a face- to- face lectures in the class and doing class assignment at home is no more adequate and no more sustainable but rather it should be augmented by a paradigm learning style considered as a basic technology education that brings technology to the classroom. This shift is basically the concept of 'study at home "and homework at school'. Here the teachers play a key role not only as knowledge providers, but also promoters of learning that encourages students to actively build knowledge. The other aspect of the digital pervasiveness in education is known as the Asynchronous mode of learning, which is typified by learning through pre-recorded videos and such e-learning platforms that are imbued with one way channel of communication.

It is a truism that teaching involves various activities and attempts that are geared towards changing the behaviour of a learner in a specific context. Paul (2006) explained that change could be in attitude, knowledge, idea, skill or

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appreciation. Effective teaching of any subject will not only stimulate students' interest in the subject but also enhance their achievement in an examination. For an efficient and effective service delivery and implementation of all these in the education sector, the educational sector must be able to adapt to the changes that are happening now in the digital age. Hence, this new paradigm shift is expedient in the education sector which will be characterized by the learners as connectors, creators, and constructionists in the context of the production and application of knowledge and innovation. Also, the teachers revered and perceived as the sage before should now only guide from the side, as the learners take the centre stage in their own learning activities.

These learning approaches are very important and relevant to the younger generations' adaptation for effective learning and has made them to be 'digital natives'' and their teachers ''digital immigrants' and has enabled them to adapt and attend to meaningful learning which are very beneficial for their daily lives and career progression. (Morrison, 2014).

It may be necessary therefore, for these to be effective and thrive, the current educational approach within the education sector will utilize the blended learning approach, which is that type of learning where a student receives a combination of traditional face to face instruction in class and are also required to complete activities outside of the class which are facilitated through a range of technological resources. One of such blended learning approaches that has facilitated the 21st century learners as ''digital natives'' is Flipped classroom approach. This approach has helped them to keep abreast with digital technology that can be accessed wherever and whenever as well as to support the students during lessons both in and outside the classroom. (O'Flaherty & Philips, 2015).

The flipped classroom is a new educational approach and teaching method that reverses the traditional learning method and allows the student to study at home -do homework at schools", (Job, 2020). In a flipped classroom, students are exposed to learning materials such as videos, lectures or reading before coming to class, the class time is then utilized for interactive discussions, collaborative activities and problem-solving exercise, (0'Flaherty & Philips, 2015). In other words, in the classroom, the instructor does not focus on teaching the lesson content because the learner can study independently. It is a "child-centered education" and a blended learning approach where technology is fully used and deployed to develop instruction and solve problems in the classroom. The responsibility of the instructor is to explain when the learner does not understand, rather than to teach them the content. It gives the instructor time to guide the learner and help learners to be more creative with a well -rounded learning experience, (Cherntawan, 2013).

It is pertinent to state that these learning strategies change the learning processes in the classroom and more focus are now on the students to apply knowledge and achieve the learning objectives at a higher level. These strategies also give the teachers' limited time to introduce concepts, while they make video lectures, screencasts, or podcasts that teaches the concepts, so that more time is available for activities that are more interesting. In the utilization of these strategies, the facilitations are done by the teachers who develop the teaching materials and give the developed materials to the students to use. These learning materials are primarily designed for students to gain knowledge at the remembering and understanding levels and has been very impactful and valuable assets to them.

Yarbro, (2014) defined the flipped classroom as an instructional approach that is traditionally carried out in the classroom but is completed at home, and that which is traditionally carried out as assignment or homework is now being executed in the class. In other words, it simply portrays that home works are rearranged and rescheduled to take place during the face-toface interaction in the classroom. In a similar view, Brooks, (2014) averred that a flipped classroom refers to a pedagogical model that combines instructional technology and active learning techniques. To the author, flipped classroom involves the use of digital tools to create pre- recorded lectures and the in -class activities is more of participatory, engaging and involvement of other student - centered learning activities. In affirmation, Sweet, (2012) beliefs that the micro –lecture made by the teacher before class activity is a key component to a successful flipped classroom practice.

In the same vein, the Flipped Learning Network (2016) defined flipped classroom as a pedagogical inversion of the traditional class. In this case, the actions that are used in class are now prepared by students previously to classroom, so when the students come into the class, they already know what is the main topic and more important problems that will be under the scope of the topic under discussion. In this scenario, the classroom is used to debate, to do exercises, to perform experimental protocols as well as to further discuss on the main implications of the scientific issues that are related with course subject matter." This approach is very beneficial as direct instruction is transferred from group learning spaces to individual learning spaces, and the resulting group space is being transformed into a dynamic and interactive learning environment in which educators guide the students as they apply the concepts and engage creatively in subject matter and into the learning practice.

Mary, (2016) claims that flipped classroom is an instructional strategy and a type of blended learning that reverses the traditional learning environment by delivering instructional content, which is often online or outside of the classroom. Flipped classroom includes a whole lot of activities, including those that may have been traditionally considered as homework, into the classroom. In a flipped classroom, students watch online lectures, collaborate in online discussions, or carry out research at home and engage in concepts in the classroom with the guidance of a mentor. Subramaniam and Muniandy (2016) stated that in a flipped

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classroom, work is usually done in the class, and the work that is usually done as homework at home is reversed or diverted, with this in place, students read material before coming to class and see videos on topics assigned to them and be involved in the classroom active learning using games, simulations, discussions or experiments with the help of educators.

Bergmann and Sam (2014) defined a flipped classroom or learning as a model of learning where direct instruction is delivered at home through videos made by the teachers or taken from other sources, as well as activities that were previously done as homework in the classroom. They view the flipped classroom as the establishment of problem-based learning inside the classroom by replacing direct instruction with video lessons in order to provide instructional content that can be accessed by students whenever and wherever it is required. In flipped classrooms students watch lesson videos at any computer, from their tablets, smart phones or from different media players at any time as they want. They bring their homework to the classroom and participate actively to learning process. In a similar vein, Hwang (2015) described flipped classroom as the teacher recording activities in the classroom to convey learning, where students watch videos before class and use class time to complete complex concepts, answer questions, and students are encouraged to actively learn and associate what was learnt and taught with daily activities.

As an innovative learning approach, the flipped classroom has four basic elements –

Experiential Engagement; - here the teachers guide the students on how to learn by using a variety of methods, including customized activities, simulation games, interactive media, experiments or art work.

Concept Exploration – here the teachers recommend learning from a variety of media or activities such as video recording media, podcasts, websites or online Chats.

Meaning making - here the learners build knowledge-based skills from self-directed learning by creating blogs, use of test, social networking and discussion boards.

Demonstration and its application - in these elements, the students create their own knowledge in a creative way by creating a project and through the presentation of their work. The primary goal of flipped classroom is to shift the focus from passive learning to active engagement and application of knowledge, (Pahay, 2013).

According to Stake and Horn (2012) flipped classroom is a rotation model and a part of the blended learning, they view rotation model as an instructional program that combines two kinds of learning modalities— the online learning and the other controlled learning activities such as small-group or full-class instruction, group project, individual tutoring and pencil-and paper assignment. In this kind of course, learners revolve on a rigid timetable or at the teachers' responsibility and discretions. The authors opine that the flipping learning is the same as the flipping classroom and is represented by the following diagram on figure 1.

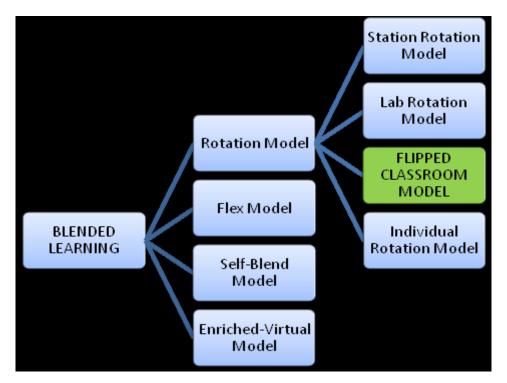


Figure 1. Flipped Classroom Model as a Blended Learning Model

From the figure above we can deduce that the flipped classroom model means a part of rotation model in which an assigned course is alternated on a fixed schedule between face-toface teacher-guided activity (or projects) or to an online transferring of content and instruction of the same subject from a distant place (often the home) after school. The essential mode of content and instruction is online, which differentiates a flipped classroom from students who are simply doing assignment online at night.

On the other hand, asynchronous instruction means learning conducted by the students on their own time or schedule, independently, which could include but are not limited to selfguided instructional modules, pre-recorded lessons and other communication not in real time while flipped classroom is a type of blended learning where students are introduced to content at home and practice working through it at school. Asynchronous instruction could be timebound where by the learner is given a deadline and it could also be at the learner's pace. A side benefit is that teachers can record lectures that emphasize critical ideas, power standards, and even the pace of a given curriculum map. It also has the side benefit of allowing students to pause, rewind, Google terms, rewatch, etc., as well as creating a readymade library for student review, make-up work, etc. The learners never feel the impact of missing a class, and also learn at any pace (their own pace). The learners in this method optimize the personalize and learning experiences as they revisit lessons as needed to improve comprehension and retention. The learners also take advantage of extra time to process, practice, and respond and adapt learning to self-accommodating for a disability. In Nigeria, English language is the major or sole official language in almost all official

contents, including governance, education, and mass media and so on. At the school level, English language plays a dominant role in the delivery of instruction. It is also a compulsory subject that a student must register for in senior school certificate and pass at credit level if such student is to proceed to higher institution. Adegbite (2005) asserts that the mastery of English language holds high hopes for the individual Nigerian learner in their own social advancement, social-political and economic growth of the nation. Therefore, to function effectively as a fully integrated member of the society, the Nigerian learner requires an appreciable degree of competence, which is almost comparable to the native speakers of the language.

The importance of English language as a major medium of communication within and outside Nigeria is not commensurate with the academic achievement of students in the study of this subject as provided by the West African Examination Council chief examiner's report. The public outcry on this dismal performance, particularly, students not gaining entrance to higher institutions for failure in this subject, has led to the quest to investigate the methods of teaching the subject. The twin pervasive elearning methods of flipped classroom and asynchronous instructional strategies have been reported to have helped students in other subjects to gain positive academic achievement. Could these methods also improve the academic achievement of secondary school students in English language in Rivers State? This is the main thrust of this research.

Research Design and methods

The study adopted the quasi experimental of pre-test post-test and control group design. The target population for the study consisted 1367 SS2 students of all the co-educational public secondary schools in Obio/Akpor Local Government Area of Rivers State for the 2022/2023 academic session. A sample of two hundred and forty-six (246) Senior Secondary English Language students from six (6) classes in six (6) secondary schools in Oio/Akpor Local Government Area of Rivers State was selected for the study. Stratified random sampling technique based on location was used in selecting 3 schools from urban and 3 from rural schools. The selected schools, two were assigned as experimental groups in urban and two were also assign experimental in rural. The remaining 2 selected schools, one from urban and the other from rural were assigned control group. The instruments used for data collection was English Language Performance Test. This was a researcher-made instrument consisting of two sections, sections A and B, section A was on demographic information of the students while section B was 40 multiple choices, items with four (4) options A, B, C, and D with only one correct answer.

The Instrument was face and content validated by two experienced English Language teachers and an expert in test measurement. While the reliability of the instrument was trial tested on a group of thirty (30) SS2 students from another school, who were not selected for the main study but have the same characteristics of the students intended to be used for the study. The instrument was administered once and the Kuder Richardson formula 20 was used to calculate the reliability. A reliability coefficient of 0.76 was obtained. An ethical compliance and introductory letter were presented to the principals of the selected schools for permission to use their schools for the research study by the researcher. The English Language teachers of the various schools were used as research assistants in the research study. The experimental groups were taught using asynchronous instructional strategy and flipped classroom instructional strategy while the control group was taught using convectional strategy in their intact classes for the period of three (3) weeks. After the treatment, post-test was administered to the experimental and control groups for one hour to test their knowledge on the concept taught. The data collected were analyzed using mean, standard deviation for research questions and Analysis of Covariance (ANCOVA) to test the research hypothesis at 0.05 while a Mean and standard deviation was used to answer the research questions raised.

Research Question 1.

What is the effect of asynchronous, flipped classroom instructional strategies on student's academic performance in English language in SS2 secondary schools in Obio/Akpor Local Government Aea of Rivers State.

Table1.

Mean, Standard Deviation and Mean Gain Scores of Students' Posttest Scores Taught English language
with Asynchronous, Flipped Classroom and Conventional Instructional Strategies with Pretest Scores
as Covariate.

Instructional Strategies	N Prettest Scores		Scores	Posttest S	Mean Gan	
		Ż	SD	Ż	SD	Oun
Asynchronous	83	13.95	3.62	33.93	3.6	19.98
Flipped Classroom	90	13.64	3.42	31.46	4.96	17.82
Convectional	73	13.21	3.30	26.77	5.12	13.56

Results on Table1 shows that the mean gain scores of students taught English Language using asynchronous, flipped classroom and Conventional instructional strategies are 19.98, 17.82 and 13.56 respectively. This result indicates that students taught English Language using asynchronous instructional strategy had the highest mean gain score, followed by those taught using flipped classroom instructional strategy; while those taught using Conventional instructional strategy had the least mean gain score.

Research Question Two

What is the effect of asynchronous instructional strategies on academic performance of Male and Female English language students in secondary school Obio/ Akpor Local Government area of Rivers State.?

Table 2:

Mean, Standard Deviation and Mean Gain Scores of Male and Female Students' Posttest Scores Taught
English Language Concepts Using Asynchronous Instructional Strategies with Pretest Scores as
Covariate.

Location	Ν	Posttest Scores		Pretest Sc	Mean Gan	
		Ż	SD	Ż	SD	Cui
Male	35	32.69	3.02	14.17	4.28	18.52
Female	48	34.83	2.79	13.79	3.09	21.04

Results on Table 2 shows that the mean gain scores of male and female students taught English Language using asynchronous instructional strategies are 18.52 and 21.04 respectively. This result indicates that female students taught English Language using asynchronous instructional strategy had a higher mean gain score when compared to their male counterparts.

H01.

There is no significant effect of asynchro-nous, flipped classroom instructional strategies on student's academic performance in English language in secondary schools in Obio/Akpor local government area of Rivers State.

Table 3:

Analysis of Covariance (ANCOVA) of Students' Posttest Scores Classified by Instructional Strategies with Pretest as Covariate

Source of Varia	ation	Sum of Squares	Df	Mean Square	F	Sig. at P<.05
Covariates	Pretest	587.19	1	587.19	32.07	.00
Main Effects	Strategies	1865.65	2	932.83	50.94	.00
Residual		4431.62	242	18.31		
Total		6884.46	245	28.10		

In Table 3, the calculated Probability value (P-value) .00 of the main effects (strategies) is less than the significance level (.05). Therefore, the null hypothesis is rejected. This implies that at P < .05, there is a significant effect of asynchronous, flipped classroom instructional strategies on student's academic performance in

English language in secondary schools in Obio/Akpor local government of Rivers State. In order to determine the direction of significance, the Least Square Difference (LSD) post hoc pairwise comparison test was done and the results are summarized in Table 4.

Table 4:

LSD Post hoc Pairwise Comparison Test of Students' Posttest Scores Classified by Instructional Strategies with Pretest Scores as Covariate

(I) Strategies	(J) Strategies	Mean Difference (I-J)	Std. Error	Sign at P < .05
flipped classroom	asynchronous	-2.36*	.65	.00
	conventional method	4.52^{*}	.68	.00
asynchronous	flipped classroom	2.36^{*}	.65	.00
	conventional method	6.88^{*}	.69	.00
conventional method	flipped classroom	-4.52*	.68	.00
	asynchronous	-6.88*	.69	.00

Table 4 shows a mean difference (2.36) between students taught English Language using asynchronous and flipped classroom instructional strategies, 6.88 between students taught English Language using asynchronous and conventional instructional strategies and 4.52 between students taught English Language using flipped classroom and conventional instructional strategies. The levels of significance displayed on Table 4 indicated that students taught English Language using asynchronous instructional strategy achieved significantly better grades than those taught

English Language using flipped classroom and convectional instructional strategies. Students taught English Language using flipped classroom instructional strategy achieved significantly better than those taught English Language using conventional instructional strategies.

H02

There is no significant effect of flipped classroom instructional strategies on academic performance of male and female English language students in secondary school Obio/Akpor LGA.

Table 5:

Analysis of Covariance (ANCOVA) of Students' Posttest Scores Classified by Gender with Pretest as Covariate

Source of Variation		Sum of Squares	Df	Mean Square	F	Sig. at P<.05
Covariates	Posttest	226.08	1	226.08	10.01	.00
Main Effects	Gender	1.12	1	1.12	0.05	.82
Residual		1965.12	87	22.59		
Total		2192.32	89	24.63		

In Table 5, the calculated Probability value (P-value) .82 of the main effects (gender) is greater than the significance level (.05). Therefore, the null hypothesis is retained. This implies that at

P < .05, there is no significant effect of flipped classroom instructional strategies on academic performance of male and female English language students in secondary school Obio/Akpor LGA.

Findings of this study are as follows:

- Students taught English Language using asynchronous instructional strategy achieved significantly better than those taught English Language using flipped classroom and convectional instructional strategies.
- Students taught English Language using flipped classroom instructional strategy achieved significantly better than those taught English Language using conventional instructional strategies.
- There exists significant effect of asynchronous instructional strategies on academic performance of Male and Female English language students in secondary schools in Obio/Akpor LGA.
- 4. There existed no significant effect of flipped classroom instructional strategies on academic performance of male and female English language students in secondary schools in Obio/ Akpor.

Discussion

The findings from the results on the difference in mean academic performance of students taught asynchronous, flipped classroom instructional strategies on student's academic performance in English language in secondary schools in Obio/Akpor LGA indicated a significant difference. Students taught English Language using asynchronous instructional strategy achieved significantly better than those taught English Language using flipped classroom and convectional instructional strategies. Also, students taught English

Language using flipped classroom instructional strategy achieved significantly better than those taught English Language using conventional instructional strategies.

The findings could be attributed to asynchronous as a student-centered approach that emphasizes the importance of peer-to-peer interactions. The strategy gives students the opportunity to access the course and its instructional materials at any time they choose and from any location with an Internet connection. Asynchronous learning environments provide a "high degree of interactivity" between participants who are separated both geographically and temporally and afford students many of the social benefits of face-to-face interaction. The findings could also be attributed to the flipped classroom provision of blended course using digital resources to supplement learning that are not meant to replace in-person instruction.

The findings of the study are in agreement with that of Udofia and Tommy (2021), who found that students who learnt through the asynchronous instructional strategy were better motivated and scored higher in Advanced Educational Research than students who learnt through lecture method. The findings are also in line with Shana and Alwaely (2021), who revealed that the students were highly satisfied with the flipped classroom. This confirmed the difference between the control and experimental groups.

The findings from the results on the difference between the mean achievement scores of male and female students taught asynchronous instructional strategies indicated a significant difference. The findings from the results on the difference between the mean achievement scores of male and female students taught using flipped classroom instructional strategies indicated a non-significant different. The findings of the study are contrary to that of Oguguo, Ocheni and Adebayo (2021), who found that gender of students significantly influenced their academic achievement in both synchronous and asynchronous learning in favour of the male students. The findings of the study are also contrary to that of Ikwuka and Okoye (2021) who examined the differential effects of Flipped Classroom and gender in Nigerian Federal University and found that both male and female students in the experimental group improved in their achievement in Basic methodology, however, male students achieved slightly better than the female students after the treatment, prior success and their computer and web experience were controlled.

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Humanitarian Aids of Non-Governmental Organization; A panacea for Rehabilitation of Internally Displaced Persons in Northern Nigeria

By Harmony Idegwu Department of Adult Education University of Lagos ORCID ID: <u>https://orcid.org/</u> 0009-0001-8167-284x Email: <u>harmonyidegwu68@gmail.com</u> +2348038996468

Abstract

The displacement of persons due to armed conflicts, natural disasters, and communal clashes in Nigeria has given rise to a staggering number of internally displaced persons (IDPs), with over 3.2 million IDPs as of December 2022, primarily due to the Boko Haram insurgency in the northeastern region. Addressing the multifaceted needs of this vulnerable population poses significant challenges for the Nigerian government, particularly in areas ravaged by violence and instability. This study investigates the critical role played by non-governmental organizations (NGOs) in providing humanitarian aid and facilitating the rehabilitation of IDPs in Nigeria, specifically in Benue State. Utilizing quantitative method, the research examines the impact of relief materials and empowerment programs provided by NGOs on the rehabilitation and transformation of lives of IDPs living in camps. Regression analysis revealed a significant influence of relief aid from NGOs on the rehabilitation of IDPs (R=.384, R2=.147, F(1,387)=3.650, p<.05), accounting for 14.7% of the variance. However, the empowerment programs did not significantly transform the lives of IDPs (R=.085, R2=.007, F(1,387)=.755, p>.05), contributing only 0.7% of the variance. In-depth interviews with stakeholders, including NGO officials, government representatives, camp coordinators, and affected community members, corroborated the quantitative findings. Participants affirmed the positive impact of relief materials on the well-being, living conditions, and rehabilitation of IDPs, highlighting the critical role of NGOs in addressing immediate needs and fostering community resilience. The study underscores the invaluable contributions of NGOs in providing humanitarian aid and supporting the rehabilitation of IDPs in Nigeria, particularly in regions affected by conflict and require further enhancement to effectively transform the lives of displaced populations. The findings emphasize the importance of collaborative efforts between NGOs, governments, and local communities in creating sustainable solutions for the reintegration and empowerment of IDPs.

Keywords: Humanitarian aids, non-governmental organisations, rehabilitation, internally displaced persons, Northern Nigeria

Introduction

Millions worldwide are forced to flee their homes due to natural disasters, armed conflicts, and humanitarian crises, leading to over 59.1 million internally displaced persons (IDPs) as of 2021 (UNHCR, 2022). Humanitarian aid is guided by four key principles: humanity, independence, impartiality. neutrality, and Different organizations prioritize these principles differently; for example, the ICRC and Médecins Sans Frontières focus on medical care, while

others address education, sanitation, and food security.

In Nigeria, there are over 3.2 million IDPs, primarily due to the Boko Haram insurgency. NGOs play a critical role in providing immediate assistance and facilitating rehabilitation for IDPs, especially in resource-limited areas. However, while humanitarian efforts address crisis symptoms, sustainable peace building targets underlying causes (Matt, 2017). There is a need for long-term strategies that adhere to "do no harm" principles. This study focuses on 23 camps housing 211,905 IDPs in Benue State, Nigeria, where over 120 NGOs operate. It aims to assess the effectiveness of humanitarian aid in addressing critical issues faced by IDPs. Despite challenges, humanitarian action can enhance peace building, although integration between these two fields remains limited (Matt, 2017).

Research Question

- 1. Has the relief provided by NGOs significantly led to the rehabilitation of IDPs?
- Have the empowerment programs of NGOs significantly transformed the lives of IDPs living in camps in Benue State?

Hypotheses

 H_i 1: The relief provided by NGOs has significantly led to the rehabilitation of IDPs

 H_i 2:The empowerment programmes of NGOs have not significantly transformed the lives of IDPs living in camps in Benue state

Review of Related Literature

Non-Governmental Organisations Intervention in IDP Camps

Non-Governmental Organizations (NGOs) are independent, typically non-profit entities focused on humanitarian or social initiatives. They gained prominence with the mention in Article 71 of the UN Charter in 1945. While there is no universal definition, NGOs are generally seen as non-profit and independent of government influence, even if they receive government funding. The UN describes NGOs as voluntary citizen groups addressing public good issues (Leverty, 2008). The term "NGO" is often used interchangeably with "Civil Society Organization" (CSO), encompassing various citizen-founded associations. Funding primarily comes from donations, with some NGOs relying on volunteers. The global NGO landscape includes an estimated 3.7 million organizations, with notable numbers in Russia, India, and Nigeria.

NGOs are categorized by the World Bank into Operational and Advocacy types. They typically serve three main roles: as implementers providing aid, as catalysts for change, and as partners collaborating to address human needs (Folger, 2021). Methods vary widely; for example, Oxfam focuses on poverty alleviation, while others like FFDA document human rights violations.

Operational NGOs aim for direct, small-scale change through project implementation, often seeking grants and fundraising. They tackle a range of issues, from emergency relief to environmental concerns, operating at community, national, or international levels (Baur & Schmitz, 2012; Davies, 2014). Their defining feature is direct involvement in project implementation.

Empowerment Programmes and the Effects on Lives of Internally Displaced Persons

In Nigeria, various factors have led to significant internal displacement, with around 300,000 individuals seeking refuge in neighboring countries (Lenshie, 2016). The Boko Haram insurgency is a primary driver of this displacement, particularly in the northern region (Ejiofor, Oni & Sejoro, 2017). IDPs in the Bakassi camp of Cross River State face severe hardships, including food and water scarcity, substandard housing, limited medical facilities, inadequate education, and incidents of sexual abuse and domestic violence. An ethnographic study by Akuto (2017) highlighted these challenges, which greatly affect their quality of life, including trauma, hunger, malnutrition, and rights infringements.

Abbas (2017) underscores the critical issue of inadequate and unsafe shelter for IDPs (IDMC, 2014). This complex situation reveals the urgent need for comprehensive intervention and support across multiple sectors in Nigeria.

Manner of NGOs Intervention in IDP Camps Forms of Empowerment for Internally Displaced Persons

There are various forms of empowerment programmes for IDPs, a number of them are discussed in this review, which include but not limited to the following:

(i) Health

The adage "health is wealth" highlights the importance of well-being, yet many struggle to attain it, especially Internally Displaced Persons (IDPs) who face various health challenges before and during their displacement. The inability to access primary, secondary, and tertiary healthcare raises significant concerns.

This issue is crucial, as it falls under governmental responsibility outlined in the United Nations' 'Guiding Principles on Internal Displacement.' Principle 19 states that all injured, sick, or disabled IDPs should receive necessary medical care promptly and without discrimination, emphasizing women's health needs and the prevention of contagious diseases (Samantha & Stuart, 2004).

However, many IDPs remain unaware of these principles and lack access to healthcare due to challenging circumstances. A study on IDPs in Colombia identified health risks such as malnutrition, respiratory illnesses, and sexually transmitted infections, noting that only about half of the displaced population had access to national social security. A significant barrier to healthcare was the lack of identity cards, which prevented health institutions from providing free assistance. At the time, Colombia had one of the largest IDP populations globally, with children making up 50% of this group.

Empowerment Programmes and the Effects on Lives of Internally Displaced Persons in Nigeria

Nigeria has experienced significant internal displacement due to various factors, particularly the Boko Haram insurgency, which has led to an increase in internally displaced persons (IDPs), especially in the northern region (Lenshie, 2016; Ejiofor, Oni & Sejoro, 2017).

IDPs in the Bakassi camp of Cross River State face severe challenges, including food and water scarcity, substandard housing, inadequate medical facilities, and limited education. An ethnographic study by Akuto (2017) highlighted the impact of these hardships on their quality of life. These challenges result in trauma, hunger, acute malnutrition, sexually transmitted diseases, and rights infringements. Many IDPs struggle with poor shelter, waste management, lack of electricity, and limited access to clean water. Abbas (2021) points out that inadequate and safe shelter is a critical concern (IDMC, 2020). Overall, the complex and dire situations of IDPs in Nigeria underscore the urgent need for multisectoral intervention and support.

Methodology

This research utilized a cross-sectional mixedmethod survey design, incorporating both quantitative and qualitative approaches. A crosssectional mixed-method involves design collecting and analyzing data from participants at a specific point in time across various dimensions. This approach is effective for describing the current status of phenomena and exploring relationships among variables (Shindi, 2017). For this study, data were collected from Internally Displaced Persons (IDPs), camp coordinators, and NGO officials within a brief period to gather insights into their current perceptions regarding the impact of NGO interventions.

Study Population and Sampling

The study's target population comprised three distinct groups:

- Internally Displaced Persons (IDPs): All IDPs residing in camps within Benue State.
- Camp Coordinators: Individuals responsible for managing IDP camps in Benue State.

• NGO Officials: Representatives from NGOs operating within Benue State involved in humanitarian aid and rehabilitation efforts.

The research was conducted across 23 IDP camps in Benue State, which collectively house a total of 211,905 IDPs. Additionally, over 120 NGOs operating in the region, each with at least five officials, were included in the study. The sample size was determined using the Glenn formula, resulting in a targeted sample of 374 respondents, comprising 180 males and 194 females.

Data Collection Methods

The study employed a mixed-method approach to data collection, utilizing both quantitative and qualitative methodologies:

Quantitative Data: Structured question-naires were administered to IDPs, camp coordinators, and NGO officials to collect quantitative data. The questionnaires included closed-ended questions designed to capture demographic information, perceptions of NGO interventions, and the perceived effectiveness of these interventions in the rehabilitation of IDPs.

Qualitative Data: In-depth interviews and focus group discussions (FGDs) were conducted with a subset of the target population, including camp coordinators and NGO officials. These qualitative methods provided deeper insights into experiences and perceptions of the the participants, allowing for a richer understanding of the challenges faced in IDP camps and the role of NGOs.

Data Analysis

Quantitative data were analyzed using statistical methods, including descriptive statistics and inferential analysis, to identify patterns and relationships among the variables. Statistical software, such as SPSS, was used to conduct these analyses, ensuring the accuracy and reliability of the results.

Qualitative data were examined through thematic analysis, which involved coding the data to identify recurring themes and patterns. This analysis provided a nuanced understanding of the experiences of IDPs and the impact of NGO interventions, offering context to the quantitative findings.

Research Design Rationale

The cross-sectional nature of this study provided a snapshot of the immediate circumstances and perceptions of IDPs, camp coordinators, and NGO officials in Benue State. By combining quantitative and qualitative elements, the research aimed to comprehensively examine the current situation of IDPs and assess the perceived effectiveness of NGO interventions. This methodology facilitated the gathering of diverse data from multiple perspectives, enhancing understanding of the impact of NGO efforts on the IDP population. Ultimately, the study aimed to evaluate the effectiveness of humanitarian aid provided by NGOs in rehabilitating Internally Displaced Persons in Northern Nigeria.

Result

Hypothesis 1: The relief provided by NGOs has significantly led to the rehabilitation of IDPs

Summary of simple linear regression showing influence of relief provided by NGOs on the rehabilitation of IDPs living in camps in Benue State

DV	Predictors	K	R 2	df	F	P	t	р
							β	
Rehabilitation of IDPs	Constant	.384	.147	1,387	3.650	.003	9.905	.003

The result in Table 22 shows that there was a significant influence of relief provided by NGOs on the rehabilitation of IDPs at [R=.384, R²=.147, F(1,387)=3.650, p<.05]. The result also revealed that, relief provided by NGOs accounted for 14.7% of the total variance observed in the rehabilitation of the IDPs and based on this

finding, hypothesis one was rejected at 5% significance level. Hence, the relief provided by NGOs has significantly led to the rehabilitation of IDPs.

Hypothesis 2: The empowerment programmes of NGOs have not significantly transformed the lives of IDPs living in camps in Benue state

DV	Predictors	R	R2	df	F	Р	β	t	р
Transforming lives of IDPs	Constant	.085	.007	1,387	.755	.202		5.100	.202

Summary of simple linear regression showing influence of the empowerment programmes of NGOs in transforming the lives of IDPs living in camps in Benue State.

The results show that, the empowerment programmes of NGOs did not significantly transform the lives of IDPs living in camps in Benue State [R=.085, R²=.007, F (1,387)=.755, p>.05]. The result also revealed that the empowerment programmes of NGOs accounted only for a negligible .07% of the total variance observed in transforming the lives of the IDPs and based on this finding, hypothesis three was accepted. Hence, the empowerment programmes of NGOs have not significantly transformed the lives of IDPs living in camps in Benue State.

Qualitative result

The qualitative study highlights the significant impact of empowerment programs for Internally Displaced Persons (IDPs) in Benue State, as emphasized by both NGO representatives and beneficiaries. These programs have fostered skill development, education, and community engagement.

Beneficiaries reported that skills training in areas such as tailoring, carpentry, and agriculture, along with entrepreneurship and financial literacy, has enhanced their economic prospects and fostered self-sufficiency. Education initiatives, including literacy programs and schooling for children, have been transformative, breaking the cycle of poverty and providing hope for a better future.

The study also underscores the role of community engagement initiatives facilitated by NGOs. These programs have rebuilt social cohesion among IDPs, promoting a sense of belonging and collective identity, which enhances psychological well-being and encourages collaborative the community.

Discussion of findings

This study examines the impact of NGO interventions on Internally Displaced Persons (IDPs) in Benue State, Nigeria, revealing a mixed reality: while NGO relief efforts have significantly contributed to rehabilitation, empowerment programs have not notably transformed IDP lives. The findings indicate that NGO relief efforts have played a critical role in addressing immediate needs such as food, shelter, and healthcare, aligning with existing literature on the importance of humanitarian aid during crises (Ferris, 2011; Heale, 2016). However, these relief efforts alone are insufficient for longterm recovery, which requires restoring livelihoods and addressing the root causes of displacement (Crisp, 2001). Conversely, the study highlights that empowerment programs have failed to create meaningful change,

reflecting critiques that empowerment is often superficially addressed in development discourse (Cornwall & Brock, 2005). These programs may not be well-adapted to the realities faced by IDPs, where opportunities for engagement are limited (Hora et al., 2017). The limited success of empowerment initiatives points to broader systemic issues, supporting claims that a disconnect exists between short-term relief and long-term development goals (Betts et al., 2017). The study suggests that redesigning these programs to align with IDPs' needs and incorporating participatory approaches 1997) could enhance (Chambers, their effectiveness. Qualitative findings reveal that while empowerment programs have improved skills, education, and community engagement, fostering self-sufficiency and resilience, further efforts are needed to ensure sustainable impact for IDPs in Benue State.

Conclusion

Non-Governmental Organizations (NGOs) in Benue State are making significant efforts to address the needs of Internally Displaced Persons (IDPs), as government efforts alone are insufficient. The study highlights the necessity for NGOs and other organizations to enhance their initiatives by providing relief materials, organizing vocational training, promoting peace talks, and offering therapeutic support. While NGOs have made a considerable impact on IDPs' lives, a collective effort from individuals, communities, and stakeholders is essential for effective rehabilitation and empowerment. This collaboration is vital for restoring hope and confidence among IDPs, paving the way for a brighter future.

Recommendations

- NGOs should enhance the design and 1 implementation of empowerment programs to better address the specific needs and challenges of IDPs in Benue State. This could involve adopting a more participatory approach, where IDPs are actively involved in shaping the programs. By incorporating local knowledge and priorities, these initiatives can be more effective in fostering sustainable livelihoods and social integration. Additionally, empowerment programs should focus on creating economic opportunities that are viable within the camp setting, such as vocational training tailored to the local economy and the development of micro-enterprises that can operate within or outside the camps.
- To ensure a smoother transition from immediate 2. relief to long-term development, NGOs should work towards better aligning their relief efforts with broader development objectives. This could include integrating livelihood restoration activities into relief programs from the outset, ensuring that as basic needs are met, there are parallel efforts to rebuild and sustain livelihoods. NGOs could also collaborate with government agencies and other stakeholders to create a more cohesive and comprehensive support system for IDPs, addressing not only immediate needs but also the underlying causes of displacement and the barriers to long-term recovery.

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Social Media Usage and Learning of Civic Education Concepts in Public Secondary Schools in Epe Local Government

By

Latifat Apeke Saka¹ and Zabur Olayiwola Soluade²

¹Department of Sociological Studies, Lagos State University of Education, Otto-Ijaniki ²Department of Sociological Studies, Tai Solarin University of Education, Ogun State **Corresponding Author**: sakala@lasued.edu.ng 08038206078

Abstract

The study assesses the social media usage and learning of civic education concepts in public secondary schools in Epe Local government area of Lagos State. The objectives were to examine the use of social media to enhance student knowledge of Civic Education content, find out mostly used social media platforms; the extent to which social media promote student attitudes towards Civic Education and examine student usage of social media in leaning Civic Education based on gender. Descriptive survey design was adopted for the study. The population comprised all public senior secondary school students in Epe local government area of Lagos State. The sample size was made up of 500 senior secondary school two students in Epe, Lagos State. A Simple random sampling technique was used in selecting the respondents. A self-structured questionnaire titled: "Social Media and civic Education Questionnaire" (SMCEQ) with a reliability level of 0.89 was used for data collection. Mean and standard deviation were used to analyze the data for the study. The findings showed that social media usage enhances student's knowledge of Civic education contents and no significant difference between males and females was found during the usage of social media by students. It is recommended that students should have more access to the usage of social media and potentials of platform such as Twitter and Skype should be emphasised for students for the learning of civic education issues.

Keywords: Social media, civic education, public secondary school, concept

Introduction

Social Studies as a school subject is structured toward an integrated approach to promote and sustain moral values in society. The strength of social studies as a school discipline lies in its ability to enhance the acquisition of knowledge, skills, attitude and values that are necessary for the development of effective citizens (Amos et al., 2015; Soluade et al., 2023). Social studies is one of the core subjects in junior secondary schools that teaches cultural values that encourage co-existence, tolerance and mutual understanding. In 2007 Civic education was introduced into the school curriculum to promote the teaching of individual rights, duties and responsibilities (Sofadekan, 2017). About fifty (50) out of fifty-six (56) themes of Civic education in primary school up to senior secondary school Civic Education curriculum were drawn from Social Studies contents. Considering this, Nigerian policy recognizes the importance of Social Studies and Civic education, making the two core subjects in Nigerian primary and secondary schools with goal of developing in the citizens essential knowledge, skills and values necessary to become a good citizen (Sam, 2017).

Civic Education plays a significant role in the development of a nation. This is because the

development of a nation hinges on good and effective citizenship. Civic education can also teach citizens acceptable values, dispositions, habits of tolerance, how to premeditated, even when they have political disparities (Bello, 2021). Civic education as a subject helps the nation to produce an informed, effective, and responsible citizenry for the development of democracy needs to be taught with teaching approaches that allow students to work freely and with other students using tools such as social media to achieve the educational goal (Sofadekan, 2017). The prevalence of low level of civic consciousness calls for the introduction of civic education to serve as an avenue of preparing Nigerian citizens to participate in democratic processes and nation building. Social media is a mobile and web-based internet services that create a highly interactive platform for people to interact with others, radically enhanced the public access to health (Franki, 2018; Malik et al. 2022). Social media encourage the creation, exchange and sharing of information through texts, images and symbols by its users (Frankie, 2018). Student overtime has used social media to pass time, connect with others and enhance their academic performance (Atomata et al., 2024). The introduction of social media has changed the student perspective and become an integral part of students' daily lives. It has bridged the communication gap of many users as it helps to interact regularly (Frankie, 2018). Scalvini, (2024) stress that social media have helped to promote the public, organization and business

interest of users and keep people updated on the events going on in every part of the world. Social media have also helped in strengthen communication and connectivity among the citizens as well as promote social awareness, activism and advocacy for better society by the youth. However, social media are not without shortcomings, social media platforms have led to distraction for students and adults; waste time and reduced family inter personal-relationships, encourages negative impacts on academic performance of students. bullving and misspelling of words (Abraham, 2020; Frankie, 2018; Sumadevi, 2024).

The recent Covid-19 experience in all parts of the world has changed the teaching strategies available to teachers and promoted the importance of social media in aiding and enhancing students learning experience. In Nigeria, the classroom teaching and learning process has concentrated mostly on the conventional educational strategies of lecturing technique which have been part of the nation's educational system since the introduction of formal education. Although the studies of Dilek and Burhanettin (2018) also found the strength of innovative strategies in promoting effective teaching and learning, and enhances academic achievement of the student. The demands for teaching and learning to go on outside the four walls of the classroom and the new technological innovation introduced by the emerging knowledge have led to the acceptance of social media usage by the teachers and students to

enhance teaching and learning processes. The advent of the social media has broken the limitations associated with the conventional learning processes which are teacher-based learning strategies with little responsibility allocated to the students and confined mainly to the classroom (Aniefiok & Ojo, 2016).

Frankie (2018) examined the impact of social media on Ghanaian high school students. Findings showed that social media have positive impact on the academic and social life of the students that have access to social media. Soluade (2018) examined the effect of whatsApp application on the learning outcomes of preservice social studies teachers in civic education and revealed that WhatsApp application contributed more significantly than conventional methods in enhancing the learning outcome of students in civic education. Oguguo et al. (2020) examined modern online tools to enhance students' secondary school academic performance. The result showed that senior secondary school students use social media to make new friends, chat with friends, upload photos and videos, and research their assignments and other educational materials. Intyaswati et al. (2021) examined social media as an information source of political learning in online education and revealed that social media enhances the knowledge of students on political issues.

This study assessed social media usage and learning of civic education concepts in public secondary school in Epe Lagos state, which have implications for digital usage. Social media platforms in recent times have been one of the innovative media to promote teaching and learning. The recent experience of the world in terms of Covid-19 pandemic has made the usage of social media in the educational sector a necessity to bridge the gap between the classroom interaction and online educational activities. The importance of social media in teaching and learning cannot be over emphasised. This study therefore assessed social media usage and learning of civic education concepts in public secondary schools in Epe local government area of Lagos state.

Objectives of the Study

The main objective of the study is to find out the extent and how students use social media to enhance their knowledge and attitude to Civic Education. The other objectives of study are to

- Examine the use of social media to enhance student knowledge of Civic Education contents.
- ii. Find out which social media are mostly used by the students enhance their knowledge
- iii. Find out the extent to which social media promote their attitude towards Civic Education
- iv. Examine student usage of social media in leaning Civic Education based on gender.

Research Questions

The following research questions guide the study.

- How has the usage of social media by students enhanced their knowledge of Civic Education contents?
- Which social media are mostly used by students to enhance their knowledge of Civic Education?
- iii. To what extent do social media promote students' attitude towards Civic Education?
- iv. Is there any difference between male and female usage of social media to learn civic education?

Methodology

This study adopted a descriptive survey design. This design helps to get the views of the students on usage of social media to enhance their knowledge of civic education. The target population of this study comprised all senior secondary school students in Epe Local Government Area of Lagos state. Five hundred (500) senior secondary school students in Epe local government area of Lagos state participated in the questionnaire administration using simple sampling techniques to select the school and students used for the study.

A self-structured questionnaire tagged "Social Media Usage and Students Learning Outcome and Civic Education Questionnaire" (SMUSLOCEQ) was used to obtain information from the respondents. The questionnaire was divided into four (4) sections. Section A was designed to obtain information on the demographic characteristics of the respondents such as gender, religion and age-range, and sections B, C and D focused on items relating to the research questions that were raised to guide the study. Section B comprised of nine items on extent to which the use of social media help to enhance students civic education knowledge, and it based on five likert scale of always, often, sometimes, rarely and never. Section C comprised seven items on the social media platform mostly used by the students to enhance their civic education knowledge, while section D with seven (7) items was based on the extent to which social media facilitate interest in civic education. The instrument was based on four likert scales of Great Extent (4), Highly Extent (3), Moderately Extent (2), and Low Extent (1). The content and face validity of the questionnaire were established by presenting a copy of the draft questionnaire to two experts in the field of testing and measurement for further scrutiny and modification. This was to ascertain the suitability of the instrument in terms of language, presentation, clarity, and applicability. Based on their comments, the necessary modifications were made. Also, a field trial of the instruments was carried out at another institution outside the study area. A test re-test reliability method was used to determine the reliability coefficient of the instrument. The data generated was correlated using Pearson Product Moment Correlation with a view to ascertaining whether the instrument is reliable or not. The reliability coefficient of the instrument yielded 0.89. Descriptive statistics of

mean and standard deviation were used to analyze the data obtained from the field work.

Research question 1: How has the usage of social media by the students enhanced their knowledge of Civic Education contents?

Findings

Table 1

Item	2	Mean	SD
1.	Nigeria culture	3.52	0.789
2.	Family life	3.28	1.179
3.	Nationalism and patriotism	3.26	0.876
4.	Civic education among the students	3.26	1.157
5.	Cordial relationship among different	3.18	1.063
	ethnic group in Nigeria		
6.	Current issues on Nigeria politics	3.16	1.095
7.	Quick information on crime activities 3.10	1.09	93
8.	Comprehensive information on Nigeria 3.04 work ethnic	0.88	80
9.	Issues of nation building character among citizens	2.74	1.139
	Mean Total	3.48	

Table 1 reveals the extent and degree that students use social media to enhance student's knowledge of Civic Education contents. The table revealed that students who acquire knowledge about Nigerian culture through social media recorded the highest mean rating of 3.52 (SD=0.789), while acquiring issues of national building character through social media recorded the least mean of 2.74 (SD =1.139). The mean total of 3.48 showed that students' social media usage has helped them to enhance their civic education content knowledge. The standard deviation shows moderate levels of closeness with the mean.

Research Question 2: Which social media are mostly used by the students to enhance their knowledge of Civic Education?

Table 2

Mostly Used Social Mediato Enhance Students Knowledge Of Civic Education.ItemsMeanSD

Facebook	3.74	2.008
WhatsApp	3.52	2.102
U-tube	2.84	1.952
Istagram	2.00	2.129
Twitter	0.64	1.258
My Space	0.54	1.129
Skype	0.42	0.929
Total Mean	1.95	

Table 2 reveals the most used social media platforms to enhance students' knowledge of civic education content. The mostly used social media platform to enhance students' learning outcomes in civic education is Facebook which recorded a mean value of x = 3.74 (SD = 2.008). this is followed by WhatsApp with a mean score of 3.52 (SD = 2.102). Skype, which recorded the mean value of x = 0.42(SD = 929) is the least social media platform used by students to

Table 3

enhance their knowledge of civic education. The mean total of x = 1.95 showed that students' usage of social media platforms for enhancing their knowledge of civic education is still low, although many of them are using Facebook, whatsApp and U-tube.

Research Question 3: To what extent do social media promote students' attitude towards Civic Education?

Item	al media and promotion of students attitude towns	Mean	SD
1.	Social media increase my awareness on social issues.	3.72	0.607
2.	I used social media platform to do my assignments with easy	3.70	0.544
3.	Social media promote my interest to studying civic education.	3.62	0.753
4.	Social media facilitate academic discussion and interact with my course mates	3.60	0.782
5.	Social media has effectively improved My skills of critical thinking and Social interactions	3.58	0.678
6.	Social media has helped to improve my performance in civic education	3.58	0.785
7.	I will continue to use social media to Improve my knowledge on civic education.	3.56	0.644
	Mean Total	3.62	

Table 3 reveals the extent to which social media have promoted students' attitude towards Civic Education. All the items showed the positive impact of social media in promoting students' attitude towards learning of civic education. The mean total of 3.62 showed that students' social

media usage of social media platforms in learning civic education and interacting with their course mates have promoted their attitudes towards civic education. The standard deviation of 0.684 showed closeness to the mean.

Research Question 4: Is there any significant difference between male and female usage of social media in learning civic education?

Table 4

Differences in the Use of Social Media in Learning Civic Education Based on Gender.

Gender	Ν	Mean	SD	t	Df	Sig	Decision	
Male	220	31.50	6.479	0.157	498	.843	NS	
Female	280	31.21	6.309					

Table 4 reveals that there is no significant difference between male and female use of social media to enhance knowledge of Civic education in the type of social media they use and in the contribution towards attitude to Civic Education. Although the mean shows male (31.50) slight preference for social media in learning the contents of civic education than the female, the mean difference is not much to show significance between male and female usage of social media in learning civic education.

Discussion

The study assessed social media usage and learning of civic education concepts in public secondary schools in Epe Local government area of Lagos State. The findings in respect to research questions one revealed that students' highly used social media to increase their knowledge of Civic Education contents, such as, Nigerian culture, family life, nationalism and patriotism, civic education among the students, cordial relationships among different ethnic group, current issues on Nigeria politics, quick information on crime activities, comprehensive

information on Nigeria work ethic and issues of nation building character among citizens. These findings corroborate with Frankie (2018) and Soluade (2018) who found out that social media have a positive impact on the academic and social life of students. This study also corroborates the findings of Owusu-Acheaw and Agatha (2015) who concluded that the acquisition of mobile phones with internet facilities by many students and fair knowledge of the existence of social media platforms encourages usage of social media for academic purposes by students. This finding might be connected to the fact that students have been using different social media platforms to study issues in civic education which has enhanced their civic education knowledge acquisition. The fact that students showed positive responses doesn't mean it will reflect totally in their academic performance, as many students still use social media platforms for leisure and connecting with friends.

Research question two revealed that Facebook, whatsApp and U-tube are mostly used by students for the learning of civic education. The study further showed that Skype, My space, Twitter and Instagram are the least used by the students. This finding supports the findings of Aniefiok and Ojo (2016) who found out that some of the schools were truly new-media based but under-utilized by the students in learning. It was also revealed that students mostly and carelessly used social media such as Facebook, WhatsApp, U-TUBE, Instagram, Twitter, My Space and Skype to increase their knowledge of Civic Education. This finding might be due to the fact that Facebook, WhatsApp and U-tube are mostly common social media platforms among youths. This in is line with the finding of Mingle and Adams (2015) who stated that the majority of respondents used Whatsapp and Facebook for making friends and chatting. The list used social media platforms of Skype, My space, Twitter and Instagram might be due to its elitist nature and that students do not see a connection between the usage of the media and the learning of civic education.

The findings of research question three showed that social media enhanced students' attitude towards Civic Education in such a way that it increase students awareness on social issues; usage of different social media platform made it easy for the students to do their assignments and promote students interest in studying civic education. In addition, the findings showed that social media help to facilitate academic discussion and interaction among students; social media have helped to effectively improve students' skills in critical thinking and social interaction. The findings also revealed that study through social media has helped to enhance student's performance in civic education. This finding supports the findings of Atomata (2024); Intyaswati (2021); Oguguo (2020); Soluade and Ogunbiyi (2020) who found positive impact of social media on student academic performance in different subjects. However, this is in contrast with the findings of Mingle and Adams (2015) who stated that the time spent on social media, the frequency of visits and the total number of online friends has a statistically significant relationship with a student's academic performance and that constant usage of social media has negative effects such as poor grammar and spelling, late submission of assignment, less study time and poor academic performance due to the heavy participation on social media networks.

The findings also indicated no difference between male and female use of social media to increase knowledge of Civic Education in the type of social media they use and in the contribution towards attitude to Civic Education. This finding corroborates with Niazi (2016) who in his study revealed that females college students spend more time on social media than males students. In general, for both males and females, the time spent on social media decreases as the age of the respondent increases.

Conclusion

The study assessed social media usage and learning of civic education concepts in public secondary schools in Epe Local government area of Lagos State. The result showed that students' social media usage has helped them to enhance their civic education content knowledge. This suggests students' access to social media platforms that promote educational content can help to improve students acquisition of knowledge of civic education in students. This study suggests that students' knowledge of the potential of Instagram, Twitter, My space and Skype in learning civic educational concepts is still low. More so, the few social media platforms that the students have knowledge and skills of operating, have impacts in learning civic education concepts. The findings of research question four showed no significant difference between male and female use of social media to enhance knowledge of Civic education.

Recommendations

1. The government should provide students with tabloids that will allow students to

access different social media platform to enhance the learning of civic education among students.

- Students should be trained on how to have access to different civic education contents on all social media platforms and not restricted to Facebook, WhatsApp and Utube only
- 3. Teachers of civic education should continue to engage students in online interaction by giving out assignments to be submitted online, encouraging students to discuss in group using different social media platforms as this will encourage learning without barrier.
- Both males and females must be given equal opportunity and encouragement to access social media platforms.

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Teacher Training Dynamics and Global Relevance: Needs for Policy Redirection in Teacher Education Programme

By

Jacob A. Adeyanju¹ and Bilikis O. Olagunju² ^{1 & 2} Department of Educational Management, Faculty of Education, University of Lagos Corresponding Author: jadeyanju@unilag.edu.ng 08037155903

Abstract

The issue of teachers' versatility has always been of serious concern in teacher production, this was evident during the "JAPA SYNDROME" when there was a mass exodus of professionals, especially teachers in Nigeria to the western world. Many of these Nigerian-trained professionals experienced a culture shock due to differences in the value system, orientation, and government policy. It is expected that teachers should be able to teach anywhere and anytime irrespective of geographical location. The objective of the study, which was to investigate teachers' training process in Nigeria and their global relevance was achieved using a descriptive survey research design. Three hypotheses were tested. An instrument entitled "Teacher Training Dynamics and Global Relevance Questionnaire" otherwise known as TTDGRQ was used to gather information from selected respondents in the study. The total population for the study was 17,918 teachers in the 689 public secondary schools in Lagos State, and a sample size of 893 teachers was selected through a multi-stage sampling approach. The reliability of the instrument was done using the split-half reliability method and a co-efficient of .78 was obtained. This was considered reliable. The study discovered a strong positive correlation between teachers' innovative assessment and their global relevance and also technology integration in teacher education programme was found to promote teachers' global professional practice. The study concluded that training of teachers in Nigeria is yet to meet international standards. However, it was recommended among others, that a total overhauling of the curriculum of the teacher education programme be carried out as a matter of urgency for teachers trained in Nigeria to have global relevance.

Keywords: Teacher training; global relevance; innovative assessment; japa syndrome; and technology integration

Introduction

Globally, teaching as a profession has gone beyond traditional classroom duties, as the interconnectivity between and among disciplines is gradually eroding inter-disciplinary boundaries. As such, teaching is becoming one of the most challenging professions in our society where knowledge is expanding rapidly and much of it is available to students as well as teachers at the same time (Perraton, Robinson, & Creed, 2001). It is expected that an individual who wants to take teaching as a profession be equipped with diverse sets of skills to function effectively as well as practice globally. The teachers' training institutions in Nigeria are saddled with the responsibility of providing all necessary training and professional development needed for a teacher to function effectively and adequately. Under this institution, the teaching skills, pedagogy, and subject knowledge of the teachers are greatly enhanced. These institutions are important because they play crucial roles in providing and enhancing quality of education for the country. The educators are exposed to the required tools and knowledge to succeed in their profession. There is a wide collaboration with stakeholders in education to align the goals of the programmes with policies and standards of national education. The teacher training institution was established as a result of the urgent need for qualified and trained teachers at all levels of education in 1976. The mission of the institution, among others, were to produce teachers that would meet the challenges of Nigerian society; and to nurture a commitment to lifelong learning that is creative, innovative, and responsive to changes in the world of knowledge and the changing needs.

In this present era of society 5.0. where learners themselves are digitally inclined, it is expedient for a teacher to be ubiquitously ready to perform anywhere in the world. A ubiquitous teacher can be referred to as a "holistic educator", someone who is not only knowledgeable in his area of specialization, but an individual who is creative, flexible, and proficient in the use of technology and can deliver in their area of competencies anywhere in the world. Someone who can foster critical thinking, problem-solving, and inquirybased learning in their students. Additionally, such a teacher is well-equipped to meet global needs and be exceptional in any environment. When teachers change the environment, some may find it difficult to adapt to the new intellectual ecology. Based on this, several questions come to mind regarding the problems behind the inability to adjust to the new educational climate. In this situation, the type and quality of training they received during their

training process becomes questionable. In the Nigerian context, the training process starts with getting students admitted into the institution, the actual training (through practical exposure to the rudiments of pedagogy, the teaching practice exercise, and finally the certification by the Teachers Registration Council of Nigeria (TRCN).

With ubiquitous obstruction in the education space, a paradigm shift in the area of assessment, technological integration, and continuous development strategies were noticed. The innovative assessment method for example, has made it easy for evaluation of the level assimilation of the teacher trainees. This can be done anywhere without compromising quality. Implicitly, admission or entrance examinations, formative, and summative assessments of the programme can be done virtually. By this arrangement, the roles of the instructors during evaluation as invigilators have changed to proctors.

In the area of technological integration, many new innovations have been brought in, especially in lesson delivery. Zoom, Google meet, Apple classroom, kazoo, etc. are the common virtual learning applications that are used in the education system. While some of these applications give room for synchronous learning opportunity, others are asynchronous in mode. In teacher education programme, these technological innovations are used for lesson delivery. Teachers' continuous development is а springboard to continuous relevance. This is because there are new discoveries on regular basis that are needed for enhanced professional performance and growth. This is one of the major mandates of TRCN. Specifically, the council is expected to keep teachers abreast of development in the theory and practice of the profession through organisation of annual conferences of registered teachers (Teacher Regulatory Council of Nigeria, 2005). Other professional associations such as the Nigeria Union of Teachers (NUT) also provide opportunities for teachers' continuous professional development.

The relevance of Continuous Professional Development (CPD) cannot be underestimated. Kypokon (2017) reiterated the importance of CPD in the education system. He affirmed that for the education performance to be progressive and attain the desired goals, CPD must be given a serious attention. Many new discoveries are unfolding in the human society. These are evident in the dynamics of the various era in human history, that is, transitions from society 1.0. to the present society 5.0. The teacher as the major actors in the education system must be given continuous retraining in contents as well as in pedagogy. This CPD can take the forms of regular conference attendance, workshops, seminars, etc. **Statement of the Problem**

Vividly, the objective of teacher education according to the National Policy on Education (Federal Republic of Nigeria, 2013) is to produce highly motivated, conscientious, and efficient

classroom teachers for all levels of the education system. It is meant also to provide teachers with the intellectual and professional background adequate for their assignments and make them adaptable to changing situations. Teachers are regarded as the major determinant of the pace of development in any country. If teachers who are saddled with these responsibilities can only perform in their environment, it follows therefore that such teachers may not be able to fit into the present-day compressed global village. How well are teachers prepared in Nigeria's teachers' training institutions for them to be globally relevant? Do the teachers trained in Nigeria possess all the needed skills for them to become ubiquitously relevant? It is on these premises that this study investigated the roles of teachers' training institutions in preparing and keeping teachers to meet up with the dictates of the 21st Century.

Objectives of the Study

This study investigated the:

- 1. relationship between teachers' innovative assessment in the training process and their global relevance.
- relationship between technological integration in the training process and teachers' global relevance.
- correlation between the continuous development of teachers and their ability to perform globally.

Research Hypotheses

The following hypotheses were tested in the study:

- 1. There is no significant relationship between teachers' innovative assessment and their global relevance.
- Technological integration does not significantly relate to teachers' global relevance.
- The continuous development of teachers and their ability to perform globally are not significantly related.

Literature Review

Teachers' Innovative Assessment in the Training Process and their Global Relevance

The relevance of innovative assessment in teacher education programme has been studied from many perspective. For instance, Amakiri (2021) conducted research on the assessment strategies used by lecturers in Rivers State. The population of the study was 1430 teacher trainees from three different public universities in the state. He used the descriptive survey research design and 180 lecturers served as the sample. The study showed that an increase in students' enrollment served as a barrier for lecturers to use innovative assessment tools for evaluating students. Hofmeister and Pilz (2020) investigated the impact of e-learning in the vocational educational sector for in-service teacher training in Germany, Poland, and Italy. Their findings portrayed a positive perception among VET teachers on the acceptance of online learning as a form of teacher training.

In another study conducted by Barakhsanvra, Vlasora, Golikov, Kuzin, Prokopyev, and Burnachov (2017) on how e-learning can be

adopted in achieving quality assessment of teachers in training, it was observed that various technological assessment tools adopted in the teacher training programme greatly enhanced the quality of their training and eventual at the final examination. Pavel, Fruth and Neacsu (2015) investigated the importance of I.C.T. and elearning in enhancing higher education quality, as well as how there can be improvement in the quality of service provided by the university system. The study showed that boosting teacher training, improvements in their skill sets can yield better exchange of ideas, innovations and communications. An investigation was carried out by Kidd and Murray (2020) on how teachers transit from practicum learning to online learning as a result of the covid -19 pandemic. The study adopted a qualitative research method during the shutting down of universities and schools in England. It was discovered that the educators were able to adapt to the adjustment, their pedagogic agility transited quickly and their practices changed for better.

Siew, Amir, and Chong (2015) carried out an investigation on teaching science via a projectbased STEM approach. Twenty-five pre-service and 21 in-service Malaysian science teachers were interviewed via classroom discussion, openended questions, interviews, and surveys. The findings showed that for teachers to embrace project-based STEM approaches as their method of teaching science subjects in the schools, there was a great need for effective and professional development workshops or seminars in STEM.

Technology Integration in the Training Process and Teachers' Global Professional Practice

The use of technology in teacher training programme is gaining ground. Ahmed, Arshad and Tayyab (2019) investigated the impacts of technology on university lecturers' professional development, they reported that university teachers were facing many difficulties in preparing their lectures with technological innovations and utilisation of ICT in the classrooms. A similar study was conducted by Tuzahra, Sofendi, and Vianty (2021) on the impact of utilising technology for pre-service teachers. It was a qualitative study on some inservice English Language teachers. Their results portrayed a negative response from the in-service teacher when the technology was introduced to them.

Tondeur, Roblin, Braak, Voogt, and Prestridge (2016) examined how technology can be integrated into teachers' training programmes for early careers. Although, they found out that integration of technology into the programme would aid assimilation and bring efficiency to it, however, all beginning teachers who used a wide range of technological applications, mainly for structured learning, achieved better student results than their counterparts who did not use technological devices. Ruggiero and Mong (2015) adopted a mixed-method research approach to examine how teachers used technology to facilitate student learning in 100 school corporations purposefully selected in the United States. The participants were 1048

teachers in K-12 classrooms. It was observed that the integration of technology was ubiquitous in all the schools. Additionally, it was recognized that teachers who adopted a student-centric approach to teaching showcased an effective need technology in provide the to learning environment. Gonen (2019) investigated preservice teachers' and students' experience with integrating technology tools in Turkey with 95 foreign students and eight pre-service teachers. The finding showed that prospective teachers and their students had positive attitudes towards integrating technology into a second language and/or foreign language (L2) class.

A study was also carried out by Saadu and Yusuf (2023) on how to ascertain the effectiveness and usage of Kwara Learn Technology by 271 primary school teachers in Ilorin West Local Government Area. A positive attitude was discovered in the use of technological applications and devices among the teachers. The study also reported that both genders were able to adapt to the technology introduced with little variant among primary school teachers who had challenges in the usage due to their qualifications and years of experience.

Continuous Development of Teachers and Ability to Perform Globally

In another study by Kasemsap (2016) on how teachers can be motivated to develop the intellectual skills of the learners and make their education globally competitive and progressive, he maintained that for education performance to be progressive and attain the set goals, continuous progressive development of teachers is an essential factor. Byabazaire (2017) explained how teachers can adopt e-portfolios for teaching and also make it a method for professional development. The study was a qualitative study with a particular focus on postgraduate in-service teachers who used e-portfolios for a duration of four months. He maintained that e-portfolios could be used for teaching as a form of new technology. He also reported that teachers who used e-portfolios experienced continuous learning leading to development enhancement. Imron, Wiyono, Gunawan, Saputra, Perdana, and Hadi (2021) examined the issue of how the teaching skills and abilities of teachers can be revamped. The study was carried out in the era of the ASEAN Economic Community and they asserted that constant professional training enhanced the teachers' teaching skills, dedication, and capabilities.

Methodology

A descriptive survey design was used for this study. This is considered apt as the researchers collected data on existing phenomena without manipulation to describe the variables concerning the population. The study population consisted of all 689 public secondary schools (junior, 357 and senior, 331) in Lagos State (Federal Ministry of Education, 2022). These schools had 17,918 teachers. The multistage sampling technique was used to classify the schools by type, that is, junior and senior. A proportionate random sampling technique was first used to select 18 junior and 17 senior secondary schools to make a total sample of 35 schools. This technique was also used in selecting 893 teachers (468 junior and 425 senior), these teachers were used as participants for the study. A 40-item structured questionnaire was used to collect data. Items were grouped into four sub-headings, namely, innovative assessment, technological integration, and teacher continuous development. The questionnaire items were weighted on a fourpoint scale of Strongly Agree = 4 Agree = 3, Disagree = 2, and Strongly Disagree = 1 for all positive statements while negative statements were weighted in reverse order. Pearson Product Moment Correlation statistical tool was used to test the hypotheses at 0.5 level of significance. The instrument was validated by expert assessment and peer review. The reliability was ascertained using the split-half reliability method and the Cronbach Alpha formula was used to calculate the reliability coefficient which yielded .78. The researchers administered the questionnaire with a return rate of 92.4% as 825 copies out of 893 copies administered were returned.

Test of Hypotheses

The hypotheses raised were tested with Pearson Product Moment Correlation statistical tool. The results are presented as follows:

Hypothesis 1

The first hypothesis stated that there is no significant relationship between teachers' innovative assessment and their global relevance. The hypothesis was tested using Pearson Product Moment Correlation statistical tool and the result

is presented in Table1.

Table 1 Teachers' Innovative Assessment and Global Relevance								
Variable	Ā	S.D	Ν	df	r	p-value	Remark	
Innovative Assessment	2.61	0.36						
			825	823	0.776	0.000	Ho1 is rejected	
Global Relevance	2.01	0.31						

The results of Pearson Product Moment Correlation coefficient as shown in Table 1 indicated a significant relationship between teachers' innovative assessment in the training process and global relevance (r=0.776, p=0.000). As indicated in the table, the p-value (0.000) is less than 0.05 level of significance at 823 degrees of freedom. Hence, the hypothesis that stated there was no significant relationship between teachers'

innovative assessment and their global relevance was rejected

Hypothesis 2

The second hypothesis stated that technological integration does not significantly relate to teachers' global relevance. The hypothesis was tested using Pearson Product Moment Correlation statistical tool and the result is presented in Table 2.

Table 2

Technological Integration and Teachers' Global Relevance

8	8						
Variable	Ā	S.D.	Ν	df	r	p-value	Remark
Technology Integration	3.21	0.38					
e			825	823	0.722	0.000	Ho2 is rejected
Global Relevance	2.01	0.31					5

The results of Pearson Product Moment Correlation coefficient as shown in Table 2 indicated a significant relationship between technology integration in the teachers' training process and their global relevance (r=0.722, p=0.000). As indicated in the table, the p-value (0.000) is less than 0.05 level of significance at 823 degrees of freedom. This showed that technological integration and teachers' global relevance are significantly related.

Hypothesis 3

The second hypothesis stated that continuous development of teachers and their ability to perform globally are not significantly related. The hypothesis was tested using Pearson Product Moment Correlation statistical tool and the result is presented in Table 3.

Continuous Development of Teachers and their Ability to Perform Globally							
Variable	Ā	S.D.	Ν	df	r	p-value	Remark
Continuous							
Development	2.62	0.30					
			825	823	0.798	0.000	Ho2 is rejected
Global	2.10	0.31					-
Performance							

Table 3

The results of Pearson Product Moment Correlation coefficient as shown in Table 3 indicated a significant relationship between the continuous development of teachers and their ability to perform globally (r=0.798, p=0.000). As indicated in the table, the p-value (0.000) is less than 0.05 level of significance at 823 degrees of freedom. Hence, the null hypothesis was rejected. This means there was a significant relationship between the continuous development of teachers and their ability to perform globally.

Discussion of Findings

The first finding of this study was that teachers, innovative assessment in the training process relate to their global relevance. This finding is in line with the position of Barakhsanvra, et al (2017) who reported a direct relationship between the quality of technological assessment tools adopted in the teacher training programme and quality of their training, and eventual performance at their final examination. This position is not surprising as Pavel, Fruth and Neacsu (2015) had earlier recommended the incorporation and adoption of digital technologies in teacher training programme. This finding is clear evidence of the ubiquitous influence of ICT in the ecological scope of all facets of lives and disciplines. The world has been

reset in different forms, especially during and after the COVID-19 pandemic. During this period, new terms and phrases such as working from home, virtual learning, virtual classroom, synchronous and asynchronous learning models, proctoring. became among others more pronounced in the education system. Since then, inter-institutional collaborations, dual student assessments, student exchange programmes, etc., have been adopted to further enhance international relevance.

Implicitly, a teacher that was produced through conglomerate of innovative assessment modes would be able to perform in any clime. This is due to the fact that the innovative assessment mode is an amalgamation of diverse methods from different educational ecologies. A teacher trainee that is exposed to this during the training process is nonetheless being prepared for global relevance.

The second finding of this study was that technological integration in the teacher training process is related to their global relevance. This finding is in support of the position of Tondeur et al (2016). They maintained that integrating technology into the teacher training programme aided assimilation, resulting in high efficiency in the programme. This position had earlier been recognised by Ruggiero and Mong (2015) who found out that teachers who adopted technology in teaching their students encouraged more indepth learning. The finding is also incongruent with the report of Tondeur, et al (2016) that, using a wide range of technological applications for structured learning achieved better student results. By implication, the use of technological applications such as Zoom, Google Meet, Apple Classroom, kazoo, and others in the training of teachers would make them globally relevant.

Teaching teacher trainees with different technological applications and devices would also expose them to other practices in the world. In this regard, a Memorandum of Understanding (MOU) could be reached with faculties, institutes, or colleges of education in other countries for collaboration without any hindrance by distance. This is possible because technology makes the importation of any idea easy, as foreign experts in any field could be electronically imported to the class. Parts of the MOU could also cover exchange programmes, joint students' academic project supervision, among others. This will no doubt make the teachers trained with the process globally relevant.

The third and last finding of this study was that the continuous development of teachers is related to their ability to perform globally. This means that, for teachers trained in Nigeria to be globally relevant, they must continue to develop themselves even after the regular prequalification training at the various teachers' training institutions. This finding corroborates the positions of Imron et al (2021) Clare (2020), Kasemsap, (2016), and Byabazaire (2017). They all reported that the continuous development of teachers enhanced their teaching skills, dedication, capabilities, and global relevance. Since knowledge evolves and society is dynamic, teachers must be abreast of the latest practices in their field, especially in pedagogy and content.

Policy Implications

The findings of this study clearly indicated the needs for policy redirection in the teacher education programmes in Nigeria. The following are the specific areas of policy adjustment or inclusion:

Although the current National Policy on Education (Federal Republic of Nigeria, 2013) took cognizance of the changes in methodology and curriculum of teacher education, it fails to incorporate the need for accommodation of innovative assessment strategy in the process of training teachers in Nigeria teachers training institutions. It therefore becomes expedient for education policy makers to review this component in the policy document to accommodate this need. The same goes for the curriculum. A total overhaul of the teacher education curriculum should be done to enable specialized training in ICT for all teacher training.

Integration of the use of technological applications such as Zoom, Google Meet, Apple Classroom, kazoo, and others in the training of teachers should be incorporated into the teacher education policy. This will give room for the use of resources from educational institutions (especially human resources) in other parts of the world to enrich the local content.

A policy on Academic Credit Transfer (ACT) and Student Exchange Programmes (SEP) should be included in the NPE. The ACT policy would enable students who leaves the shores of their home university on SEP to join their colleagues on return without losing any semester or session. For instance, if a student on a four-year in Bachelor of Science in Economics Education leaves for a university in England after completing the 200 Level courses for a twosemester programme and returns in the first semester of 400 Level, he should be able to transfer the credits of the courses offered at 300 Level in England to his academic transcript in his original university. Inclusion of this in the NPE will make the process seamless.

Adequate provision on the sources of funding the career-long professional development of teachers should be well spelt out in the NPR as it was done in the case of Universal Basic Education (UBE) and Tertiary Education Trust Fund (TETFUND). This will prevent the problem of funds that usually impede the success of public education programme,

Conclusion

This study investigated the dynamics of training teachers in Nigeria for global relevance. The aim was hinged on the fact that the world has compressed to a global village, hence, the need for all-round training that will equip the teacher with the needed skills to perform in any clime. It was clearly established that for teachers produced in Nigeria to be globally relevant, the adoption of innovative assessment, integration of technology, and continuous development programmes in their training process becomes necessary. For proper incorporation, therefore, a total overhauling of education policy, especially in the aspects of teacher education curriculum and funding at all levels of teacher training programmes is needed.

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Self-Awareness and Self-Management as Correlates of Career Performance of Academics in Colleges of Education in Nigeria

By

Terkula Daniel Uyeh¹, Batur-Laha Gbenda², & Ezekiel Aondoaseer Hanior³ ¹Department of Early Childhood Education, College of Education, Oju, Benue State, Nigeria ^{2 & 3} Department of Education Foundations, Benue State University Makurdi, Nigeria **Corresponding Author**: <u>terkulauyeh12@gmail.com</u>

Abstract

This research investigated the correlation between self-awareness and self-management and academics' career performance in Colleges of Education in Benue and Cross-River States, Nigeria. The study adopted a correlational survey design. Self-Awareness and Management Questionnaire (SAMQ) and Academics Career Performance Questionnaire (ACPQ) were the instruments used for data collection. The population of this study consisted of 1146 academic staff in the three public Colleges of Education in Benue State and the two public Colleges of Education in Cross River State respectively. Three research questions and three null hypotheses guided the study. Sample of the study consisted of 213 Academic Staff drawn from 5 public Colleges of Education using the multistage procedure involving the purposive, proportional and random sampling techniques. Pearson Product Moment Correlation (PPMC) was used to answer the research questions and to test the null hypotheses. The study revealed that there was a significant correlation between self-awareness and academics' career performance in Colleges of Education in Benue and Cross-River States (r =.803, P<0.05). It was also found that there was a significant correlation between self-management and academics' career performance in public Colleges of Education (r =.608, P<0.05). It was recommended that students should be provided with the opportunity to report their opinion about the performances of their lecturer as a way of unveiling the level of academics' self-awareness and management. By implication, every Colleges of Education should have a functional counselling unit to assist maladjusted academics. Self-awareness and management tests should be administered to individuals before they are recruited in the academic field.

Keywords: Self-awareness, self-management, career performance and academics

Introduction

Career performance plays an important role for the growth and development of an organization. Career performance basically describes actions and behaviours of an employee that contributes to the achievement of organizational goals. In an academic context, career performance refers to the overall effectiveness, productivity and impact an academic has in his field over time (Akin, 2020). Key indicators of academics' career performance include research output, teaching effectiveness encompassing course development, student evaluations mentoring and pedagogical innovations. Success in obtaining research grants and funding, participation in professional service activities such as serving on editorial boards are other key

indicators. The broader impact of academics' work on industry, policy or society as well as their ability to collaborate and build networks also play crucial role in defining their career performance. Improving the performance of academic staff is essential in order to provide high quality learning and service to the students and the general society. Indeed, tertiary institutions are constantly pursuing goals to raise and sustain the standards of services in an increasingly competitive environment (Federal Government of Nigeria, 2020). There is a wide range of aspects that can determine an employee's career performance levels in an organization. Work quality, punctuality, performance, human resources, job outcomes,

behaviour, training effectiveness, personal characteristics and productivity can be used to accurately measure career performance. Other aspects are human resources, job outcomes, behaviour, training effectiveness, personal characteristics and judgment (Gatewood & Field, 2020). In an academic contextual background, career performance is the measurement of the degree of success or failure of academics that have been assigned a specific task or given responsibilities to perform which may result to achieving the school objectives. According to Akin (2020), the major work of academics is human resource development and research and no nation can develop above her human resources. Thus, academics are very important in the actualization of the school goals and national development. Apparently, it is apt to say without 'academics' there can be no development. It is equally the same that if academics do not perform their career effectively there will be no meaningful national development. However, in spite of the central role expected of academics in the realization of school objectives, which translate into national development, academics seem not to be performing optimally. This has led to failure of the academic staff to produce the desired results in terms of teaching and research, assessing and marking students' test and examinations. Consequently, this results to producing "halfbaked" graduates which in most cases have drastic consequences on the moral and value development in our country (Akin, 2020).

It is not surprising to discover that many workers cannot perform in their chosen careers and academics seem not to be an exception. Studies by Gunu and Oladepo (2020) and Anderson (2016) reveal that, academics are not performing optimally in their various ranks and positions of work. Research studies by Jack and Punch (2021) show that academics complain of poor working condition, low status, inadequate extrinsic motivation, and poor salary are causes of poor career performance. Furthermore, other research studies by Kyriacou (2017) and Ajavi (2019) on career performance have dealt with different cognitive factors such as reading ability, memory, spatial ability; affective factors such as work pressure, tolerance for ambiguity, poor attitude to work, anxiety to perform, perseverance, interest, motivation and factors such as age and increased introversion are factors that interact to cause poor career performance. Other research evidences revealed that stress, health care, reasoning ability and mental adjustment are some of the psychological factors that affect career performance of academics (Wagler, 2017). Consequently, these have led to poor work quality, dissatisfaction and poor students' performance. The consideration of factors affecting career performance of academics in Nigerian tertiary institutions has often neglected the influence of crucial psychological variables such as self-awareness and selfmanagement.

Self-awareness is the process an individual understands his own character, feelings, motives and desires (Hall-stigart, 2015). In other words, self-awareness involves knowing what you feel and using this understanding to make decisions. It is an essential step in early self-development and a critical step in defining who one is. High self-awareness enables individuals their know worthiness. effectiveness and capability. It also gives individuals confidence and courage to perform on their jobs. High self-awareness is also considered to be important in a work place because of the role it plays in choosing a career. This is why Ochiagha (2019; p.54), states that "career choice is the implementation of selfconcept". Unfortunately, some of our academics seem to have wangled into the teaching profession without knowing whether their personality traits are compatible with the expectations from the profession. Thus, though they get the academic titles and the benefits attached to them, they are frustrated (Ochiagha, 2019).

Robbins, Judge and Sanghi (2015) defined selfmanagement as one's ability to regulate his emotions such that norms are not violated. Norms in this context refer to the standard behaviors that are typical of, and are accepted by a particular organization. Synonymous to norms are rules, ethics or code of conduct. DuNeen (2016), opine that, the ability of an individual to observe the norms of an organization with less stress show how competent the individual is, being unable to do so shows incompetence of the individual. By implication, for academics in any institution to relate well and perform their duties, functions and roles they need a high level of emotional self-management or regulation. The academic arena is guarded with rules and ethics for its

members to operate effectively. Academics are required to be highly conscious of how they do their work, especially in the teacher training institutions, for they serve as models to many people and they are the nation builders.

The researcher as an academic in the college of education observed in many different occasions that, academics in the tertiary institutions in Benue and Cross-Rivers States are not exempted from the menace of poor career performance. This is evident in their persistent coming late to work, absenteeism, stagnation (in knowledge & promotion), change of authorship, inclusion of their names in publications they do not contribute academically to, wanes of motivation, falsification of data, changing of grades for money among others. The researcher's observation might be the confirmation of Ochiagha (2019)'s statement that, some academics wangled their way into the teaching profession without having adequate knowledge of their self-awareness and self-management. The academics in public Colleges of Education in Benue and Cross-river states seem to be having psychological related challenges and frustration on their career as a result of self-awareness inadequate and selfmanagement. Likely, this may translate to some notable learning gaps among students such as unethical behaviours, lack of enthusiasm and teamwork, low academic achievement and school dropout among others. Invariably, the students who are like raw materials in the hands of such academics suffer significant setbacks in their performances and subsequently in their

goals' achievement. It is certain that if this abysmal situation is allowed to thrive for a longer time, it will lead to a total collapse of the educational system in Nigeria. Consequently, there will be fewer opportunities for sustainable and viable national growth and development. The researcher perceives the bizarre situation of low academics' career performance with the view that if persistently tackled psychologically, it will be reduced to the barest minimum. Since most studies on career performance have not focused on the correlation between self-awareness, selfacademics' management and career performance, this study therefore becomes important. Despite the efforts of government and researchers to improve on academics' career performance, deficiencies in career performance still abound. Could this be attributed to academics' poor self-awareness and self-management? Hence, the researcher sought answer to this pertinent question by investigating if self-awareness and selfmanagement have any correlation with career performance of academics in public colleges of Education in Benue and Cross-rivers States, Nigeria.

Research Questions

The following research questions were used to guide the study:

1. What is the correlation between selfawareness and academics' career performance in public Colleges of Education in Benue and Cross-River States, Nigeria? 2. What is the correlation between selfmanagement and academics' career performance in public Colleges of Education in Benue and Cross-River States, Nigeria?

Hypotheses

The following null hypotheses were tested:

- There is no significant correlation between self-awareness and academics' career performance in public Colleges of Education in Benue and Cross-River States.
- Self-management does not significantly correlate with academics' career performance in public Colleges of Education in Benue and Cross-River States.

Methodology

The researcher adopted the correlational survey design. The choice of this design is informed by the fact that the correlational survey design seeks to establish what relationship exists between two or more variables. The data obtained from each of the college's statistics unit in 2023 indicated that the population of the study consisted of 1146 academic staff in the three public Colleges of Education in Benue State and the two public Colleges of Education in Cross River State respectively. The sample of the study consisted of 215 Academic Staff drawn from 5 public Colleges of Education: three public colleges of education in Benue State and two public Colleges of Education in Cross River States, Nigeria, using multistage sampling procedure, which the purposive, proportional and simple random techniques were utilized. Two instruments known as Selfawareness and Management Questionnaire (SAMQ) and Academics' Career Performance Questionnaire (ACPQ) were used for data collection. SAMQ is a researcher made 20 items questionnaire which is intended to help academic staff express their self-awareness and self-management attributes. Each of the items is a 4-point Likert-rating scale with 4 response options. The options are Strongly Agree (SA=4), Agree (A=3), Disagree (D=2), and Strongly Disagree (SD=1). ACPQ is also a researcher made 20 items questionnaire. ACPQ items are arranged to obtain information on different carrier performance activities of the academic staff. ACPQ contains items which respondents are to respond to by indicating their level of agreement or disagreement on a 4-point scale. The SAMQ and ACPQ items were developed from information acquired through review of relevant literature by the researcher. The instruments were validated by 2 experts in Guidance and Counselling and 1 expert in Measurement and Evaluation. The experts scrutinized the instruments in the areas such as general content validation, clarity, simplicity of language and scope or coverage of each variable. The experts made relevant suggestions for improvement.

After validation, both instruments were trialtested to establish their reliabilities. Cronbach Alpha was used to ascertain the reliability index of the instruments generally, and according to their sub-scales. The overall reliability value of SAMQ was 0.88. However, the reliability of SAMQ according to its' sub-scale were 0.86 and 0.87 for self-awareness, and selfmanagement respectively. The reliability coefficient of ACPQ was 0.86. According to Maduabum (2011), the coefficients of 0.50-0.99 is an indication that an instrument is reliable. Based on this view the instruments are said to be sufficiently reliable. During the main study, the instruments were administered to the 215 respondents using the direct contact approach in order to minimize non-response from respondents. This method enabled the researcher and his assistants to thoroughly the explain purpose, importance and confidentiality of all information involved to the respondents. Copies of the instruments were given to each of the respondents to fill and return within the same day of visit to any of the colleges. The approach minimized the loss of questionnaires, however, only 213 respondents successfully returned theirs. Pearson Product Moment Correlation (PPMC) was used to answer the research questions and to test the null hypotheses.

2 Data Analysis

Presentations in this section are based on research question and null hypotheses

3.1 Research Question 1

What is the correlation between self-awareness and academics' career performance in public Colleges of Education in Benue and Cross-River States, Nigeria? The answer to research question one is presented on Table 1.

Variables	Ν	Mean	STD	R	Remark
		ĩ	δ		
Self-Awareness		3.0376	.87335		Strong Correlation
	213			.803**	
Career Performance		2.8545	.84811		

relation Analysis between Self Awareness

Source: Field Survey, 2024

Table 1 shows the correlation between selfawareness and academics' career performance in public Colleges of Education in Benue and Cross-River States, Nigeria. The result indicated that there is a strong positive between self-awareness correlation and academics' career performance (r = .803). This implies that self-awareness relates to career

performance of academics in public Colleges of Education in Benue and Cross-River States.

3.2 **Research Ouestion 2**

What is the correlation between selfacademics' management and career performance in public Colleges of Education in Benue and Cross-River States, Nigeria? The answer to research question two is presented on Table 2.

Variables	Ν	$\mathbf{Mean}_{\widetilde{X}}$	STD δ	R	Remark
Self-Management		31315	.84205		Moderate
	213			.608**	Correlation
Career Performance		2.8545	.84811		

Source: Field Survey, 2024

Table 2 reveals the correlation between selfmanagement and academics' career performance in public Colleges of Education in Benue and Cross-River States, Nigeria. The result shows that there is a moderate positive correlation between self-management and academics' career performance (r = .608). This implies that self-management relates to career performance of academics in public Colleges of Education in Benue and Cross-river states.

3.4 **Hypothesis One**

There is no significant correlation between selfawareness and academics' career performance in public Colleges of Education in Benue and Cross-River States. The answer to hypothesis one is presented on Table 4.

Table 4: Pearson Correlation between Self-awareness and Career Performance

Variables	Ν	r	p – value	Remark
Self-awareness				
	213	.803**	.000	Significant
Career Performance				
Source: Field Survey, 2024				

Table 4 presents Pearson Product Moment Correlation between self-awareness and academics' career performance in public Colleges of Education in Benue and Cross-River States. The data in Table 4 indicated that the Pearson product moment correlation of selfawareness and academics' career performance was found statistically significant (r =.803, P<0.05). Hence, the null hypothesis that stated there is no significant correlation between selfawareness and academics' career performance was rejected. This implies that there is a significant correlation between self-awareness and academics' career performance in public Colleges of Education in Benue and Cross-River States.

3.5 Hypothesis Two

Self-management does not significantly correlate with academics' career performance in public Colleges of Education in Benue and Cross-River States. The answer to hypothesis two is presented on Table 5.

Table 5: Pearson Correlation between Self-Management and Career Performance

Variables	Ν	r	p-value	Remark
Self-Management				
	213	.608**	.000	Significant
Career Performance				
Source: Field Survey 2024				

Source: Field Survey, 2024

Table 5 presents Pearson correlation test result for the correlation between self-management and academics' career performance in public Colleges of Education in Benue and Cross-River States. The data in Table 5 reveal that the Pearson product moment correlation of selfmanagement and career performance was found statistically significant (r = .608, P< 0.05). Hence, the null hypothesis that stated Selfmanagement does not significantly correlate with academics' career performance was rejected. This implies that there is a significant correlation between self-management and academics' career performance in public Colleges of Education in Benue and Cross-River States.

1. Discussion of Findings

This research investigated the correlation between self-awareness, self-management and

academics' career performance in Colleges of Education in Benue and Cross-River States, Nigeria.

The first hypothesis found that there was significant correlation between self-awareness and career performance of academics of public Colleges of Education in Benue and Cross-River States. This finding agrees with Masimane, Ndambuki and Mulinge (2022) who investigated the effect of self-awareness on the performance of employees of commercial banks in Kenya. The researchers' finding indicated that self-awareness affect the performance of employees in Kenya. The finding of this study is also in line with the findings of Atuma and Agwu (2015), Udo and Ukpong (2020) and Alferaih (2021) who in their various studies concluded that selfawareness significantly influences career performance in the Nigerian banking sector, Education students' Business academic performance in Federal Universities in South-South, Nigeria and job performance of Saudi Arabian telecom employees respectively. Thus, the reason for this outcome may be connected to the fact that self-awareness is crucial to the improvement of strategic work, since academics should be aware of the various aspects of the self, including its attributes, characteristics, behaviours, and emotions. In other word, one's ability to control or be aware of self-emotions, feelings, behaviour and motivations are important component to effective performance. The presence of selfawareness significantly influences the work of academics, permeating various aspects of their professional lives and contributing to their effectiveness as educators, researchers, and colleagues. Self-aware academics are better equipped to navigate the complexities of academic environments, as they possess a deep understanding of their strengths and weaknesses. This awareness allows them to play to their strengths in teaching and research, while also recognizing areas for improvement and seeking out opportunities for growth. Moreover, self-awareness enhances their ability to communicate and collaborate with others, as they can navigate interpersonal dynamics with empathy and authenticity, fostering positive working relationships and effective teamwork. In the realm of teaching, self-aware academics are attuned to the needs and learning styles of their students, adapting their instructional methods accordingly and

providing tailored support when necessary. In research, they approach their work with humility and a willingness to learn from others, leading to more innovative and impactful contributions to their field. Overall, selfawareness serves as a foundation for personal and professional development, enabling academics to thrive in their roles and make meaningful contributions to academia.

The second hypothesis revealed that there was significant correlation between selfmanagement and career performance of academics in public Colleges of Education in Benue and Cross-River States. This finding agrees with Sunhwa and Kukhoan (2020) who found that self-management have a strong relationship with organizational atmosphere and job performance. In the same vein, this finding agrees with Vito, Kumanwee and Cyracus (2018), and Jain and Shinha (2018) who concluded that self-management influences performance of employees of Port Harcourt telecommunication companies. Likely, this outcome may be connected to the fact that academics that have high selfmanagement skills tend to regulate distress situations and disruptive feelings and thereby resulting to higher career performance. The integration of self-management within the work of academic staff profoundly shapes their effectiveness and impact in the academic realm. Through adept time management, they navigate myriad responsibilities of teaching, the research, and service with efficiency, ensuring each aspect receives due attention. Clear goalsetting coupled with vigilant progress

monitoring fosters a sense of purpose and direction, driving them towards tangible outcomes in their scholarly pursuits. Their adaptability enables them to thrive amidst the evolving landscape of academia, embracing new methodologies and technologies to meet the dynamic needs of students and advance their research agendas. Moreover, selfregulation cultivates a culture of excellence, as academic staff produce work of a higher caliber through disciplined focus, reflective practice, and a commitment to continuous improvement. Ultimately, the presence of self-regulation among academic staff not only enhances individual productivity and quality of work but also contributes to the overall advancement and success of the academic institution.

2. Conclusion

It is evident from the findings of this study that self-awareness and self-management have a strong positive relationship with career performance of academics in Colleges of Education. This means that there will be an improvement in an academic's career performance, if there is an improvement in selfawareness and self-management skills and the reverse will be the case if there is a decrease in self-awareness and self-management.

Recommendations

Based on the findings, the following recommendations were made:

 Students should be provided with the opportunity to report their opinion about the performances of their lecturers as a way of unveiling the level of academics' selfawareness and management. By implication, every Colleges of Education should have a functional counselling unit to assist maladjusted academics.

 Self-awareness and management tests should be administered to individuals before they are recruited in the academic field.

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Assessment of the Psychometric Properties of the Use of English General Studies Examination using Item Response Theory at Bayero University Kano-Nigeria

By

Abubakar Rabiu Uba¹ and Yaro Umar²

¹Department of Education, Faculty of Education, Sule Lamido University Kafun Hausa ²Department of Education, College of Vocational and Technical Education, Hassan Usman Katsina Polytechnic, Katsina. **Corresponding Author**: <u>Abubakar.rabiu@slu.edu.ng</u> +2348061679685

Abstract

To effectively achieve Sustainable Development Goal 4 and its 10 targets, the quality of information from assessment instruments for decision-making has become a concern for all stakeholders. As part of the minimum benchmark set by the Nigerian University System, students are expected to pass all courses in the General Studies Program (GSP), including Use of English. This paper aims to assess the quality of the Use of English examination item functions using two- and three-parameter models in Item Response Theory (IRT) at Bayero University Kano, Nigeria. The study employed an ex post facto research design and multiphase cluster sampling technique to select a representative sample of the study population. Analyses were conducted using SPSS and IRTPRO software. The findings revealed that most items in the GSP 1201 (Form A and Form B) Use of English Examination for the 2018/2019 academic session at Bayero University Kano were difficult based on the one-parameter model, which could explain the high failure rate in this examination. Regarding guessing, the three-parameter model showed that most items had very low guessing indices. The study recommends that item writers in the School of General and Entrepreneurship Studies at Bayero University Kano and other related university departments should utilize IRT in the design, analysis, and scoring of examinations. This approach would enhance the information function of their assessment instruments.

Keywords: Assessment, psychometric properties, use of english, general studies program, item response theory

Introduction

Education is the agent of transformation towards sustainable Development. It increases peoples' capacities to transform their visions for society into reality. The educational measurement focuses either on measures of aptitude or measures of achievements and the data obtained from the measurements assist the teacher, the learner and even parents or guardians to make decisions about the progress of the learner. Therefore, for an individual to function effectively in the furtherance of national development and sustainability, he must have to possess an impressive command of the official language of communication which is English language.

At Bayero University Kano, the teaching and learning of English language concepts would be futile without proper assessment methods. A key responsibility of educators is to effectively impart knowledge to students, aiming to foster positive behavioral changes. To determine whether these desired changes have occurred and in what manner, teachers employ a comprehensive process involving testing, measurement, assessment, and evaluation. The GSP 1201 examination at Bayero University Kano is structured into two distinct forms, catering to different academic programs. Form A is typically administered to students in science-based departments during the first semester, while Form B is given to those in arts-based departments in the second semester. This variation in exam content may potentially influence item performance across different programs.

The Use of English course is a mandatory component of the General Studies Programme in Nigerian universities and other tertiary institutions. Its inclusion stems from persistent concerns raised by lecturers and employers regarding the inadequate English language proficiency of many undergraduates and even graduates. The inability of Nigerian graduates to compose basic job application letters in English, which is considered a national language, has been a source of embarrassment and disappointment, as noted by Nweye and Nwoye (2016).

The recurring poor performance in the GSP 1201 (Use of English) examinations at Bayero University Kano requires urgent attention. To address this issue and achieve the intended objectives, several questions need to be considered regarding the possible causes of these failures. One crucial aspect to examine is the difficulty level of the test items. The item difficulty index, which ranges from 0 to 1, provides insight into how challenging each question is for students. A very low index suggests an extremely difficult item, while a high index indicates an easy one. According to Baker (2012), items with a difficulty index below 0.50 are considered easy, while those above 0.50 are deemed difficult. It's essential to evaluate the difficulty of each item to ensure a balanced assessment. Another important factor to consider is whether the test items effectively differentiate between high and low achievers. Ebel and Fresba (1991) proposed a discrimination index scale where items scoring 0.40 and above are considered very good, 0.30-0.39 reasonably good, 0.20-0.29 marginal, and 0.19 or less poor. This discrimination helps ensure the test accurately assesses students' abilities.

To address these concerns, this paper aims to analyze the psychometric properties of the GSP 1201 (Use of English) examination at Bayero University Kano, specifically focusing on its difficulty and probability of guessing (a and b parameters). The primary objective of this study is to investigate the difficulty level and guessing probability of items in the GSP 1201 Examination set and administered by the School of General and Entrepreneurship Studies of Bayero University Kano during the 2018/2019 Academic Session. By examining these factors, the study seeks to provide insights that can help improve the examination's effectiveness and ultimately address the consistent failure rates.

Research Questions

The paper answered the following research questions:

a. What is the *b*-parameter of each item on GSP1201 form A of 2018/2019 First SemesterAcademic Session in Bayero University Kano?

- b. What is the *b*-parameter of each item on GSP1201 form B of 2018/2019 Second SemesterAcademic Session in Bayero University Kano?
- c. What is the guessing index *c* parameter of each item on GSP 1201 form A of 2018/2019 First Semester Academic Session in Bayero University Kano?
- d. What is the guessing index *c* parameter of each item on GSP 1201 form B of 2018/2019 Second Semester Academic Session in Bayero University Kano?

Research Hypotheses

The following Hypotheses was tested at 0.05 level of significance.

 H_{02} : There is no significant difference in the mean of *b*-parameter on items between GSP 1201 form A and GSP 1201 form B of 2018/2019 Academic Session in Bayero University Kano.

 H_{02} : There is no significant difference in the mean of *b*-parameter on items between GSP 1201 form

A and GSP 1201 form B of 2018/2019 Academic
Session in Bayero University Kano.

Methodology

The study employs an ex post facto research design to analyze the b and c parameters of the Use of English Examination from the 2018/2019 academic session at Bayero University Kano. The population of the study consist of all undergraduate students who registered for a compulsory course GSP 1201 Use of English of 2018/2019 academic session in Bayero University Kano, constituted the target population for the study. The total number of students who sat for the Use of English Examination of 2018/2019 academic session was Nine thousands and fifty (9050) which comprises both male and female undergraduate students and their average ages ranges from 18 to 22 years.

S/N	Faculties	No. of Departments	No. of Students
1	Allied Health Science	5	544
2	Agriculture	1	440
3	Arts and Islamic Studies	9	1,050
4	Basic Medical Science	4	426
5	Clinical Science	3	146
6	Computer Science and info. Tech.	1	394
7	Communications	1	196
8	Dentistry	1	19
9	Earth and Environmental Science	7	329
10	Education	22	2,166
11	Engineering	9	668
12	Law	1	250
13	Life science	4	721
14	Social and Management Science	10	1,435
15	Pharmaceutical Science	1	52
16	Physical Science	4	407
	Total	80	9050

Summary of Population

Source: School of General and Entrepreneurship Studies, BUK.

The sample size employed is 1000. The size is deemed appropriate because the parameter model that has been used in this study requires large sample size in order to obtain accurate parameter estimates and this was

Table 2

achieved via the use of IRTPRO software (students version), in this regard, Scholars like (Forero 2013; Thomas 2013; Forero 2009 & De Ayala 1994) recommends the use of 500, 1000, 1500 and 2000 sample sizes for a study under Item Response Theory.

S/N	FACULTIES	POPULATION	SAMPLE
1	Arts and Islamic Studies	1,050	149
2	Engineering	668	96
3	Physical Science	407	58
4	Social and Management Science	1,435	204
5	Basic Medical Science	426	61
6	Allied Health Science	544	77
7	Education	2,166	308
8	Earth and Environmental Science	329	47
	Total	7,025	1000

The study employed a multi-phase cluster sampling technique to ensure adequate representation of the population. This sampling method was carried out in three phases: In the first phase, eight out of sixteen faculties were selected using a draw-from-a-hat method without replacement. This approach ensured fair representation of faculties in both GSP Form A and Form B. The second phase applied the same procedure to sample 32 departments from the previously selected faculties. This selection adequately represented the total of 80 departments across the university. In the final phase, systematic sampling was used to select 1,000 undergraduates from the chosen departments. This method ensured а representative sample of the student population for the study. For data analysis, the researcher

utilized both item analysis and conventional statistical methods. The item analysis involved determining the b-parameter (item difficulty) and c-parameter (guessing factor) indices using IRTPRO software. This analysis helped answer the research questions related to the psychometric properties of the exam items. Conventional statistical methods were also employed, including frequency distribution, mean, standard deviation, and t-test for independent samples. These analyses were conducted using SPSS software and were used to address all research questions and test the hypothesis at a 0.05 significance level. This comprehensive approach to sampling and data analysis allows for a thorough examination of the GSP 1201 (Use of English) examination's psychometric properties,

potentially providing valuable insights into the test's effectiveness and areas for improvement.

Results Presentation

Research Question one: What is the b-parameter of each item on GSP 1201 form A of 2018/2019 First Semester Academic Session in Bayero University Kano?

Table 3: Indices of	f b-parameter on	GSP 1201 (form A)
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Item No.	b-parameter						
1	2.68	26	-0.95	51	-0.48	76	4.52
2	7.00	27	0.21	52	-1.98	77	-0.29
3	-0.34	28	2.10	53	-2.45	78	1.45
4	-1.27	29	-2.35	54	-1.27	79	0.84
5	0.42	30	-12.53	55	-2.47	80	0.31
6	1.76	31	0.43	56	2.03	81	-0.86
7	1.56	32	2.09	57	0.35	82	0.04
8	-1.73	33	0.92	58	-0.39	83	2.64
9	-1.12	34	-2.35	59	0.50	84	-0.70
10	4.64	35	3.07	60	-1.28	85	0.98
11	1.84	36	-0.11	61	-0.11	86	0.98
12	1.76	37	1.93	62	1.36	87	-1.98
13	0.47	38	0.31	63	0.82	88	3.52
14	1.44	39	0.36	64	2.39	89	-1.23
15	1.38	40	2.96	65	-1.92	90	-2.33
16	0.78	41	0.00	66	-0.59	91	0.99
17	-0.74	42	4.89	67	0.05	92	0.41
18	3.51	43	10.95	68	1.61	93	-0.82
19	3.56	44	1.19	69	0.10	94	0.80
20	-3.34	45	0.65	70	0.37	95	-2.78
21	0.47	46	-2.29	71	0.72	96	-3.86
22	2.87	47	-12.29	72	0.16	97	-0.81
23	0.06	48	-0.76	73	-1.47	98	2.89
24	-0.39	49	-0.01	74	-0.91	99	7.77
25	-1.27	50	-1.69	75	-1.00	100	-2.74
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Source: field data

Analysis of the b-parameter indices for GSP 1201 form A items reveals that the majority (75%) of the items are considered easy, with threshold values below 0.5. The remaining 25% of items are flagged as difficult, comprising numbers 1, 2, 4, 6-12, 14, 15, 18-20, 22, 25, 28-30, 32, 34, 35, 37, 40, 42-44, 46-48, 50, 52-56, 60, 62, 64, 65, 68, 73, 75, 76, 78, 87-91, 93-96, 98-100. Conversely, the items identified are 3, 5, 13, 21, 23, 24, 27, 31, 36, 38, 39, 49, 51, 57-59, 61, 67, 69, 70, 72, 77, 80, 82, & 92.

Research Question two: What is the *a*-parameter of each item on GSP 1201 form B of 2018/2019 First Semester Academic Session in Bayero University Kano?

Item No.	b-parameter						
1	1.53	26	0.05	51	0.36	76	0.17
2	0.60	27	0.53	52	0.45	77	0.20
3	0.49	28	1.05	53	0.07	78	1.23
4	0.64	29	0.23	54	0.30	79	3.53
5	-0.49	30	0.32	55	1.00	80	0.49
6	0.27	31	5.31	56	0.20	81	0.63
7	0.59	32	1.01	57	0.74	82	0.05
8	0.42	33	1.40	58	0.20	83	2.15
9	3.39	34	0.86	59	0.59	84	1.04
10	5.83	35	0.89	60	0.48	85	1.00
11	0.49	36	4.02	61	0.49	86	0.36
12	1.93	37	0.66	62	1.58	87	0.36
13	2.36	38	1.40	63	0.20	88	0.66
14	1.13	39	1.61	64	1.52	89	0.75
15	0.31	40	0.05	65	1.01	90	0.01
16	1.01	41	1.86	66	0.60	91	4.47
17	1.54	42	0.58	67	1.94	92	1.51
18	0.92	43	8.95	68	1.70	93	0.05
19	0.17	44	1.95	69	3.54	94	0.90
20	1.04	45	2.28	70	0.51	95	0.85
21	0.27	46	1.06	71	0.20	96	0.54
22	-0.70	47	1.73	72	5.00	97	0.98
23	4.89	48	0.17	73	0.11	98	0.05
24	0.42	49	0.32	74	0.79	99	0.92
25	0.23	50	1.05	75	0.59	100	0.36

Table 4: Indices of b-parameter on GSP 1201 (form B)

The item analysis performed with IRTPRO for GSP 1201 form B, as presented in Table 4, reveals that the majority of items (63%) are classified as difficult, with threshold values below 0.5. The difficult items are numbered 1, 2, 4, 7, 9, 10, 12-14, 16-18, 20, 22, 23, 25, 27, 28, 31-39, 41-47, 50, 55, 57, 59, 62, 64-70, 72, 74, 75, 78, 79, 81, 83-85, 88, 89, 91, 92, 94-97, 99, and 100. The remaining 37% of items are flagged as easy, consisting of numbers 3, 5, 6, 8, 11, 15,

19, 21, 24-26, 29, 30, 40, 48, 49, 51-54, 56, 58, 60, 61, 63, 71, 73, 76, 77, 80, 82, 86, 87, 90, 93, 98, and 100. This analysis provides insight into the overall difficulty distribution of the examination items in form B.

Research Question three: What are the guessing values (*a*-parameter) of each item on GSP 1201 form A of 2018/2019 First Semester Academic Session in Bayero University Kano?

Item No.	<i>c</i> -parameter	Item No.	c-parameter	Item No.	c-parameter	Item No.	c-parameter
1	-0.89	26	-0.75	51	0.27	76	-2.79
2	-2.17	27	-0.24	52	1.43	77	0.23
3	0.22	28	-2.16	53	1.92	78	-0.82
4	1.55	29	2.19	54	-0.48	79	-0.79
5	-0.40	30	-0.74	55	1.48	80	-0.14
6	-0.90	31	-0.35	56	-2.25	81	0.64
7	0.53	32	-0.45	57	-0.21	82	-0.03
8	1.24	33	-0.70	58	0.39	83	2.27
9	0.92	34	2.19	59	-0.12	84	4.81
10	-2.32	35	-4.00	60	1.58	85	-1.99
11	-1.81	36	0.08	61	0.17	86	-1.93
12	-0.92	37	-4.21	62	-1.61	87	0.82
13	-6.53	38	-0.23	63	-0.53	88	-2.28
14	-0.46	39	0.29	64	-1.95	89	0.86
15	-0.51	40	-2.31	65	1.91	90	2.30
16	-1.30	41	-0.00	66	0.33	91	0.96
17	0.20	42	-3.12	67	-0.06	92	-1.05
18	-1.05	43	-2.85	68	-1.61	93	0.82
19	-0.56	44	-1.20	69	-0.22	94	-0.59
20	0.98	45	-0.98	70	-0.40	95	4.75
21	-0.54	46	2.44	71	0.91	96	3.94
22	-1.41	47	4.43	72	-0.21	97	9.51
23	-0.07	48	0.78	73	1.62	98	-0.68
24	0.18	49	1.23	74	0.63	99	0.99
25	1.55	50	0.58	75	0.55	100	1.93

Table 5: Indices of c-parameter on GSP1201 (form A)

Table 5 summarizes the c-parameter values (guessing factor) for GSP form A items. The analysis reveals that 71 items have very low guessing values (-0.00 and below), including numbers 1, 2, 5, 6, 10-16, 18, 19, 21-23, 27, 28, 30-33, 35, 37, 38, 40-45, 54, 56, 57, 59, 62-64, 67-70, 72, 76, 78-80, 82, 85, 86, 88, 92, 94, and 98. Six items (3, 17, 24, 36, 61, and 71) fall into the low guessing value category, ranging from 0.01 to 0.25. The remaining 39 items (4, 7-9, 20, 25, 29, 34, 39, 46-53, 55, 58, 60, 65, 66, 71, 73-

75, 81, 83, 84, 87, 89-91, 93, 95-97, 99, and 100) are categorized as having high guessing values, ranging from 0.26 and above. This distribution provides insight into the likelihood of students guessing correctly on various items in the examination.

Research Question four: What are the guessing values (*a*-parameter) of each item on GSP 1201 form B of 2018/2019 First Semester Academic Session in Bayero University Kano?

Item No.	<i>c</i> -parameter	Item No.	c-parameter	Item No.	c-parameter	Item No.	c-parameter
1	0.98	26	-0.07	51	0.36	76	-0.05
2	-0.22	27	-0.83	52	-0.49	77	-0.17
3	0.64	28	-0.57	53	-0.11	78	-1.81
4	0.99	29	0.37	54	0.25	79	-2.19
5	0.39	30	s0.38	55	1.60	80	0.35
6	0.10	31	-0.72	56	-0.63	81	0.69
7	-0.92	32	-1.91	57	1.34	82	-0.08
8	0.46	33	-0.51	58	-0.37	83	-0.78
9	-4.22	34	-0.66	59	-1.24	84	0.67
10	-1.50	35	1.12	60	0.54	85	-1.70
11	0.64	36	-3.89	61	-0.60	86	0.31
12	-2.97	37	-0.62	62	1.54	87	-0.31
13	-2.12	38	-4.62	63	-1.23	88	-0.79
14	-1.69	39	-1.04	64	-0.47	89	0.37
15	-0.30	40	-0.07	65	-2.06	90	0.02
16	-0.95	41	-2.99	66	0.49	91	-1.75
17	-2.93	42	-0.61	67	-1.44	92	-1.53
18	-0.66	43	-3.58	68	-2.63	93	-0.08
19	-0.10	44	0.95	69	-1.28	94	-1.88
20	-1.66	45	s-1.90	70	-0.67	95	-0.79
21	-0.22	46	1.27	71	-0.37	96	0.89
22	0.88	47	-3.19	72	-2.89	97	-1.75
23	-2.69	48	-0.17	73	0.06	98	-0.08
24	0.46	49	-0.29	74	-0.69	99	1.05
25	0.22	50	0.38	75	-0.27	100	-0.31

 Table 6: Indices of c-parameter on GSP 1201 (form B)

Table 6 summarizes the c-parameter values (guessing factor) for GSP form B items. The analysis shows that 71 items have very low guessing values (-0.00 and below), including numbers 2, 7, 9, 10, 12-21, 23, 26-28, 31-34, 36-45, 47-50, 52, 53, 56-59, 61, 63-65, 67-72, 74-79, 82, 83, 85, 87, 88, 91-95, 97, 98, and 100. Five items (6, 25, 54, 73, and 90) fall into the low guessing value category, ranging from 0.01 to 0.25. The remaining 24 items (1, 3-5, 8, 11, 22, 24, 29, 30, 35, 46, 51, 55, 60, 62, 66, 80, 81, 84, 86, 89, 96, and 99) are categorized as having high

guessing values, ranging from 0.26 and above. This distribution provides insight into the probability of students guessing correctly on various items in form B of the examination.

Hypotheses Testing

Hypothesis one: There is no significant difference in the mean of *b*-parameter on items between GSP 1201 (form A) and GSP 1201 (form B) of 2018/2019 Academic Session in Bayero University Kano.

Form	N	Mean	S. D	Std. Error Mean	t-value	Df	P value	Decision
Form A	100	.4036	2.91555	.29156	-1.291	198	.199	Accontad
Form B	100	.8377	1.67449	.16745	-1.271	190	.177	Accepted

Table 7: Result of t-test for b Parameter Indices by GSP 1201 (form A) and GSP 1201 (form B) of 2018/2019 Academic Session in Bayero University Kano.

Table 7 summarizes the results of a t-test analysis conducted using SPSS to compare the bparameter indices (item difficulty) between GSP 1201 form A and form B. The analysis reveals that there is no statistically significant difference in the mean b-parameter indices between the two forms. The t-value was calculated to be -1.291, with a corresponding p-value of 0.199, which is greater than the conventional significance level of 0.05. As a result, the null hypothesis is accepted, indicating that there is no significant difference in the mean b-parameter indices between GSP form A and form B. This finding suggests that, on average, the difficulty levels of the items in both forms are comparable, despite any individual item variations that may exist between the two versions of the examination.

Hypothesis two: There is no significant difference in the mean of *c*-parameter on items between GSP 1201 (form A) and GSP 1201 (form B) of 2018/2019 Academic Session in Bayero University Kano.

Table 8 : Result of t-test for c Parameter Indices by GSP 1201 (form A) and GSP 1201 (form B) of 2018/2019 Academic Session in Bayero University Kano.

Form	N	Mean	S. D	Std. Error Mean	t-value	Df	P value	Decision
Form A	100	.0637	1.91152	.19115	3.214	198	.002	Rejected
Form B	100	6741	1.27136	.12714	3.214	190	.002	Rejected

Source: field data

Table 8 presents the results of a t-test analysis conducted using SPSS to compare the cparameter indices (guessing factor) between GSP 1201 form A and form B. The analysis reveals a statistically significant difference in the mean cparameter indices between the two forms. The tvalue was calculated to be 3.214, with a corresponding p-value of 0.002, which is less than the conventional significance level of 0.05. Consequently, the null hypothesis is rejected, indicating that there is a significant difference in the mean c-parameter indices between GSP form A and form B. This finding suggests that the guessing factors of the items in the two forms are notably different, which could imply variations in how students might randomly guess correct answers in each form of the examination. This difference in guessing probabilities between the two forms may have implications for the overall difficulty and fairness of the tests.

Summary of the Findings

Based on the analysis of the GSP 1201 examination forms A and B, the following conclusions can be drawn:

- The b-parameter (item difficulty) analysis shows that both forms contain a majority of difficult items. Form A has 75% difficult items and 25% easy items, while Form B has 63% difficult items and 37% easy items.
- ii. The c-parameter (guessing factor) analysis reveals differences between the two forms. In Form A, 55% of items have very low guessing values, 6% have low guessing values, and 39% have high guessing values. Form B shows a different distribution with 71% very low, 5% low, and 24% high guessing values.
- Statistical analysis indicates no significant difference in the mean b-parameter indices between Form A and Form B, suggesting similar overall difficulty levels.
- iv. However, there is a significant difference in the mean c-parameter indices between the two forms, indicating varying levels of guessing probability across the forms.

These findings suggest that while the overall difficulty of the two forms is comparable, there are notable differences in how students might randomly guess correct answers, which could affect the fairness and consistency of the examination across different groups of students.

Discussion of the Findings

The *b* and *c*-parameter are some of the properties to be examined when assessing the quality or worth of items in a test. In the same vein, a high b-index means a difficult item while a low bindex means an easy item and a high c-index indicates high guessing probability and a low cindex indicates low guessing probability of the items by the examinees.

In research question one the items had an average difficulty of 0.40, indicating they were generally easy, yet many students still failed. This could be because even the easy items were too challenging for some students. This result aligns with Bashir (2018), who found that 80% of the items on the 2014 WAEC English Examination in Minjibir Education Zone, Kano State, were easy. Similarly, Mustapha (2018) found that 70% of the items on the 2014 Jigawa State Mathematics **Oualifying Examination in Hadejia Education** Zone were easy. Given the purpose of the GSP 1201 Use of English examination at Bayero University, Kano, in the 2018/2019 academic session was to certify students for their first degree, the difficulty level should have been higher to ensure proper assessment.

With regards to research question two, the items had an average difficulty of 0.83, indicating they were difficult for the students. This finding differs from Ibrahim (2017), who evaluated Chemistry multiple-choice items in the Kano State Qualifying Examination and found only 12 out of 40 items needed revision. However, it aligns with Daniel (2014), who found that more items on the 2014 NECO Mathematics Examination in Kogi State were difficult. Similarly, Sayyad et al. (2012) found that items on Written Multiple-Choice Questions in Kashan University of Medical Sciences, India, had an average difficulty index of 0.54, indicating high difficulty. The difficulty level for the GSP 1201 examination should have been lower to accommodate students with lower abilities.

For research question three, the items had an average guessing value of 0.06, indicating a low probability of guessing correctly. Since the purpose of the test was certification, the guessing probability should have been higher to appropriately measure student achievement. This finding contrasts with Badamasi (2018), who found that 57.5% of the items on the 2015 Kano State Mathematics Senior Secondary Qualifying Examination in Dala Education Zone were desirable and 42.5% were undesirable, implying moderate guessing values.

In research question four, the study found that the items had an average guessing value of -0.67, indicating a very low c-index. This suggests that the items had a very low guessing ability, which should have been higher to appropriately measure the examinees' achievement for certification purposes. This finding contradicts Badamasi (2018), who, in his analysis of the 2015 Kano State Mathematics Senior Secondary Qualifying Examination in Dala Education Zone, found that 57.5% of the items were desirable and 42.5% were undesirable.

The objectives of this research were to examine the items in the GSP 1201 Use of English multiple-choice examination for the 2018/2019 academic session by determining their difficulty and probability of guessing. The collected data was analyzed based on research questions and hypotheses. The findings aligned with the theoretical framework of Item Response Theory (IRT), which assumes that a person's responses to test items are influenced by a single unobservable proficiency variable, known as a 'trait' or ability. This trait is an innate characteristic of test-takers that affects their consistent performance on the test and their responses to individual items (Popoola, Ojo & Onyeneho, 2012; Wilson & Mislevey, 1980, as cited in Ojerinde in Bashir, 2018). According to IRT, each test item has characteristics such as difficulty level and the ability to differentiate test-takers based on their mastery level. IRT focuses on four key aspects: the individual's ability on the assessed variable, the extent to which an item discriminates between high and low-scoring groups, the difficulty of the item, and the probability that a person with low ability will answer correctly (Mustapha, 2018).

The findings from hypothesis two revealed that the items in the GSP 1201 Use of English examination for the 2018/2019 academic session at Bayero University Kano showed no significant difference in the mean discrimination indices between forms A and B. This contradicts the work of Abubakar (2018), who found significant differences in the discrimination indices of NECO multiple-choice Mathematics examination items based on school location and type in Malumfashi Education Zone. However, the findings from this study align with Bashir (2018), who reported no significant difference in the mean discrimination indices by location in his investigation of the difficulty levels of items on the English Language multiple-choice examination of WAEC/SSCE in 2014.

Conclusion

The study examined the items in the GSP 1201 Use of English multiple-choice examination for the 2018/2019 academic session at Bayero University Kano, focusing on their difficulty levels and probability of guessing. The findings indicated that while the difficulty of the items was generally low, resulting in easy items, the low probability of guessing and average discrimination indices suggested that the items were not effectively challenging for some students.

The results showed that there was no significant difference in the mean discrimination indices between forms A and B of the examination. This finding aligns with Bashir (2018), who reported no significant difference in discrimination indices by location in the WAEC/SSCE English Language examination, but it contradicts

Abubakar (2018), who found significant differences based on school location and type in NECO Mathematics examinations. Overall, the study's support findings the theoretical assumptions of Item Response Theory, which posits that a person's responses to test items are influenced by their inherent traits or abilities. The examination items should be designed to appropriately reflect these traits to ensure accurate assessment and certification of students' proficiency levels. Future examinations should consider adjusting the difficulty levels and guessing probabilities to better differentiate between students' abilities and to enhance the overall effectiveness of the assessment.

Recommendations

- Since the findings from this study shows that the items for both GSP 1201 form A and form B are relatively difficult items it is therefore recommended that the test constructors in the School of General and Entrepreneurship Studies of Bayero University, Kano to make use of appropriate item analysis from the beginning so as to discard items that are too difficult since the purpose of this test is fulfilling the criteria for the award of first degree.
- 2. The School of General and Entrepreneurship Studies (SGES) should encourage pilot testing of the Use of English multiple choice items during test construction stage prior to administering the test to ensure that the item

analysis is properly undertaken to judge the quality of the items in this examination.

3. Given the fact that the results show in GSP form B, some departments recorded mass failure in the examination, it is therefore recommended that the departments usually affected by the massive failure of students in the Use of English (GSP 1201) course, especially Arabic and Islamic Studies, should make separate arrangements to include regular teaching of English at all levels in their curriculum.

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Influence of Toilet Training and Immunization on Child Rearing Practices in Badagry Local Government Area of Lagos State

By

Usman Tunde Saadu¹, Ramat Teniola Na'Allah² and Fatimoh Yusuf³

¹Department of Early Childhood and Primary Education, Faculty of Education, Kwara State University, Malete

^{2&3}Post graduate student of the Department of Early Childhood and Primary Education, Faculty of Education, Kwara State University, Malete

Corresponding Author: <u>usman.saadu@kwasu.edu.ng</u>

<u>08038493554</u>

Abstract

Toilet training and immunization are crucial aspects of child-rearing practices that can significantly impact infant health outcomes by reducing the risk of diseases, improving cognitive development, and enhancing overall well-being. This study examined the influence of toilet training and immunization on child-rearing practices in the Badagry Local Government Area of Lagos State. A descriptive survey design was adopted, with the population comprising all parents in the Badagry area. The sample size of 384 was determined using Research Advisor (2006). Two research purposes, two research questions and two hypotheses were postulated for this study. The reliability coefficients of the instruments for toilet training practices and child immunization were 0.75 and 0.79, respectively. Data collected were analyzed using descriptive statistics, including mean, percentage, and frequency count for demographic data and research questions. Inferential statistics, specifically Analysis of Variance (ANOVA), were used to test all hypotheses at a 0.05 level of significance. The findings revealed that the influence of parents' level of education on toilet training practices in Badagry Local Government was low. Conversely, the influence of parents' level of education on child immunization in the Badagry Local Government Area was very high. There was a significant difference in the mean ratings of respondents on the level of toilet training practices based on parents' level of education in Badagry Local Government Area (F3,380=19.372, p<0.05). Similarly, there was a significant difference in the mean ratings of respondents on the level of child immunization based on parents' level of education in Badagry Local Government Area (F3,380=26.156, p<0.05). It was concluded that parents' level of education influences both toilet training and child immunization practices. It was recommended that the government organize workshops and establish mobile immunization clinics or outreach programs for all parents.

Keywords: Toilet training, immunization, child rearing practice, parents

Introduction

African Society consists of both young and old individuals who require proper training from birth, including toilet training and other essential practices. Due to the significant role that children play in African society; their care is taken very seriously. Various practices for caring for children exist, differing based on the society or family in which the child is born. According to Murdock (2021) Child-rearing practices are often influenced by a variety of factors, including cultural values, social norms, family history, and individual beliefs and experiences. For instance, in some cultures, extended family members play a larger role in child-rearing than in others, while in other cultures, parents may prioritize individual achievement and success in academic or extracurricular activities. Effective child-rearing

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practices are often grounded in principles of positive parenting, which emphasize building strong relationships between parents and children based on mutual respect, trust, and open communication. Positive parenting and positive child-rearing practices are interconnected approaches to raising children in a nurturing and supportive environment. Both emphasize the importance of setting clear and consistent limits and boundaries while providing opportunities for children to learn and grow. In positive parenting, parents show love and affection through gestures like hugs, praise, and quality time spent together. They encourage independence by allowing ageappropriate decision-making and responsibilities. Additionally, positive parenting involves setting clear expectations through rules and consequences, providing positive feedback for efforts and accomplishments, and modeling appropriate behavior through respect, kindness, and empathy towards others (Murdock, 2021).

Toilet training is one of the aspects of childrearing is toilet training, which is known as potty training. Toilet training is a comprehensive process that involves teaching young children the necessary skills and behaviors to use the toilet independently (Johnson, 2019). It encompasses different stages and considerations to ensure a successful transition from diaper use to toilet use. One crucial aspect of toilet training is assessing the child's readiness, which involves both physical and emotional factors (Klassen et al., 2013). Establishing regular toileting schedules helps the child develop a sense of predictability and familiarity. Parents can encourage their child to sit on the toilet at consistent intervals, such as upon waking up, before and after meals, and before bedtime. Positive reinforcement, such as verbal praise or small rewards, can be used to motivate and encourage the child's progress and success in using the toilet. It's important to note that toilet training is a gradual process, and setbacks or accidents are common. Patience, understanding, and maintaining a positive attitude are essential during this period. Parents are also encourage to handle their children calmly, without punishment or shame, to create a supportive and encouraging environment for the child (Johnson, 2019).

Both toilet training and child immunization require patience and understanding. In toilet training, setbacks or accidents are common, and a positive attitude and supportive environment are essential (Johnson, 2019).

Child immunization is a critical aspect of public health that involves administering vaccines to protect children from infectious diseases. It is a comprehensive approach that aims to stimulate the immune system and provide long-lasting immunity against specific pathogens. Vaccines contain weakened or inactivated forms of disease-causing agents, triggering an immune response without causing illness. Following a recommended vaccine schedule, children receive vaccines at specific ages to maximize their immune response and protection. This schedule also includes booster doses to enhance and maintain immunity. Immunization not only

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safeguards individual children also but contributes to community health through the concept of herd immunity. Vaccine safety is a paramount concern, and extensive research and monitoring ensure the safety and effectiveness of vaccines (World Health Organization, 2020). Promoting vaccine advocacy and education is crucial for increasing vaccine acceptance and coverage rates (Centers for Disease Control and Prevention, 2021). By understanding and implementing the concept of child immunization, healthcare providers and policymakers can effectively protect children and communities from vaccine-preventable diseases, contributing to overall public health (World Health Organization, 2020; Centers for Disease Control and Prevention, 2021).

Parent-related variables or parental factors play a crucial role in shaping a child's development and well-being. These variables can be classified into different categories, including demographic variables, psychological variables, parenting styles, parenting practices, and the parent-child relationship. Demographic variables such as age, gender, education, occupation, income, and marital status of the parents have been associated with differences in parenting styles, practices, outcomes (Conger et al., and 2012). Psychological variables such as personality traits, values, beliefs, and attitudes of the parents also influence their parenting behaviors. Additionally, parenting styles are broad patterns of parenting behaviors and attitudes, and parenting practices are specific behaviors that parents engage in to

promote their children's development. The quality of the parent-child relationship, which includes attachment, communication, and interaction, is another important factor that influences child outcomes (Dix, Ruble, & Zambarano, 2019). This study focused on three aspects of parent-related variables: parents' level of education, as this element significantly influence how parents nurture their children.

Parents' level of education refers to the highest level of education achieved by an individual's parent or parents (McLoyd, 2018). It serves as a measure of their educational background and is commonly utilized in research, surveys, and educational settings to gain insights into the socioeconomic and educational status of individuals or groups (Gennetian & Leone, 2005). The parents' level of education can be categorized into various levels, such as no formal education, primary education, secondary education, vocational or technical education, some college or associate degree, bachelor's degree, master's degree, and doctorate or professional degree (DiCerbo, 2016).

Parental education has been linked to higher rates of child immunization. Parents with higher education levels tend to adhere more closely to recommended immunization schedules and ensure their children receive necessary vaccinations (Bui, Lee, & Le, 2020).

Statement of the Problem

Child-rearing practices in African societies are deeply influenced by cultural values, social norms, and individual family beliefs, creating a diverse range of methods for raising children. While positive parenting practices-such as fostering strong parent-child relationships, setting consistent boundaries, and encouraging child independence-are widely recognized for their effectiveness, the specific practices that constitute child-rearing, including toilet training and child immunization, vary significantly across different families and communities. However, there is a lack of comprehensive understanding regarding how parent-related variables. particularly the parents' level of education, influence these practices and the overall development and well-being of children in African societies.

Research has shown that parental education is a critical factor affecting various child-rearing practices, including adherence to immunization schedules and effective toilet training methods. Parents with higher education levels tend to have better knowledge and understanding of child development principles, which can result in improved health and developmental outcomes for children. Despite the importance of these factors, there is limited empirical evidence exploring the relationship between parents' education levels and their child-rearing practices in African contexts, especially concerning toilet training and child immunization.

This study aims to fill this gap by examining how the education level of parents affects their childrearing practices, focusing on toilet training and child immunization in African societies. Understanding these relationships is crucial for developing targeted interventions and educational programs that support positive parenting practices and promote the health and development of children across diverse African communities.

Objectives of the Study

The general objective of this study is to find out the influence of parental factors on toilet training and immunization in Badagry Local Government Area of Lagos State. Specifically, this study examined the influence of;

- parent level of education on toilet training practice in Badagry Local Government Area of Lagos State.
- Parent level of education on child immunization in Badagry Local Government Area of Lagos State.

Research Questions

The following questions were raised to guide this study.

- To what extent does parents' level of education influence toilet training practice in Badagry Local Government?
- To what extent does parents' level of education influence child immunization in Badagry Local Government Area of Lagos?

Research Hypotheses

The following research hypotheses were formulated and tested at 0.05 level of significance for this study.

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H₀₁: There is no significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State.

 H_{02} : There is no significant difference in the mean rating of respondents on the level of child Immunization based on parents' level of education in Badagry Local Government Area of Lagos State.

Methodology

The research design for this study is a Descriptive Survey design. This methodology aims to provide a detailed and comprehensive description of a particular phenomenon, event, or population. The population for this study consisted of all parents in the Badagry Area of Lagos State, including both mothers and fathers with children residing in the area. According to the Annual National Population Census of 2006, there are 237,731 parents in the Badagry Local Government Area of Lagos State. According to research advisor (2006) a sample size of 384 respondents was recommended for the population of 237,731. A multi-stage sampling technique was employed. Simple random sampling was used to select five communities from each zone, resulting in a total of 15 communities. Proportional sampling technique was then used to sample parents from each of the 15 communities based on the population found in each community and the total number of 384 respondents was eventually

selected for the study. Proportional sampling technique was used because population in each community was not the same and therefore respondents were selected in accordance with the population and in all 384 respondents were selected for the study.

Questionnaires were used as the research instrument, structured into two sections, A and B. Items were rated on modified likert scale of very high extent, high extent, low extent and very low extent. Face and content validity were ensured by having the instrument reviewed by lecturers in the Department of Early Childhood and Primary Education at Kwara State University, Malete. The reliability coefficients for toilet training practices and child immunization were 0.75 and 0.79, respectively. A letter of introduction and a consent form were provided to all respondents for approval. Data collected were analyzed using descriptive statistics, including mean, percentage, and frequency count for demographic data and research questions. Inferential statistics. specifically Analysis of Variance, were used to test all hypotheses at a 0.05 level of significance.

Results

Demographic profile of the respondents was presented using frequency counts, mean and percentages. Inferential statistics of Analysis of Variance (ANOVA) was adopted to analyze the research hypotheses generated at 0.05 at level of significance.

Gender	Frequency	Percentage	
Male	181	47	
Female	203	52	
Total	384	100	
Parent Qualification	Frequency	Percentage	
Degree	165	43.0	
NCE	113	29.4	
SSCE	79	20.6	
FSLC	27	7.0	
Total	384	100	

 Table 1:
 Distribution of respondents based on gender

Table 1 shows the gender respondents on the parental factors on childrearing practices among parents in Badagry. One hundred and eight-one (181) of the respondents representing 47.1% were male while two hundred and three (203) of the respondents were female representing 52.9%. From the analysis above, it was indicated that female respondents were found to be more in number than male respondents. Therefore, in view of the above result, female respondents prevailed of parental factors on childrearing practices among parents in Badagry.

Table also show educational qualification of the respondents on the parental factors on childrearing practices among parents in Badagry. It was indicated that one hundred and sixty-five (165) of respondents representing 43.0% had degree result, one hundred and thirteen (113) of

respondents representing 29.4% had NCE `(Nigeria Certificate Education) result, seventynine (79) of respondents representing 20.6% had SSCE (Senior School Certificate Education) results, while twenty-seven (27) of respondents representing 7.0% had FSLC (First School Leaving Certificate) result. From the analysis above, it was indicated that the respondents who had civil degree result found to be more in number than others with highest frequency and percentage. Therefore, in view of the above result, parent who had degree result prevailed of parental factors on childrearing practices among parents in Badagry

Research Question one: To what extent does parent level of education has influence on toilet training practice in Badagry Local Government?

 Table 3: Frequency on the extent to which parent level of education have influence on toilet training practice in Badagry Local Government.

S/N	Parent level of Education on Toilet Training VHE Practice	E HE	LE	VLE	E N	Aean
1	The level of your education influences your access to reliable information about modern toilet technologies and hygiene practices?	42(10.9)	104(27.1)	116(30.2)	119(31.0)	2.20
2	Educational level of parents influences their ability to teach their children about proper toilet habits?	30(7.8)	40(10.4)	215(56.0)	99(25.8)	2.00
3	I introduced the concept of using the toilet to my child at an appropriate age based on my level of education	28(7.3)	10(2.6)	95(24.7)	251(65.4)	1.52
4	My level of education has influenced my ability to establish a consistent toilet routine for a child, including regular toilet visits after meals or when they show signs of needing to go.	53(13.8)	50(13.0)	123(32.0)	158(41.1)	1.99
5	Parent level of education has influenced the understanding of the significance of successful toilet training as an important developmental milestone for a child, boosting their confidence, self-esteem, and overall development?	16(4.2)	90(23.4)	81(21.1)	197(51.3)	1.80
	Weighted Mean					1.90

Decision rule: Very High Extent: 3.0-4.0, High Extent: 2.0-2.9, Low Extent: 1.0-1.9, Very Low Extent: 0-0.9. Note: The figures in parentheses are in percentages

Table 3 shows the responses of the respondents on the extent to which parent level of education has influence on toilet training practice in Badagry Local Government. It was indicated that; the level of education influences access to reliable information about modern toilet technologies and hygiene practices (mean=2.20), Educational level of parents influences their ability to teach their children about proper toilet habits (mean=2.00), they did not introduced the concept of using the toilet to their child at an appropriate age based on level of education (mean=1.52), level of education has no influence low ability to establish a consistent toilet routine for a child, including regular toilet visits after meals or when they show signs of needing to go(mean=1.99), and Parent level of education has low influence on the understanding of the significance of successful toilet training as an important developmental milestone for a child, boosting their confidence, self-esteem, and overall development (mean=1.80). In the light of the result, it was revealed that the extent to which parent level of education has influence on toilet training practice in Badagry Local Government is low. The weighted mean 1.90 which is a numeric indicator that the extend to which parent level of education has influence on toilet training practice in Badagry Local Government is low. The weighted mean 1.90 which is a numeric indicator that the extend to which parent level of education has influence on toilet training practice in Badagry Local Government is low.

Research Question two: To what extent does parent level of education have influence on child immunization in Badagry Local Government Area of Lagos? Table 4: Frequency on the extent to which parent level of education has influence on child immunization in Badagry Local Government Area of Lagos

S/N	Parent Level of Education on Child Immunization	VHE	HE	LE	VLE	Mear
1	Parent level of education influence their ability to critically evaluate the	236	94	44	10	3.45
	potential benefits and drawbacks of different vaccination options for their child?	(61.5)	(24.50)	(11.5)	(2.6)	
2	Your educational background influences your awareness of	131	226	25	2	3.27
	government or local initiatives that provide information about child immunization?	(34.1)	(58.9)	(6.5)	(1.5)	
	Your educational background impact your awareness of the	273	85	20	6	3.63
	recommended immunization schedule for your child's age?	(71.1)	(22.1)	(5.2)	(1.6)	
	Your level of education influences your understanding of the	192	85(22.1)	64	43	3.11
	importance of child immunization for overall health?	(50.0)		(16.7)	(11.2)	
;	Your educational attainment influences your ability to interpret medical	50	43	141	150	1.98
	information and recommendations related to child immunization?	(13.0)	(11.2)	(36.7)	(39.1)	
	Weighted Mean		. ,	. ,	. ,	3.09

Decision rule: Very High Extent: 3.0-4.0, High Extent: 2.0-2.9, Low Extent: 1.0-1.9, Very Low Extent: 0-0.9. Note: The figures in parentheses are in percentages

Table 4 shows the responses of the respondents on the extent to which parent level of education has influence on child immunization in Badagry Local Government Area of Lagos. It was indicated that the: Parent level of education influenced their ability to critically evaluate the potential benefits and drawbacks of different vaccination options for their children (mean=3.45), educational background influences their awareness of government or local initiatives that provide information about child immunization (mean=3.27),educational background impact their awareness of recommended immunization schedule for their children's age (3.63), level of education influenced their understanding of the importance of child immunization for overall health (mean=3.11), and educational attainment has low influence on their ability to interpret medical

information and recommendations related to child immunization (mean=1.98). In the light of the result, it was revealed that the extent to which parent level of education has influence on child immunization in Badagry Local Government Area of Lagos is very high. The weighted mean (**3.09**) which is a numeric indicator that the extent to which parent level of education has influence on child immunization in Badagry Local Government Area of Lagos is very high.

Research Hypotheses

The following research hypotheses were formulated and tested for this study.

H_o1 There is no significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State.

Table 5: Summary of Analysis Variance (ANOVA) showing significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State.

	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	396.346	3	132.115	19.372	.000
Within Groups	2591.560	380	6.820		
Total	2987.906	383			

The results of analysis of variance as presented in Table 5 revealed that the calculated value of F was 19.372 ($F_{3,380}$ =19.372) and observed probability value is .000 which is less than the fixed probability value of 0.05(P<0.05). This indicated that the hypothesis which stated that, there was no significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State was rejected. This implied that there was a significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State ($F_{3,380}$ =19.372, p<0.05). In the light of the result, there was a significant difference in the mean rating of respondents on the level of toilet training practice based on parents' level of education in Badagry Local Government Area of Lagos State.

Table 6: Summary of Bonferroni's Post Hoc pairwise Comparison of educational qualification of parentss

Education	Mean Score	Degree	NCE	SSCE	FSLC
Degree	10.68	*			
NCE	9.00		*		
SSCE	8.67			*	
FSLC	8.53				*

Table 6 presents the results of a Bonferroni post hoc pairwise comparison of parents' educational qualifications and their corresponding mean scores. The table compares four groups based on their highest educational qualification: Degree, NCE (National Certificate in Education), SSCE (Senior Secondary Certificate Examination), and FSLC (First School Leaving Certificate). Parents with a Degree have significantly higher mean scores compared to those with NCE, SSCE, and FSLC. Parents with an NCE qualification have significantly higher mean scores than those with SSCE and FSLC. Parents with an SSCE qualification have a higher mean score than those with an FSLC qualification, but lower than those with a Degree or NCE.

The significant differences revealed by Table 6 suggest that the educational qualification of parents has a substantial impact on the measured outcome (as indicated by the mean scores).

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Parents with higher educational qualifications (Degree) tend to perform better or have more favorable scores compared to those with lower qualifications (e.g., FSLC). This finding emphasizes the importance of educational attainment in influencing the variable under consideration.

H₀2: There is no significant difference in the mean rating of respondents on the level of child Immunization based on parents' occupation in Badagry Local Government Area of Lagos State.

Table 7: Summary of Analysis Variance (ANOVA) showing significant difference in the mean rating of respondents on the level of child Immunization based on parents' level of education in Badagry Local Government Area of Lagos State.

	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	727.495	3	242.498	26.158	.000
Within Groups	3522.745	380	9.270		
Total	4250.240	383			

The results of analysis of variance as presented in Table 7 revealed that the calculated value of F was 26.158 ($F_{3,380}$ =26.156) and observed probability value is .000 which is less than the fixed probability value of 0.05(P<0.05). This indicated that the hypothesis which stated that, there was no significant difference in the mean rating of respondents on the level of child Immunization based on parents' level of education in Badagry Local Government Area of Lagos State was rejected. This implied that there was a significant difference in the mean rating of respondents on the level of child Immunization based on parents' level of education in Badagry Local Government Area of Lagos State ($F_{3,380}$ =26.156, p<0.05). In light of the result, there was a significant difference in the mean rating of respondents on the level of child Immunization based on parents' level of education in Badagry Local Government Area of Lagos State.

 Table 8:
 Summary of Bonferroni's Post Hoc pairwise Comparison of educational qualification of parents

Education	Mean Score	Degree	NCE	SSCE	FSLC
Degree	16.99	*			
Degree NCE	14.48		*		
SSCE	14.29			*	
FSLC	13.44				*

Table 8 presents the results of a Bonferroni post hoc pairwise comparison of the mean scores associated with the educational qualifications of parents. The table compares four groups based on their highest educational qualification: Degree, NCE (National Certificate in Education), SSCE (Senior Secondary Certificate Examination), and FSLC (First School Leaving Certificate).

Bonferroni post hoc pairwise comparison to further explore which specific educational levels differ significantly from each other regarding the mean rating on child immunization. Degree: Highest mean score (16.99), significantly different from all other groups. NCE: Mean score (14.48), significantly different from SSCE and FSLC. SSCE: Mean score (14.29), significantly different from FSLC. FSLC: Lowest mean score (13.44), significantly different from all other groups.

The post hoc comparison confirms that parents with higher educational qualifications (Degree) have significantly higher mean ratings regarding child immunization compared to those with lower educational qualifications (FSLC). This indicates that as the level of education increases, so does the awareness, understanding, or favorable attitude toward child immunization.

Discussion of Findings

In discussion, the findings were examined in connection with relevant previous studies.

The study revealed that parental level of education has influence on toilet training practices in Badagry Local Government. This finding contradicts the results of Buki et al. (2019), which indicated that higher levels of parental education are linked with more successful and timely toilet training. Buki et al. (2019) found that parents with higher educational backgrounds were more likely to successfully guide their children through the toilet training process in a more efficient manner compared to parents with lower levels of education.

Furthermore, the study found that parental level of education has influence on child immunization in Badagry Local Government Area of Lagos is very high. This may be because parents with higher levels of education are more likely to comprehend the importance of immunization in preventing diseases. This finding aligns with Ateere (2014), who found that children of mothers who attained a primary level of education were more likely to be fully vaccinated than children of mothers with no education. Additionally, Mora et al. (2017) found that the higher the mothers' educational attainment level, the greater the probability of children being vaccinated in immunization programs.

The study also revealed a significant difference in the mean rating of respondents on the level of toilet training practice based on parents' education levels in Badagry Local Government Area of Lagos State. This implies that the level of parental education determines the level of toilet training practices. This supports the findings of Lee and Kim (2021), who found that parents with higher levels education were more knowledgeable about toilet training strategies and information had access to about child development.

Similarly, the study found a significant difference in the mean rating of respondents on the level of child immunization based on parents' education

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levels in Badagry Local Government Area of Lagos State. This suggests that parents with different levels of education might have varying attitudes, beliefs, or access to information regarding child immunization. This finding is consistent with Ateere (2014), who suggested that children of mothers who attained a primary level of education were more likely to be fully vaccinated than children of mothers with no education. Mora et al. (2017) also found that higher levels of maternal education increased the probability of children being vaccinated in immunization programs.

Conclusion

Based on the findings of the study, it was concluded that parent level of education and immunization influences toilet training and child immunization practice in Badagry Local Government is low. Parents with Degrees are practicing toilet training and child immunization than parents with lower qualification (NCE, SSCE and FSLC).

Recommendations

Based on the findings for this study, the following recommendations were made

1.To address the influence of parental education on both toilet training and child immunization practices, educational programs should be developed and tailored to parents at different educational levels. These programs should focus on providing practical guidance on effective toilet training techniques and the importance of timely child immunization. 2. Programs can be delivered through community health centers, schools, and local organizations, utilizing various communication methods such as workshops, pamphlets, visual aids, and digital media. Emphasis should be placed on simple, clear messaging that is culturally relevant and accessible to parents with varying levels of education.

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Goal-Orientation as Determinant of Performance in English Language Among Secondary School Students in Cross River, Nigeria

By

Obeten, Samuel Okoi Department of Educational Foundation University of Lagos

Abstract

The study examined goal-orientation as determinant of performance in English language among secondary school students. The study has two objectives which are to investigate the correlation between goal-orientation and performance in English language among secondary school students, To ascertain gender differences in performance in English language among secondary school students. To guide the study, two (2) null hypotheses were formulated. The research adopted a descriptive survey design; population of the study was 3,370 SS2 students. Multi stage random sampling procedure was employed to select the sample size of 796. Using the Achievement Goal Questionnaire, with a modified four likert scale and Performance in English Language Test was used to gather data. The questionnaire was validated and also subjected to a reliability test. Multiple regression analyses and Analyses of covariance, used and result showed correlation between goal orientations in performance in English language . Also result showed no gender relationship between performance in English language due to goal orientation. The study established that goal-orientation predicts students' performance in English language, importantly, mastery goal orientation is the only criterion variables, found to enhance students' performance and competence in English language, However, gender differences due to goalorientation did not impact English language performance.. It was recommended further that for Education stakeholders, and students should recognise that goal- orientation predict performance in English language,

Keywords: - English language performance and goal-orientation.

Introduction

Educational systems are designed to equip individuals to address contemporary issues in various fields, with a shared classroom language being crucial for achieving educational goals. In Nigeria, where multiple languages are spoken, English is the primary language of instruction, essential for learning and national development. However, students' performance in English fluctuates, impacting their overall academic success. Ahmed and Emeka (2010) noted that English performance in Nigerian secondary schools has been suboptimal, with various factors like teaching methods, school environments, and family backgrounds contributing to this issue.

Research on improving English performance has often focused on psychological factors,

such as goal orientation, with studies outside Nigeria by Karle (2016) and Keys et al. (2012). This study investigates how goal orientation affects English performance among secondary students in Cross River, Nigeria. Goal orientation refers to the purposes individuals strive for in achievement contexts, influencing their academic outcomes (Elliot et al., 2005). It is а perceptual-cognitive framework determining how students engage with academic tasks and the importance they attach to them (Murayama et al., 2012; Woolfolk-Hoy & Hoy, 2006).

Payne et al. (2007) found that goal orientation predicts academic performance. Elliot and McGregor's (2001) 2 X 2 model of goal orientation includes mastery approach, mastery avoidance, performance approach, and performance avoidance. Mastery goals focus on skill and competence, while performance goals involve comparison with others (Elliot, 1999; Pintrich, 2000).

Table 1:

Elliot & McGregor Goal Orientation

Goal-Orientations	Descriptions
Mastery approach	Trying to attain competence relative to the task or personal standards (students are motivated to learn or develop skills)
Mastery avoidance	Trying to avoid incompetence relative to the task or personal standards (students are motivated to avoid failures or become de-skilled)
Performance approach	Trying to attain competence relative to one's peers (students are motivated to outdo others or to be considered talented)
Performance avoidance	Trying to avoid incompetence relative to one's performance peers (students are motivated to avoid doing worse than others or to be considered less talented)

Source: Elliott and McGregor (2001)

Elliot and McGregor (2001) describe goal orientation with two main dimensions: masteryperformance and approach-avoidance. A mastery-approach goal focuses on achieving success by mastering a task or improving relative to past performance, encouraging students to develop competence and learn new skills. In contrast, a mastery-avoidance goal aims to avoid failure or becoming unskilled, emphasizing the avoidance of mistakes.

Students with a mastery approach view competence as a result of effort and practice, seeing errors as part of the learning process (Senko, Hullemana & Harackiewicz, 2011). This orientation fosters internal motivation and personal growth.

On the other hand, a performance approach goal-orientation centres on validating competence in comparison with others, seeking favourable judgments and external rewards (Dekker & Fischer, 2008). Students with this orientation may be motivated by external validation and might resort to academic dishonesty to achieve their goals. Pintrich (2000) notes that these students often see competence as an innate trait and may engage in self-handicapping to rationalize failures.

Statement of the Problem

The complex linguistic environment in Nigeria poses significant challenges for secondary school students, who must learn English in addition to their indigenous languages. This requirement complicates bilingual both teaching and learning, as students often struggle to fully understand subjects taught in English. Chief Examiner's Report (WAEC, 2018) highlights this issue, noting that English language pass rates were 60.85% in 2016 and 54.86% in 2017, compared to much lower rates in previous years (21.99% in 2014, 35.22% in 2015, and 43.30% in 2018). The high failure rates (78.01%, 64.78%, 39.15%, 45.14%, and 56.70% respectively) impede students' ability

to gain admission to tertiary institutions and contribute to national development, affecting students from Cross River State as well.

This poor performance in English often hinders students' aspirations for higher education and can lead to social issues, including criminal behaviour and hostility towards society. There is a lack of research on how goal-orientation influences academic performance in Nigeria, making it crucial to investigate this psychological factor as a determinant of English performance language among secondary school students orientation,

Objectives of the Study:

The aim of this study is to examine goalorientation as a determinant of performance in English language among secondary school students. Specifically, the study has two objectives which are to:

- investigate the correlation between goalorientation and performance in English language among secondary school students.
- ascertain gender differences in performance in English language among secondary school students related to goalorientation.

Research Questions:

- To what extent does goal-orientation correlate with performance in English language among secondary school students?
- 2. To what extent does gender influence performance in English language among

secondary school students in relation to goal-orientation?

Research Hypotheses:

- There is no significant correlation between goal-orientation and performance in English language among secondary school students.
- There is no significant gender difference in performance in English language among secondary school students due to goalorientation.

The Concept of Academic Performance:

Academic performance is a significant concern for students, parents, and educators, involving various interpretations and terminologies such as academic achievement, school readiness, and school performance. Santrock (2006) defines academic performance as the skills students acquire, typically measured through assessments like standardized tests and routine evaluations. Busari (2001) describes it as the evaluation of students' classroom learning activities based on marks or grades, reflecting their performance in tests, subjects, or courses.

Factors influencing academic performance include cognitive abilities, teacher relationships, student interest, study habits, emotional intelligence, self-confidence, motivation, and personality. Martin (2008) traces the concept of academic performance back to the industrial revolution, which necessitated schooling to meet job demands and shifted vocational qualifications from societal class to demonstrated ability and skill. Thus, academic performance evolved from historical educational limitations and selective admissions based on social class or parental background to a broader focus on individual skills and capabilities.

Concept of Goal-Orientation

The concept of goal-orientation was initially explored by Diener and Dweck in 1978, as referenced by Elliot and McGregor in 2001. In their study, primary school children were assigned a complex task to solve individually. As the task's difficulty increased, some children embraced the challenge with confidence and continued to engage persistently, aiming to develop competence and mastery. These children demonstrated a learning goalorientation, focused on improving their skills and strategies.

Conversely, other children displayed a sense of helplessness and disengagement as the task became more complex. These children exhibited a performance goal-orientation, characterized by a focus on proving their ability rather than improving it. This early work by Dweck and colleagues laid the foundation for the dichotomous goal-orientation concept in education, distinguishing between learning goals and performance goals

Goal-Orientation and Academic Performance

In the study by Christopher (2020), the relationship between goal orientation and academic performance in statistics was explored. The findings indicated that mastery goals had the highest overall weighted mean of 4.16 and the lowest standard deviation (0.5416), suggesting that students with mastery

goals performed better and showed less variation in their performance. Performance approach goals had a mean of 3.77 with a standard deviation of 0.6831, while performance-avoidance goals had the lowest mean of 2.98 and the highest standard deviation of 0.8498.

Joyce, Celeste, Ruslan, Paul, and Renate (2018) investigated the impact of goal orientation on academic performance in adult distance education. They found that performanceavoidance goals negatively predicted academic performance (F (1, 860.37) = 4.52, p = .03), meaning that students who aimed to avoid appearing incompetent performed worse. Conversely, performance-approach goals positively predicted academic performance (F (1, 746.48) = 5.13, p = .02), indicating that students who aimed to outperform others achieved higher grades. Mastery approach and mastery avoidance goals were not significant predictors of academic performance (F (1, 294.00 = 0.09, p = .76 and F (1, 896.73) = 0.72, p = .40, respectively).

Keys, Conley, Duncan, and Domina (2012) studied 2,231 California students to assess the relationship between goal orientation and mathematics performance. Their findings revealed a significant relationship with mastery approach goals, contradicting Pekrun, Elliot, and Maier (2009), who suggested that performance-approach goals are typically positive predictors, performance-avoidance goals are generally negative, and mastery goals vary in their predictive value. The study highlighted that the impact of goal orientation on academic performance can depend on the type of task, age of participants, and analysis methods used.

Goal-Orientation, Gender Differences and Academic Performance

The studies by Kayis & Ceyhan (2015) and Bakirtzoglou & Ioannou (2011) examined the impact of gender on goal-orientation and academic performance, finding that female students are generally more inclined towards mastery goal orientation, while male students are more likely to pursue performance approach goals.

Diseth and Samdal (2014) investigated 2,594 Norwegian students and found similar trends: female students excelled in mastery goals, while male students performed better in performance goals. This supported the findings of Kayis & Ceyhan (2015) and Bakirtzoglou & Ioannou (2011), reinforcing the significant relationship between female students and mastery approach goals.

Kifle and Melese (2017) studied 482 second and third-year students at Work College of Teachers Education. Their research, using goal orientation questionnaires and academic selfefficacy scales, revealed that males scored higher in goal orientation compared to females. The study concluded that higher goal orientation is associated with better academic performance, indicating that gender differences in goal orientation can significantly affect academic success.

Methodology

The study employed a descriptive survey design, focusing on SS2 students in public coeducational Senior Secondary Schools in Cross River, Nigeria. The population for the study was 3,370 SS2 students in co-educational public schools in Cross River, Nigeria. Multi stage random sampling procedure was employed to select the sample size of 796 from the 18 schools across three educational zones. The study utilized two primary research instruments: Achievement Goal Orientation (AGQ) Inventory: Developed by Elliot and McGregor (2001), this tool initially featured 12 items on a 7-point Likert scale ranging from 'Not true of me' to 'true of me.' For this study, the AGQ was adapted to a 4-point Likert scale after reviewing items for appropriateness, cultural fairness, and relevance. Performance in English Language Test (PELT): This 100-items test later modified into 50-items. It was created by the researcher based on the SS2 curriculum and first-term scheme of work. It covered topics such as lexis and structure, synonyms, antonyms, idioms, concord, nominalization, and registers. The PELT's content validity was confirmed by a panel of four experienced SS2 English language teachers from Cross River State. Reliability was tested with 62 students not part of the main study population, and the Kuder-Richardson (21) formula yielded a reliability coefficient of 0.76. Data from the research instruments were analysed using statistical methods to compute means and standard deviations. Hypothesis 1 was tested using Multiple Regression Analysis, while Hypothesis 2 was examined with Analysis of Covariance (ANCOVA) at a 0.05 significance level.

Results Presentation and Analysis:

Hypothesis 1: "There is no significant correlation between goal-orientation and performance in English language among **Table 2**:

secondary school students." This hypothesis was tested with Multiple Regression Analysis. Results are summarized in Tables 2 and 3

This table presents the correlations between students' performance in English language and the Achievement Goal Questionnaire.

Variables	PELT	MAP	MAV	PAP	PAV
PELT	1.00				
MAP	.14**	1.00			
MAV	03	.05	1.00		
PAP	.06	.33**	.05	1.00	
PAV	.06	.27**	.14**	.09*	1.00

Source: Researcher's Computation, (2023)

Table: 2 present the triangular correlation matrix between PELT and four measures of Goal Orientation, namely Mastery Approach (MAP), Mastery Avoidance (MAV), Performance Approach (PAP) Performance Avoidance (PAV). Among the predictor variables, MAP has the highest correlation with PELT. This correlation was .14 and was statistically significant at below the .05 (two-tailed) level, following pairs of independent measures: PAP and MAP(r= .33, p< 0.05), PAV and MAP(r = 0.27, p< 0.05), PAV, MAV(r = 0.14, p< 0.05) and PAV and PAP(r=0 .09, p< 0.05).

Table 3:

Stepwise multiple regression of goal orientation (significant measure only) and performance in English language.

Variables	PELT	MAP	В	ß	Т	R ²	R ² Adj	R ² change	F	df ₁	df ₂	Р
MAP	.14**	1.00	.95	.14	4.05	.020	.019	.020	16.4	1	794	.001
Intercept			40.0	2.54								
Mean	49.8	10.3										
SD	12.9	1.93										

Source: Researcher's Computation, (2023)

Table: 3 displayed the summary of a stepwise multiple regressions conducted to ascertain which of the four measures of goal orientation the best predictor of performance in English language, a one variable model was indicated in which only Mastery Approach (MAP) with a B weight of 0.95 and a β weight of 0.14 was statistically significant. These weights (or slopes) were statistically significantly different from 0 (t = 4.05, df =794, p< .001). Mastery Approach was entered first and explained 2% of the variance on performance in English language R^2 = 0.20, F (1,194) = 16.4, P<.001). None of the remaining measures of Goal Orientation when entered, explained a significant proportion of the variance on performance in English language (p>.10). Greater academic performance in English language was associated with greater goal orientation as measured by Mastery Approach.

The regression model can be written as: PELT = 40.0 + 0.95MAP.

Hypothesis 2: "There is no significant gender difference in performance in English language among secondary school students due to goalorientation." This hypothesis was tested using Analysis of Covariance (ANCOVA). The results are presented in Tables 4 and 5.

Table 4:

Displays descriptive data on gender differences in performance in English language as influenced by goal-orientation.

Goal Orientation	Gender	Ν	Mean	Sd
	Male	158	56.30	10.86
Mastery Approach	Female	145	54.92	11.04
	Total	303	55.64	10.95
	Male	64	44.27	16.23
Mastery Avoidance	Female	30	41.83	8.67
	Total	94	43.49	14.26
	Male	99	51.14	13.54
Performance Approach	Female	66	51.39	8.82
	Total	165	51.24	11.85
	Male	102	42.78	10.85
Performance Avoidance	Female	132	44.34	12.18
	Total	234	43.66	11.62
	Male	423	50.01	13.66
Total	Female	373	49.5	12.05
	Total	796	49.77	12.93

Source: Researcher's Computation, (2023)

The results in Table 4 indicated the mean and standard deviation of each group in performance in English language. To determine if there will be significant differences between the groups, ANCOVA was used to test the hypothesis and the results are displayed in Table 5. Table 5:

Source	Sum of Squares	Df	Mean Squares	F
Corrected Model	23631.12	7	3375.86	24.36
Intercept	1428682.41	1	1428682.41	10309.03
Goal-orientation	23218.45	3	7739.48	55.85
Gender	38.29	1	38.29	0.28
Goal- Orientation*Gender	391.46	3	130.49	0.94
Error	109205.37	788	138.59	
Total	2104678	796		
Corrected Total	132836.39	795		

Analysis of covariance in gender difference in performance in English language due to goalorientation

 $F_{3, 788, 0.05} = 2.60$

Source: Researcher's Computation, (2023)

The result of the analysis in Table 5 showed significant main relationship of goalorientation on the students' performance in English language. (F = 55.85, df = 3/788, p < .05). The main relationship of gender was not statistically significant as the F value of 0.28 is less than the table value of 2.60 at 0.05 level of significance, given 1 and 788 degrees of freedom. A calculated F-value of 0.94 resulted as the interaction relationship of gender and goal-orientation in performance in the English language among secondary school students. This calculated F-value is not significant since it is less than the critical F-value of 2.60 given 3 and 788 degrees of freedom at 0.05 level of significance. Hence, hypothesis two was accepted and this implies that there is no significant gender difference in performance in English language among secondary school students due to goal orientation.

Findings

Generally, findings on this research have demonstrated two major issues according to the research questions respectively. One goalorientation predicts performance in English language of secondary school students in Cross River, Nigeria.

Two gender differences due to goal orientation did not predict performance in English language among secondary students in Cross River, Nigeria

Discussion of the Findings

First it is deduced from the findings that significant correlation exist between goalorientation and performance in English language among secondary school students in Cross River, Nigeria.. This finding aligns with studies by Suprayogi et al. (2019), Karle (2016), Menon (2015), and Putwain & Symes (2012), which also reported a correlation between goal-orientation and academic performance. However, it contradicts Hulleman and Harackiewicz's (2010) finding that mastery approach was significantly unrelated to academic outcomes. The results revealed that only the Mastery Approach goal orientation significantly correlated with students' performance in English language, which is consistent with Christopher (2020), who found that mastery goals had the highest weighted mean in academic performance. This finding supports Keys et al. (2012), who reported a significant correlation between mastery approach and academic performance, and Akira et al. (2012), who found that goal-orientation positively predicts behaviour in learning English.

The conclusion aligns with expectations, as the mastery approach, which focuses on learning goals, skill, and competence, tends to yield better academic outcomes compared to mastery avoidance, performance approach, and performance avoidance.

Second on the differences from the findings it is construed that there is no significant relationship between gender differences and performance in English language due to goalorientation among secondary students in Cross River, Nigeria.

This result is consistent with Gavaza, Muthart, and Khan (2014), and Rashid and Javanmardi (2012), who found no significant difference between gender and academic performance due to goal-orientation, and observed that males preferred MAP, MAV, and PAP, whereas females preferred PAV. However, these findings contrast with studies by Kayis and Ceyhan (2015) and Bakirtzoglou and Ioannou (2011), which identified a correlation between gender differences in goalorientation and academic performance. Kayis and Ceyhan (2015) found a significant relationship, with females favouring masteryavoidance and males preferring performance approach. Similarly, Kifle and Melese (2017) reported significant gender differences in academic performance due to goal-orientation, which contradicts the current study's results.

The preference for performance avoidance among females is attributed to their apprehension of failure and irrational beliefs about competence, which negatively affect learning. On the other hand, the high performance approach scores among males are seen as potentially detrimental due to a tendency for self-determination without appropriate learning strategies. Overall, except for the mastery approach, the other goal orientations (mastery avoidance, performance approach, and performance avoidance) were viewed obstructive academic as to performance.

Conclusion

Based on the findings, the study confirmed that goal-orientation affects students' performance in English language, importantly, out of the four goal-orientation criterion variables, mastery goal orientation was found to enhance students' performance and competence in English language, Hence, Not all goalorientation criterion variables predict English language performance. Importantly, gender differences related to goal-orientation did not significantly impact English language performance..

Recommendations

In light of the findings, the following recommendations were made:

 It is vital for Education stakeholders, and students to note that goal- orientation predict performance in English language. In doing this, they should also understand that not all goal-orientation variables predict performance in English language. It therefore implies education stake holders should encourage mastery approach goal orientation variables to students' learning.

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Integration of Technology in Teaching Physics among Secondary Schools in Oyo Metropolis

By

Umar Muktar, Adeoye Busola Adeola and Ogungbenro Joshua Olufemi

Department of Physics, Federal College of Education (Special) Oyo

Email: umarmuktar311@gmail.com

08066070791

Abstract

This study investigates how technology integration in teaching physics in secondary schools can lead to sustainable development. Three research questions were used and three null hypotheses were tested at 0.05level of significance. A descriptive research design was used for the study, the population of the study is 1,205 teachers from public and private secondary schools in Oyo metropolis. Among this population, 101 teachers (Private N=37 and Public N=64) were randomly selected to constitute the sample for this study. The instrument used for data collection is a survey questionnaire with a total of 30 items based on a 4-rating scale ranging from 4= Strongly Agree (SA) 3= Agree (A), 2= Disagree (D), and 1= Strongly Disagree (SD). The questionnaire was validated by senior colleagues in the field of physics and other experts in measurement and evaluation units, and a reliability coefficient of 0.85 was obtained using the Cronbach Alpha method. The data collected were analyzed using mean and standard deviation to answer the research questions and z-test to test the hypotheses. It was found that there is a statistically significant difference in the mean perception of teachers towards the use of ICT in teaching physics in public and private secondary schools with z-value=5.67(P < 0.05) also there is no statistically significant difference in the challenges of using ICT in both public and private secondary schools,. It was recommended that, teachers should be encouraged to use ICT in their teaching to avoid wrong perception about it and secondary schools should be provided with computers and other ICT facilities to give ample opportunity for teachers to use it in the teaching process.

Keywords: Technology, Integration, effectiveness, secondary schools, teaching physics

Introduction

Physics is a science that deals with the study of matter and their interaction with energy. Physics is basically the study of how objects, the world itself and the entire universe behave (Johnson, 2019). The key agent for the development of many disciplines such as Chemistry, Biology, Medicine and Engineering is Physics. Physics is therefore, pivotal to economic, intellectual, social and cultural development of every society, nation and the world at large (Kankia, 2012).

The activities of human life including most of educational activities have being affected by technology (Ramma, Bholoa,Watts & Nadal,2017). Technology as a key element of the 21st century skills for learners, provide the appropriate medium for teachers to nurture higher-level thinking in students, by means of carefully structured activities (Shelly, Gunter & Gunter, 2012,Pedrosa-de-Jesus, Moreira, Lopes, & Watts, 2014).The use of technology by teachers in the classroom, particularly the powerpoint software, is restricted most of the time to presenting information from a one-sided perspective, which imply that technology is employed as a tool rather than as a pedagogy(Isseks, 2011). However, there is a difference when technology is used as a pedagogical tool for teaching and learning (Westera, 2015) and the pedagogical value of the tool is reflected in the level of students' engagement and the nature of participation garnered (Johnson & Golombek, 2016).

The level of development of any society depends on its intellectual, scientific and technological achievement (Anwaruddin, 2015).Therefore, the quality of education be it general, scientific or technological, provided in any society and the nature of the change effected by the education affects the level of national development and industrial growth in the society.

The national education scheme designed for Secondary School Physics (1985) has it that the objectives of studying Physics include, among others, to provide basic literacy in physics for functional living in society and to acquire essential scientific skills and attitudes as a preparation for the technological application of physics. The teaching of physics in secondary schools is intended to produce young scientists who would be able to design the technological devices that would make day-to-day activities easier and living more comfortable (Ajayi, 2008). It thus implies that physics is one of the pivotal subjects in technology. The teaching and learning outcomes of this important subject needs serious attention in order to enhance sustainable technological development in Nigeria.

Conceptual Framework

For effective teaching and learning experience in schools, in the light of technology integration, the theory of Technology Acceptance Model (TAM) by Davis (2003), has been identified and adapted. (Figure 1) The TAM theory comprises of various parts which is representing the process of technology acceptance by the users including; behavioral intension, perceived usefulness and perceived ease of use. The perceived usefulness refers to the degree to which person believes on the benefit from the use of a particular technology by improving the job performance, perceived ease of use refers to the importance of a technology in being user-friendly for the users. Generally, TAM theory was developed to measure the effectiveness or success of a technology in helping understanding the value and efficacy of a particular system. It is also considered as one of the most influential theories in contemporary information systems research. However, figure 1 described the theory evolved with more specific variables explaining how a user can accept a technology over the years.

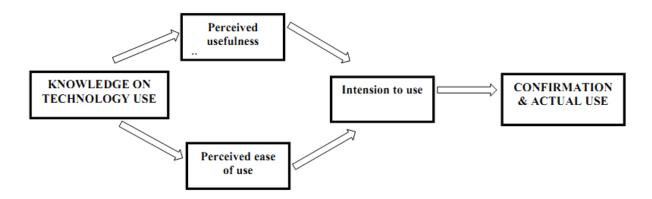


Figure 1: Conceptual framework of study (Davis, 2003; Rogers, 2003)

The proposed framework of the study explains how knowledge and perceptions will affect the perceived usefulness and ease of use of technology integration. However, the intention to integrate technology by teachers is the main variable that supports the key elements in the above framework such as ease-of-use, functionality, flexibility, accessibility, and integration. In addition, the intention of teachers to use the technology is strongly influenced by their perceptions of the usefulness of the system as well as perceived ease of use and determines their actual use of technology. The proposed framework has guided this research in investigating the factors affecting technology integration by school teachers.

Objective of the Study

The general objective of this study is to determine how technology is use in the teaching and learning of physics in secondary schools, however the specific objective is to:

 Determine the perception of teachers in using ICT facilities in teaching of physics in public and private secondary schools

- Determine the effectiveness of using ICT in the process of teaching physics in public and private secondary schools
- Determine the challenges of using ICT in teaching physics among teachers in public and private secondary schools

Research Questions

- 1. What is the mean difference in perception of teachers towards using ICT in teaching physics among public and private secondary schools?
- 2. How does use of ICT enhances learning of physics among public and private secondary schools?
- 3. What are the challenges of using ICT in teaching physics among teachers in public and private secondary schools?

Hypotheses

H₀₁: There is no significant difference in the mean perception of teachers towards using ICT in teaching physics among public and private secondary schools

 H_{02} : There is no significant mean difference in the effectiveness of using ICT in learning physics among public and private secondary schools

 H_{03} : There is no significant difference in the challenges of using ICT in teaching physics among teachers of public and private secondary schools

Methodology

Descriptive survey design was used for the study, and the population of the study was 1,205teachers from public and private secondary schools in Oyo metropolis. Among this population, 101 teachers (Private N=37 and Public N=64) were randomly selected to constitute the sample for this study. The instrument used for the study is a survey questionnaire with a total of 30 items based on 4rating scale ranging from 4= Strongly Agree (SA) 3= Agree (A), 2= Disagree (D) and 1= Strongly Disagree (SD). The questionnaires consisted of 4 sections. Section A is about the demographic background of the respondents which consists of 8 items that includes type of school.. Section B comprises with 10 items that investigated teacher's perception of ICT in teaching, section C consists of 10 items that examine the effectiveness of ICT integration for students in learning while section D contains 10 items that explored the challenges of ICT integration in teaching. The questionnaire was validated by senior colleagues in the field of physics and other experts in measurement and evaluation unit, a reliability coefficient of 0.85 was obtained using Cronbach Alpha method. The questionnaire used for this quantitative study was adapted Gulbahar and Guven (2008).

Results Presentation

Research Question 1: What is the perception of teachers towards using ICT in teaching physics among public and private secondary schools?

SN	Items	Public Mean	School Std	Private Mean	School Std	Average mean
1	I think that ICT supported teaching makes learning more effective.	3.79	0.59	3.75	0.75	3.77
2	The use of ICT enables the students' to be more active and engaging in the lesson.	3.73	0.57	3.91	0.39	3.84
3	There is more time to cater to students' need if ICT is used in teaching.	3.68	0.69	3.76	0.83	3.72
4	I feel confident learning new computer skills.	2.78	0.74	3.12	0.87	2.95
5	It is not easy to use computer in teaching	2.43	0.67	1.98	0.83	2.21
6	I find it easier to teach by using ICT	3.23	0.59	2.87	0.96	3.05
7	Students' makes no effort for their lesson if ICT is used in teaching	2.15	0.65	1.56	0.75	1.86
8	The classroom management is out of control if ICT is used in teaching.	1.86	0.78	2.14	0.84	2.00
9	I am confident that my students' learn best without the help of ICT.	2.34	0.88	2.43	0.86	2.39
10	Students' pay less attention when ICT is used in teaching.	1.97	0.67	2.01	0.56	1.99
	Grand mean					2.78

Table 1: Teacher's perception of ICT integration in teaching

Table 1 revealed that items numbers 1,2,3,4 and 6 have their mean value above the criterion mean of 2.50, while items number 5,7,8,9, and 10 have mean values below the criterion mean, which implies negative perception of the use of ICT in teaching physics in secondary schools. However the grand mean of 2.78 is above the criterion mean which shows that teachers perceived ICT supported teaching physics in both public and private secondary schools to be more effective, the use of ICT enables the students' to be more active and engaging in the lesson and students' show much attention when ICT is used in teaching, as shown in the responses of the teachers in table 1.

Research Question 2: How does ICT enhances students teaching of physics in public and private secondary schools?

SN	Items		School	Private School	Average
		Mean	Std	Mean Std	mean
1	ICT allows students' to be more creative and imaginative	2.76	1.32	2.35 0.94	2.56
2	The use of ICT helps students to find related knowledge and information for learning.	3.75	0.67	3.24 0.56	3.49
3	The use of ICT encourages students to communicate more with their classmates.	2.31	0.86	1.67 0.57	1.99
4	The use of ICT increases students' confidence to participate actively in the learning process	2.78	1.04	3.12 0.76	2.95
5	Students learn more effectively with the use of ICT.	2.23	0.86	1.45 0.58	1.84
6	ICT helps to broaden students' knowledge paradigm.	3.86	0.65	3.54 0.75	3.70
7	The use of ICT helps to improve students' ability specifically in reading, writing.	3.23	1.11	3.78 1.03	3.51
8	Students' are more behaved and under control with the use of ICT.	1.67	0.87	2.31 0.64	1.99
9	The use of ICT enables students' to express their ideas and thoughts better.	2.45	0.78	2.53 0.95	2.49
10	The use of ICT promotes active and engaging lesson for students' best learning experience.	3.87	0.54	3.69 0.76	3.78
	Grand mean				3.18

Table 2: Effectiveness of ICT integration for student's learning

Analysis shown in table 2 is that, items number 1,2,4,6,7 and 10 have mean values above the criterion mean of 2.5 which revealed that ICT enhances students learning of physics in public and private secondary schools through: promoting active and engaging lesson for students' best learning experience, improve students' ability specifically in reading /writing,

increases students' confidence to participate actively in the learning process, allows students' to be more creative and imaginative and broaden students' knowledge paradigm. However students does freely express their though and ideas when ICT is used in teaching physics in secondary schools. Therefore, since the grand mean of 3.18 is above the criterion mean value it show that ICT enhances students learning of physics in secondary schools.

Research Question 3: What are the challenges of using ICT in teaching physics among teachers in public and private secondary schools?

SN	ITEMS	Public	School	Private	School	Average mean
		Mean	Std	Mean	Std	
1	The ICT facilities in my school are well-functioning and can be used.	1.87	0.54	2.89	0.85	2.38
2	The technical supports are provided if teachers are faced with difficulties.	2.45	0.95	3.24	1.12	2.85
3	There is Little access to ICT in my school, which prevents teachers from using it in teaching.	3.76	0.86	2.31	0.64	3.04
4	Lack of supports from the school top management discourages me from using ICT.	3.45	0.56	1.35 0.	95	2.40
5	Teaching time are not enough for me to use the ICT for teaching and learning purposes.	1.57	1.12	2.54	0.84	2.06
6	There is enough training and professional development provided for teachers about ICT use in teaching.	1.67	0.64	3.87	1.12	2.77
7	All ICT tools in my school go to waste and less used by teachers.	2.31	0.65	2.32	0.83	2.32
8	Teachers are given more time to learn and be comfortable with the use of ICT in teaching.	1.46	0.68	3.67	0.68	2.57
9	There is computer lab in my school in which I can bring students there to watch educational videos.	2.14	0.87	2.56	0.62	2.35
10	Teachers' are given the freedom to design their own teaching with the helps from the ICT.	1.56	0.45	3.32	0.65	2.44
	Grand mean					2.52

Table 3: Challenges of using ICT in teaching physics among teachers

Table 3 revealed that teachers in public secondary schools encountered challenges in the use of ICT more than their counterparts in privates schools this is shown as the mean values of items 1,2,5,6,8,9 and 10 varies with responses in privates school teachers having mean values above the criterion mean while those in public schools are below. It shows that some of the challenges of using ICT are: inadequate computer laboratory in both public and private secondary schools, lack of training and professional development for teachers about ICT use in teaching especially in public schools, and lack of maintenance of ICT facilities in both public and privates schools.

Hypothesis 1: There is no significant difference in the mean perception of teachers towards using ICT in teaching physics among public and private secondary schools

School o	category	Ν	X	SD	Df	Z-V	alue	P-Value	Remark
Public	64	22.17	4.93		99	5 67	0.00	Sign	ificant
Private	37	24.59	4.94		99	5.67	0.00	Sigi	nificant

 Table 4: Independent sample z-test on mean perception of teachers in public and private secondary schools toward the use of ICT in teaching physics

Table 4 revealed that the public school teachers have the mean value of 22.17 and the standard deviation of 4.93 while private school have mean perception value of 24.93 and standard deviation of 4.94 with the degree of freedom of 99. The zvalue=5.67(P<0.05) indicate that there is statistically significant difference in the mean perception of teachers towards the use of ICT in teaching physics in public and private secondary schools. The null hypothesis is rejected.

Hypothesis 2: There is no significant mean difference in the effectiveness of using ICT in learning physics among public and private secondary schools

 Table 5: Independent sample z-test on mean effectiveness use of ICT in teaching physics among teachers in public and private secondary schools

School ca	ategory	Ν	X	SD	Df	Z-Value	P-Val	lue Remark
Public	64	23.97	6.85	99	2.78	3	0.001	Significant
Private	37	25.69	5.35			-	01001	Significant

Table 5 revealed that public school have mean effectiveness value of 23.97 and standard deviation of 6.85 less than the mean effectiveness value of 25.69 and standard deviation of 5.35 in private schools. This indicates that the effectiveness of using ICT in teaching physics is higher in private schools than in public schools. Since (z=2.78, P<0.05) there is statistically

significant difference in the effectiveness of using ICT in teaching physics among teachers public and private schools.

Hypothesis 3: There is no significant difference in the challenges of using ICT in teaching physics among teachers of public and private secondary schools.

 Table 6: Independent sample z-test on challenges of using ICT in teaching physics among teachers in public and private secondary schools

School category	Ν	X	SD	Df	Z-Value	P-Valu	e Remark
Public	64	18.56	3.46	99	1.06	0.056	Not Significant
Private	37	18.69	3.06				0

Table 6 indicate that public school mean of the usage of ICT in teaching physics is 18.56 and standard deviation of 3.46 while the private school have mean of 18.69 and standard deviation of 3.06. The degree of freedom of 99 and z-value=1.06 (P>0.05) which implies that, there is no statistically significant difference in the challenges of using of ICT in both public and private secondary schools. Therefore, the null hypothesis is retained.

Discussion of Findings

This study revealed that teachers in both public and private secondary schools have positive perception on the use of ICT in teaching physics, these perceptions includes: ICT supported teaching makes learning more effective, use of ICT enables the students' to be more active and engaging in the lesson and there is more time to cater to students' need if ICT is used in teaching. These agreed with the findings of Zhang (2013) and Ghavifekr & Rosdy, (2015) which affirmed that teachers have positive attitude regarding the use of Internet in teaching and learning; teachers have some knowledge about Internet use in teaching and learning; they have not well integrated Internet into teaching and learning so far; teachers' knowledge about ICT and network technology is very limited.

It is revealed from the finding of this study that: The use of ICT helps students to find related knowledge and information for learning, allows students' to be more creative and imaginative, increases students' confidence to participate actively in the learning process and promotes active and engaging lesson for students' best learning experience.

Some of the challenges of ICT use in secondary schools includes: inadequate computer laboratory in both public and private secondary schools, lack of training and professional development for teachers about ICT use in teaching especially in public schools, and lack of maintenance of ICT facilities in both public and privates schools. This findings agreed with Lewis, (2003), Sicilia (2005), technical problems were found to be a major barrier for teachers . These technical barriers included waiting for w ebsites to open, failing to connect to the Internet, printers not printing, malfunctioning computers, and teachers having to work on old computers.

Conclusion

Base on the findings of this study, it was concluded that teachers of both public and private secondary schools have positive perceptions on the use of ICT in teaching physics, also ICT enhance the teaching and learning of physics in both public and private secondary schools through promoting active and engaging lesson for students' best learning experience, improve students' ability specifically in reading /writing, increases students' confidence to participate actively in the learning process, allows students' to be more creative and imaginative and broaden students' knowledge paradigm. Teachers encountered challenges in using ICT in both public and private secondary schools, but the challenges is more severe in public schools, some of the challenges are: inadequate computer laboratory in both public and private secondary schools, lack of training and professional development for teachers about ICT use in teaching especially in public schools,

Recommendations

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

- Teachers should be encourage to use ICT in their teaching to avoid wrong perception about it
- 2. Secondary schools should be provided with computers and other ICT facilities to give ample opportunity for teachers to use in the teaching process
- 3. Proper training of teachers in using ICT should maintain in order to equip them with the knowledge on how to use ICT tools.

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Computer Literacy for Effective Use of Databases among Undergraduate Students in Federal University Dutsin-Ma Library

By

Kabir Ibrahim¹, Jabir Isah Karofi², and Sirajo Abubakar Danzangi³

Department of Library and Information Science, Federal University, Dutsinma Katsina State **Corresponding Author**: Ikabir@fudutsinma.edu.ng, sabubakar1@fudutsinma.edu.ng

Abstract

This study is on computer literacy for effective use of databases among undergraduate students in Federal University Dutsinma library. Three research questions guided the study. The population of the study was 2541 undergraduate students in Federal University Dutsinma, Katsina State. The sample size of the study was 245 undergraduates students which represent 10% of the population using proportionate stratified random sampling technique the major instruments for data collection are Ouestionnaire and Observation Checklist, data collected are analyzed using descriptive statistics of mean, standard deviation, frequency and percentages to answer the research questions all instrument were validation by three expert two from the Department of Library and Information Science one from the Measurement and Evaluation unit Department of Educational Foundation in faculty of Education Federal University Dutsinma. The finding reveal that the availability of the types of database in Federal University Dutsinma library include: Access to Global Online Research in Agriculture (AGORA), Bio line international (Bio line), Health Internetwork Access to Research Initiative, HINDAWI publishing cooperation, Research paper in Economics (REPEE), Library Index (LIBDEX), Hein online and Online public access catalogue the computer literacy skills possessed for use of the databases by the undergraduate students they include: Use of mouse and keyboard, Access to online databases, how to search information resources by Author and ISBN, Copying information into storage device. These recommendations were made that Undergraduate students should be sensitized on the availability of databases and be encouraged to use them for their academic research. The University administration should pay more attention to students' computer literacy by making some computer education compulsory for all students and incorporated into students' curriculum with emphasis on practical aspects.

Keyword: Computer literacy, databases, undergraduate students

Introduction

The ability to make effective use of information has been a very important factor in the development of individual and society at large. This is because information plays a vital role in people ability to make decision affecting their lives and lives of others. This ability is embedded in the concept of computer literacy. University libraries are found in the universities to serve a wide range of purpose including, providing faculty and students with information resources for research and consultation (Bjonrner, 2010). Boden & Davis (2012) noted

that today University libraries encourage intellectual inquiry and discovery providing areas for research and study, and serving broad educational of need various users' communities. University libraries are essential contributors to knowledge generation and serve a wide spectrum of knowledge seekers. University libraries connect students and scholars to the world of information and ideas. Computer literacy refers to knowledge and understanding of computer combined with the ability to use them effectively (Tukur & Bilkisu, 2015). Computer literacy involves knowing how to turn on a computer, start and stop simple application programs, and save and print information. Computer literacy is the ability to operate a computer system for performing personal and job related tasks like using web browsers and search engines on the internet or retrieve needed information and communicate with the others (chaps, 2016). Computer literacy is the ability and knowledge to use the computer effectively. Therefore, computer literacy is a necessity in the modern education in the 21st century.

Ekere, (2014). Opined that computer literacy is needed for effective use of databases by the undergraduate students is include operational skills which include the use of mouse and keyboard, copying information into storage devices such as flash drive or diskette and scanning of image, access of online databases, strategies literacy skills involve use of search engine skills such as how to search information by Author, ISBN, ISSN publishers, place of publication, Borcode. Emuwanta, (2013). classified computer literacy-skills which are prerequisite for the use of online information resources into the following categories, basic micro computing skills: this includes understanding personal computer and its components, using command orientation window base, and land operation environments to accomplish basis task such as formatting floppy disk, creating and navigating through directory and sub directing structure, creating

and deleting files, copying and renaming files using available help screens, when needed. Basic micro computing spread sheet skills: this involves the ability to create, organize and navigate through spread sheet or a specific block of cells entering and editing formulas values and text copying, moving and protecting cells, inserting and deleting columns and row, saving and retrieving files, printing relevant materials. According to Igbeka, (2015), databases refer to a large collection of electronically organized data for one or more purposes which can access electronically. Databases can be produced and distributed rapidly It can be easily updated and duplicated. It can be disseminate worldwide. It is time and cost effective than print Publication. Easy to update, modify and Space saving Databases are important because they can store a large number of records.

Statement of the Problem

University libraries are the center of teaching, learning and research activities in Universities and have important roles to play in the community in which they are established. Some of these roles includes: information services, research services, recreational services and custodial services among others. Despite the fact that there are many benefits attached to the information on the databases, it has been observed that many undergraduate students in Federal University Dutsinma are not benefiting maximally from this great opportunity due to either lack of awareness, poor implementation of the programmes or lack of searching skills. This poses a problem worthy of study. The expensive resources often remain unutilized, resulting in wastage of money, time, energy and space compounded to the problem of lack of adequate computer literacy skills required to identify, select, synthesis, retrieve and use information from diverse sources. Therefore with the above present situation make the researcher necessary to undergone the computer literacy for effective use of databases among undergraduate students in Federal University Dutsin-ma.

Research Questions

- 1. What are the types of databases available in Federal University Dutsinma Library?
- 2. What are the computer literacy skills possessed on use of databases by undergraduate students?
- 3. What are the strategies for enhanced the effective use of database by the undergraduate students?

Review of the Related Literature

Availability of databases in University Libraries access to Global Online Research in Agriculture (AGORA) is a program that provides free or low cost access to major scientific journals in agriculture and related biological, environmental and social sciences to public institutions in developing countries. Launched in October 2003, AGORA will provide access to more than 3000 journals from the world's leading academic publishers. Led by the Food and Agriculture Organization of the United Nations, the goal of AGORA is to improve the quality and effectiveness of agricultural research, education and training in low-income countries, and in turn, to improve food security. Through AGORA, researchers, policy-makers, educators. undergraduate students, technical workers and extension specialists have access to high-quality, relevant and timely agricultural information via the Internet. The partnership's goal is to reduce the scientific knowledge gap in between industrialized countries and the developing world (Igben & Ajoba, 2013).

According to Alberio, (2011). BIOLINE International is a pioneer in the provision of open access to peer reviewed bioscience journals published in developing countries. These journals contain timely research on public health, international development, tropical medicine, food and nutritional security, and biodiversity. Bioline increases the visibility of the research by making it readily available to researchers across the world. Bioline is not a publisher, but an aggregator that provides a free platform for journals who wish to participate in the global open access movement. An aggregation of over 78,000 peer-reviewed, fulltext articles on current research in Biodiversity Conservation, Biology, Ecology, Plant Sciences, Entomology, Ornithology, and Zoology. Discipline like Biology, Ecology, and Environmental Science are also available. Subscription and an Open Access Collections are available for users through their respective libraries for the undergraduate and postgraduate student to be used.

HINARI Health inter-network access to research initiative Programme set up by World Health Organization (WHO) together with major publishers, enables low- and middleincome countries to gain access to one of the world's largest collections of biomedical and health literature. Up to 12,700 journals (in 30 different languages), up to 24,900 e-books, up to 70 other information resources are now available to health institutions in more than 100 countries, areas and territories benefiting many thousands of health workers and researchers, and in turn, contributing to improve world health. HINARI Access to Research in Health Programme provides free or very low cost online access to the major journals in biomedical and related social sciences to local, not-for-profit institutions in developing countries (World Health Organization, 2010).

HINARI was launched in January 2002, with some 1500 journals from 6 major publishers: Blackwell, Elsevier Science, the Harcourt Worldwide STM Group, Wolters Kluwer International Health & Science, Springer Verlag and John Wiley, following the principles in a Statement of Intent signed in July 2001. Since that time, the numbers of participating publishers and of journals and other full-text resources has grown continuously. Today more than 150 publisher partners are offering more than 37,000 information resources in HINARI and many

others are joining the programme. In order to provide effective and sufficient information undergraduate and post graduate student (Kuhlthau, 2011).

Research Methodology

This study employed a Descriptive survey research design Descriptive survey design according to Uzoagulu, (2011) is the type of design that is interested in observing and describing the existing characteristics of an event or situation without manipulating any variable. The population of the study was two thousand five hundred and fourty one (2541) registered undergraduate students who were duly registered with Federal University Dutsinma Library. The sample size of this study is 254 undergraduate library users the sample represents 10% of the population. Using proportionate stratified random sampling technique from the population of two thousand five hundred and forty one (2,541) undergraduate students who are registered user. The major instrument for data collection for the study are questionnaire and Observation checklist. Data collected are analyzed using frequency and percentages in Observation Checklist. Simple descriptive statistics of mean and standard deviation were used in research question 1 and 2

Results Presentation

S/No	Items			Decision
		F	%	
1	Access to Global Online Research in	7	100%	Available
	Agriculture (AGORA)			
2	Bioline International (Bioline)	7	100%	Available
3	Health Internetwork Access to Research	7	100%	Available
	Initiative			
4	HINDAWI publishing cooperation	7	100%	Available
5	PLOS	0	0%	Not Available
6	Research paper in Economics (REPEE)	7	100%	Available
7	Library Index (LIBDEX)	7	100%	Available
8	Heinonline	7	100%	Available
9	EGRANARY	2	28.6%	Not Available
10	Online public access catalogue (OPAC)	7	100%	Available

Research Question One: What are the nature of databases available in Federal University Dutsinma Library?

The result in research question 1 revealed that the available of databases in Federal University Dutsinma Library. Shows that in items 1, 2, 3, 4, 6, 7. 8, and 10 in the table above were available databases. The decision for regarding the 8 Databases available was based on the fact that the percentage availability of those databases was up to 50% or above set for decision rule. Meanwhile, the remaining 2 databases in items 5, and 9 had their percentage availability below 50% which is below the cut-off point. This indicates that they were not available on the average.

Research question 2: What are the level of computer literacy skills Possessed for use of database by undergraduate students in Federal University Dutsinma Library?

S/No	Items			Decision
		\overline{X}	SD	
1	Use of mouse and keyboard	3.73	.48	Accepted
2	Access to online databases	3.59	.58	Accepted
3	Understanding personal computer and it components	3.57	.60	Accepted
4	Search engine skill	3.54	.67	Accepted
5	How to search information by Author and ISBN.	3.49	.67	Accepted
6	Copying information into storage device	3.45	.68	Accepted
7	Copying and renaming files	3.37	.75	Accepted
8	Storing information into Flash drive, diskette	3.33	.78	Accepted
9	Ability to create, organize and navigate through spread sheet	3.19	.84	Accepted
10	Creating and deleting files	3.18	.88	Accepted
11	Using command oriented window base	3.13	.82	Accepted
12	Creating and navigating through directory and sub director structure	3.13	.82	Accepted
13	Ability to formatting floppy disk	3.03	.94	Accepted
	Cluster mean	3.36	.73	Accepted

Table 2: Mean and standard deviation scores of the computer literacy skills possessed for use of the databases by the undergraduate students

Key: X = Mean, SD = Standard Deviation

The result of the study, as presented in Table 2, shows the level of computer literacy skills possessed by undergraduate students in Federal University Dutsin-ma. The result shows that the undergraduate students possesses the skills of Use of mouse and keyboard, Access to online databases, Search engine skill, Understanding personal computer and its components among others with a high extent of mean score ranging between 3.03 - 3.75 and SD= .48 - .94 on the 13 items. And the cluster mean of 3.36 shows undergraduate that students of federal university Dutsin-ma possesses computer literacy skills to a high extent.

Research Question Three: What are the strategies for effective use of database by the undergraduate students in Federal University Dutsinma Library?

S/No	Items			Decision
		\overline{X}	SD	
1	Provide suitable network in the library	3.86	0.41	Accepted
2	The library should provide relevant databases to their universities programmes	3.73	0.45	Accepted
3	Provide adequate power supply	3.72	0.47	Accepted
4	Provide orientation to undergraduate for the use of computer literacy skills	3.64	0.53	Accepted
5	Collaboration with lecturers and the librarians to teach computer literacy course	3.60	0.67	Accepted
6	The university should pay regular subscription of the Database	3.59	0.69	Accepted
7	The library should provide sufficient databases	3.51	0.50	Accepted
8	Integrating computer literacy instruction with the research course in the universities	3.49	0.72	Accepted
9	Provide computer literacy skills in the university	3.33	0.74	Accepted
	Overall	3.60	0.57	Accepted

 Table 3: Mean and standard deviation scores of the strategies for effective use of database by the undergraduate students

Key: X =Mean,

SD=Standard Deviation

The findings of the study, as presented in the table 3 reveals that the strategies for effective use of database by the undergraduate students in Federal University Dutsinma. The result shows that undergraduate students agreed with the strategies such as providing suitable network in the library, provide relevant database to their University programme, provide adequate power supply, and provide Orientation to undergraduate students for the use of computer literacy skills among others. With a higher extent of Mean score ranging from 3.33 - 3.88 SD = 0.57 - 0.41 on the 9 items and the cluster mean of 3.60. The result shows that undergraduate students accepted the strategies to a high extent

Summary of the Findings

The following are the major findings that resulted from the data analyzed.

1. The types of database available in Federal University Dutsinma library include: Access to Global Online Research in Agriculture (AGORA), Bioline international (Bioline), Health Internetwork Access to Research Initiative, HINDAWI publishing coope-ration, Research paper in Economics (REPEE), Library Index (LIBDEX), Heinonline and Online public access catalogue. PLOS and EGRANARY are not available in the library.

2. The computer literacy skills possessed for use of the databases by the undergraduate students they include: Use of mouse and keyboard, Access to online databases, how to search information resources by Author and ISBN, Copying information into storage device among others.

3. The strategies for effective use of database accepted by the undergraduate students in Federal University Dutsinma include, providing suitable network in the library, provide relevant database to their University programme, provide adequate power supply, and provide Orientation to undergraduate students for the use of computer literacy skills among others

Based on the findings of this study, the following recommendations are made for developing computer literacy for effective use of databases among undergraduate students in federal university Dutsinma libraries.

- Undergraduate students should be sensitized on the availability of databases and be encouraged to use the for their personal and library services.
- The university administration should pay more attention to students' computer literacy by making some computer education compulsory for all students and incorporated into students' curriculum with emphasis on practical aspects.
- For effective acquisition, c virtual reference services, serial management and resource sharing, Electronic Resource Management (ERMS) and other library management software should be bought and installed by the library administration for efficient and effective services delivery to their patrons.

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An Analysis of the Role of User Education for Effective Utilization of Information Resources and Services in Academic Libraries

By

¹Aliyu Ahmed and ²Zainab Abba Halliru and ³Jacob Priscilla Ayooluma

^{1 & 2}Department of Library and Information Science, Bauchi State University Gadau ³Department of Library and Information Science, Unilorin Nigeria Corresponding Email: <u>aliyulifidi238@gmail.com</u>

Abstract

The role of user education in academic libraries cannot be overemphasized. User education in academic libraries refers to a range of activities, programs, and services designed to help library patrons, primarily students and academic staff to effectively access, evaluates, and utilize the resources and services offered by the library. The academic libraries and the librarian educate clients to locate information at the right time and in the right place to motivate reading habits. The paper focuses on the role user education in academic libraries in understanding the library users, how they interact with the systems, facilities and services available in the library in which they are engaged and their patterns of retrieving their required information. The paper aims at analysing user characteristics, identifying the needs of the library user, educating users in locating information needed and motivating reading habits of the users. The study also explores the various methods and strategies employed by academic libraries to provide user education, including orientation programs, workshops, tutorials, and online guides. The findings emphasize the need for academic libraries to prioritize user education to ensure that users can effectively locate, evaluate, and utilize information resources and services. By doing so, academic libraries can empower their users to achieve academic success and become informed decision-makers in their chosen fields.

Keyword: Library user, academic libraries, user education, information

Introduction

Academic libraries serve as critical hubs for learning, research, and knowledge dissemination within educational institutions. These libraries house a vast array of information resources, including books, journals, e-resources, databases, and multimedia content, which are crucial for academic success and intellectual development. However, the effective utilization of these resources requires that users such as students, faculty members, and researchers possess the necessary skills to locate, access, and use the available information effectively (Hsieh and Tsai 2019). User education in academic libraries encompasses a range of instructional activities aimed at equipping library users with essential skills, such as information literacy, research

strategies, and the proper use of library tools and services. The goal is to empower users to navigate complex library systems, identify relevant resources, and critically assess the information they find. Without adequate education and guidance, users may struggle to make the best use of the resources and services available to them, leading to underutilization of the library's potential and hindering academic progress (Chow, 2020).

Over time, academic libraries have evolved, integrating digital resources and technologies that have revolutionized access to information. However, the rapid expansion of electronic databases, online catalogs, and digital archives has created challenges for users unfamiliar with these tools. As a result, user education programs have expanded to include instruction on the use of digital tools, databases, and online research techniques, ensuring that users can effectively utilize both physical and digital collections (Folliard and O'Neill, 2019).

In light of these developments, this study seeks to explore the role of user education in enhancing the effective use of information resources and services in academic libraries. The research will examine how user education programs impact the ability of students and researchers to access, evaluate, and use information resources efficiently, ultimately contributing to academic achievement and lifelong learning.

Objectives of the Study

The specific objectives were classified as follows.

- 1. To analyse user characteristics
- 2. To identify the needs of the library user
- 3. To educate users in locating information needed
- 4. To motivate reading habits of the users

Literature Review

User Characteristics

Understanding user characteristics is vital to improving the design and delivery of information resources and services in academic libraries. The way individuals seek, access, and use information is shaped by various user attributes. The key user characteristics involve demographic, cognitive, affective, behavioral, disciplinary, and academiclevel factors.

Demographic Characteristics

Demographic factors such as age, gender, ethnicity, and socioeconomic status play a significant role in how users approach information-seeking. Hargittai (2022)and Tenopir (2019) highlight that individuals from different age groups and socioeconomic backgrounds often have varied levels of access to and familiarity with information technologies. Additionally, cultural and ethnic backgrounds can influence preferences for certain information sources or formats. These demographic characteristics shape users' information-seeking behaviors and preferences, underscoring the need for libraries to consider diversity and inclusion in their service delivery.

Cognitive and Affective Characteristics

Cognitive factors refer to the user's prior knowledge, learning style, and cognitive abilities, which impact how effectively they can search for and process information. According to Solomon (2017) and Felder (2020), users with greater prior knowledge in a subject area are likely to seek more specialized resources, while those with different learning styles may prefer diverse formats such as video tutorials, texts, or interactive platforms. Affective characteristics, including motivation, attitude, and emotional state, also significantly affect the user's information-seeking behavior. Kuhlthau's (2024) model of information search emphasizes how users' emotions, such as uncertainty or confidence, can influence their approach to finding information. A user's attitude toward technology and information literacy also plays a role in how proactively they engage with information systems. Understanding these cognitive and affective factors can help libraries tailor their instruction and support to meet the diverse needs of users.

Needs of the Library User

Understanding the needs of library users is crucial for providing effective information resources and services. This literature review examines various needs of library users, including information needs, which encompass access to relevant, accurate, and timely information (Kuhlthau, 2024). Additionally, learning needs refer to the support for learning and research, including instruction and guidance (George, 2018). Technology needs highlight the importance of access to and training on relevant technologies (Hargittai, 2022). Furthermore, space and environment needs emphasize the necessity for comfortable and conducive study and research environments (Somerville, 2019). Service needs focus on the importance of having helpful and responsive library staff and services (Tenopir, 2019), while accessibility needs address the requirement for access to information and resources for users with disabilities (Liu, 2017). Lastly, multicultural needs recognize the importance of support for diverse languages, cultures, and perspectives (Hall, 2017).

These needs are not mutually exclusive, and users may have multiple, intersecting needs. Understanding these various needs can help librarians design more effective services and resources that cater to the diverse requirements of their users. By addressing the multifaceted nature of user needs, libraries can enhance user satisfaction and engagement, ultimately leading to improved information access and learning outcomes.

Users' Education in Locating Information Needed

With the vast amount of information available, users need education to locate the information they need effectively. Users' education is crucial in enabling individuals to navigate the complex information landscape. Research has shown that many users lack the necessary skills to effectively find and utilize information (Kuhlthau, 2024). Therefore, education focused on information literacy, critical thinking, and research skills is essential for empowering users to become proficient in locating the information they require.

Information literacy is defined as the ability to locate, evaluate, and use information effectively (ALA, 2020). Users need education on how to access, assess, and apply various information sources to their needs (Kuhlthau, 2024). Integrating information literacy instruction into academic curricula is vital to ensure that students develop these essential skills throughout their educational journey (ACRL, 2016). By fostering information literacy, libraries can help users become more adept at navigating the information landscape.

In addition to information literacy, critical thinking is essential for evaluating information sources (Solomon, 2017). Users must be educated on how to critically assess the reliability and relevance of information (Kuhlthau, 2024). Furthermore, research skills are necessary for effectively locating and utilizing information (George, 2018). Education strategies such as collaborative instruction between librarians and faculty (Somerville, 2019), online tutorials and guides (Hargittai, 2022), and workshops or training sessions (Liu, 2017) can significantly enhance users' abilities. By educating users on these critical areas, we can empower them to locate the information they need effectively.

Reading Habits of Users

Understanding users' reading habits is crucial for librarians and information professionals to provide effective services and resources. This literature review examines the various aspects of reading habits, including types of reading, reading preferences, reading behaviors. influencing factors, and implications for libraries. Types of reading encompass recreational reading, such as fiction and non-fiction (Ross, 2016), informational reading, which includes academic and professional materials (Kuhlthau, 2024), and digital reading formats like e-books and articles (Liu, 2017). Recognizing these different types of reading helps libraries tailor their collections and services to meet diverse user needs. Reading

preferences also play a significant role in shaping user habits. Factors such as format preferences (print vs. digital) (Hargittai, 2022), genre preferences (fiction vs. non-fiction) (Ross, 2016), and specific author and title preferences (Kuhlthau, 2024) influence what users choose to read. Additionally, reading behaviors, including reading frequency and duration (Liu, 2017), reading purposes (academic, professional, personal) (Kuhlthau, 2024), and reading strategies (such as skimming and scanning) (Solomon, 1997), further define how users engage with texts. Understanding these behaviors can help librarians develop targeted programs and resources that align with users' reading habits.

Several factors influence reading habits, including demographic characteristics such as age, gender, and education level (Ross, 2006), access to technology and digital resources (Hargittai, 2022), and time constraints (Liu, 2017). By considering these influencing factors, libraries can better understand the challenges users face and adapt their services accordingly. The implications for libraries are significant, as insights into reading habits can inform collection development and management (Kuhlthau, 2024), enhance reader's advisory services (Ross, 2006), and guide digital literacy and technology training efforts (Hargittai, 2022). By understanding users' reading habits, librarians can tailor services and resources to meet their needs and preferences effectively.

Conclusion

Library is a trinity of staff, resources or documents and users. Among them 'User' is the key and dynamic component of any library and information system. The thirst for information 'Need' is satisfied by having access to the identified information in a particular package and form, and at a suitable time. This is the impact of user education in the library, because it motivates for searching and using the information, creating awareness about available information resources, and exposing them to various organisational tools of the library. Therefore, user education plays an important role in academic library.

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Trade Union Education as a Tool for Enhancing Organisational Reengineering in the New Normal World

By

Fatai Akanji Akinkunmi¹, Romoke Edu Ogunlana², and Imran, Adesile Moshood³

^{1 & 2}Department of Adult and Continuing Education, Osun State University College of Education, Ipetu Ijesa, Osun State, Nigeria

³Department of Guidance and Counselling, Osun State University College of Education,

Ipetu Ijesa, Osun State, Nigeria

Corresponding Author: defalak2016@gmail.com

https://orcid.org/0009-0002-5423-3144

+2347032328775

Abstract

Today's industrial organisations are growing increasingly complex due to global hurdles in technological advancement. This strongly suggests that industrial organisations periodically reengineer the system to keep up with the many issues these innovations are creating. The gap in extant literature on industrial unrest and organisations' acute productivity revealed that trade union education (TUE) has not been fully embraced and utilised to enhance workers' knowledge and skills necessary to meet the challenges presented by technological advancement in the real world. This study therefore set out to find ways to lessen the constant industrial unrest that currently permeates industrial settings, to create opportunities for mutual respect, understanding, and cooperation among industrial relations actors, and to improve workers' knowledge, skills, attitudes, innovations, and ideas by building friendly relationships that support industrial peace and harmony between the actors. A qualitative approach that involves reviewing and adapting existing literature to establish facts that can help industrial organisations overcome a number of obstacles that are working against them in the twenty-first century. Conclusively, industrial unrest and instability is rampant and require immediate action so that peace, stability, effectiveness, efficiency and productivity on the side of workers can be accomplished. It is therefore recommended among other things, that trade unions in every organisation and management should work tirelessly to create new opportunities for the growth and development of employees and industrial organisations through trade union education.

Keywords: Trade union, trade union education, organisation, industrial organisations

Introduction

There are several groups of people in every society/organisation although their aims and objectives may differ but yet, organisational interest must still be paramount in their various minds. The coming together of people of likeminded is referred to as association or organisation. There are formal and informal organisations, however any organisation that is bureaucratic is perceived to be formal while those that are not or non-formalised ones are informal organisations. Montana and Charnov, (1993) affirmed that organisation happens when people team together to accomplish some desired goals. It can happen through intentionally designed activity, spontaneous improvisation, or some combination of the two, but it always depends upon coordinated effort.

Organisation occurs when two or more individuals unite, collaborate and work together to achieve a common goal or with the aim of accomplishing some desired objectives or goals. As described by Akinkunmi (2018), an organisation can be defined as a company, business, club or gathering of people formed for a particular purpose or to accomplish stipulated purpose. Omole (1999) described organisation as a system of consciously coordinated personal activities and forces of two or more persons. Furthermore, it is a system that has established structure and conscious planning in which people work and deal with one another in a coordinated and cooperative manner for the accomplishment of recognised goals.

In line with this school of thought, Akinkunmi (2023) further explained that organisation generally implies these three things: group of persons working together for a common purpose; network of relationships among individuals and activities, that is, the structural arrangement of persons' positions and roles; and a process of executive function aimed at ensuring that resources activities and authority relationships are so coordinated to achieve specific goals, this means the management context of the term called organisation.

Historically, organisation has been part of human existence for a very long period. Early history revealed that humans organised to hunt and gather food, find shelter, and protects and raises their children and to nurture their souls, they engaged in the act of practicing religion. By grouping together in pursuit of these goals, they formed the first human organisations, families and tribes. However, this is not limited to human beings alone but also among animals in their kingdoms, Ants form colonies while Bees built hives and so on. Virtually every living things realised that collectivism makes them stronger and improves their chances for survival in a competitive ecology.

It is evident that human beings, who are the foundation and engine of every environment, are necessary for every organisation to exist. However, when a large number of employees are pooling their resources to achieve organisational goals, such employees are given the right to organise into a group or establish a union in order to be heard by management and to be recognised for their rights. The gathering of workers within an organisation is therefore referred to as a trade union (Omole, 1999).

Every persons that cares about effectiveness, efficiency and relevance in his/her assigned duty must prioritise education hence, the need for workers in an organisation to continually equip and strength themselves through a specially designed skill and knowledge acquisition channel for workers known as trade union education. In tandem with this opinion, Habib and Wazir (2012) perceived organisation as crowd of interconnected units/components that creates value through integration of firm's processes while Marjanovic (2000) stated that the contemporary business process environment in which an organisation exists is becoming increasingly dynamic.

It is beyond any iota of doubt that technological advancement is good for industrial organisations that is, where good and service are being produced however, it actually came with series of challenges that require any progressive and competitive organisation globally to modify both organogram structure and the workforce in the establishment which is known as organisational reengineering. In describing organisational reengineering Ali, Payan, Afshin, Hamidreza and Mohammad (2013) opined that reengineering is an approach for the reconstruction of the management and the entire organisation. It is therefore the process of revolutionising and restructuring an existing industrial organisation in order to improve the organisational performance and enhance competitive capacity in the world of work.

Corroborating the above scholars, Carrasco, Mataix, Carrasco-Gallego (2015) asserted that with reengineering deals the design, improvement, and installation of integrated systems (as of people, materials, and energy) in industry. Sharing the same thought Graham (2010) posited that for any industrial setting to experience or achieves efficiency, enhance productivity and as well maximise profit, obviously there should be a dramatic change with respect to the design of firms processes. That is to seek means by which the organisation can now be using modern technology to do those things that were not been easily done previously. It is therefore worthy to emphasise that reengineering an organisation is seeking for new innovations that could lead to improvement, transformation and to maximise productivity.

Most often, the aim of organisational reengineering as a result of technological

advancement challenges is to reach new knowledge, skills, innovations and ideas, discovering new and unprecedented capabilities instead of using previously known ability to accomplish the set goals of the organisation (Marjanovic, 2000). OR in the real sense is not so easy to carry out rather, it is very difficult task and cogent among the hardest components require to accomplish organisational effectiveness, efficiency and productivity.

Expatiating further on OR, Ortiz (2016) describe it as such operation that deals with designing, building, operating and improving organisations' processes, people, materials, information, capital and so on. It is undisputable fact that businesses nowadays in every continent of the world have become so competitive to the extent that, many organisations are now embarking on reengineering their businesses in order to be more effective, efficient and competitive in the industry they operate.

Elucidating further, Sharma (2006) posit that the technological driven economy globally is becoming more serious than ever and this is why reengineering organisations have therefore become a competitive tool. It is so crucial to the extent that firms are presently employing it with the aim of helping organisations to develop themselves with contemporary technologies, business solution and innovations. Overhauling an organisation in totality will aid organogram advancement structurally, strategically and technologically thereby enhancing effectiveness, efficiency and productivity of such business establishment and as well yielding better rewards to the stake holders generally.

The reality is that customers wish to obtain quality product and service with minimum price and time. Evans and Berman (1990) emphasised that it is the wish of the customers to obtain large quantity and highly quality product and service at the cheapest price and appropriate time. However, some organisations are still operating in the traditional way of operations which are already obsolete, archaic and unable to withstand the taste of time by producing their products and rendering services manually which can only breeds ineffectiveness, inefficiency and disappointment to the organisation, stakeholders and clients/ customers in the present day competitive situations.

It is therefore pertinent to mention that OR is a process in which the current functions of the organisation change its place with main processes of business thereby making the organisation change direction from function-oriented to process-oriented. Ali, Payan, Afshin, Hamidreza and Mohammad (2013) affirmed that OR will enhance business cost reduction, acceleration of business process, efficient production, goaloriented and high competitiveness. Hence reengineering is the beginning of another opportunity to reestablish the reconstruction and modification processes and working methods.

It is therefore worthy to emphasis that organisational reengineering does not really mean either organisational development or organisational behaviour but can only be used or lead to improve the organisation structurally, technologically and also focuses on organisations' continuous improvement. Therefore, employees in organisation must be reengineered through continuous training, retraining and educating the workforce of the business. This does not only focus on new developments in technology, but designs the process in such a way that embraces technology in the future and predicts the possibility that reengineering processes are continuum.

Trade Union (TU)

A trade union is an organisation that is based on membership of employees in various trades, occupations and professions, whose major focus is the representation of its members at the workplace and in the wider society. Buttressing further. Oludeyi and Akinsanya (2022)emphasised that TU particularly seeks to advance its interest through the process of rule-making and collective bargaining. Furthermore, the main goal of a trade union is to protect and promote the interest of its members, due regard being paid to the interest of the overall workforce and to the greater national interest. To achieve this aim, trade unions have a duty to maintain the viability of the undertaking by ensuring cooperation with management in measures to promote efficiency and good industrial relations. Trade union therefore is expected to be the voice of all its members in an organisation.

Trade union confides the administrative activities on the executive of the union. This group of individual workers called the union executives represents and manages the workers' union affairs. Bankole and Oderinde (2021) therefore mentioned some roles that union executives must be playing amongst are to: seek and maintain management-union effective arrangements at industry or local levels for negotiation, consultation, and communication and for settling grievances and disputes; take all reasonable steps to ensure that their officials and members observe all arrangements made by both parties; provide for the training/education of delegates (union members) in the scope of their powers and duties and the day-to-day operation of the unions.

Moreover, union executives must provide adequate training/educational opportunities for the advancement of their members; seek proper staffing of the executive members to serve the needs of their union members, and allow for effective lines of communication between such staff and the rank and file membership; encourage members to take active part in the union activities by adopting such means as would best allow them to do, including the compilation and distribution of information; make information available and accessible particularly those pertaining to the rules and policies of the union; provide adequate advisory services for their members and in particular assist them to understand the terms and conditions of their employment; and identify trends in industrial relations to help their members to anticipate and keep abreast of change. Suffice to say that both the union executive and their members can achieve and

make headway if there is adequate provision and acquisition of education for them.

Trade Union Education (TUE)

Trade union education is a form of Adult-Education that is specifically designed to facilitate and enhance better involvement, participation and constructive contribution of workers in their various organised unions in order to enhance industrial peace and harmony that is needed to achieve effectiveness, efficiency and productivity in business organisations. Trade union education (TUE) is therefore the type of educational activities that is purposively designed for awareness creation and problem solving and to aid technological skill improvement for better productivity.

In the view of Samuel (2020), TUE is specifically intended for service in the trade unions. An education exercise that is designed to meet the educational needs of workers as they arise to participate in trade union movement, it is specially designed for those that are interested in representing the interest of their co-workers to acquire needed skills, knowledge, attitudes, and values which will contribute to their greater effectiveness within the trade union movement and as representative of organised labour in the larger society.

The International Confederation of Free Trade Union (ICFTU) (n.d) defined it as any educational activities aimed at developing the personality and social efficiency of the workers engaged in the labour movement; with the exception of activities aimed at developing the workers' professional skills, activities undertaking by trade unions or under their control with the more precise aim of giving the workers a training which will enable them to serve their organisation and the country and to cope with the problem confronting them as members of the trade union movement at whatever level.

Nevertheless, TUE is meant to be education for collective effort hence, it is not vocational or occupational oriented and clearly distinct from skill development. To buttress this fact, Akinkunmi (2021) affirmed that it is educational activity meant to set worker free from employers' oppression from materialism, individualism, and bad taste in industrial relations and collective bargaining from apathy, ignorance, and mostly free from utter drabness of unfulfilled life and expectations in the workplace. It is obvious and beyond doubt that only a liberated mind can render the best to his/her organisation in terms of effective job delivery, adaptation to changes both structurally and technologically and most importantly uphold, aid and promote industrial peace and harmony during acclimatisation period of reengineering the business.

Objectives of Trade Union Education

The objectives of trade union education in a democratic environment as stated by Oludeyi and Akinsanya (2022) includes but not limited to: designed and inculcate social relation into union members in the workplace; sharpens employees interaction positively; promote social justice and human rights; identify the rights, obligations and their limitations in the organisation; motivate the workers in effective participation in trade union activities; develop orientation and awareness on the part of the recipients; creating solidarity for the workers in the struggle, recognition and survival of their union.

It is pertinent to mention that these objectives are germane to effective unionism however, it is cumbersome to accomplish without proper funding and financing of the union. Morris (2002) affirmed that education and training should be used by trade unions to: modify attitudes and behaviours through learning experiences, build loyalty and commitment to the organisation, provide cohorts such as staff, organisers and researchers with the relevant skills to function effectively and efficiently, create awareness, alert and active membership, provide members with a broad knowledge of labour-management issues, prepare shop stewards and officers of branches, divisions, boards, councils and committees to perform their functions, and also provide education training opportunities and for members.

It is therefore necessary to unveil that to enhance industrial peace, cooperation and harmony, unionists must possess and be vast in labour laws and regulations, effective bargaining and negotiation, union administration and governance, economic and social policy analysis, health and safety at work, effective conflict resolution and communication, workers right and social justice among others (Ojedokun, 2021). Building trade union solidarity and membership loyalty is fundamentally linked to the provision of trade union education and training, it is therefore essential that both union and executive members be equipped with the requisite education and training in order to be more functional in the activities of their union and the training courses for this group may embrace: concentrated knowledge required for the specific area; team work and group experiences to generate ideas and develop attitudes required for the tasks; and opportunities to develop new appropriate skills and to practice those that were already acquired (Akinkunmi, 2021). There are several ways or sources by which TUE can be financed prominent amongst are: the government, employer/management, trade union, foreign aids and so on.

Enhancing Organisational Reengineering with Trade Union Education

The representatives of trade unions in the challenging environment in which they are operating today require desire skills which were previously frowned upon by trade unionists. These skills are necessity and are required to successfully and effectively run the modern day organisations. However, successful trade unions in organisations use renewable strategies to enhance financial management, transparency and accountability to members, research and development, organisational adaptability and negotiating skills in order to plan better for the future of the organisation Morris (2002).

In the bid to enhance effective trade union education (TUE), the management should be more proactive instead of been paternalistic in the reengineering process. The turn-around should be designed to accommodate and adopt new ways of doing things and should let go of archaic or outdated practices that cannot stand the taste of time or compete with the contemporary organisations around the world. OR nowadays must not ignore unquantifiable benefits of Information and Communication Technology (ICT) in the restructuring and transformation process (Akinkunmi).

This will go a long way in widening and broadening the horizon of knowledge of workers. It will as well encourage and facilitate the worker to continually upgrade their knowledge moreover, it will also enhance easy access to acquiring new skills. ideas. innovation. knowledge, and TUE will be enhanced easily with less financial implication via modern technologies thereby improving service and productivity in the organisation (Abiodun, 2005). An effective OR must vehemently embrace if there will be any meaningful reengineering in an establishment, suffice it to sav that management/employers must look inward to strategise how the workers will be advanced or upgraded. Onabanjo (2013) suggested the following areas to be prioritised in order to advance the workers and also benefit the organisation by making it more competitive, efficient and stabilise its operation.

a. Financing trade union education: Management of organisation that bends on reengineering their firm should endeavour to have provision for funding education of their workers in the process.

- b. Communication: Communications have important functions in ensuring that organisations work effectively. Trade unions need to ensure that there is constant and effective communication between the centre and the periphery of the union movement so that its members are kept abreast of its programmes and policies (Bolland, 2001).
- c. ICT accessibility: Trade union membership in an organisation should be very enthusiastic about education and training in the information and communication technologies (ICT), particularly in the use of the computer, Internet and related technologies however management needs to invest heavily on training their workers to be computer literate as it is now the organisational practice globally.
- *d. Time creation:* Management must enthusiastically give the workers needed period of time to attend training and educational programmes without any intimidation or harrasement from any quarters so that workers will be encouraged to do so.
- *e. Designing educational packages:* The management of organisation must endeavour to seek and include design of the curriculum and educational packages for the trade union representatives from time to time in the programmes of their organisation.
- *f. Building organisational structure:* In the reengineering process in organisations,

the management must ensure that building formidable structure hierarchically that will ensure just, equity and accountability is a necessity.

Conclusion

The management of organisations must typically seek to have the best possible structure, practices and prioritise trade union education (TEU) when making decision. Workers and management relation is under threat presently and it is as a result of inadequate TUE of the workers where rights and privileges cannot be segregated. The unions should be involved in reforms that aimed at improving the organisational performance as well improve the output and productivity. Trade union education must be given more attention moreover, proper advocacy and orientation must be embraced in the process of reorganising the organisation.

Recommendations

Recommendations are therefore made based on the extent literature reviewed as thus:

Proper attention should be given to trade union educational programmes. This is not to exclude constantly reengineering of organisations where the employees are working. However, pursuing organisational reengineering route will make a unique and distinctive contribution to development and accelerate the progress of the organisation and also the entire workforce in the system.

Management of organisations should improve in financing of trade union education (TEU) by making significant contribution to engage the workers in educational programmes particularly those ones that has to do with how best to participate in trade union activities in order to enhance peaceful industrial practices and environment.

Information and Communication Technology should be made available, accessible and mandatory to workers so that they will be able to learn more from developing countries about trade unionism and its benefits to their various organisations. This can best be done through possession of adequate and effective trade union education. The management of organisations should endeavour to create time for their employees to acquire and upgrade themselves particularly on trade union and other skills acquisition programmes in order to be more active in trade union activities organisational progress. It will be a deadliest mistake for the management to deny their employees the right to acquire more knowledge about their union/management relations.

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Self-Concept as Correlates of Academic Achievement and Extracurricular Activities of Secondary School Students in Makurdi and Guma Local Government Areas of Benue State, Nigeria

By Anna Aneoyi Onogwu¹, Ezekiel Aondoaseer Hanior² and Oteh Friday Yahaya³ Department of Educational Foundations, Benue State University, Makurdi Corresponding Author: <u>annonogwu@gmail.com</u> 08063501554

Abstract

This study investigated self-concept as a correlate of academic achievement and extracurricular activities of secondary school students in Makurdi and Guma Local Government Areas of Benue State, Nigeria. Two research questions and two hypotheses were raised and tested at 0.5 level of significance. A correlational survey design was adopted and multi-stage sampling procedure was used to select the 382 respondents out of the total population 1,710 students. A self-structured questionnaire titled: "Student Academic Achievement and Extracurricular Activities Questionnaire (SAAEAQ)" and an adopted self-concept questionnaire titled: "Robson Self-Concept Questionnaire RSCQ) were used to elicit information from the respondents. The content and face validity of the instrument were done by 3 experts in the faculty of education, Benue State University Makurdi. To determine the reliability of the two instruments, the researcher administered the questionnaires to 30 students outside the sampled schools, the test yielded a Cronbach Alpha of 0.88 on the first instrument and 0.77 on the second instrument. Pearson Product Moment Correlation Coefficient (PPMCC) was used to answer the research questions and ANOVA Regression Analysis to test hypotheses. The findings revealed that self-concept has strong positive correlation on students' academic achievement and there is a strong negative correlation on extracurricular activities of secondary school students in the area. Based on the findings of the study, it was recommended that educational psychologists, counsellors and teachers in secondary schools should supervise, educate and monitor students through counselling on how to develop positive self-concept in relation to their academic achievement and extracurricular activities.

Keywords: Self-concept, academic achievement, extracurricular activities, secondary school students

Introduction

Developed countries such as Germany, Canada, the United Kingdom, United States, France, Poland, Singapore among others, stand out as global leaders not only in economic prosperity and technological advancement but also their unwavering commitment to education. These nations, recongnise that education is the foundation for growth and development in different spheres of life. As a result, they invest significantly in their educational programmes, implement innovative approaches and continuously strive to improve learning (Adeoti, 2012). Education can be described as the process in its entirety through which children, younger or even adults are helped to cultivate and grow their abilities, attitudes, values and other forms of behavioural attributes that represent positive value aimed at changing the individual to enable him or her contribute to the well-being of the society (Amadioha & Akor, 2018).

A synopsis of statistics from the West Africa Examination Council (WAEC) and the National Examination Council (NECO) reveal a decline in student's performance over the years. In 2020, WAEC noted that 61,509 candidates sat for the examination, out of which only 24,491, representing 39.82 percent obtained credit and above in a minimum of five subjects including English Language and Mathematics. This implies that over 40,000 students failed to obtain the minimum requirement. Similarly, in 2021 WAEC pointed out that the percentage of candidates who obtained credit and above in a minimum of five subjects, including English Language and Mathematics, in WASSCE for private candidates, is 35.10, thus, showing a marginal decline of 4.72% in performance. Also, the analysis of the statistics of the performance of candidates shows that out of the 61,509 candidates that sat the examination, 31,751 candidates representing 51.62 percent obtained credit and above in a minimum of five subjects, with or without English Language and or Mathematics.

Self-concept can be defined as the way in which people perceive their strengths, weaknesses, abilities, attitudes and values. It is one of the most important psychological constructs in the behavioural sciences (Marsh & Martin, 2011). An individual's self-concept is a critical face of his or her personality. The importance of studying the self-concept of students is because it is the single most important attribute and the key to understanding the behaviour of an individual.

The correlation between self-concept on academic achievement and extracurricular activities of secondary school students has become a significant area of interest within educational psychology. Understanding the interplay between these two constructs is curial as it can influence educational strategies and interventions aimed at improving students' outcomes. Each one is equally emphasising the degree that any change whether positive or negative in one enables the appropriate variation in the other (Babatunde and Olanrewaju, 2014).

Studies have shown that there is a correlation between self-concept, academic achievement and extracurricular activities (Ajmal, & Rafique, 2018; Ikpayar, 2017 & Agusa, 2020). Positive academic self-concept can enhance students' academic achievement and extracurricular activities. Conversely, negative self-concept can negatively impact academic achievement and extracurricular activities creating low selfconcept and continued academic struggles. The change in the relationship between self-concept on academic achievement and extracurricular activities can be mirrored on students' academic outcomes.

Academic achievement according to Crawford (2013) is the indicator of the ability of the students to appraise, demonstrate and display competencies learnt in the classroom to the real setting. Academic achievement is the extent to which a student, teacher or institution has achieved their long-term or short-term educational goals (Agusa, 2022). Some learning institution apply the cumulative grade point average (CGPA) to reflect student academic achievement. That is, the performance outcome that indicates the extent to which a person has

accomplished specific goals that constitute the focus of activities in institutional environments. Self-concept and academic achievement are closely related. Self-concept which refers to students' awareness and understanding of their abilities, can influence academic achievement. Specifically, students with a positive self-concept are more likely to believe in their ability to succeed in academics and are more likely to engage in behaviours that lead to academic success such as setting challenging goals and persisting in the face of obstacles. On the other hand, students with A negative self-concept may struggle with academic achievement.

Extracurricular activities refer to those activities that fall outside the realm of a normal curriculum of school or university education performed by students (Stars, 2021). Extracurricular activities comprise sports, singing, music, debate, dance, social services. drama, among others. Extracurricular activities play an important role for development of students' skills. It makes a student think critically, managing time well and competently in terms of intelligence. It also helps the student to achieve social goals and maturity as well as positive developmental outcomes such high school athletics maybe linked to strong academic achievement (Rabia, 2017). Selfconcept is related to participation in extracurricular activities as students who participates in these activities tend to have higher selfconcept. Participation in extra-curricular activities can positively impact overall selfconcept, particularly for students from rural

areas. Individual choice and options matter in extra-curricular activities, as students who already have a strong sense of self-concept may be more likely to enroll and stay in activities.

Madhvi and Anil (2015), examined academic achievement and self-concept of secondary level students' relationship in Delhi, India. The purpose of the research was to investigate the relations of academic achievement and selfconcept in relation to gender, area of school and type of the school of secondary level students. The sample for the investigation comprises of total 400 secondary class students, from various government and public schools in East Delhi and North-East Delhi. The Academic Achievement Motivation Scale" was used as data collecting The descriptive statistics, Pearson's tool. coefficient of correlation and t-test were used in the analysis of data. One of the findings of the study was that no significant difference was observed in the achievement motivation with regard to local and management variation of secondary level students. The study also revealed significant relationship between the two variables of self-concept and academic achievement. Based on the findings, suggestions for increasing the academic achievement of the students have been developed. The reviewed study is interrelated to the study under review because both studies Pearson's Moment Correlation Coefficient to analyse data. However, the discrepancy between the two studies is that the present study used a correlational survey design while the reviewed study used a descriptive survey design.

Muhammad and Mariam (2018), conducted a study on the relationship between academic selfconcept and academic achievement of distant learners in Allama Iqbal Open University Islamabad, Pakistan. The purpose of the study was to find the relationship between academic self-concept and academic achievement of distance learners. The academic self-concept of distance learners was measured by the Liu and Wang (2005), academic self-concept scale which was adapted by the present researcher. The scale comprised of two sub-scales; academic effort and academic confidence. Academic achievement of the distance learners was determined by their last semester result. Total population of M.Ed was 854 and B.Ed was 746 in Rawalpindi region. Convenient sampling technique was used to draw sample of 427 distance learners from M.Ed program and 373 distance learners from B.Ed program of Allama Iqbal Open University. Pearson product moment correlation and independent sample t-test and effect size was calculated for the collected data. The results revealed that there is a strong relationship between academic self-concept and academic achievement of distance learners. It is recommended that there may be proper workshop sessions specifically to enhance the self-concept of students so that they may understand their hidden potentials and use their abilities to achieve better in academics. The reviewed study is related to the study under review because it focused on self-concept and academic achievement of secondary school students. However, the

differences in both studies are that while the reviewed study carried out in Pakistan, the present study was carried out in Nigeria.

Agnes, Elijah and Mugala (2020), examined the influence of participation in competitive cocurricular activities on self-concept of secondary school students in Kenya, Nairobi. The purpose of the study was to examine the influence of participation in co-curricular activities (sports, music and drama) on the self-concept among secondary school students in sKenya. The study adopted the Ex-post Facto research design and data was collected through a self-concept inventory questionnaire and examination of school records from students' participants (1,408) in the regional championships in central region Kenya. Data was analysed using independent ttest and Two-way ANOVA. The findings revealed that participants in drama had a higher self-concept compared to sports and music. Therefore, schools should encourage students to participate in competitive co-curricular activities. The reviewed study is significant to the present study because both studies investigate on selfconcept and extracurricular activities on secondary school students. While the reviewed study is an influence study, the present study is a correlational study.

Achi, Anthony and Melvina (2020), conducted a study on interest in extracurricular activities and self-efficacy of senior secondary school students in Cross River State, Nigeria. The purpose of the study was to find out if interest in extracurricular activities has any influence on self-efficacy with reference to social self-efficacy, academic selfefficacy, language self-efficacy and moral selfefficacy. The ex-post facto design was adopted for the study. A sample of 1,586 students was randomly selected from the public secondary schools in Cross River State. A questionnaire titled "Interest in Extra Curricular Activity and Self-Efficacy (IECASEQ) was used for data collection. The face validity of the instrument was determined by two experts in test and measurement and two in educational psychology. The reliability of the instrument was determined using Cronbach Alpha. The data collected were analysed using descriptive statistics. The results revealed that interest in co-curricular activities significantly influenced social self-efficacy, academic self-efficacy, language self-efficacy, moral self-efficacy and overall self-efficacy. Based on the findings, it was recommended that teachers and school administrators should create opportunities for students to travel for excursions and not see involvement in co-curricular activities as a distraction to students. The reviewed study is related to the study under review because it focused on extracurricular activities of secondary school students. The differences in both studies are that while the reviewed study was on self-efficacy, the present study used self-concept.

1.2 Statement of the Problem

There has been consistent report of decline in academic performance of students in both internal and external examinations such as WAEC, NECO and other external examining boards in various schools in Benue State including Makurdi and Guma Local Government Areas of Benue State (Teaching Service Board, 2020). The reports from these examination boards consistently reflect poor academic performances of students. These issues are of dire concern to parents, teachers, curriculum experts and stakeholders in education. Education is the bedrock for growth and development of any nation and Nigeria is no exception that is why anything affecting education is of utmost concern. From the foregoing, the unappealing academic performance of students has prompted researchers to continuously make relentless efforts in conducting studies that could better demystify these trends (Morakinyo, 2013; WAEC 2020; NECO, 2021).

Students in the area of study experience challenges with academic issues ranging from academic achievement and extracurricular activities among others. One then wonders as what could be the factor behind this. Self-concept is a critical aspect of student's psychological development and functioning, influencing how individuals perceive themselves and their abilities, interact with others and navigate various challenges. Students' self-concept may affect how they perform academically on many levels in terms of their abilities and overall self-worth. The relationship between self-concept, academic achievement and extracurricular activities has been recognised as a salient contributor to academic performance.

Despite numerous studies highlighting this relationship, there remain a gap in understanding how self-concept specifically affects performance in particularly in non-traditional educational, settings. As such, this research work aims to examine self-concept as a correlate of academic achievement and extracurricular activities of secondary school students in Makurdi and Guma Local Government Areas of Benue State.

1.4 Research Questions

The following research questions guided the investigation:

- 1. What is the correlation between self-concept and academic achievement?
- 2. What is the correlation between self-concept and extracurricular?

1.5 Hypotheses

The following hypotheses were formulated to guide the study and were tested at 0.05 levels of significance:

- Self-concept has no significant correlation with academic achievement of secondary school students in Makurdi and Guma Local Government Areas of Benue State.
- Self-concept has no significant correlation with extracurricular activities of secondary school students in Makurdi and Guma Local Government Areas of Benue State.

Methodology

A correlational survey design was adopted for the study. This design seeks to establish the direction and magnitude of the relationship between two or more statistical variables known as the correlation coefficient for data analysis. Taking into consideration the background of the study, process of data collection and analysis, the correlational design survey is preferred because it measures the relationship between two or more variables. The multi-stage sampling procedure was used to select the 382 respondents out of the total population 1,710 students from the 16 grantaided secondary schools in Makurdi and Guma Local Government Areas of Benue State. This technique will aid in determining a fair representation of students' population in each sampled school.

Thirdly, the study adopted the simple random technique. A self-structured questionnaire titled: "Student Academic Achievement and Extracurricular Activities Ouestionnaire (SAAEAQ)" and an adopted self-concept questionnaire titled: "Robson Self-Concept Questionnaire (RSCQ) were used to elicit information from the respondents. The content and face validity of the instrument were done by 3 experts in the faculty of education, Benue State University Makurdi. To determine the reliability of the two instruments, the researcher administered the questionnaire to 30 students outside the sampled schools who exhibit the same characteristics as the sample, the test yielded a Cronbach Alpha of 0.88 on the first instrument and 0.77 on the second instrument which are considered high enough. Pearson Product Moment Correlation Coefficient (PPMCC) was used to answer the research questions and ANOVA Regression Analysis to test hypotheses.

Data Presentation and Findings The data obtained from students' Academic Achievement and Extracurricular Activities Questionnaire (SAAEAQ) and Self-Concept Questionnaire (RSCQ) are analysed and interpreted below.

Research Question One: What is the correlationbetweenself-conceptandAcademicachievement?

Table 1: Pearson Product Moment Correlation between Self-Concept and Academic Achievement

		Self-Concept	Academic achievement
Self-Concept	Pearson Correlation	1	0.532
_	Sig. (2 tailed)		0.016
	N	381	381
Academic motivation	Pearson Correlation	0.532	1
	Sig. (2 tailed)	0.016	
	N	381	382

Table 1 shows that r = 0.532 indicating a moderate positive relationship between self-concept and academic achievement. Therefore, research question one could be answered that, there is a moderate positive correlation between self-concept and academic achievement.

Research Question 2: What is the correlation between self-concept and extracurricular activities of secondary school students in Makurdi and Guma LGA?

		Self-Concept	Extracurricular Activities	
Self-Concept	Pearson Correlation	1	-0.224	
*	Sig. (2 tailed)		0.642	
	N	381	381	
Extracurricular Activities	Pearson Correlation	-0.224	1	
	Sig. (2 tailed)	0.642		
	N	381	382	
negative correlation	= -0.224 indicating a low between self-concept and	and extracurricul		
extracurricular activ	ities. Therefore, research	Hypothesis 1: There is no significant relationshi		
question two could b	e answered that, there is a	between self-concept and academic achievemen		

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	0.340	1	0.340	0.272	0.016
Residual	93.866	379	. 248		
Total	94.206	381			

Table 3 shows that F (1, 379) = 0.016, P = 0.016 < 0.05 (less than 0.05). Since P is less than 0.05, it means null hypothesis rejected. This implies that, there is a significant correlation between self-concept and academic achievement of secondary school students in Makurdi and Guma LGA. That is, there is a significant positive relationship between self-concept and academic achievement. This is to say, when students develop positive self-concept, their academic achievement increases.

Hypothesis 2: There is no significant correlation between self-concept and extracurricular activities.

Table 4: ANOVA of Regression Analysis on the Correlation between Self-Concept andExtracurricular Activities.

Model	Sum of Square	Df	Mean Square	F	Sig.
Regression	0.073	1	0.143	0.216	0.642
Residual	127.218	379	. 336		
Total	127.291	381			

Table 4 shows that F (1, 379) = 0.216, P = 0.642 > 0.05 (greater than 0.05). Since P is greater than 0.05, it means null hypothesis is not rejected. This implies that, there is no significant relationship between self-concept and extracurricular activities of secondary school students in Makurdi and Guma LGA. Though, there is a low negative relationship between self-concept and extracurricular activities, the relationship is not statistically significant.

Discussion of Findings

The first findings revealed that, there is a significant positive correlation between selfconcept and academic achievement of secondary school students in Makurdi and Guma Local Government Areas of Benue State. This is to say, when students develop positive self-concept, their academic achievement increases. This result agrees with Madhvi and Anil (2015) whose findings revealed a significant relationship between the two variables of self-concept and academic achievement. Similarly, the findings are in agreement with Muhammad and Mariam (2018). The results revealed that there is a strong relationship between academic self-concept and academic achievement of distance learners. It is the researcher's contention that this finding may be so because students who develop positive self-concept, can easily improve and achieve a lot academically.

The second findings revealed that there is a significant negative correlation between selfconcept and extracurricular activities. The result implies that high level of students' self-concept is associated with low level of students' extracurricular activities. It entails that student that have high level of self-concept might not be able to participate actively in extracurricular activities. This result disagrees with the findings of Agnes, Elijah and Mugala (2020) whose research finding revealed that participation in cocurricular activities had a positive influence on students' self-concept in reference to gender, school type, class and parental economic status. Contrary to this result, Achi, Anthony and Melvina (2020) found that interest in cocurricular activities significantly influenced social self-concept, academic self-concept, language self-concept, moral self-concept and overall self-concept of students. The researcher affirms that the finding of the present study may be true because self-concept of students may not lead to high level of participation in extracurricular activities. She also contended that, though there is a low negative relationship between self-concept and extracurricular activities, the relationship is not statistically significant. This finding may be so because of the students understanding of the items in questionnaire.

Conclusion

The study has established that there is a significant correlation between self-concept and the academic achievement of secondary school students in Makurdi and Guma Local Government Areas of Benue State. This is based on the fact that there is no significant positive correlation between self-concept and students' extracurricular activities.

Recommendations

The following recommendations were made based on the findings of the study.

 School administrators should create a supportive and nurturing environment that enhances students' self-concept and ultimately contributes to their overall academic success and well-being by promoting school cultures that value diversity and respects all students.

2. Educational Psychologists should ensure that extracurricular activities are inclusive and accessible to all students regardless of their background and abilities. This helps in fostering sense of belonging and acceptance which is crucial for positive self-concept development.

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AI Revolution: Transforming Education in Nigeria's Higher Institutions

Bv

Ibrahim Ismail Rafindadi¹, Amina Ibrahim Inkani², Hindatu Salisu Abubakar³ and Bashir Sadisu Imam⁴

1Nigerian Meteorological Institute of Science and Technology, NiMet 2Department of Geography, Umaru Musa Yaradua University, Katsina 3Department of Library and Information Sciences, Bayero University, Kano 4Department of Library and Information Sciences, Bayero University, Kano (PG Student) Corresponding Author: iiirafindadi@gmail.com

+2348146985560

Abstract

Artificial intelligence (AI) is poised to revolutionize education in Nigeria's higher institutions. This article examines the integration of AI into the educational sector, focusing on its potential to personalize learning, enhance teaching, and foster pedagogical innovation. The study aims to explore the levels of AI technology, identify opportunities, and explain challenges associated with AI adoption for an effective learning environment in Nigeria. Methodologically, using a comprehensive narrative and systematic review, the research highlights AI applications from narrow AI to theoretical super intelligence. Despite the numerous opportunities AI presents, ethical concerns, such as data privacy, algorithmic bias, and potential job displacement, must be addressed. Additionally, the skills gap and unemployment call for strategic educator training and industry collaboration. Overreliance on AI raises questions about preserving human-centric pedagogy and maintaining student agency. Addressing these challenges requires promoting digital literacy, ensuring transparency, and balancing AI with traditional teaching methods. By viewing AI as an enhancement rather than a replacement, Nigeria's higher institutions can create more engaging, effective, and equitable learning experiences. On-going research and collaboration will ensure Nigeria remains at the forefront of educational innovation. The study recommends enhancing knowledge-sharing strategies for academic activities among lecturers regarding AI in Nigerian higher institutions.

Keywords: Artificial Intelligence, opportunities, Nigerian education sector, higher institution of learning, challenges, measures

Introduction

In the age of rapid technological advancement, artificial intelligence (AI) stands as а transformative force with the potential to reshape various aspects of society, including education. As Nigeria strides towards leveraging cutting-edge innovations to enhance its educational landscape, the integration of AI holds significant promise for revolutionizing learning experiences, particularly within higher institutions of learning. However, amidst this potential lies a landscape fraught with challenges, ethical dilemmas, the and imperative need for strategic measures to

harness AI's benefits while mitigating its pitfalls.

The integration of AI into the educational sector represents a paradigm shift, promising personalized learning experiences, enhanced teaching efficacy, and improved educational outcomes (Goodfellow, Bengio, & Courville, 2016). However, realizing these promises necessitates a comprehensive understanding of AI's nuances, its diverse applications, and the strategic measures required to navigate its integration effectively. This study delves into the multifaceted realm of AI in education, exploring its levels of technology adoption, the

myriad opportunities it presents, and the challenges and measures imperative for its successful implementation.

Through a narrative and systematic review approach, this study elucidates the evolving landscape of AI in education, encompassing its various facets from narrow AI applications, such as intelligent tutoring systems and virtual mentors, to the potential of artificial super intelligence. By examining the opportunities provided by AI, including personalized learning, enhanced teaching practices, and datadriven insights, this study underscores the transformative potential of AI in fostering innovation and inclusivity within educational environments.

However, the integration of AI in education is not without its challenges. Ethical considerations surrounding data privacy, algorithmic bias, and the displacement of human educators underscore the need for conscientious and equitable AI deployment strategies. Moreover, the skills gap and unemployment concerns highlight the imperative for investment in educator training and collaboration with industry partners to bridge existing disparities.

Furthermore, the spectre of dependency and overreliance on AI poses critical questions regarding the preservation of human-centric pedagogy and the maintenance of student agency in the learning process. Addressing these challenges necessitates a multifaceted approach, emphasizing digital literacy, promoting transparency, and fostering a balanced integration of AI alongside traditional teaching methodologies. Hence, holds immense promise for revolutionizing education in Nigeria, its successful integration hinges upon a strategic and ethical approach.

Statement of the Problem

Artificial intelligence (AI) has the potential to transform education in Nigeria by personalizing learning, improving teaching effectiveness, and enhancing educational outcomes, particularly in higher institutions that serve as hubs of knowledge development. While most studies focus on AI's application, adoption, and perception, this study aims to explore the creation of an environment conducive to AI integration in education. However, to fully harness AI's benefits, it is essential to address ethical concerns, skills gaps, and equity challenges (Russell & Norvig, 2022). By responsibly implementing AI, lecturers can foster more inclusive, engaging, and effective learning experiences.

Objectives of the Study

- To explore the levels of AI technology in education sector for effective learning environment in Nigeria;
- To identify the opportunities provided by AI technology in education sector for effective learning environment in Nigeria, and
- To explain the challenges and measures associated with adopting AI technology in education sector for effective learning environment in Nigeria.

Methodology

Narrative and systematic review were adopted in the course of this study. These types of review aims to provide a broad understanding of a topic, highlighting key themes, debates, and gaps in the existing literature and ensures a more objective and comprehensive analysis of the available literature, making it valuable for evidence-based research and decision-making (Cooper, 2017). Therefore, by embracing the diversity of literature review methodologies, researchers can enrich the understanding of a subject and contribute meaningfully to the advancement of knowledge.

Literature Review

Artificial Intelligence (AI) involves the simulation of human intelligence by machines, enabling them to learn, reason, and self-correct. It has become a transformative force across sectors, including education, where its integration raises important discussions about its potential impact on lecturers. In the educational context, AI refers to technologies and techniques designed to enhance teaching and learning processes. These applications range from personalized learning systems and intelligent tutoring to virtual mentors, automated grading, and administrative tools, sparking significant interest due to their potential to revolutionize education (VanLehn, 2021).

There are many different levels of artificial intelligence, each with its own characteristics, capabilities, and applications. AI continues to evolve rapidly, driving innovation across various industries and reshaping the way we live, work, and interact with technology. AI can be categorized into different steps based on its capabilities and functions:

• Narrow or Weak AI: Narrow AI is designed to perform a narrow task or a specific set of tasks within a limited

domain. These AI systems excel at a particular task but lack the ability to generalize beyond their predefined scope. Examples of narrow AI include virtual assistants like Siri or Alexa. recommendation systems on streaming platforms, and image recognition software. In education sector, narrow AI applications intelligent include tutoring systems, chatbots for student support, and plagiarism detection tools etc. (Baker & Inventado, 2020).

- General AI: General AI, also known as strong AI or human-level AI, refers to AI systems that possess human-like intelligence and can understand, learn, and apply knowledge across diverse domains. General AI has the ability to perform any intellectual task that a human can do, and potentially even surpass human intelligence. While true general AI remains largely theoretical and has not yet been achieved. Advancements in deep learning and cognitive computing hold promise for more sophisticated educational applications (Kurzweil, 2019).
- Machine Learning: Machine learning is a subset of AI that focuses on enabling machines to learn from data without being explicitly programmed. Machine learning algorithms use statistical techniques to identify patterns in data, learn from past experiences, and make predictions or decisions without human intervention (Koedinger, 2017). According to Bostrom (2022) types of machine learning include supervised learning, unsupervised/deep

learning (Deep learning algorithms excel at tasks such as image and speech recognition, natural language processing, and autonomous driving), and reinforcement learning (commonly used in areas such as robotics, game playing, and autonomous systems). In education, machine learning techniques are used for student assessment, adaptive learning, and predicting student outcomes.

Artificial Super intelligence (ASI): Artificial Super intelligence is an advanced form of AI that surpasses human intelligence in every aspect. ASI would possess capabilities far beyond human comprehension and could potentially solve complex problems, make ground breaking discoveries. and innovate at an unprecedented rate. The development of ASI raises profound ethical and existential questions about its impact on society and humanity (Russell & Norvig, 2022).

Opportunities Provided by AI

The opportunities provided by AI cannot be overemphasize; overall, AI has the potential to revolutionize education by personalizing learning experiences, impro-ving teaching effectiveness, increasing access to educational resources, and fostering innovation in pedagogy through:

 Personalized Learning: AI-driven adaptive learning systems utilize algorithms that can cater to individual student needs by providing personalized learning experiences and analyse students' learning patterns, preferences, and performance data to provide customized learning experiences. These systems adjust and offer individualized content, pace, and support, allowing students to learn at their own pace and according to their unique needs which enhance student engagement, performance and improving learning outcomes (Baker & Inventado, 2020). All that a lecturer needs to do is to set the courses contents and learning outcomes and the directions.

- 2. Enhanced Teaching and Learning: AIpowered tools, such as intelligent tutoring systems and virtual assistants, augment teaching practices by automating administrative tasks, providing real-time feedback, and offering supplementary learning resources. This fosters more interactive and efficient learning environments through simulating one-onone tutoring experiences (Goodfellow, Bengio, & Courville, 2016).
- 3. Data Analytics and Learning Insights: AIpowered learning analytics tools analyse large volumes of educational data to identify patterns, trends, including student performance data, attendance records, and engagement metrics, to extract meaningful insights. Educators can use these insights to make data-driven decisions, personalize instruction, and support student success by assess the effectiveness of teaching strategies and students at risk of falling behind (Siemens & Gasevic, 2018).
- 4. Language Processing and Translation: AIpowered language processing tools facilitate language learning by providing real-time translation, grammar correction, and pronunciation feedback. AI

technologies enable accessibility features like speech-to-text and text-to-speech functionalities, benefiting even the students with disabilities. These tools can enhance language acquisition for students learning a second language or studying in multicultural environments (Ally, 2019).

- 5. Virtual Reality and Simulation: AI technologies, combined with virtual reality (VR) and augmented reality (AR), enable immersive learning experiences through simulations and virtual laboratories. These technologies allow students to explore complex concepts in a realistic and interactive environment, enhancing comprehension and retention (Siemens & Gasevic, 2018).
- Administrative Support: AI-powered chatbots and virtual assistants streamline administrative tasks such as course registration, scheduling, and student inquiries. These tools provide round-theclock support, freeing up educators' time to focus on teaching and mentoring students (Warschauer, 2023).

Challenges and Measures

The use of AI in education raises ethical concerns, skills gap and unemployment and dependency and overreliance questions as:

• Ethical Concerns:

A major ethical concern regarding AI in education is data privacy and security. AI systems depend on extensive data, including sensitive student information like academic performance and behavior, raising questions about data access, usage, and potential breaches (Selwyn, 2019). Moreover, algorithmic bias is another challenge, as AI algorithms trained on biased data can perpetuate inequalities, disadvantaging underrepresented students (Smith & Johnson, 2020). Ensuring fairness and equity in AI systems is crucial to prevent these biases from exacerbating existing disparities.

The impact of AI on educators is another ethical consideration. While AI can assist lecturers in tasks like grading and personalizing learning, there is concern over the potential displacement of human educators. Preserving the unique role of lecturers in fostering creativity, critical thinking, and socio-emotional development is essential, even as AI enhances teaching practices (Garcia & Lee, 2018). Further-more, transparency and accountability in AI decisionmaking are necessary to ensure that stakeholders can understand and challenge AIdriven recommendations and outcomes (Miller & Jones, 2019).

Beyond the classroom, AI's societal implications, including workforce readiness and its role in shaping the future of work, raise important ethical questions. Educational systems must not only equip students with the skills to thrive in an AI-driven economy but also foster responsible AI usage and ethical considerations (Smith & Johnson, 2020).

In response to these ethical concerns, it is for imperative policymakers, educators, technologists, and other stakeholders to collaborate in developing ethical guidelines, regulations, and best practices for AI in education. This includes implementing robust data protection measures, promoting diversity and inclusion in AI development and deployment, fostering transparency and accountability in AI systems, and prioritizing human-centric approaches to AI integration in education (United Nations Educational, Scientific and Cultural Organization, 2020).

Skills Gap and Unemployment:

The rise of AI in education has sparked concerns about the future employability of students and educators, primarily due to the AI skills gap—the difference between the skills required by AI technologies and those possessed by the current workforce (Brown & Johnson, 2020). Educators now face increasing demands for proficiency in AI tools, data analytics, and personalized learning systems, in addition to their subject matter expertise. However, many educators lack formal training in AI integration, leaving them unprepared to utilize these technologies effectively (Smith, 2021).

This skills gap is compounded by the potential job displacement AI may cause. AI-powered systems can automate tasks such as grading, student record management, and basic academic support, reducing the need for certain educational roles traditionally performed by humans (Brynjolfsson & McAfee, 2021). The automation of these tasks could lead to job losses, particularly in administrative and support roles.

Without strategic measures to address the AI skills gap and the risk of job displacement, the education workforce may face increased unemployment or underemployment. This could exacerbate existing inequalities and impede the widespread adoption of AI innovations aimed at improving student learning outcomes.

To mitigate the impact of the AI skills gap and unemployment in the education sector, concerted efforts are needed at various levels:

- 1. Investment in Lecturer Training and **Professional Development**: Education institutions and policymakers should prioritize providing educators with training programs and professional development opportunities focused on AI integration into their teaching and research practices. This includes hands-on training in utilizing AI understanding data tools, analytics, interpreting AI-generated insights, and fostering а supportive learning environment that encourages collaboration and critical inquiry among educators (Brown, 2019).
- 2. Collaboration with Industry Partners: Collaboration between educational institutions and industry partners can facilitate the development of AI curricula tailored to the needs of the education sector. Industry partners can provide insights into emerging AI technologies and best practices for integration into educational settings (Smith, 2021).
- 3. **Promotion of Lifelong Learning**: Encouraging a culture of lifelong learning among educators is essential to adapt to evolving technological trends. Continuous upskilling and reskilling initiatives should be promoted to ensure that educators remain agile and equipped with the latest knowledge and skills required to thrive in an AI-driven environment (Brown & Johnson, 2020).

4. Emphasis on Human-Centric Skills: While AI can automate certain tasks, there remains a crucial role for human educators in fostering critical thinking, creativity, empathy, and socio-emotional development in students. Education systems should prioritize the cultivation of these human-centric skills alongside technical competencies (Garcia & Lee, 2019).

Dependency and Overreliance:

Artificial intelligence (AI) has become an increasingly integral part of the education sector, offering innovative solutions to enhance teaching, learning, and administrative processes. However, excessive reliance on AI technologies for learning may diminish students' ability to think critically, problemsolve indepen-dently and there is a potential for loss of human touch and personalized interaction, since AI cannot fully replicate the empathetic and nuanced interactions that occur between educators and students and this may lead to a dehumanization of the learning process. There is a risk of students becoming passive consumers of information rather than active participants in their learning journey (Williamson, 2020).

Another challenge associated with AI dependency in education was reported by Lee and Garcia (2020), is the potential for technological failures and disruptions. AI systems are not infallible and can encounter errors, glitches, or malfunctions, which can disrupt learning experiences and administrative processes. Moreover, reliance on AI may lead to complacency among educators and

administrators, diminishing their capacity to address challenges and solve problems independently.

Addressing the risks of AI dependency and overreliance in the education sector requires a multifaceted approach:

- 1. **Promoting Digital Literacy and Critical Thinking**: Education institutions should prioritize teaching students and educators about AI technologies, including their capabilities, limitations, and ethical implications. By fostering digital literacy and critical thinking skills, individuals can better navigate and evaluate the use of AI in education (Williamson, 2020).
- 2. Balancing Automation with Human-Centric Approaches: While AI can automate certain tasks and processes, it is essential to strike a balance between automation and human-centric approaches to education. Educators should leverage AI as a tool to enhance rather than replace human interaction and creativity in the learning process (Lee & Garcia, 2020).
- 3. Ensuring Transparency and Accountability: Education stakeholders must ensure transparency and accountability in the development and deployment of AI technologies. This includes disclosing the algorithms used in AI systems, addressing biases in data sets, and establishing mechanisms for oversight and accountability (Smith & Johnson, 2021).
- 4. **Continued Research and Evaluation**: On-going research and evaluation are essential to assess the impact of AI on education and identify areas for

improvement. This includes studying the effectiveness of AI-driven interventions, learning measuring outcomes, and soliciting feedback from students, educators, and other stakeholders (United Educational, Nations Scientific and Cultural Organization, 2020). By adopting a balanced approach to AI integration in education and addressing the risks of dependency and overreliance, we can harness the transformative potential of AI while safeguarding the integrity and human-centric nature of education. Ultimately, the goal should be to empower educators and learners to leverage AI technologies responsibly and ethically, ensuring that AI serves as a tool for enhancing, rather than replacing, the educational experience.

Integrating AI into educational practices requires careful consideration of pedagogical principles and instructional design. Educators must balance the use of AI technologies with traditional teaching methods to maintain a human-centred approach to education (Darling-Hammond & Flook, 2018). However, AI opens up new possibilities for innovative teaching strategies and instructional design approaches. Virtual reality (VR) and augmented reality (AR) technologies create immersive learning environments that engage students in interactive simulations, virtual laboratories, and real-world scenarios (Watts, 2023). Natural language processing (NLP) tools enable conversational interfaces and virtual tutors that facilitate active learning through dialoguebased interactions. By leveraging AI-driven

analytics and data-driven insights, educators can identify areas for improvement, experiment with new teaching methods, and continuously refine their pedagogical practices to meet the evolving needs of learners.

Conclusion

Artificial Intelligence has the potential to transform education by enhancing teaching and research practices, personalizing learning experiences, and fostering innovation in pedagogy. By integrating AI technologies into educational settings, educators can empower students to reach their full learning potential and prepare them for success in the digital age. However, to realize the full benefits of AI in education, it is essential to address ethical considerations, promote equity and inclusivity, and provide on-going support and professional development for educators. With thoughtful planning, collaboration, and innovation, AI pedagogical integration can revolutionize education and create more engaging, effective, and equitable learning experiences for all learners.

Recommendations

- Future research should focus on developing pedagogical frameworks that effectively integrate AI into educational practices while preserving the humanistic aspects of teaching and learning.
- 2. Empowering educators to leverage AI tools strategically to enhance rather than replace traditional teaching methods.
- Provision of enhance knowledge sharing strategies for academic activities among lecturers over AI in Nigerian higher institutions of learning.

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Assessment of Emotional Intelligence and Attitude as Predictors of Senior Secondary Students' Performance in English Language in Katsina State

By

Nuraddeen Yusuf Galadanchi¹, Basiru Ibrahim Musawa² and Jamilu Haruna³

School of Education, Yusuf Bala Usman College of Education Daura, Katsina State

ygaladanchi2015@gmail.com

08032128756

Abstract

This study aimed to assess the emotional intelligence and attitude as predictors of senior secondary school students' performance in English language. Descriptive survey research design was adopted. The population of the study comprises the senior secondary school students' of Daura metropolis. The population contained in this study was one hundred (100) respondents. Data were collected using Emotional Intelligence Questionnaire (ETQ), Students Attitude Questionnaire (SAQ), English Language Performance Test (ELPT). Three research questions were designed for the study. Three hypotheses were subjected for hypotheses testing using independent t-test. The results obtained showed that, there was a significant relationship between students' emotional intelligence and performance in English language. It was also discovered a significant relationship between students' attitude and their performance in English language. Based on this finding, recommendation was made to ensure that English teachers do ensure that, an interest in learning English language is instilled in the students' minds.

Keywords: Assessment, attitude, emotional intelligence, English, performance

Introduction:

English language is a subject in itself; it is a specialized discipline in its own context. Admission to tertiary institutions is based on competence in English, and also as a condition for employment in some sectors of the economy. More than half of the world's population is bilingual, English language is a global language now a day (Bamagbose, 2001). According Crystal, (2003) there are about 43 million nonnative English speakers whereas native of others are 330 million, excluding those who are learning English language.

Bottery, (2000) claimed that globalization is mostly associated with English language supremacy, as English is becoming more and more global language, it is associated with academic achievement for the students in any field. English language is the official language of

most business transaction in the country. Government policies and decisions are taken in English. English is the language of instruction in all nation's institutions of learning, most school text books are printed in English and it is the predominant language of the media, where government policies and decisions are disseminated (Azikwe, 2000). Despite official and public emphasis on English, the secondary schools do not seem to be producing an adequate number of students who are sufficiently proficient in English, the performance of candidates has never been satisfactory, and their understanding and use of English have not attained a standard that is considered reasonable by other users of English. English language is so important in Nigeria that ability to speak, read and write becomes the mark of elitism; it is seen

as a key to success in the Nigerian Society. Learning English Language as a second language in Nigeria is affected by various factors. Mostly students who have a negative attitude toward learning English language in senior secondary school failed to graduate with the minimum requirements in which English is included, as this could diminish earning a potential in adulthood and other poor outcomes (Adebayo, 2010). Most of the measures being taken to reduce massive failure in English language are more of provision of instructional materials rather than motivation and developing positive attitude towards learning English language, up till today the problem has not been well addressed despite the danger it has on the individual and society's wellbeing.

In light of the above, there is need for psychological strategies in assessing emotional intelligence and attitude in English language performance, such emotional intelligence and attitude help to develop positive attitude towards learning English in order to improve their academic performance. It is believed that language learning has a pivotal role in helping human to express his opinions (Zainol, Alzwari, 2002). Among different factors that influence learning a foreign language affective variables such as attitude, orientations motivation and anxiety are as important as aptitude, intelligence, age and personality (Noels, Pellitier and Valleran, 2000) and (Zainol, 2012).

Academic Performance

School achievement is such psychological phenomenon that has been written about by many psychologists in their attempt to show significant concern to human and social development. Academic performance is very important in any educational institution. It serves as a yardstick in measuring the success or otherwise of that organization. According to Abdu (2000) education achievement refers to the standard attained in the subject, to him, the standard reached depends in the management of institution and the students' interest in the subject or skills taught in the school. School achievement may either be high or low depending on the criteria used in the measurement. Such achievements can be measured using a test conducted under, a standard condition or by assessing or inspecting past examination results of individuals or schools, in which this work is intended. It is worthy to note that, to achieve or attain a certain level of educational accomplishment there has to be an interplay of some certain factors which determine whether the task has been successfully attained or not. Among such factors is the level of motivation with which the learner has been exposed to; the learners' interest in the task to be learned, and some societal or environmental influences that affects the learning process. A lot of researches in this regard pointed out that performing well in school may leads students to expend efforts and persist at tasks that promotes learning (Zimmerman, 1978; Bandura, 1980;

Schunk, 1989), were of the opinion that students perceive their learning process, their initial sense of efficacy is sustained which in turns, sustained motivation. According to them, even when students have encounter difficulties on the process their ability of success can override negative effects of previous performance which provide motivated behavior (Abdu, 2000).

A lot of researches have been conducted in an attempt to the venture into whether or not difference exist among the sexes and their academic performance, thereby resulting into some remarkable findings that either support or refute the occurrence of such differences. Again, what accounted the differences in a number of human endevour has for many years also, been a subject to discussion: Abdu, (2000) in an attempt to answer such questions as "80 sexes differ in their emotional reaction to events or people? Do they differ in vigor with which they tackle life problems confronting them? Do sexes possess equal potentials for acquiring knowledge and skills for variety of occupation?

Bulus and Gagera (1997), in their research on sex differences, opined that, biological factors are important and do appear to play some roles in the nature of differences between the two sexes. According Abdu (2000), the pattern of relation between motivation, strategy use and achievement was the same for boys and girls. Others researches were in support of the absence of significant sex differences and academic performance. Exevdu, (1995) found that male student, did better than female students in academic performance. Eccles (1987) while investigating the mathematical ability of Males and Female, found that girls have lower selfconcept of ability and expectancies for success even when their achievement is similar. (Abdu, 2000).

Few studies, however, found that female students did better than male students (Ezeliora, 1996; Nworgu, 1990; Obodo, 1990). For instance; Ezeliora's (1996) research on the science achievement of boys and girls in special science school in SSCE in Anambra state, she discovered that girls not minding their fewness when compared to boys, did better than boys in all sciences (Abdu, 2000).

Emotional intelligence and Student's Academic Performance

Literature reveals that emotional intelligence skills and competencies are essential to success and that significant positive relationships exists between emotional intelligence and academic achievement among secondary education students, for instance, Tans (2003) found a relationship between positive emotional intelligence and other criteria such as contextual performance. But, emotional intelligence can work with other variables like gender, personality and personal value to predict performance, job satisfaction and effective service delivery.

Cote and Miner, (2006) argued that emotional intelligence and cognitive intelligence interact to influence efficient performance. It is a fact that it takes more than traditional cognitive intelligence to be successful at school. It also takes emotional intelligence; the ability to restrain negative feelings, such as anger, frustrations and selfdoubt, rather focus on positive ones such as confidence to be successful at school.

According to theory of emotional intelligence postulated by John & Meyer (1997), an individual intelligence is far too narrow, and that individual emotions play a major role in thought, decision making and individual success. He further posits that individuals are born with a general emotional intelligence that determines their potential for learning emotional competencies in which learning English Language is no exception. Effective learning of English Language is in line with strong motivation. The more the tendency to focus on the set goals by individual, the stronger the motivation for an individual to learn English language.

Attitude and Academic Performance

Attitude refers to our feeling and shape our behaviors toward learning, not only the students' achievement influenced by attitude but also their desire to learn in general. Kim and Mcgarry (2014:28) stressed "Attitude generally related to person's desire to study interest".

Teachers should pay more attention to students' attitude as it affects their success. As Al-Tamimi and Shuaibu (2009) emphasized "Attitude played a crucial role in language learning as would appear to influence students' success or failure in their learning".

In a research conducted by Soleimani and Hanafi, (2013) it was recommended that teachers

should be responsive to learners' attitude and values their students' attitude and predispositions as it can affect their success in second language learning; especially English foreign language learning. Alscereed, (2009) pointed out that "in the context, English as a Foreign Language (EEL), the attitude' of the students toward the achievement of English language of a queen position and can hardly, ignore it in such a situational study". Gardner and Lambert (2008) claimed that negative attitude does not serve the purpose. Similarly, Shah, (2001) agreed with that in his findings, that the lack of a positive attitude contributes towards low achievements to students.

Attitude and Academic Performance in English Language

English language learning has a psychological and social aspect and attitude to learning English as a second language affect the ability, of the learners to master the language in 1992, Baker focused on the importance of research about effect of attitude in language learning (Zainol, 2012).

Hassan (2003) shows a significant correction between attitude towards learning English language and English achievement. Popham (2011) pointed out that, effective domain is important for its impact on learner's future learning behavior. He stated: "the reason such, effective variable as students' attitude, interest and values are important to us is that those variable typically influence future behavior. The reason we want to promote positive attitude towards learning is inclined to pursue learning in the future".

Learners' attitude, skills and strategies determine their underachievement or accomplishment (Nunan, 2000). Attitude to language learning is a hypothetical construction that cannot be observed directly and must be inferred from the responses that reflect evaluation of attitude object (Adjen, 2005).

Statement of the Problem

Every child of school age is expected to be educated and well trained for his future and betterment of the society especially in the language being used in the country, it is assumed that students at senior secondary level would be able to speak and write fluently in the language of instruction in most of the subjects taken. Despite the official and public emphasis, senior secondary schools do not seem to be producing adequate number of students who are sufficiently proficient in English. The performance of candidates has not been satisfactory, their understanding and use of English have not attained a standard considered reasonable by users, as this reflected in their terminal and SSCE examinations.

Students differ in their emotional intelligence and attitude toward learning a second language. In school setting, there are some instances when students develop negative attitude toward a lesson or subject or showing disparity in his emotional intelligence as a result of inability to adjust to irrelevant method of learning by teachers (KhaZakka, 2002). And as a result a student may decide to keep away from the lesson and this may lead to having poor academic performance in English language are due to number of reasons. If their emotional intelligence and attitude toward learning English language is not checked especially among senior secondary school students, it can lead to school dropout which will lead to serious problems like unemployment etc.

Research Questions

The study attempted to find answers to the following research questions:

- 1. What is the relationship between students' emotional intelligence and academic performance in English language?
- 2. What is the relationship between students' attitude and academic performance in English language?
- 3. What is the difference in emotional intelligence of senior secondary school students based on gender?

Research Hypotheses

In this study, the following null hypotheses are formulated:

- 1. There is no significant relationship between emotional intelligence and students' academic performance in English language
- 2. There is no significant relationship between students' attitude and academic performance in English language
- 3. Male and female students' Academic Performance in English and Emotional Intelligence will not be significantly different.

Methodology

Descriptive survey research design is adopted for this study. The population of this study consists of all the senior secondary school students in Daura Local Government, Daura Educational Zone. A total of one hundred (100) Students were selected randomly from the students' population. Fifty male students were randomly selected from Government Pilot Senior Secondary School, Daura and Fifty (50) females' students were randomly selected from Government Day Secondary School Koza, which made their number to be (100) Senior Secondary School Students; fifty (50) males students and fifty (50) female students respectively. Three research instruments were used for data collection such as Emotional Intelligence Questionnaire (ETQ), Students Attitude Questionnaire (SAQ), English Language Performance Test (ELPT). The instrument consisted of two sections which are bio-data and attending skills section. Emotional Intelligence Questionnaire was subjected to five Likert Scale which the respondent is expected to tick the appropriate: SA, (Strongly Agree), A (Agree), UD (Undecided), SD (Strongly Disagree), and D (Disagree).

The instrument was adapted by modifying some items that suit this work from Sanusi, (2010)

Emotional Intelligence test. Attitude Questionnaire was adapted by modifying and set ten items relevant to this work from Gardner's (2008) Attitude/Motivation test Battery, it was placed on the five Went Scale: Q5 – Strongly Agree (AS), 4- Agree (A), 3- Undecided (UD), 2-Strongly Disagree (SD) and 1-Disagree (D) respectively.

English language performance test is a teacher made test which was set by adapting some items from West African Examination Council (WAEC 2022) and National Examination Council (NECO 2023) examinations, objective test with option A-D in which the respondents were to pick the correct answer. Validity of the instrument.

The three (3) instruments were validated by experts in the field of psychology and English language. A reliability coefficient of the three instrument were (coefficient) for Emotional Intelligence questionnaire, (coefficient) for Student's attitude questionnaire and (coefficient) for English language performance test.

The data obtained were subjected to statistical tool (SPSS) where null hypotheses One (1) and Two (2) were tested using Pearson moment correlation formula. The third (3) null hypotheses was tested using independent t-test.

Results Presentation

erformance in English I	language	(N=100)					
Variables	Mean	SD		df	r-calc.	r-critical	Remarks
Emotional intelligence	28.73	2.70					
			98	0.671	0.195	Signi	ficant
English							
Performance	23.78	3.70					
Significant level= 0.05: d	f = 98; r-criti	ical = 0.195					
Evidence from Table calculated r of 0.671 is g 0.195. This is significant a here is a significance emotional intelligence	reater than r at 5%. This ir relationship	critical of nplies that		which state relationship	es that betweer erforman	"There is memotional in ce of seco	ull hypothesis no significant ntelligence and ondary school

Table 1.0: There is no significant relationship between emotional intelligence and students' academicperformance in English language(N=100)

 Table 2.0: There is no significant relationship between students' attitude and academic performance in English language (N=100)

Variables	Mean	SD	df	r-cal	lc. r-critical	Remarks
Students' attitude	26.89	3.67	98	0.789	0.195	Significant
English Performance	23.78	3.70				C .

Significant level= 0.05: df = 98; r-critical = 0.195

Table 2.0 revealed that the average attitude of the						
student is 26.89 while average scores in English						
is 23.78. The Table further reveals that the \boldsymbol{r}						
calculated of 0.789 (78.9%) is significant at 5%						

(p=0.00). This implies that there is a significant relationship between students' attitude and academic performance in English language. The null hypothesis is therefore rejected.

Table 3.0: T-test showing gender difference in Emotional Intelligence and English performance

					-		
Variable	Group	Mean	SD	Df	t-cal	t-crit	Remarks
Emotional Intelligence	Male	24.56	2.66				
Significant	Female	28.09	2.04	98		2.739	1.645
English Performance	Male	25.42	1.66				
Significant	Female	22.14	1.04	98		3.167	1.645

Table 3.0 reveals that the average scores of male candidate in emotional intelligence of 24.56 is less than that of female of 28.09. The Table further shows that the calculated t of 2.739 is greater than critical t of 1.645 at a degree of

freedom of 198, this is significant at 5% level (p = 0.00). This implies that gender difference exists in the emotional intelligence of the participants. Similarly, the average score of male participants in English of 25.42 is more than that

of female of 22.19. This is also significance at 5% (p=0.00). This indicates that there is a significance difference in the English performance of male and female participants. The null hypothesis is therefore rejected.

Discussion of the Findings

The first Hypothesis states that, "There is no significant relationship between Emotional Intelligence and Performance in English of secondary school students". The hypothesis was rejected because findings as seen in table 1.0 shows there is a significant relationship. The findings revealed that academic performance positively and significantly correlated with attending to emotions, positive expressivity as well as gender but negatively correlated with negative expressivity. These significant positive correlations between Emotional Intelligence and Academic performance indicated that academic success does not only depend on cognitive aspects of intelligence rather it is also affected by emotional abilities. These results were expected and a probable reason for this outcome among sample may be due to the fact that Emotional Intelligence is very important in life accomplishments which according to Salovey and Mayer (1990) is a form of social intelligence that involves the ability to monitor one's own and others' feelings and that the key skills and qualities needed to be successful came from within emotional rather than from cognitive intelligences (Snarey & Vaillant 1985).

The hypothesis two states that "there is no significant relationship between attitude of students and performance in English." This hypothesis was rejected because table 2.0 revealed that there is a significant relationship between Students' Attitude and English Performance.

<u>Fennema-Sherman</u> (1998) posited that a positive attitude is a relationship of interest towards a particular desire. So therefore, performance would be positively skewed when there is positive attitude from students or clients generally.

Mayer and Salovey (1990) found out that a learner with a positive attitude towards a subject performs better than those who lack interest. Those with higher positive attitude eventually performs better academically in their subject of interest.

Hypothesis three states that "Male and female student's Academic Performance in English and Emotional Intelligence will not be significantly different". The null Hypothesis was rejected because Statistical analysis from Table 3.0 shows there exists a significant difference between the Performance of Male and Female students in relationship to their individual Emotional Intelligence.

Recommendation

The following recommendation are based on the findings

1. Teachers in Secondary Schools should be trained on how to handle a students' emotion and

also how to handle behavioral crisis even in the absence of a school Guidance-Counsellor.

2. Motivational measures should be taken in order to direct the interest of learners to academic achievement. This is because research has shown that a negative attitude shown towards a subject will lead to poor achievement in that subject. 3. As gender has been found to be a significant factor in learning, there is the need for curriculum developers, teachers and lecturers to take the gender of the learners into account when developing curriculum and designing instructions for the benefit of the students.

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Adult Education and Sustainable Development in Nigeria: Challenges and Way Forward

By

Ibok, Emmanuel Okon¹, Aya, Eke Kanu², Aniashi, Benedict Undishikele³, and Alobo, Theresa Daniel⁴,

Department Of Continuing Education and Development Studies, University Of Calabar; Calabar – Nigeria Corresponding Author: ibokemmanuelokon@gmail.com +2347068967449

Abstract

Adult education is the wheel upon which the society revolves. It is an organized educational activity focused on the adult for the acquisition of knowledge and skills on either part time or full time basis. The paper reviews the concepts of adult education and sustainable development, role of adult education in sustainable development, problems of adult education in achieving sustainable development in Nigeria as well as the techniques through which sustainable development can be enhanced in Nigeria. Adult education is an indispensable tool in the process of sustainable development. It offers the adult members of the society opportunities to acquire skills, knowledge, competencies, attitudes, values among others. A country is said to achieve sustainable development of the society. Adult and non-formal education remains the pivot upon which the wheels of the society revolve. The paper finally suggests among others that adults should be continually trained in order for them to become self-reliant and wealth creators in other to promote sustainable development.

Keywords: Adult education, non-formal education, development and sustainable development.

Introduction

Adult and non-formal education is a potent channel of disseminating the latest and most pertinent knowledge to adults and through it, human resources are developed and harnessed to effectively contribute to the growth and development of the society. The activities of any given society are managed by adult members of such society, be it at community or national level. For such adult members to effectively carry out community or national tasks delegated to them, they need to acquire knowledge, skills, competencies and values. The more educated adult members of a society are, the better the society will be. Education of the adult group is vital to any development process as the pride of any government is the attainment of higher level of sustainable development in such a way that its citizens would derive natural attachment to governance.

However, for a nation to achieve sustainable development there must be some pre-requisites, which include socio-political and economic stability. The social roles of Adult & Non-Formal Education in every society are apparent in its contributions to human and sustainable development. Adult & Non-Formal Education is very relevant in the training and development of human resources in any country through imparting the appropriate skills, capacities, values, knowledge and attitudes which can be used in the transformation of individuals, communities, nations and the world at large. Therefore, Adult & Non-Formal Education is a veritable tool in promoting sustainable development in Nigeria. In order to successfully enhance meaningful sustainable development, effective strategies must be

evolved. This paper attempts to dissects the role of adult education in sustainable development.

Clarification of concepts Adult and non-formal education

Adult education is a voluntary programme. It is not usually undertaken under any legal compulsion. It is undertaken at any age and for different purposes, deliberately or unconsciously for individual, group of people, community, state or for national progress. Adult education is also viewed as a practice in which persons regarded as adults by the society which he or she belongs engages in systematic and self-directed learning activities in order to acquire new forms of knowledge, skills, attitudes and values that will help in the development of the society which they belong. Akpama (2017) asserted that adult and nonformal education stresses the indispensability of continuous learning throughout the lifespan for self and societal improvements. Adult education can also be seen as any form of learning activities adults engages beyond traditional schooling, encompassing basic literacy to personal fulfilment as a life-long learner. Similarly, Ariya, Ogundele, Abiodun and Saleh (2015) defined the term Non-formal education: "any organized systematic educational activity carried on outside the frame work of the formal school system to provide selected type of learning to particular sub-group in the population be it adults or children". Adult education embraces the entire life of individuals and its purpose is to improve on what is i.e. the current state of affairs. It is directed to the people and so its curriculum

content is based on the present needs and problems of the group or learner(s) as well as the society (Ibok, Aniashi, Aya & Dennis, 2023).

The International Congress on Comparative Study of Adult Education in (1969) as cited by Akpama (2017) defined adult education as a process whereby persons who no longer attend school on a regular and full time basis (unless full time programmes are especially designed for adults) undertake sequential and organized activities with the conscious intention of bringing about changes in information. knowledge, understandings or skills. appreciation and attitudes or for the purpose of identifying and solving personal or community problems. This implies that all organized educational activities focused on the adult for the acquisition of knowledge and skills on either part time or full time basis could be described as adult education. Adult education is not only concerned with preparing people for life, but also concerned with helping people to live more successfully. Thus, adult education assist adults to increase competence or negotiate transitions in their social roles as (workers, parents retirees and so on) to help them gain greater fulfilment in their personal lives and to assist them in solving personal and community problems.

Marlyn (2019) listed the following as some criteria that qualify a programme as adult education:

1. The activity must be purposeful.

2. The purpose of the activity must be educational.

3. The activities must be relatively organised.

4. The target audience must be the adult group.

5. It must be need-based.

6. It is carried out voluntarily without any compulsion on the part of the learner.

7. It is often carried out as part time or leisure time activity.

8. It is flexible in terms of contents and time.

Any form of education that satisfies the above criteria qualifies as adult education. It could be basic literacy, remedial education, functional literacy, continuing education, vocational education etc.

Sustainable development

In 2015, UN Member States translated their vision of sustainable development into a blueprint for achieving it: the 2030 Agenda for Sustainable Development. Its 17 Sustainable Development Goals —with ambitious targets to achieve by 2030— cover the three dimensions of sustainable development: the economy, social development and the environment. However, halfway to our 2030 deadline, the climate crisis, a weak global economy, conflicts and the lingering impact of COVID-19 have put the Goals in jeopardy. Sustainability is the foundation for today's leading global framework for international cooperation the 2030 Agenda for Sustai-nable Development and its Sustainable Development Goals (SDGs) (United Nations. 2022). Sustainable development is how we must live today if we want a better tomorrow, by meeting present needs without compromising the chances of future generations to meet their needs. The survival of our societies and our shared planet depends on a more sustainable world. Where development is sustainable, everyone has

access to decent work, quality health care and education. Natural resource use avoids pollution and permanent losses to the environment. "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs (United Nations, 2022).

The concept of sustainable development can be interpreted in many different ways, but at its core is an approach to development that looks to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society (Brown, 2015). All too often, development is driven by one particular need, without fully considering the wider or future impacts. We are already seeing the damage this kind of approach can cause, from large-scale financial crises caused by irresponsible banking, to changes in global climate resulting from our dependence on fossil fuel-based energy sources. The longer we pursue unsustainable development, the more frequent and severe its consequences are likely to become, which is why we need to take action now. Sustainable development aims to balance the needs of the economy, environment, and social well-being. Sustainable development overlaps with the idea of sustainability which is a normative concept. Robert, Parris & Leiserowitz (2015) asserted that the aim of sustainable development is to have a society where living conditions and resources meet human needs without undermining planetary integrity.

Sustainable development is far broader than just the environment. It's also about ensuring a strong, healthy and just society. This means meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity. Unsustainable development happens when people pursue immediate rewards without thinking about harms to other people or the planet. Often, short-term gains are overshadowed by longer-term costs. That's the case when someone cuts down an entire forest to turn a quick profit – even if an ecosystem collapses, endangered species die off and local communities are left at permanent risk of devastating floods. Sustainable development provides an approach to making better decisions on the issues that affect all of our lives. By incorporating health plans into the planning of new communities, for instance, we can ensure that residents have easy access to healthcare and leisure facilities (UNESCO, 2022).

Role of Adult & Non-Formal Education in Sustainable Development in Nigeria

The relevance of adult and non-formal education in attaining sustainable development in Nigeria can not be overlooked. Adult learning enhances employability and income of individuals, which is a key pathway to realizing a range of other benefit. For example, it enables people to some extent, choose and shape the context in which they live and work and even increase their social status. Olojede (2015), averred that Adult and non-formal education is a productive human development investment. Ability of people to read and write has possessed a great significance and importance to the extent that literacy has become one of the fundamental requirements of modern civilization. UNESCO (2022) asserted that the higher the percentage of a functional literate people in a society, the much better are the opportunities for socio-economical. technological and cultural development. In agreement with the foregoing, and based on the National Policy on Education (NPE, 2014), education in Nigeria is an instrument "par excellence."

Adult education plays a very crucial role in training and skills acquisition of adults which in turn leads to sustainable development. The dynamic global environment requires that skills should be upgraded constantly hence the relevance of adult education in sustainable development. Adult education provides individuals in any society the opportunity to upgrade their skills. Adult education helps in values reorientation, disciplined behaviour and leadership by example. All these are components of sustainable development in Nigeria in the 21st century. Continuing education makes it possible for adults to get an extensive opportunity or structure. For developing behavioural and technical skills which enhances their level of growth thereby leading to a more confident individual. Adult education helps enhance an individual's functional knowledge and skills at any level, and lead to expansion of their personality and mental horizons.

Bello, (2022) opined that the role of adult education in national development is multidimensional. Indeed, literacy could be said to be the bedrock of sustainable development. It is not just a basic right, education is a foundation for progress in areas such as human capital, health, nutrition and the development of institutions and democracy. Therefore, the role of adult education in sustainable development can be appreciated through the complex relationships existing between its provision and economic, political, social and cultural determinant in Nigeria. The economic role of adult education is apparent in its contribution to human capital formation. An educated population also provides a more attractive investment climate. Thus, investment in the development of human capital, through adult education is crucial for developing a labour force and managerial know-how in today's global economy.

Egbezor and Okanezi (2008) as cited in Ibok, Dennis and Alobo (2019) outlined the models of adult and non-formal education which is used in achieving sustainable development of any nation to include:

- Agricultural extension model and services; designed for farmers and which is geared towards increased food production through improved farming method.
- Apprenticeship model; practically designed for skills acquisition through vocational training and job improve-ment programmes.
- 3. Community mobilization and development model; which involves

liberal education and counseling aimed at rural communities, helping to transform the people by working in close relationship with them and liberate the minds of the people from debilitating conditions

- 4. Self-help and enrichment of skills model; is a process of enablement of the individual through responsible and creative engagements. It also assist individuals to rely on local skills and materials in order to promote self-reliance.
- Sunday school model; which goes beyond religion and moral instruction including programmes such as cookery and home management for girls, music and trade for boys.
- Training institute model; designed for onthe-job training at the work place meant to improve the occupational competence of the participants.
- 7. Village craft centre model; sometimes initiated by Local Government Authorities or community develop-ment agencies to impart skills to youths in the rural areas thus creating self-employment and discouraging rural-urban migration among youths. It encourages hard work, creativity and dignity of labour.
- 8. Basic literacy education model: This is organized by local government authorities and other voluntary agencies. The intention here is to teach basic literacy – reading, writing and arithmetic (3 R's) in the form of adult education classes or night school. Migrant fishermen and Nomadic Education programme also benefit from this model.

- 9. Age-group model: This is a situation whereby peer groups and youths of the same age range interact and engage in various community activities. This model promotes understanding of social obligations and rules as well as the acquisition of basic skills which would enable youths to function as responsible members of society.
- 10. Self-help model: This model does not only rely on local skills and materials, but it also promotes self-reliance and industry. Community leaders and chairmen of community development organisations are usually facilitators and their roles include helping and motivating the community through the youths, first to identify their needs and then mobilize and organize them to work in the projects. All these programmes are geared towards economic independence and self-reliance of individuals which are the key indicators for sustainable development.

Bello, (2022) asserted that Adult education is also instrumental in familiarizing the active population of Nigeria with information Communication Technology (ICT), a decisive tool for the smooth integration of Nigeria economics in the global economy. The importance of this cannot be overemphasized as the world is rapidly moving towards knowledge based economics structures and information societies that comprise networks of individuals, firms and countries linked electronically in inter-dependent and interactive relationship. Adult education also plays a major role in social development. Nigeria population will need some kind of formal and non-formal education and training to be able to benefit from basic health care, including sexual and reproductive health service the development of new medicines, and this be in a position to free itself from diseases, that devastate poor people, such as HIV/AIDS, tuberculosis, malaria and other parasites. Adult education will also be needed to enable the poor Nigerians to really take advantage of programmes aimed at protecting orphans and vulnerable children or drastically reducing the number of people without access to safe water and basic sanitation (Bello, 2022).

Adult and non-formal education provides a foundation for development, the ground work on which much of our economic and social wellbeing is built. It is the key to increasing economic efficiency and social consistency. By increasing the value and efficiency of their labour, it helps to raise the poor from poverty. Adult and non-formal education increases the overall productivity and intellectual flexibility of the labour force. Ozturk (2001) as cited in Ibok et'al (2019) opined that adult education in every sense is one of the fundamental factors of development. He observed that, no country can achieve sustainable economic development without substantial investment in human capital. Adult education enriches people's understanding of themselves and world. It improves the quality of their lives and leads to broad social benefits to individuals and society. Adult education raises people's productivity and creativity and promotes entrepreneurship and national development. In addition, it plays a very crucial role in securing economic and

social progress and improving income distribution.

Challenges of Attaining Sustainable Development through Adult Education in Nigeria

Nigeria faces several challenges in attaining sustainable development through adult education. One major challenge is the need for effective policy implementation, which is hindered by issues such as corruption, bad leadership, political instability, slow public service structures, and ethnicity. Another challenge is the deepening energy crisis, with a low electricity generation capacity and a reliance on unsustainable alternatives like petroleum-based electricity generating sets. The COVID-19 pandemic has also significantly impacted Nigeria's progress towards the Sustainable Development Goals, particularly in the areas of economy, education, and health. Adequate housing delivery is another challenge, with issues such as unskilled workmen, unachievable building standards, housing finance, urbanization, poor policy programs, and contravention of building standards. These challenges highlight the need for effective policy implementation, improved energy infrastructure, pandemic response strategies, culturally relevant education, and better housing delivery in Nigeria.

Similarly, Ibok, Dennis and Alobo (2019) listed the following as the challenges of attaining sustainable development through adult education in Nigeria:

1. Inconsistency in government policies: the frequent changes in the policies of

government is a challenge being faced in sustainable development. In time past, it's found that there is inconsistency in the policies of government, some of the policies of government which is attributed to the constant change of government, some of the policies made do not even last more than four years before the new government change it. There is no continuity in the policies of government.

- 2. Corruption: widespread of corrupt practices in terms of implementations of the government initiatives and programmes as a result of some head of agencies being appointed based on political affiliation or compensation not based on skills and competencies. This has resulted in huge resources being wasted. There is also the of misappropriation issue and embezzlement funds of meant for sustainable and national development in Nigeria.
- Lack of good governance: This factor also militates against sustainable development. Where there is no good governance, development becomes a mirage.
- 4. Illiteracy: There is no gainsaying the fact that illiteracy is an impediment to entrepreneurship and national development. An educated society is a dynamic society in which peace and progress is witnessed. On the other hand, an illiterate society breeds violence and contempt which lead to stagnation, poverty and ultimately little or no development. Apart from being a right of everyone to be educated, adult education

paves way for people to contribute to the development of themselves and their society. It is on record that the present level of illiteracy is very high in Nigeria, this makes it difficult for Nigeria to achieve sustainable development.

5. Political and social factors: political and social factors strongly affect the level of entrepreneurship and national development. Religious intolerance and ethnic crises limit a country's progress in development activities.

Conclusion/suggestions

Sustainable development is critical and essential to sustenance and growth of any nation. A country is classified as developed when it is able to provide qualitative life for her citizenry. This paper posits that Adult Education is a tool that is used in achieving human capacity for sustainable development in Nigeria. Through Adult education programmes, the much needed technical, vocational knowledge, skills, values, and attitudes needed by the adult populace for sustainable development are achieved. In addition, adult education enables people to become wellinformed, capable of thinking critically and owning their destiny through active participation sustainable development initiatives. Sustainable development cannot be achieved when the majority of the populace are illiterates. It is the belief of this paper that if adult and non-formal education is made available to the adult citizens of the country,

Nigeria will attain greater height in sustainable development. It is obvious that sustainable development cannot take place if the adult citizens are not sufficiently enlightened.

Based on the challenges of attaining sustainable development in Nigeria, the following suggestions are put forward:

- The paper advocates for a systematic adult education policy to be adopted in Nigeria. This should be guided in both conception and implementation by a philosophy of continuing education or lifelong learning. Lifelong learning stresses the need for learning to be ongoing throughout life.
- Stability and continuity of government policies to encourage investment which propels development.
- Corruption on the part of policy makers, designers and implementers should be addressed by Government and her agencies without any iota of favoritism.
- 4. Adult education should also be made a relevant part of public policy because from the perspective of poor funding, adult education continues to be poor education for poor people, even among the elite. It has always been seen as an education reduced to temporary effort aimed at literacy development. The government should therefore be ready to see adult education as part of education delivery that can help to achieve SGDs in Nigeria.
- Government at all levels, should increase campaigns about sustainable development goals.

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Skills and Challenges of Using Grant writing Proposal for the Acquisition of Information Resources by Library Staff in Federal University Library, Gusau

By

Abba Hamza¹, Zulaiha Adamu Dankwangila², Hafizu Ashiru³ and Kabir Ibrahim⁴

¹Department of Library and Information Science, Ahmadu Bello University, Zaria

²Federal University Gusau Library, Zamfara State, Nigeria

³Department of Library and Information Science, Hussaini Adamu Federal Polytechnic Kazaure, Jigawa State, Nigeria.

⁴Department of Library and Information Science, Federal University, Dutsin-ma, Katsina State

Corresponding Author: <u>abbahamza2017@gmail.com</u>

08064292353

Abstract

This study examined the Skills possessed by library staff and Challenges faced on writing grant proposal for the acquisition of Information Resources in Federal University Library, Gusau. Two research objectives were formulated i.e. to find out the grant writing skills possessed by library staff for the acquisition of information resource in Federal University Gusau Library and to identify the challenges faced by library staff in using grant writing skills for acquiring information resources. Quantitative approach was used, the population of the study comprised of all the thirty-two library staff in Federal University Gusau Library, all the population was used as the sample for the study. The instrument used for data collection was questionnaire, the data collected was analyzed using descriptive statistics. The findings show that; grant writing skills mostly possessed by library staff in Federal University Gusau Library is information literacy; the study also found out that, lack of awareness is the most common challenge that affect library staff in using grant writing skills for acquisition of Information Resources in Federal University library Gusau. It was concluded that effective grant writing is essential for libraries seeking to acquire valuable information resources. The study recommended that, The Library should focus on strengthening the staff's skills in needs assessment and evaluation and impact assessment, thereby providing experts to practically train the Library Staff on the basic skills required, also, the Library should create regular training sessions, workshops and seminars focused on grant opportunities and the importance of grant writing for resource acquisition.

Keywords: Challenges, grant writing, information resources, library staff, skills

Introduction

The acquisition of information resources is a critical function of academic libraries, essential for supporting the educational and research needs of students, faculty, and staff. In an era of budget constraints and rising costs of information materials, libraries increasingly rely on external funding sources, such as grants, to supplement their acquisitions. Grant writing has thus become a vital skill for library staff, enabling them to secure necessary funds to enhance their collections and services. However, despite its

importance, the effectiveness of grant writing can be hampered by various challenges, including a lack of necessary skills and awareness among library staff (John, 2020).

Grant writing is the process of crafting a compelling proposal to secure funding from external sources, such as government agencies, foundations, or private organizations, for specific projects or initiatives. The process begins with identifying a funding opportunity that aligns with the needs and goals of the organization seeking the grant. This step is crucial as it ensures that the proposal fits the priorities and criteria of the funder. Once a suitable grant is identified, the grant writer must thoroughly research and gather relevant information to build a strong case for why the proposed project deserves funding. This involves understanding the objectives of both the funding organization and the project itself, as well as ensuring that the proposal clearly articulates how the grant will address a specific need or challenge (Smith, *et al.*, 2022; Chan & Hart, 2023).

A well-written grant proposal typically includes several key components: an introduction or cover letter, an executive summary, a detailed project description, a budget, and a plan for evaluation and sustainability. The project description is the heart of the proposal, outlining the goals, objectives, methods, and expected outcomes of the project. It must be clear, concise, and persuasive, demonstrating the feasibility of the project and its potential impact. The budget provides a detailed breakdown of how the funds will be used, ensuring transparency and accountability. Equally important is the inclusion of a plan for evaluating the project's success and sustainability beyond the grant period, which reassures funders that their investment will have a lasting impact (Stenlin & Cleivigh, 2020).

The art of grant writing lies in balancing creativity with precision. A successful grant proposal not only meets the technical requirements of the funding agency but also tells a compelling story that resonates with the funder's mission and values. Effective grant writers must be adept at research, writing, and strategic thinking, as they must align the needs of their organization with the priorities of the funder. Additionally, grant writing is often a collaborative process, requiring input from various stakeholders to ensure that the proposal is both comprehensive and realistic. Ultimately, mastering the skills of grant writing can significantly enhance an organization's ability to secure essential funding, enabling it to achieve its goals and expand its impact (Heyland & Jiang, 2021).

This study sought to examine the specific skills required for successful grant writing in the context of acquiring information resources and to identify the challenges that the library staff face in this process. By focusing on the grant writing capabilities of library staff at Federal University, Gusau, this research aimed to shed light on the current proficiency levels in key areas such as information literacy, needs assessment, and impact evaluation. Understanding these aspects is crucial for developing targeted interventions to improve grant writing outcomes, thereby enhancing the library's ability to acquire valuable information resources and better serve its academic community.

Problem Statement

The acquisition of information resources in libraries is crucial for maintaining up-to-date collections that meet the evolving needs of users. However, many library staff face significant challenges in securing the necessary funding to acquire these resources due to a lack of grant writing skills. Despite the availability of grants, the complexity of the application process, coupled with limited training in grant writing, often hinders library staff from successfully obtaining funds. This gap not only impacts the quality and diversity of resources available to library users but also limits the professional growth of library staff in the area of resource acquisition.

Objectives of the Study

The objectives of this study are to:

- to find out the grant writing skills mostly possessed by library staff for acquisition of information resource in Federal University Gusau Library, Zamfara State-Nigeria.
- to identify the challenges faced by library staff in using grant writing skills for acquiring information resources in Federal University Gusau Library, Zamfara State-Nigeria

Literature Review

Grant writing skills possessed by Library Staff for acquisition of information Resources

Grant writing skills can be invaluable for library staff as they can help secure funding for important, projects, programs, and initiatives that benefit the library and the University community. Librarians possess several valuable skills that can contribute to successful grant writing for the acquisition of information resources. These skills include: Information literacy: is of utmost importance for librarians as it enables them to effectively navigate, evaluate, and utilize information resources. Here are some key reasons why information literacy is significant for librarians; Enhancing User Services; Librarians with strong information literacy skills can provide better assistance to library users in finding relevant and reliable information. They can guide users in effective searches, conducting evaluating information sources, and using various tools and technologies to access and retrieve information (Shrivastava & Shrivastava, 2020)

Research skills: plays a crucial role in the work of librarians, enabling them to stay current with evolving trends, contribute to knowledge creation, and enhance their professional practice. Here are some key reasons why research is significant for librarians. Professional Development: Engaging in research allows librarians to deepen their understanding of various topics, technologies, and methodologies related to their field. It helps them develop expertise and enhances their ability to provide high-quality services to library users (Radford, 2017).

Budgeting and Financial Management skills: are crucial for librarians as they play a vital role in the effective administration and sustainability of library operations. Here are some reasons highlighting the significance of budgeting and financial management skills for librarians. Efficient Resource Allocation; Budgeting skills enable librarians to allocate financial resources effectively to meet the needs of their user community. By understanding the financial constraints and priorities, librarians can make informed decisions about purchasing materials, subscribing to databases, implementing new technologies, and maintaining facilities. Financial Planning: Librarians with financial management skills can develop strategic plans that align with the available budgetary resources Radford (2017). This entails setting financial goals, forecasting future expenses.

Collaboration and Partnership Skills: are essential for librarians when writing grant proposals, as they help to strengthen the chances of securing funding and enhance the overall impact of funded projects. Here are some reasons highlighting the significance of collaboration and partnership skills for librarians in grant writing, enhanced expertise and resources, collaborating individuals, with other departments, organizations, or community partners allows librarians to Collaboration and partnership skills; are essential for librarians when writing grant proposals, as they help to strengthen the chances of securing funding and enhance the overall impact of funded projects. Here are some reasons highlighting the significance of collaboration and partnership skills for librarians in grant writing. Enhanced Expertise and Resources, collaborating with other individuals, departments. organizations, or community partners allows librarians to tap into additional expertise and resources Portner. By incorporating diverse perspectives and capabilities, librarians can develop stronger and more comprehensive grant proposals that address a wider range of needs and objectives.

Evaluation and Impact Assessment: are crucial components of grant writing for librarians as they demonstrate accountability, measure effectiveness, and provide evidence of the project's success. Here are some reasons highlighting the significance of evaluation and impact assessment in grant writing. Demonstrating Accountability, Evaluation and impact assessment allow librarians to demonstrate accountability to funders and stakeholders by providing evidence that the grant funds are being used effectively and efficiently (Smith & Chowdhorg, 2022).

Challenges faced by Library Staff in using Grant Writing Skills

a. Limited Financial Resources and Training

Libraries often have limited budgets for including professional development, grant writing training. Lack of financial resources and dedicated training programs can make it challenging for librarians to access the necessary resources and expertise to develop grant wiring skills. Initial research for research on writing skills in the library and information Science databases revealed articles on the involvement of academic librarians in co-teaching research and writing courses Foutch (2010) Gasper & Wetzel (2009) Toth (2005) but nothing on the competencies or assessment of graduate writing in LIS programs. Grant proposal writing is an extremely herculean task as it requires a rigorous and systematic approach. This challenge is particularly daunting for novice researchers who received title or no training in how to write Grant proposals writing in their graduate programs (Chan & Hart, 2023). Researchers and scholars need to apply for grants so as to improve their academic research quality, to support their research, and to gain an academic reputation.

b. Time Constraints

Librarians are typically engaged in various day to day responsibilities, such as managing collections assisting patrons and organizing events, finding the time to learn and practice grant writing can be difficult. Grant writing requires significant research planning, and writing, which can be time consuming. For instance, when seeking members cross-disciplinary background is considered to be one of the potential factors that might add to the feasibility and capacity of the grant team Kulage et al., (2022). These shows that before all those members are being picked the librarian should waste time on critical thinking of who will be more appropriate than the other. Limited time will hinder librarian while securing necessary resources. In 2020 Shrivastava's elaborate on how Grants enable researchers to secure the necessary resources to conduct high quality student, disseminate their finding and build up their professional reputation (Shrivastava & Shrisvastava, 2020).

c. Complex and evolving funding Landscape

The landscape of grant funding is complex and constantly changing librarians need to stay updated on available funding opportunities eligibility criteria and application procedures. Keeping up with these changes can be demanding, especially without elicited support and resources. Scientific research grant proposals have a law success rate in most parts of the world (Stenlin & Cleivigh, 2020). As one of the essential academic genes in addition to thesis and journal articles, grant writing has its unique style not only in terms of components of grant application proposed manuscripts. These implies that the uniqueness of the grant writing skills. Several writing style even variables are statistically significant predictors of Grant application success, and we would expect that the same holds oral presentation skills.

The fundamental elements such as preparing and planning a grant, little space is given to the principles of grant review and of Grant member selection, which are regarded as determinants in winning the grants (smith et al., 2022). Librarian should always be updated on available funding, eligibility status and other criteria for the grant application.

e. Limited Networking Opportunities

Building connections and networking with grant funders and other grant professionals is crucial for success grant writing. However, librarians may have limited opportunities to engage with these networks slowing down their learning process and access to potential finding sources Expert writers and graduate students in their writing for scholarly publication. The participants seemed to relay on Authorities in their fields to support their arguments, much like junior faculty members writing a grant proposal. There are limited opportunities for the librarians to stand on their own to have such connection on the funders due to the challenges on the Network limitation. Funding agencies which are a clear fit for health professions, Education projects, are small in number and often limited in resources.

f. Balancing Technical and persuasive writing

Grant writing requires a balance between technical details such as project plans and budgets and persuasive writing to convince finders of the projects value and impact. Striking this balance can be challenging, particularly if librarians have more experience technical writing or have not written persuasive document before.

g. Competing priorities and project

Librarians have multiples priorities and ongoing projects, making it difficult for librarians to prioritize grant writing. Tagging multiple responsibilities can hinder their ability to dedicate sufficient time and effect to developing grant writing skills. These can make them relay on the Authorities to supports their arguments, perceive that the participants seemed to relay on Authorities in their fields to support their arguments, much like junior faculty members writing grant proposal.

Methodology

Quantitative research methodology was adopted and descriptive survey research design was used for the study, the population of the study comprised of all the library staff of federal University Gusau, Zamfara State, Nigeria which amount to thirty-two (32) and all the population were used as sample size using census population sampling technique. The researcher used questionnaire as instrument for data collection and the data collected for research questions were analysed using descriptive statistical tools (Frequency distribution and percentage).

Data Presentation and Discussion

The following Tables presented the analysis of data collected from the respondents:

Table 1

Grant writing skills possessed by Librarians for acquisition of Information Resources in Federal University Gusau, Zamfara State, Nigeria

S/N	Grant Writing Skills	Frequency	Percentage %
1.	Information literacy skills	12	42.9
2.	Research skills	11	39.3
3.	Needs Assessment skills	4	14.3
4.	Editing and Revision	7	25.0
5.	Budgeting and Financial Management skills	6	21.4
6.	Proposal Writing	8	28.6
7.	Collaborative and partnership skills	6	21.4
8.	Evaluation and impact Assessment skills	4	14.3

Source: Filed Survey, 2024

Table 1 shows grant writing skills possessed by Librarians for acquisition of information resources in Federal University Library Gusau, Zamfara State, and the Table revealed that; Information literacy skills have the highest frequency and percentage of 12(42.9), closely followed by research skills with 11(39.3), followed by proposal writing with 8(28.6), then editing and revision with 7(25.0), followed by Budgeting and Financial Management skills and collaborative and partnership skill with 6(21.4)each, this is followed by needs assessment skills and evaluation and impact Assessment skill with 4(14.3) each. So, it can be inferred that the grant writing skills mostly possessed by library staff in Federal University, Gusau is Information literacy skills. While, the least were needing assessment skills and evaluation and impact Assessment skills.

It can be inferred that library staff at Federal University, Gusau, are most proficient in information literacy skills when it comes to grant writing, meaning they are skilled in locating, evaluating, and effectively using information necessary for drafting grant proposals. However, they are less adept in needs assessment and evaluation and impact assessment skills, which are critical for identifying specific needs that a grant could address and for measuring the effectiveness and outcomes of funded projects. This indicated a potential weakness in the ability of staff to fully align grant proposals with institutional needs or to demonstrate the impact of funded initiatives, which could limit the success of their grant applications and the longterm benefits of awarded grants.

Table 2

Challenges faced by library staff in using Grant writing skills for acquiring Information Resources
in Federal University Library in Zamfara State.

S/N	Challenges	Frequency	Percentage %
1.	Limited financial resources and Training	18	64.3
2.	Time constraints	16	57.1
3.	Lack of awareness	23	82.1
4.	Complex and evolving landscape	1	3.6
5.	Lack of terminology	0	0.0
6.	Limited Networking opportunities	11	39.3
7.	Balancing Technical and persuasive writing	3	10.7
8.	Competing priorities and project	6	21.4
8.		6	

Source: Filed Survey, 2024

Table 2 shows the challenges faced by library staff in using grant writing skills for acquiring Information Resources in Federal University Library of Zamfara State, and the Table revealed that lack of awareness has the highest frequency and percentage of 23(82.1), followed by limited financial resources and training with 18(64.3), then time constraint with 16(57.1), followed by limited networking opportunities with 11(39.3), followed by competing priorities and project with 6(21.4), followed by balancing technical and persuasive writing with 3(10.7) and lastly lack of terminology with 0(0.0). It can therefore, be deduced that lack of awareness happens to be the most common challenge that affect library in using grant writing skills for acquisition of Information Resources in Federal University library Gusau, Zamfara State. While, lack of terminology is the least challenge affecting library in using grant writing skills for acquisition of Information Resources in Federal University library Gusau, Zamfara State.

It can be said that the primary challenge hindering the use of grant writing skills for acquiring information resources at the Federal University library in Gusau, Zamfara State, is a lack of awareness. This indicated that library staff may not be fully informed about available grant opportunities or the importance of leveraging these skills to secure funding. Conversely, the least significant challenge is a lack of familiarity with grant-related terminology, indicating that while staff may understand the language used in grant writing, their limited awareness of funding sources or processes significantly hampers their ability to effectively utilize these skills for resource acquisition. The finding implies that improving awareness among library staff about grant opportunities could significantly enhance their ability to secure funding for acquiring information resources. Despite having a basic under-standing of grant terminology, the lack of awareness is a critical barrier that limits their effectiveness in using grant writing skills.

Summary of the Findings

Based on the data collected and analysed for this study, the following are the findings of the study:

- The study found out that; the grant writing skills mostly possessed by the library staff in Federal University Gusau Library are Information literacy skills, research skills, proposal writing skills, editing and revision skills, budgeting and financial management skills and collaborative and partnership skills used for acquisition of Information Resources.
- 2. The study also found out that, lack of awareness, limited financial resources and training, time constraint, limited networking opportunities, competing priorities and project happens to be the most common challenges that affect library staff in using grant writing skills for acquisition of Information Resources in Federal University Library Gusau, Zamfara State.

Conclusion

In conclusion, effective grant writing is essential for libraries seeking to acquire valuable information resources, but it requires a combination of specific skills and overcoming various challenges. While strong information literacy skills among library staff can facilitate the drafting of compelling proposals, deficiencies in areas such as needs assessment and evaluation can undermine their success. Addressing these gaps through targeted training and increased awareness of funding opportunities can significantly enhance the ability of library staff to secure grants, ultimately leading to improved resource acquisition and better support for the academic community. Investing in these areas not only boosts the library's capacity to expand its collection but also strengthens its role as a vital educational resource.

Recommendations

- 1. The study recommended that, the Federal University Library Gusau, should focus on strengthening the staff's skills in needs assessment and evaluation and impact assessment, thereby providing experts to practically train the Library Staff on the basic skills required which could be achieved through targeted training programs that teach staff how to accurately identify and articulate the specific needs that grants can address, as well as how to measure and communicate the outcomes and impact of funded projects.
- 2. In order to address the challenge of limited awareness, the study recommended that; the Federal University Library Gusau, Zamfara State, should create regular training sessions, workshops and seminars focused on grant opportunities and the importance of grant writing for resource acquisition. Also, establishing a dedicated team or a point of contact for grant-related information within the library will help ensure that staff are wellinformed and actively seeking out funding opportunities to enhance the library's resources.

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Effects of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on Chemistry Secondary School Students Academic Achievement and Interest in Kano State, Nigeria

By

Nafisah Muhammad Sani¹, Auwal Abdullahi Tijjani² and Ali Abdu Giginyu³

Department of Education, Faculty of Education, Federal University Dutse, Jigawa State, Nigeria Corresponding Author: aligiginyu@fud.edu.ng.com 080-6933-7226

Abstract

This study investigates "Effects of Student Teams Achievement Division (STAD) Cooperative Learning on Chemistry Secondary School Students' Academic Achievement and Interest in Kano State, Nigeria. The study adapted Analysis of covariance (ANCOVA) design. A total of two hundred and thirty (230) students were selected by simple random sampling formed the sample of the study. The instruments were validated by experts in physical chemistry, test and measurement, and educational psychology, the instrument was found reliable for data collection. The findings revealed that the experimental group, taught using Student Teams Achievement Division (STAD) cooperative learning strategies, performed significantly better than the control group, which was taught using conventional methods. The study recommends, among others, that chemistry teachers should be encouraged to use cooperative learning strategy in teaching of chemistry.

Keyword: Cooperative, learning strategy, academic achievement, interest

Introduction

Science education plays a vital role in the lives of individuals and the development of a nation scientifically and technologically. It is widely and generally acknowledging that the gateway to the survival of a nation scientifically and technologically is scientific literacy which can only be achieved through science education (Lawwil, 2010). Science is a way of thinking in pursuit of understanding nature, a way of investigating and body of established knowledge (Aniodoh, 2012). Teaching of science in Nigeria started during the period of Christian missionaries in 1859 who introduced western education in the country. Therefore, the foundations of science education that were created and injected into school's curriculum, though lead to the beginning of science education in the country. The nation development is highly depending on the important of science education that is the reason why every nation must not take

their institution of learning with levity hand (Omosewo, 2014).

Science education is made up three subjects which are biology, chemistry and physics which are combined with education in our institutions (Aina, 2014). Science is a branch of knowledge that is concerned with the observation. classification of facts, formulation of general truth, systematic search for truth, it suggests and provides the basic technology, and without science technology does nor becomes exist. Within the context of science education, chemistry has been identified as a very important school subject and its importance in scientific and technological development of any nation has been widely reported (Aina, 2014) it was as a result of recognition given to chemistry in the development of the individual and the nation that is made a core-subject among the natural sciences and other related courses in the Nigerian education system. Therefore, chemistry is a branch of science that deals with the structure, composition, properties and reactions of matter in different forms. Chemistry is very important in the technological development of the nation (Asiyai, 2005).

Chemistry being a subject in secondary schools is one of the foundations of schools science in Nigeria. Although it is expected that on completing basic education, the learner is fully prepared for senior secondary education (science education inclusive) and should be able to excel in secondary education. This assertion does not however seem to held for secondary school science because research has shown that students' performance in secondary science is low (Trumper, 2014). So many factors were attributed to that such as poor teaching method.

Poor academic performance by the students, majority is fundamentally linked to application of ineffective teaching methods by teachers to impact knowledge to learners. Teaching is a process that involves bringing about desirable changes in learners so as to achieve specific out comes. In order for the methods used for teaching to be effective, teaching need to be conversant with numerous teaching strategies that take recognition of the magnitude of complexity of the concepts to covered (Aduola, 2011).

The primary purpose of teaching at any level of education is to bring fundamental changes in learner (Tebabal and Kashssay, 2011). To facilitate the process of knowledge transmission, teachers should apply appropriate teaching methods that best suit specific objectives and level exit outcomes. In traditional epoch, many teaching practitioners widely applied teacher – centered method to impart knowledge to learners comparative to student – centered methods. Until today, questions about the effectiveness of teaching methods on students' learning have consistently raised considerable interest in the thematic field of education research (Hihgtower, 2011).

Cooperative learning is the deliberate instruction using small groups of students by a teacher, for the students to learn something together. Members of each group work together to maximize their learning of a given instructional task. Nnaks (2006) sees cooperative learning as a successful teaching strategy in which small groups of student with different levels of ability, use a variety of learning activities to improve their understanding of a topic or subject matter. The teacher who adopts the cooperative learning strategy organizes the students in small groups. Each group should be heterogeneous in abilities (by using students team achievement division model (STAD)) and socio-cultural background. They work in convert through a given instructional assignment until every member successfully understands, and completes the assignment. Anaekwe, (2006) however, pointed out that cooperative learning differs from the usual classroom group work whereby the teacher for convenience or because of inadequate materials or large class size directs his students to work together in small groups.

Student Teams Achievement Division (STAD) cooperative learning therefore is an innovative instructional approach, which is capable of solving some instructional problems if carefully employed. Chemistry have shown strong resistance to the conventional instructional approaches, this study deemed it necessary to find out effect of cooperative learning strategy on chemistry secondary school students' academic achievement and interest.

Interest, as an aspect of effective domain is a construct that has to do with one's readiness to like or dislike something. It could be aroused in individual by activit that tends to satisfy the individual needs (Geosciences, 2007). Interest according to Trumper, (2006), is a team that refers topreferences to engage in some type of activities rather than others. It is a fact that a child usually performs classroom activities in order of preference. The child take pleasure in doing what he/she is interested in. the learning that occurs after indulging in such activities, in most cases is permanent (Nwabuzeu and Chijoke, 2008). Interest sis an important aspect in the learning process because the learners' interest is a fundamental factor in including the right knowledge, skills, values and attitudes that the curriculum seeks to attain. It helps in sustaining concentration, purpose and committeemen to learners and cooperative with the teacher in the learning process (Obioma, 2006). In the opinion of Alao and Adeniyi (2009) the teacher can motivate children to develop interest to learn the following ways: 1. By identifying and catering

for the needs of the students 2. Acknowledging their success no matter how little 3. Making the classroom students friendly will always make them eager to participate in the classroom activities, there by learning become very interested and fun 4. Recognizing and respecting students view there by boosting and developing confidence.

When students are motivated, they participate actively in the learning process. The curiosity and interest of the students, according to Aydin and Cuskunt (2011) manifest itself in the performance of the students. Students whose interests have not been developed do to not attain class regularly, such students do not listen to the lesson carefully neither they do their homework. For the learner to be interested in class activities, appropriate learning strategy such as cooperative learning strategy should be put in place because such type of learning strategy have the tendency of developing students interest to learn thereby enhancing achievement (Deaking and Maswell 2006).

Achievement has been defined in different ways, according to Eze (2009), it is regarded as something very good and difficult which was carried out successfully. The concept could also be regarded as the ability to perform a given role effectively, according to Anekwe (2006) achievement is something which has been accomplished successfully, especially by means of experience, skills and practice. Achievement can also be viewed as a test for the measurement and compares of skills in various fields of academic studies. It is not easy to define quantity and measure student achievement. The most common indicator of achievement generally refers to a student's performance in academic areas such as reading, language arts, math, science and history as measured by achievement test. Policy makers know, however, that academic achievement also depends on child's circumstances and situations, the quality of schools and teachers and many other factors.

Students' achievement in chemistry is the level of attainment of predetermined learning objectives by the student. this is mainly shown by the results of either internal examinations in the school or external examinations like SSCE poor academic achievement in Senior Secondary School Chemistry is alarming and disturbing. The trends of candidates' performance in chemistry for May/June WAEC, 2013 showed that 53.80% failed while 46.20% of the candidate passed at credit level WAEC 2007-2008. This implies that students' performance in chemistry is poor. A study by Eze and Zgbo (2007) has attributed the observed student poor achievement in chemistry to use inappropriate and ineffective teaching methods by chemistry teachers. Areghan (2023) said that out of a total of 1,613,733 candidates that sat the 2023 WAEC examination, the results of 262,803 candidates was being withheld due to report of cases of examination malpractices, some of the admission seekers who sat the 2023 Unified Tertiary Matriculation Examination (UTME) did not provide the required SSCE results in their

application forms but declared they were awaiting their results.

Generally, a credit pass in chemistry is needed for admission in higher institution of learning, to read science and technology based courses. This is because chemistry occupies a central position among various science-based courses (Anchor and Eriba, 2010). Efforts made through research to discover the course factors of the persistent failed disclosed that secondary school chemistry teachers mainly adopt the lecture method in the teaching and learning of chemistry (Udoh, 2008). According to Lovat (2003) "teaching is not an incidental craft to follow naturally from mastery of subject content, but a highly complex blend of theoretical understanding and practical skills." Thus, Eze (2010) opined that the incompetence of the science teacher stems from poor teacher preparation. According to Bybee (2009) student's prior conceptions, ideas, and experiences which they carry to the classroom influence the way they learn new concepts and skills. Hence, it is important that they are actively engaged in the learning process and that they are challenged to reflect on their own learning besides being able to link their prior knowledge to new knowledge. Apart from students' active participation in the learning process their gender seems to be very important determinant on learning. Thus, this study investigated effect of Student Teams Achievement Division (STAD) cooperative learning strategy on chemistry secondary school students' academic achievement and interest in Kano State, Nigeria.

Statement of the problems

In Nigeria, there are many factors influencing the performance of students in chemistry, some of which are teachers' methods of teaching and lack of motivation for most teachers (Amadike, 2008). The poor achievement of students in chemistry has continued to be major of concern to all, particularly those in the mainstream of chemistry education in Nigeria (Adesojo, and Olatunbosun, 2008). Among the factors identified as responsible for poor achievement in chemistry are poor science background and of ineffective teaching and learning resources in classrooms (Adesoji, 2008). There has been consistent decline in the performance of students in public examinations conducted by the West African Examination Council (WAEC) in science and more specifically chemistry across the country over the years (Samba and Eriba, 2012). The WAEC also confirmed this decline in chemistry performance by the students in their WEAC chief examiner's reports (2011 & 2012). The chief examiner reports of WAEC Senior Secondary School Certificate (SSCE), 2012-2016 showed the following student performance in chemistry Thus, application of ineffective traditional teaching methods by the teachers such asc lecture attributed methods the poor academic performance of SSCE, NECO and similar bodies in science subjects i.e. chemistry, proper utilization of Student Teams Achievement Division (STAD) cooperative learning strategy will improved the performance of science students. The study also significant better than the

control group, which was taught using conventional methods. The study if government and stake holders encourage teachers to adopt in teaching of chemistry and other subjects.

Objectives of the study

The general objective of the study is to Effects of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on Chemistry Secondary School Students Academic Achievement and Interest in Kano State, Nigeria. The study sets out to achieve the following objectives: To

- Determine the effect of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on Chemistry Secondary School Students Academic Achievement in Kano State, Nigeria
- Identify the effect of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on student interest in Chemistry Secondary School Students in Kano State, Nigeria
- Examine if gender is a factor on chemistry students' achievement when taught using Student Teams Achievement Division (STAD) cooperative learning strategy in Kano State, Nigeria

Research Questions

The research question s in line with the objectives of the study as follows:

 What is the difference in the mean academic score of student taught chemistry using Student Teams Achievement Division (STAD) cooperative Learning Strategy and traditional lecture method?

- 2. What is the effect of Student Teams Achievement Division (STAD) cooperative Learning Strategy on student interest in Chemistry Secondary School Students in Kano State, Nigeria?
- Is there any difference by gender on chemistry students' achievement when taught using Student Teams Achievement Division (STAD) cooperative learning strategy in Kano State, Nigeria?

Research Hypotheses

The research hypotheses in line with the objectives of the study and research questions as follows:

HO₁: There is no significant difference in the academic achievement of student taught chemistry concept using Student Teams Achievement Division (STAD) cooperative Learning Strategy and those taught using conventional method of teaching in Kano State, Nigeria

HO₂: There is no significant difference in students' interest in chemistry when taught using Student Teams Achievement Division (STAD) cooperative instructional strategy and students' taught conventional method of teaching in Kano State, Nigeria

HO₃: There is no significant difference in gender of student taught chemistry concepts using Student Teams Achievement Division (STAD) cooperative Learning Strategy and those taught using conventional method of teaching in Kano State, Nigeria

Methodology

The research adopted Quasi-experimental design (pre-test and post-test experimental control group design). Simple Random Sampling Technique was used in this study. however, 230 chemistry sampled students consist of 102 males' and 128 females for both two groups formed the sample for each group respectively, from each of the six schools, an intact class of SSII students was chosen using simple random sampling techniques. The study adapted Analysis of covariance (ANCOVA) design. Three topics and three sub topics under chemistry were chosen for this study i.e. Chemical Equilibrium, Reversible Reactions, Equi-librium Constant, Le Chatliers' Principle, Chemistry of Electrolysis and Oxidation and Reduction. The population of this study covered 12 senior secondary schools selected at random with the total population of SSII students offering chemistry in the zone were 1,152 consisting of 477 males and 675 female students respectively (Kano Educational Resources Department of Nassarawa Zonal Education Office Dakata, 2023). Government Boys Senior Secondary School (GBSSS) Suntulma, Government Boys Senior Secondary School (GBSSS) Kawaji and Government Girls Senior Secondary School (GGSSS) Dangana served as experimental group, while Government Boys Senior Secondary School (GBSSS) Tarauni, Government Girls Senior Secondary School (GGSSS) Dakata and Government Girls

Senior	Sec	condary	School	(GGS	SSS)	Ta	rauni
served	as	control	group.	The	samj	ple	size

comprises of 230, 102 male and 128 female students.

|--|

Sch. Designation	Grouping	Male	Female	Group size
Α	Experimental	56	00	50
В	Control	00	69	69
С	Experimental	00	59	59
D	Control	46	00	46
Total		102	128	230

Research Question 1: What is the effect of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on Chemistry in Secondary School Students Academic Achievement in Kano State, Nigeria?

 Table 2: Effect of STAD Cooperative Learning Strategy on Chemistry in Secondary School Students

 Academic

Group	Number	Mean	Standard Deviation	Mean	Dif. Decision
Experimental	115	26.1	29	47	
Control	115	23.9	07.61	2.22	Significant

The above table showed that the experimental group had a mean performance of 26.12, while the control group had 23.90, with a mean difference of 2.22, this shows that the experimental group had performed better as a result of exposure to cooperative learning strategy. However, the standard deviation for experimental and control group are 9.47 and 7.61 respectively.

Null Hypothesis 1: There is no significant difference in the academic achievement of

students taught chemistry concept using cooperative learning strategy and those using conventional methods of teaching.

The post test data of the experimental and control groups were generated via CAT and were subjected to Z- test statistical analysis to determine if there is any significant difference in academic achievement of students in the experimental and their counterpart in the control groups. Summary of the analysis is presented in table below:

 Table 3: Z- test statistical analysis of the Post Test Mean Scores of the Experimental Group (EG) and the Control Group (CG)

Group	Ν	X	SD	SE	DE	Z-crtc	P-value	Decision
Experimental	115	26.12	9.47	0.88				
					114	2.56	0.006	Significant
Control	115	23.90	7.61	0.88				-
Significant at I	P<0.05							

From above table the calculated Z – value is 2.59 with DF = 114. The result of the Z – test showed

that significant difference exists between the mean scores of the subjects in the experimental group and their counterparts in the control group. This is because the p value of 0.006 is under level of significant. Therefore, the null hypothesis which states that there is no significant difference in academic achievements of students taught using cooperative learning strategy and those taught using conventional method is there by rejected. This implies that the experiment group taught chemistry using cooperative learning strategy instruction achieved significant higher than the control group taught concepts using conventional method. **Research Question 2:** What is the effect of Student Teams Achievement Division (STAD) cooperative learning strategy on interest of chemistry students?

To answer this research question, mean and standard deviation were used. The pre-interest questionnaire and post-interest questionnaire mean score of experimental group before and after the treatment were subject to descriptive statistics. Mean and standard deviation were computed and presented in the table below:

Table 4: Means score of students' interest before and after exposure to treatment table

Group	Number	Mean	Standard Deviation	Mean Dif.	Decision
Before	115	51.91	6.13		
After	115	56.23	4.55	4.32	Significant

The above table shows difference in mean scores of students before and after exposed to cooperative learning strategy in chemistry. The mean score of students before and after treatment was 51.91 and 56.23 respectively. the standard deviation of the students before and after treatment is 6.13 and 4.55 respectively. This shows an improvement of the students' achievement after exposed to cooperative learning strategy. To check whether differences exist or not the corresponding hypothesis was tested.

Null Hypothesis 2: There is no significant difference in the student' interest in chemistry when taught Student Teams Achievement Division (STAD) cooperative learning strategy and those taught using conventional methods of teaching.

	C' / // C	$cn \cdot 10$	before and after experiment table
I anie 5. Zatest Analysis o	t interest Niean Neare (ht Exnorimontal (-rain	hethre and atter experiment table
I able S. Z-iesi I marysis 0	<i>j mici</i> csi micuni score c	j Daper memu or oup	

Group	Ν	X	SD	SE	DE	Z-crtc	P-value	Decision
Before	115	51.91	6.13	0.71				
					226	6.07	0.006	Significant
After	115	56.23	4.55	0.71				-
Significar	nt at p < 0	.05						

From the above table the data generated shows that, the calculated Z-value is 6.07 with DF = 226 and p value of 0.006 which is level of significant

this means there is significant change in the interest of the experimental group before and after exposure to the cooperative learning strategy method. This null hypothesis is rejected. **Research Question 3:** Is there any difference by gender in chemistry students' achievement when taught using Student Teams Achievement Division (STAD) cooperative learning strategy? To answer this research question, mean and standard deviation were used. The post-test mean scores of experimental group were subjected to descriptive statistics based on gender (i.e. male and female). Mean and standard deviation were computed in below table:

 Table 6: Experimental Group achievement scores of male and female students on the chemistry posttest

Group	Number	Mean	Standard Deviation	Mean Dif.	Decision
Male	56	29.00	10.51		
Female	59	23.53	7.46	5.47	Significant

Above table shows difference in mean scores of male and female students in chemistry post-test. Male students score was 29.00 while that of their female counterparts was 23.53. This shows that male students generally achieved higher than the female students in the post – test. However, the standard deviations for male and female students are 10.51 and 7.46 respectively. The result shows that the males scored higher than females after exposed to cooperative learning.

Null Hypothesis 3: There is no significant difference in the gender of student' taught

chemistry concepts using cooperative learning strategy and those taught using conventional methods of teaching.

To test this hypothesis, the post-test achievement scores of the experimental group were split according to sex of the subjects in the group and compared accordingly. The mean scores of the male and female students who were exposed to the cooperative learning strategy of instructions were subjected to z-test statistical analysis. The results obtained are show in below table:

 Table 7: Z-test Analysis of post-test Mean Scores of Male and Female Students in the Experimental Group table

Group	Ν	Χ	SD	SE	DE	Z-crtc	P-value	Decision
Male	56	29.00	10.51	1.69				
					113	3.24	0.002	Significant
Female	59	23.53	7.46	1.71				-
Significan	nt at p < ().05						

From the above table calculated Z-value is 3.24 with DF = 113 P - value of 0.002 which is less than 0.05 level of significant. Null hypothesis is therefore rejected. This means there is significant difference between the mean score of the male students and their female counterparts of the

experimental group exposed to cooperative learning strategy. This implies that male student performed significantly better than female students, when exposed to cooperative learning strategy.

Discussion of the Findings

This study examined the Effects of Student Teams Achievement Division (STAD) Cooperative Learning Strategy on Chemistry Secondary School Students' Academic Achievement and Interest in Kano State, Nigeria. Three hypotheses were tested and the results in line with the research questions.

The first finding shows that there is a significant difference in the means scores of the experimental group and control group in favour of the experiment group which implies that Student Teams Achievement Division (STAD) cooperative learning strategy method was more effective instructional strategy than the conventional method.

Secondly, data shows that students developed positive learning towards chemistry after exposure to cooperative learning strategy method of instruction via the CAT.

Thirdly, data indicates that the performance of male students exposed to Student Teams Achievement Division (STAD) cooperative learning strategy method in chemistry post-test is significantly higher than that of female students exposed to cooperative learning strategy method in chemistry post-test.

Conclusion

Based on the findings of this study, the following conclusions were drawn:

1.Students who were exposed to the Student Teams Achievement Division (STAD) cooperative learning strategy performed significantly better in chemistry compared to those taught using traditional lecture methods. This suggests that the cooperative learning strategy enhances students' performance in learning chemistry.

- 2. The Student Teams Achievement Division (STAD) cooperative learning strategy was found to improve students' interest in learning chemistry concepts. This indicates that cooperative learning can enhance students' engagement and enthusiasm for chemistry
- 3. The study revealed that the Student Teams Achievement Division (STAD) cooperative learning strategy had different effects on male and female students, with male students showing a greater improvement in performance. This suggests that the cooperative learning strategy may not be equally effective for both genders in the context of chemistry education.

Recommendations

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

- 1. Given that the Student Teams Achievement Division (STAD) cooperative learning strategy significantly improved students' academic performance, chemistry teachers are encouraged to adopt this strategy as an alternative to traditional methods to enhance the teaching and learning of senior secondary chemistry.
- 2. Since the study found that male students performed significantly better with the Student Teams Achievement Division (STAD) cooperative learning strategy, it is

recommended that female students be actively encouraged and supported by teachers to engage more in cooperative learning activities to improve their academic achievement.

3.It is recommended that the Student Teams Achievement Division (STAD) cooperative learning strategy be integrated into the school chemistry curriculum. Curriculum materials, including textbooks and instructional resources, should reflect the effective use of this teaching approach to support its implementation

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Exploring the Effect of Creative Materials on Pupils' Understanding of Mensuration Concepts in Mathematics in Ifelodun, Kwara State

By

Jamiu Temitope Sulaimon¹, Awoyemi, Olusola Adenike², and Taofeeq Sola Salaudeen³ ¹Department of Adult and Primary Education, University of Ilorin, Ilorin, Nigeria ²Federal University of Education, Zaria ³ Federal University of Education, Zaria Corresponding Author: Sulaimonjamiu7991@gmail.com_solaawoyemi2@gmail.com, and solasalaudeen@gmail.com 07065141180, 08135416147 and 08078977478

Abstract

The study explored the effect of creative materials on Primary III pupils' understanding of mensuration concepts in Ifelodun, Kwara State, Nigeria. The objectives of the study were guided by one research question and two hypotheses. Quasi-experimental research involving pre-test and post-test control group research design was adopted for the study. Three instruments were used for data collection; Mathematics Mensuration Test (MMT), Guide for Creative Materials Package (GCMP) and Guide for Control Group (GCG). The Mathematics Mensuration Test (MMT) was subjected to test-retest reliability, and a reliability index of 0.74 was established using statistics of Pearson Product Moment Correlation (PPMC). The research question was answered using descriptive statistics of frequency and percentage, while the hypotheses were tested using Analysis of Covariance (ANCOVA) at 0.05 level of significance. The results obtained from the study revealed that the level of pupils understanding of mensuration concepts was low, there was no significant interaction effect of using creative materials and gender on pupils understanding of mensuration concepts. It was concluded that creative materials could improve pupils understanding of mensuration concepts. It was recommended that teachers should be trained on how to identify, create, and utilize creative materials in teaching Mathematics, among others.

Keywords: creative materials, mathematics, mensuration

Introduction

A bid to enhance the child's development of permanent numeracy skill informed the teaching of Mathematics as a compulsory subject in basic school. Mathematics is a subject that deals with critical thinking involving numbers, figures or shapes. Its study enhances and solving the day to day human problems in our society. As noted by Edwin-Ezeoka, Ekweozor and Bello (2020), Mathematics is very important to human beings and their cultures and that is why it is being regarded as the base of human civilization. Godino (2019) viewed Mathematics from a philosophical perspective and defined it as human activity which involves the solution of problematic situations. While Ehiemere (2022) defines it as the language of science and technology. Umeonyang (2017) as cited Ehiemere (2022) referred to Mathematics as the foundation for science and without which a nation can never be prosperous and economically independent. This therefore implies that the teaching and learning of Mathematics is appropriately and adequately catered for at the basic level for the future generation is imperative. Mensuration is a branch of Mathematics that deals with the measurement of lengths, areas, and volumes of various shapes and objects. At the primary school level, mensuration is introduced through basic concepts such as; perimeter, area and volume. Primary school students learn to calculate the perimeter, area, and volume of various shapes, including rectangles, squares, triangles, circles, cubes and rectangular prisms. Pupils also learn about units of measurement, such as Centimeters (cm), Meters (m). Kilometers (km), Milliliters (mL) and Liters (L). The aims of teaching Mensuration at the primary school level are to develop problem-solving skills, spatial awareness, and critical thinking. The knowledge lays the foundation for more advanced Mathematics concepts in later years. By mastering mensuration concepts, primary school pupils are building a strong foundation in Mathematics and are developing essential skills for problem-solving in various areas of life.

"Basic 3" refers to the third year of primary school, which is typically the third grade or third class. The concept is used to denote the third level of elementary education, which usually corresponds to students aged 8-9 years old. In Basic 3, pupils typically build on the foundational skills they learned in the previous two years and expand their knowledge in various subjects, including English language, Mathematics, Science, Social studies, Arts and crafts, Physical education and the languages. Zulkardi(2013) submitted that one of the goals of Mathematics learning is to develop creative activities that involve imagination, intuition, and discovery, by developing divergent thinking, originality.

curiosity, prediction and conjecture, and trial and error. This can however be better done when teachers use natural and creative materials around the learners environment to impact the Mathematical skills which in the context of this paper include but not limited to: counters, sticks, matchsticks, flash cards, number cards, paper cutting of different shapes, weighing scales, balance scales, tapes meter, rules and so on.

Apart from the fact that these creative materials learning and enhance retention aid of Mathematical concepts, they are cheap, easier to get and do not require electricity and technology for use. Use of creative materials while teaching also affords the pupils to relate with the teaching process with mind and the hands. Hence, Cardino Jr. and Cruz (2020) opine that effective teaching, which requires flexibility, creativity, and responsibility of teachers to provide an instructional environment that is able to respond to the learner's individual needs is required to enhance Mathematics teaching. Corroborating this is the opinion of Okeofu (2022), who investigated the effect of hands-on/mind-on learning creative materials on primary school pupils` achievement and found out that the handson/mind-on learning creative materials improve pupils' achievement.

Numerous authors have pointed to the fact that despite the benefits accrued to teaching this important subject in schools, records of learners' poor performance is still on a very high side.Some of the reasons attributed to the learners' poor performance therefore include teachers' teaching strategies, materials used for teaching Mathematics, and a bunch of others.In the opinion of Ehiemere (2022), factors such as attitude of pupils towards the learning of mathematics, unqualified teachers or using nonmathematics specialist to teach the subject in schools, lack of appropriate methods of teaching and also lack of instructional materials for teaching are responsible for poor performance in Mathematics at the primary school level in Nigeria. According to Mazana, Montero and Casmir (2019), students' learning of and performance in Mathematics is affected by a number of factors such as students' attitude towards the subject, teachers'instructional practices, and school environment. While Muhammad, Wun and Nordin (2020) also identified learners attitudes. teachers' understanding of subject matter and instructional facilities for teaching as some of the factors contributing performance to poor in Mathematics.

However, attempts at offering effective teaching to improve learners academic performance in Mathematics has given rise to good number of innovative teaching strategies in the field education. Aguhayon, et al (2023) carried out a quasi-experimental study on selected grade 10 students in Philippines, using differential instruction strategy. The findings of the study showed among other things that differential successfully instruction boosted students' academic performance, particularly in fundamental mathematical operations, within a short period of time.

Balaaldia (2024) also conducted an experimental research to determine whether the use of Mathematics creative games as intervention materials in teaching basic mathematics among blended students in Banca-Banca Integrated High School in Philippine can produce high result and the result proved among other things that there was a significant improvement in students' performance after utilizing Mathematics creative games as intervention materials in teaching basic Mathematics. In the same vein, Bight, et al (2024) study on the impact of using technology in teaching and learning Mathematics, as mediated by students' interest in Mathematics in some selected schools in Ghana also revealed a positive and significant impact on Mathematics interest of learners.

In Nigeria, Mutiu and Sampson (2024) researched on differential effects of selected instructional strategies Mathematics on achievement of secondary school students in Rivers State and discovered that learners who were tutored using a combination of collaborative and peer tutoring pedagogical methods, as well as peer tutoring alone, experienced a significant improvement in their learning outcomes. Akintade, Ogunrinade & Awe (2024) also found out the effectiveness of geometrical instructional teaching strategy on Junior Secondary School students' achievement, in Plane Geometry, in Odeda Local Government area of Ogun state, using gender and attitudes as moderating

variables. The studytherefore revealed that students taught plane geometry using Geometrical Instructional Teaching Strategy package achieved higher mean scores than those students taught using conventional method, with gender having no influence on the result.

Statement of the problem

Despite the importance of Mensuration concepts in Mathematics, pupils in primary schools often struggle to comprehend and apply these concepts, leading to poor academic performance and a lack of interest in the subject. Traditional teaching methods, which rely heavily on abstract formulas and procedures, may not be effective in promoting deep understanding and retention of Mensuration concepts. The use of creative materials, such as visual aids, manipulatives, and real-world applications, has been suggested as a potential solution to this problem. However, there is a need for empirical research to investigate the effects of creative materials on pupils' understanding of Mensuration concepts in Mathematics. This study aims to address this knowledge gap by exploring the impact of creative materials on pupils' understanding of Mensuration concepts.

Research Question

- What is the current level of understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara state?
- Is there any main effect of use of creative materials on pupils' understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara State?

3. Is there any interaction effect of use of creative materials and gender on pupils' understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara State?

Research Hypotheses

- There is no significant main effect of usage of creative materials on Primary III pupils' understanding of mensuration concepts in Ifelodun, Kwara state.
- There is no significant interaction effect of the usage of creative materials and gender on Primary III pupils' understanding of mensuration concepts in Ifelodun, Kwara state.

Methodology

The study adopted a quasi-experimental research design involving pretest-posttest control groups. A 2x2 factorial matrix design was adopted for this study; the experimental group and the control group make up the first two factors. Gender is the second factor, which was divided into two categories: male and female. The population of this study is all Primary III pupils in Public primary schools in Ifelodun, Kwara State. A simple random sampling technique was used to select two public primary schools which were randomly assigned to experimental group and control group. Primary III of the schools were purposely selected. The experimental school was exposed to the creative materials to teach mensuration concepts while the control group was taught mensuration concepts without creative materials. A sample of sixty-three (63)

participated in the study. Three pupils instruments were used for data collections; Mathematic Mensuration Test (MMT), Guide for Creative Materials Package (GCMP) and Guide for Control Group (GCG). The items generated for Mathematics Mensuration Test (MMT) were drawn from the scheme of work and textbooks for Primary III class, and it consisted of twenty (20) multiple choice questions. The instruments, Mathematics Mensuration Test (MMT), Guide for Creative Materials Package (GCMP) and Guide for Control Group (GCG) were validated by three lecturers from the Faculty of Education, University of Ilorin. To estimate the reliability of the instrument, test retest method was used. The instruments MMT was administered twice within two weeks interval on 20 respondents who are not part of the initial sampled for this study. The data collected from the two administration were analyzed using inferential statistics of Pearson Product Moment Correlation (PPMC), while a reliability index of 0.74 was established. The study lasted for 7 weeks. The data collected for this study were analyzed using descriptive statistics of mean, while inferential statistics of Analysis of Covariance (ANCOVA) was used for hypothesis testing at 0.05 level of significance.

Results Presentation and Data Analysis Answering of Research Question

Research Question One: What is the current level of understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara state?

Tabl	e 1: Frequency and	Percentage showing	level of understand	ing of mensuration	on concer	ots among
Prin	ary III pupils in Ife	elodun, Kwara state				
		~				

Levels	Score	Frequency	Percentage (%)	
High	28 - 40	0	0.0	
Average	14 – 27	20	31.7	
Low	1 – 13	43	68.3	
Total		63	100.0	

Result in Table 2 indicates that 43 (68.3%) of the sampled respondents had low understanding of mensuration concepts, 20 (31.7%) had average understanding of mensuration concepts while none had high understanding of mensuration concepts. From the foregoing, it means the level of pupils understanding of mensuration concepts is low.

Research Question Two: Is there any effect of use of creative materials on pupils' understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara State?
Research Hypothesis One: There is no significant main effect of use of creative materials on Primary III pupils' understanding of mensuration concepts in Ifelodun, Kwara state.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Remark
Corrected Model	323.014ª	2	161.507	6.906	.002	
Intercept	828.291	1	828.291	35.417	.000	
PRETEST	153.141	1	153.141	6.548	.013	
GROUP	237.167	1	237.167	10.141	.002	*Significant
Error	1403.208	60	23.387			0
Total	26647.000	63				
Corrected Total	1726.222	62				

 Table 2: Summary of ANCOVA on significant main effect of usage of creative materials on pupils understanding of mensuration concepts

R Squared = .187 (Adjusted R Squared = .160)

The Table 3 above revealed the Summary of ANCOVA on significant main effect of use of creative materials on pupils understanding of mensuration concepts. The value of F (10.141) is significant at 0.05 alpha level (p = .002 < 0.05). To answer the research question, there is a significant effect of using creative materials on pupils' understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara State. This equally indicated that the null hypothesis which states that there is no significant main effect of usage of creative materials on pupils understanding of mensuration concepts is not retained. It shows that there is significant main effect of usage of creative

materials on pupils understanding of mensuration concepts. This implies that the participants that were taught with creative materials performed better than the participants that were taught without the usage of creative materials.

Research Question Three: Is there any interaction effect of use of creative materials and gender on pupils' understanding of mensuration concepts among Primary III pupils in Ifelodun, Kwara State?

Research Hypothesis Two: There is no significant interaction effect of use of creative materials and gender on Primary III pupils' understanding of mensuration concepts in Ifelodun, Kwara state.

Table 3: Summary of ANCOVA on significant interaction effect of use of creative materials and gender on
pupils understanding of mensuration concepts

Source	Type III Sum of Squares	df Mean Square		F	Sig.	Remark	
Corrected Model	334.176ª	4	83.544	3.481	.013		
Intercept	820.268	1	820.268	34.177	.000		
PRETEST	157.061	1	157.061	6.544	.013		
Group	227.572	1	227.572	9.482	.003		
Gender	4.247	1	4.247	.177	.676		
Group * Gender	7.527	1	7.527	.314	.578	*Not Significant	
Error	1392.047	58	24.001			C	
Total	26647.000	63					
Corrected Total	1726.222	62					

R Squared = .194 (Adjusted R Squared = .138)

The Table 3 revealed summary of ANCOVA on significant interaction effect of usage of creative materials and gender on pupils understanding of mensuration concepts.

The F-value of .578 indicating the interaction effect of using creative materials and gender on pupils understanding of mensuration concepts is not significant at 0.05 alpha level (p > 0.05). This shows that there is no significant interaction effect of use of creative materials and gender on pupils' understanding of mensuration concepts. Hence, the null hypothesis which states that there is no significant interaction effect of use of creative materials and gender on pupils' understanding of mensuration concepts is retained. This implies that the effect of use of creative materials on pupils' understanding of mensuration concepts does not depend on gender.

Summary of findings

- i. The level of pupils understanding of the mensuration concept is low
- Use of creative materials had a significant positive effect on pupils' understanding of mensuration concepts in Mathematics.
- iii. Use of creative materials on pupils' understanding of mensuration concepts does not depend on gender.

Discussion of the Findings

The findings of this study revealed that the level of pupils understanding of the mensuration concept is low. This submission is in consonance with the findings of Dada, Hapuruchi, Olutayo, and Olanrewaju (2021) who investigated the difficulties senior secondary school students encounter in mensuration. They posited that the level of learners' understanding of mensuration is low. The finding also concurred with the submissions of Dada, Folorunsho and Johnson (2019), who revealed that learners have poor understanding of mensuration concepts in schools. The findings of the study that the level of pupils understanding of mensuration concepts was low led to the integration of the use of creative materials into the teaching of the topic.

Another finding of this study revealed that use of creative materials had a significant positive effect on pupils understanding of mensuration concepts in Mathematics. The finding is in line with submissions of Okeofu (2022), who investigated the effect of hands-on/mind-on learning creative materials on primary school pupils` achievement. The study revealed that the hands-on/mind-on learning creative materials improve pupils' achievement as compared to it in the conventional groups. The finding is also consistent with Kul et al. (2018) who found out that implementing educational creative materials in Mathematics teaching has a significant influence on pupils' achievement in elementary Mathematics, which also varies on the basis of topics such as number and numerations, mensuration, and geometry; it also varies on the basis of materials used and time. This is also in consonance with the findings of Lanante (2019), who posited that a class section filled with creative manipulative materials has a significant impact on pupils problem-solving skills generally

compared to their control group. This is also in line with the submissions of Galiç and Yıldız (2023), who revealed that activities enriched with creative games significantly enhance pupils' Mathematics achievement.

Additionally, the findings of this study revealed that there was no significant interaction effect of use of creative materials and gender on pupils understanding of mensuration concepts. This submission is in line with the findings of Sulaimon and Manditereza (2024), who revealed that study revealed that there was no significant interaction effect of treatment presented to pupils regardless of gender. Similarly, the finding was also in consonance with the submissions of Dada, et al (2021) who revealed that the understanding of mensuration concepts is not significantly influence by gender of the learners. This submission is not in line with the findings of Salami and Spangenberg (2024), who posited that gender is a significant influence on the menstruation achievement of pupils exposed to treatment packages.

Conclusion

The research revealed that the level of pupils' understandings of mensuration concepts was low. The results of this finding also lead to the conclusion that creative materials could improve pupils understanding of mensuration concepts and pupils understanding of the concepts improves regardless of their gender.

Recommendations

Based on the findings of the study, the following recommns were made:

- 1. Elementary school teachers should pay significant attention to the teaching of mensuration.
- Seminars and workshops should be organized to train teachers on how to identify, develop, and integrate creative materials into the teaching of mensuration.
- 3. Teachers should consider using creative materials as a gender-neutral instructional strategy to improve pupils' learning outcomes in Mathematics. This can include using visual aids such as creative materials, hands-on activities and technology-based resources.

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Factors Militating Against Physical Development in Children in Nigeria

By

Rashidat Omowumi Ibrahim

Primary Education Department, Federal University of Education, Zaria rashidatmowumi2018@gmail.com

Abstract

The paper examines factors militating against physical development in children. The paper adopts a qualitative method to explain how factors like heredity, gender and hormones, Nutrition, Immunization, proper ventilation, and parental period militate against physical development in children. The study recommends that parents and caregivers should be encouraged to get good nutrition before and after birth because it plays an important role in the child's physical development. This is because If the mother during pregnancy gets good nutrition it aids the development of the fetus in the womb. Therefore, the paper concludes that physical development is the foundation of human growth and development because it prepares infants and toddlers for activities that support language development, social skills, and other areas of learning, resulting in success in school

Keywords: Development, child, infant and toddlers, physical development

Introduction

Physical development is described as an important aspect of human development because it takes place from conception to death. This deals with the growth of the body and its parts which includes muscle and motor development. The growth and development of the brain and body in infancy and early childhood are one of the stages of physical development that is from 0-1 year and 1-3 years (Nadeau, 2023). Virtual Lab School (VLS, 2023) states that physical development in infancy and early childhood refers to the biological changes and advancements in physical abilities and motor skills as they grow and age. This encompasses various aspects such as gross and fine motor skills, coordination, strength, and overall physical fitness. For instance, in gross motor skills, infants experience significant physical development, from 0-6 months Infants start developing basic motor skills such as lying on their backs and rolling from side to side. This

skill makes muscle strength increases and infants gain the ability to sit without support. However, at age 8-10 months, many infants begin to explore their surroundings by crawling, improving both coordination and strength. In the same vein, at the end of the first year, some infants may pull themselves up to stand, showcasing enhanced leg strength. (VLS, 2023).

In the same vein, VLS, (2023) explains that fine motor skills in the infancy stage is a significant aspect of physical development. This is because, infants learn to grasp objects, refining their ability to hold onto items. Therefore, from 4-7 months, they start transferring objects from one hand to another to enhance coordination. It is in this case that Nadeau (2023) explains that the above skills and abilities affect how a child interacts with other people, objects, and the environment. In addition, Nadeau (2023) and VLS, (2023) state that the physical development of toddlers that is from 1- 3 years, begins with the ability to run, showcasing improved balance and coordination. Starting from 2 years old, jumping becomes possible, demonstrating enhanced leg strength. They assert that many toddlers, in this stage, enjoy climbing, further developing their gross motor skills and spatial awareness. In the same vein, fine motor skills in toddlers focus on activities that improve hand and finger dexterity. This usually occurs at 12-18 months. therefore, toddlers practice stacking blocks, enhancing hand-eye coordination. They also start using utensils, improving hand and finger control.

In other words, Oduolowu (2011) states that physical development in infants and toddlers is referred to as orderly psychosocial, emotional, physical, and cognitive changes that take place during early childhood. These are changes that happen in children from the moment of conception to birth to early years (0-1 and 1-3 years). The changes involve how a child sees things and acts, reacts, and reasons among many other things. All these make him/her become better and more functional as he/she advances in age. The child's development comes through broad domains and the domains are not distinct rather, they combine in an integrated and holistic fashion to form the living and growing child. The different domains of development in children are physical development, cognitive development, and emotional development. In the same vein, child development is also described as a gradual unfolding of biologically determined characteristics and traits that arise as the child learns from experiences (Oduolowu, 2011).

However, physical development in infants and toddlers is an ability to further learning through exploration. It helps prepare infants and toddlers for activities that support language development, social skills, and other areas of learning, resulting in later success in school (Rebecca & Pat, 2020). In other words, Grantham-McGregor, Cheung, Cueto, and Richter (2007) and Anderson, (2023) explain that before infants and toddlers can be physically active certain factors are responsible for it which include heredity, gender, and hormones. In the same vein, VLS, (2023) stresses that the following are important factors for the physical development of infants and toddlers' nutrition, immunization, proper ventilation, prenatal period, family, socioeconomic status, and intelligence if the above factors are not met on infants would not have full developmental potential. It is against this backdrop that this paper examines factors affecting physical development in children.

Objective of the paper

The paper examines factors that hinder physical development in children, such as infants (0-6 months) and toddlers (1-3 Years)

The Concept of Physical Development in Children (Infant 0-1 and Toddler1-3)

The word physical growth is referred to as an increase in body size (length or height and weight) and the size of organs. From birth to about age 1 or 2 years children grow rapidly.

After 2 years of rapid growth in the infant and early toddler, the growth slows until the adolescent growth spurt (Hauf, & Aschersleben, 2008). This development includes both growth and the ability to use muscles and body parts for particular skills. Both gross (large muscle movements) and fine (small movements) motor skills contribute to physical development, and children often learn a set of skills by a certain age. (Mayes & Zigler 2006). In other words, Hauf, & Aschersleben, (2008)describe **Physical** development as an advancement and refinement of motor skills, or, in other words, children's abilities to use and control their bodies.

In other words, VLS, (2021) stresses that the physical skills of a child are for his development and affect all areas of their growth and learning. Children must grow physically in early childhood so that they can do every task. Each motor skill is necessary for them to become fully independent. However, motor skills can be categorized into two main groups: Gross motor and fine motor skills. Both skills work together to perform basic everyday functions. Gross motor skills involve the large movement of the body. The bigger muscles are engaged in helping to move and function. Gross motor development involves a child's muscle balance. core. posture, coordination, and endurance. Fine motor skills, on the other hand, involve the smaller movements a child makes. From grabbing a toy to writing, these are developed during the early years. Both gross motor and fine motor skills are important need to be developed to succeed and

academically as well as be independent (VLS, 2021).

Importance of Physical Growth and Development

Preparing infants and toddlers for school requires more than developing a set of skills; it includes physical development and health. When an infant or toddler is happy and healthy, they're more likely to engage with their environment and surroundings. This allows infants and toddlers the ability to further their learning through exploration. Thus, physical development and health can help prepare infants and toddlers for activities that support language development, social skills, and other areas of learning, which result in later success in school (Mayes & Zigler 2006).

While there isn't a specific area of development that determines later school success, research highlights the importance of supporting a strong foundation for development to grow by promoting healthy physical, social, emotional, and cognitive development. In this case, Hauf, & Aschersleben, (2008) state that during infancy, these foundations of child development begin and continue to be built upon as other areas of development progress. For example, young children can develop the ability to sit, crawl, and walk from their primitive reflex responses. Once infants and toddlers can move on their own, they are then able to explore and expand their cognitive development in ways that were not possible before they were able to sit, crawl, and walk (Mayes & Zigler 2006). For instance, a oneyear-old who has not started crawling. While sitting on their own, they struggle to coordinate movements, such as pushing up to a crawling position and propelling themselves forward with their arms and legs. Most objects and people in their environment must be brought close to them by others for them to explore. How might the limitations in physical and motor development impact other areas of development for this 1year-old? The EYFS states that early education programs should: "provide opportunities for young children to be active and interactive; and to develop their co-ordination, control, and movement. Children must also be helped to understand the importance of physical activity and to make healthy choices concerning food.

Virtual lab school VLS) (2021) listed things teachers/parents can do to help infants and toddlers develop physically.

- a. Support infants' bodies and heads in an upright position when you hold them to allow better observation of their environment.
- b. Allow lots of close face-to-face time when you talk and play with them.
- c. Hold onto the infant's or toddler's feet and rotate or massage them gently as you sing songs like "The Wheels on the Bus."
- d. Provide many opportunities to practice and use new skills, such as sitting up on your lap as you support an infant's chest and back (between 4 and 6 months).
- e. Spend time together on the floor and provide lots of tummy time.

Factors that Affect Physical Development in a Child

Many factors are responsible for the physical development of children. Anderson (2023), stated heredity, gender, and hormones as some of the factors that could affect the child's development. Heredity means transfer of the genes or physical traits from the parents to children. Heredity plays a vital role in influencing the physical development of the child. The eye colour, hair colour, weight, height, or body structure of the child may be inherited from any of the parents. Illness and diseases of the parents could affect the development of the child. Gender is another biological factor that affects the development of a child.

According to Anderson (2023), the development of boys and girls while nearing puberty differs. In adolescence, girls mature faster than boys. Boys tend to have a more athletic body compared to girls. Hormones can also influence different parts of the body. The proper functioning of different glands that produce hormones is essential to ensure that children have normal physical development. Hormonal imbalance may cause obesity, growth defects, and other issues in children. Dutta (n.d.) also highlighted some factors that affect the physical development of a child among which are nutrition, immunization, proper ventilation, prenatal period, family, socioeconomic status, intelligence, and so on.

1. Nutrition: This explains that **n**utrition is one of the major factors that affect physical development in children. The nutrition that the

child gets before and after birth plays important roles in the child's physical development. If the mother gets good nutrition during pregnancy, it aids the development of the fetus in the womb. Also, a child who gets better nutrition develops well and completes his developmental tasks. His bones, muscles and internal organs also develop well.

2. **Immunization:** Immunization taken at the appropriate time saves the child from getting different diseases. This helps the child to grow properly. Many children who have various infectious diseases like tuberculosis, measles, yellow fever, and so on are weak and their body development is affected.

3. Proper ventilation: Proper ventilation is another factor that affects a child's physical development. A child who is not exposed to sunlight and pure air may not grow properly. Sun rays are a very good source of vitamin D which helps to make a child bone strong. (Dutta, n.d.).

4. **Prenatal period**: The prenatal period is another vital factor that affects the physical development of a child. The health of the mother, her nutrition, immunization (like Tetanus injection and COVID-19 injection), and her mental state affect the baby in the womb as the body of the fetus develops in the womb of the mother. If the mother is healthy and tension-free, the development of the baby will be good. After birth, such a baby will grow well. 5. **The Family**: The family in which the baby is born also affects the baby's physical development. The family which provides a proper atmosphere, opportunities, and encouragement to the child to explore his environment helps the child develop himself through exploration.

6. **Socio-Economic Status**: The socio-economic Status of the family plays an important role in the physical development of a child. The all-around development of a child is affected by the socioeconomic factors of the family. Families that can afford to provide all facilities, like good nutrition, hygienic conditions, and healthy recreation help in maintaining the good health of the children so that they can develop good physiques. Parents who have low income may not be able to afford good facilities for their children and their health status may be affected which eventually affects the physical development of the children. (Dutta, n.d.)

Characteristics of Physical Development in Children

Tanja (2022) highlighted the characteristics of children from birth to 3 years as follows:

1. Birth to six Months

(a) Gross motor

i. Newborns to lift their chin and hold their heads upright

ii. As they grow older, they start to lift their torso and raise their upper body

iii. They begin to roll back and forth

iv. Towards six months, they can sit by themselves

(b) Fine motor

i. Early on, children develop a strong grip

ii. They start to become aware of their hands and feet and they start moving each finger and toe independently.

iii. Children start simply holding a toy without knowing what it is, and eventually shake and pull on toys.

iv. They begin to hold their bottles and other objects in their hands.

2. 7 to 12 months

(a) Gross motor

i. Children start supporting their weight more

ii. They start to crawl, try to stand, and walk with assistance

iii. Towards the end of this stage, they begin to stand independently

(b) Fine motor

i. Children begin to pick up things using their index finger along with their thumbs

ii. They can feed themselves and pick up objects on their own.

iii. As they play, they learn to drop one toy for another toy.

3. 1 year

(a) Gross motor

i. At 1 year, they start to take their first few stepsii. They learn to throw objects and play more sport-like games.

iii. Towards the age of two years, they walk independently and can also walk backward.

(b) Fine motor

i. They start to grasp cups and drink out of them

ii. They start typical skills like pointing at objects they desire, building towers out of blocks, scribbling, turning the pages of books, and starting to eat on their own.

4. 2 Years

(a) Gross motor

i. Children can run and cling onto objects

ii. Shake heads and swing their limbs

iii. Dance, roll, balance, and jump up and down

iv. They enjoy playing at playgrounds

(b). Fine motor

i. They build a tower using block

ii. They open a door and undress they play in water and sand by filling containers.

iii. They paint

5. 3 Years

(a). Gross motor

i. They jump from steps and balance on one leg

ii. Their coordination and balance improve as they walk upstairs with one foot at a time and throw a ball without falling over.

(b) Fine motor

i. They draw lines and circles while cutting and folding papers.

ii. They can dress dolls and button clothes themselves

iii. They take an interest in more chores and they can make their bed and set the table

Conclusion

The paper concludes that physical development is the foundation of human growth and development from conception to death. This is because physical development helps prepare infants and toddlers for activities that support language development, social skills, and other areas of learning, resulting in later success in However, nutrition, immunization, school. proper ventilation, prenatal period, family, socioeconomic status, and intelligence are some of the factors that aid physical development in both infants and toddlers, if the above factors are not taken care of the infants and toddlers are at the risks of poverty, malnutrition, poor health and unstimulating home environment, which detrimentally affecting their development. It is in this case that the paper recommends that parents and caregivers should get good nutrition before and after birth because it plays an important role in the child's physical development. This is because If the mother during pregnancy gets good nutrition it aids the development of the fetus in the womb

Recommendations

The paper recommended that:

Parents and caregivers should be encouraged to get good nutrition before and after birth because it plays an important role in the child's physical development. This is because If the mother during pregnancy gets good nutrition it aids the physical development of the fetus in the womb. Parents should also be encouraged to get proper Immunization because it saves the child from being infected by different diseases. This also helps the child to grow properly. Children who have various infectious diseases like tuberculosis, measles, yellow fever, and so on are weak and their body development is affected.

Parents and caregivers should provide proper atmosphere, opportunities, and encouragement to the child to explore his environment, for this helps the child develop himself through exploration.

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Effect of Registration Pressure on Academic Performance of Undergraduate Students in University of Delta, Nigeria

Bv

Vera Ngozi Okonoko University Librarian University of Delta, Agbor Library, Nigeria. vera.okonoko@unidel.edu.ng 08033194790

Abstract

The study investigated effect of registration pressure on academic performance of undergraduate students in university of Delta, Nigeria. The objectives of the study are; to determine the academic performance of the undergraduate students, identify factors affecting registration system and ascertain influence of registration pressure on academic performance of undergraduate students. The descriptive survey design was used in the study. The study population comprised 112 undergraduate students at University of Delta, Nigeria. (2023/2024 academic session). A census sampling techniques was used to distribute the questionnaire. The instrument used for data collection in this study was questionnaire. The major finding of the study revealed that academic performance of the students during registration process were averagely and fear. The study further revealed that registration anxiety, depression, unfamiliarity with the registration website, emotional stress, unfamiliarity with the registration process and non-responsive networks, crowd in the bank, poor registration skills, endless queues in registration centre, inability to open the registration website, psychological stress and insufficient fund were the numerous challenges encountered during registration exercise. The study further indicated that registration pressure is normal exercise, stress affect their academic performance and registration pressure affect their motivation to study. The study recommended that administration of the university should devise plans to enable effective online registration and payment from any place in other to ease stress encountered by the undergraduate students during registration, undergraduate students should be familiar with the registration procedure beforehand and management should provide a reliable and sufficient internet access in the campus.

Keywords: Academic performance, Registration pressure, Undergraduate students, University

Introduction

Academic performance refers to the degree of achievement a student, teacher, or even an institution has in their educational pursuits, whereas pressure to meet graduation requirements, compete for limited seats, and schedule conflicts are some of the factors that can cause this pressure. It serves as a gauge for how successfully someone or anything is achieving their learning objectives. Consequently, one of the most crucial factors to take into account when evaluating students at higher education institutions is their academic achievement. Grade point average (GPA) is a useful tool for illustrating academic success.

Exam results, in the opinion of Remali et al, (2013), are the best indicator of a student's level of knowledge and may be used to help them advance in their studies, win scholarships, and secure a better entrance position at prestigious colleges. According to Nakalema and Ssenyoga (2013), a student's study habits whether methodical, effective, or ineffective have a major impact on their academic success. Put differently, academic achievement is a critical factor in higher education.

Although enrolling in a higher education institution is an exciting moment, it can also be nerve-wracking for students, particularly those in their first year who are starting over. The worlds of adulthood and postsecondary education present first-year students with many obstacles as they embark on two pivotal stages of their lives. After leaving home and starting to get used to the new life on campus with all of its associated social and academic expectations, university students generally encounter stressful situations. Numerous factors. including academics, registration, finances, health issues, or the death of a close friend or relative, can cause stress in students. The body's neurological and physiological response to the altered circumstances is pressure. (Othman, et al, 2014). One of the main pressures first-year students in higher education institutions face is registration pressure because it involves recording the information of actual students at the institution. According to Richardson (2016), registration in higher education institutions entails the recording of student data, particularly that of recently accepted students. Agbatogun et al (2011), emphasized that as part of the university registration process, students must pay acceptance and school fees as well as undergo screening, verification, and the acquisition of a matriculation number. They must also register for courses, receive updates on their personal information, and stay up to date on system news. According to Lee and Graham (2015), pressure is a significant factor contributing to the difficulties university students encounter in meeting their academic goals and preparing for their future. One of the things that leads to kids failing is academic pressure. Hence, Richardson (2016), asserted that pressure is the mental reaction and action

brought on by hormone signalling; the sense of danger sets off an instinctive reaction mechanism that is known as the "fight-orflight" response.

Pressure generally refers to two things: the psychological experience of pressure on the one hand, and the physiological reaction to pressure on the other, involving several systems ranging from memory to muscle deterioration. High standards for oneself are demanded by pressure, which leads to tension and stress. In recent years, pressure has attracted a lot of attention. It has caused academics and other researchers a considerable deal of concern. Although most people believe that pressure is harmful and should be avoided, this isn't always the case. Thus, the purpose of this study is to look into undergraduate students' academic performance and pressure at the University of Delta, Nigeria

Objectives of the Study

The main objective of the study is to investigate the effect of registration pressure on academic performance of undergraduate students in university of Delta, Nigeria. Specifically, the study sought to:

- I. determine the academic performance of the undergraduate students in university of Delta, Nigeria
- II. identify factors affecting registration system among undergraduate students in university of Delta, Nigeria
- III. ascertain influence of registration pressure on academic performance of undergraduate students in university of Delta, Nigeria

Research Questions

The following research questions were raised

- I. What is the academic performance of the undergraduate students in university of Delta, Nigeria
- II. What factors affecting registration system among undergraduate students in university of Delta, Nigeria
- III. What is the influence of registration pressure on academic performance of undergraduate students in university of Delta, Nigeria

Literature Review

Academic Performance of Under-graduate Students

Academic performance can be defined as the performance outcomes that show the extent to which a person has accomplished specific goals in instructional environments (Steinmayr et al., 2017). There are widespread scholarly investigations which highlight that this is the outcome of a complex interaction of different home, personal and institutional factors (Evans, 1999; Stinebrickner & Stinebrickner, 2000; Stinebrickner and Stinebrickner, 2003; Nelsonet al., 2012). Currently, university students' academic performance is explained by their course unit success or failure, the number of courses they pass or fail, and the grade point average (GPA) and cumulative grade point average (CGPA) of their grades (Goldfinch & Hughes, 2007). Most first-year students' academic performance is below the pass mark as determined by their course work, attendance, and exam scores. Therefore, about 27% of them drop out of the course of study at the end of the first academic section (Zeegers 2004). In a similar vein, Igere and Akporhonor (2020) investigated the relationship between first-year

university of Benni library and information science students' academic performance and registration stress. The results showed that the pupils' academic performance fell into the fair and average categories, respectively, with 45 (43.27%) and 35 (33.65%). That is to say, the majority of first-year students perform below expectations because they are ill-prepared to meet the requirements of the school and complete the other tasks necessary to receive a passing grade. The degree to which students come at university prepared has a direct impact on their ability to adjust and succeed academically throughout their first year.

To put it another way, students who are familiar with computers or who have a foundation in information and communication technology (ICT) before enrolling in college will find it easier to register online. According to (Adebowale and Oyekunle, 2014), the introduction of registration in the Nigerian educational system was seen as a positive step toward maintaining proper student records management and building a relationship between the institution and the student. Each student must provide their identity and supporting documentation to the school, as well as register for their courses manually or, in the case of some institutions in the current ICT era, electronically.

Factors Affecting Registration System

During the registration process, undergraduate students go through a rollercoaster of emotions, including worry, anxiety, fear, tension, and frustration. It's crucial to keep in mind that these feelings will change based on the particular student, their academic circumstances, and the unique difficulties associated with registering at their university. Because pressure has an effect on adverse both physical and psychological health, undergraduate students stated that pressure was the health aspect that affected their academic performance the most (Dwyer & Cummings, 2001). Richardson (2016), established that a high level of pressure in the first year of college provides for a lower level of overall adjustment and can make students more vulnerable to many social and psychological problems, thus leading to a weighted average for the last year. Many studies have addressed this issue and it has been found that many psychological problems such as unhappiness, anxiety, inadequate sleeping and pressure have an impact on student academic performance. Richardson (2016), reported that among anxious and depressed youth, stressful life events are significantly elevated, which in turn results in poor academic performance. In both academic and popular research projects, pressure has grown in importance. Researchers have long studied the effects of academic pressure on students, and they have identified a number of significant stressors, such as assignments, unhealthy peer competition, fear of failing academically, inadequate funds, strained relationships with teachers, and family problems Richardson (2016),list several institutional pressures, including crammed conference rooms, the semester system, and a lack of supplies for academic work.

The admissions process, the high expectations of the parents, the curriculum with its complex concepts, the inappropriate school hours, the physical classroom environment, the unbalanced student-teacher relationship, the strict and quick discipline rules, the excessive number of complex tasks, the teaching methodology, the teacher's negligent attitude, and the emphasis on weaknesses rather than strengths (Richardson (2016),). Pressure can negatively affect a student's academic performance, so it is important for students to manage stress in order to overcome the negative effect of stress (Mushtaq, & Khan, 2012).

In other words, Every student is expected to pick up a course form and manually register a number of course units per a semester in most cases it is 16 units or a minimum of course units for the lecturer to append his/her signature. This form of registration known as manual registration is presently replaced with the electronic form of registration due to the pressure posed by it (Adebowale & Oyekunle, 2014; Davidson (2015) highlighted some factors affecting registration of students as physical registration pressure which is associated with physical body pains, fatigue and tiredness due to long queue; The brain's and thinking hormones' psychological registration pressure may have an impact on pupils' academic achievement; Students experience emotional registration pressure, which is referred to as illogical behaviour, as a result of wasting a lot of time trying to register but failing; Financial registration pressure refers to the issues students face with registration fees. Students frequently complain about a variety of issues. including exorbitant deductions, frequent increases in registration costs, and hefty bank charges; pressure from admission

security, also referred to as the fear of losing admission because of failure to register by the deadline. The stress that students experience in learning new skills as a result of the internet, computers, and other electronic-based registration systems replacing manual registration is known as "registration skill pressure." similarly. According to Onochie (2010), the majority of recently admitted students and former students returning to higher education frequently express their frustration and pressure during the registration process, citing things like program crashes, difficulty accessing the registration website, difficulty opening email attachments, unresponsive networks, slow networks because of low bandwidth, high accessibility costs, and poor connectivity. A study on the relationship between academic performance and selfefficacy and the usage of electronic information was carried out by Tella, Ayeni, and Omoba (2007).

Influence of Registration Pressure on Academic Performance of Under-graduate Students

Family factors have been found to contribute to the successful academic attainment of students. Stinebrickner and Stinebrickner (2000)identified a strong positive relationship between family income and the length that an individual remained in college. In particular, it was revealed that students in the bottom third of the income distribution were more likely to drop out of school before the third year than those in the upper third of the income distribution. Likewise, Checchi et al. (1999) also found that while family income did not discourage enrolment in higher education, it

positively correlated with students' was performance. However, (Checchi et al., 1996 and Checchi et al., 1999) emphasized that cultural family background was more indicative of students' academic success. Students from better-educated families, for example having a graduated mother, were seen to receive stronger pressure and have higher persistence to complete their academic study, which enabled them to perform better and not to drop out during initial years. The model of educational investment proposed by (Checchi et al., 1999) argues that families will always invest a fraction of their income in their children's education. An increase in the investment means a reduction in parents' spending but is likely in exchange for higher future earnings for their children (Checchiet al., 1999).

Among personal variables, an extensive number of studies have pointed out the impact of previous academic performance, including institutional grades, study skills and registration pressure, to students' performance at university (McKenzie & Schweitzer, 2001; Bazelais et al., 2018). Some of the most important ones for university success, as identified by Hassanbeigi et al. (2011), comprise time management, concentration and memory; note-taking skills; anxiety management; organizational skills; motivation attitude. and and reading comprehension skills. Many authors (Schmelzer et al., 1987; Talbot, 1990; Komarraju et al., 2009; Bratti & Staffolani, 2013) share the view that academic individual differences strongly influence academic success in motivation. The rationale is that the responsibility for success rests entirely with students; therefore, being motivated helps students be more persistent and active in their learning behaviour and have a higher commitment to the goal of college completion. (Talbot, 1990), has argued that 'the single most influential personality traits (in relation to academic persistence and achievement) appear to be intrinsic motivation and the student's level categorization of cognitive (attribution complexity). However, since such findings may come from lecturers' and students' selfreported data, caution must be taken in attempting to generalize particular results to other contexts or even to all the students across the university where the data are collected.

Students' dread of registering has a negative impact on their overall academic performance since it causes them to be less motivated to study, unable to attend lectures when classes resume, and afraid they won't be admitted (Mandernach, et al, 2006). Agbatogun, et al (2011) suggest that the stress of registration that newly admitted university students experience during the registration process may be a contributing factor in their low achievement. Particularly recently admitted students experience pressure related to registration, including pressure during the registration process, delays in registration, strict paperwork requirements, extreme stress from standing in long lines under the hot sun, crowding during results verification, and increases in registration fees like bank fees. It is common knowledge that newly admitted students miss lectures during the first two to four weeks of classes after returning because of their protracted registration process. This leads to low

attendance at lectures, insufficient reading time, and academic anxiety, all of which are indicators of subpar academic achievement. In a research on registration stress, Kelly (2008) discovered that 85% of students especially those who have just been admitted experience some kind of anxiety related to paying for their education and registering for classes. The majority of students, according to the survey, are impacted by registration pressure, which lowers academic performance. Adebowale and Adeyinka (2014) went on to say that manual registration is laborious and can be timeconsuming, particularly when students have to miss classes or shuffle between them in order to get the relevant lecturers to sign their course forms. Thus. the online or electronic registration dimension has emerged as a means of progressing annual registration, as well as a means of building and recording the academic database of admitted students.

Even though online registration is now accepted in higher education institutions, many students still have trouble registering. According to Yildrim, et al, (2005), there are a number of challenges, including inadequate computer systems, poor orientation, and inexperience with the registration procedure, anxiousness, insufficient power supply, inadequate skills, and an inability to access the registration website. Additionally, Igere and Akporhonor (2020) confirmed that a variety of factors affecting the university's registration system included long lines at the registration centre, throngs of people waiting in banks to pay for school fees, poor registration skills, difficulty opening the registration website, psychological

stress, unfamiliarity with the institution, and a non-responsive network.

Methodology

The survey research design was adopted for this study. The population of the study was made up 112 undergraduate students of the University of Delta. Nigeria. (Registration **Statistics** 2022/2023 academic session). A census sampling technique was adopted in the distribution of 112 copies of the questionnaire to the undergraduate students at university. The questionnaire were used for data collection at the following faculty, Faculty of Art, Faculty of Computing, Faculty of Education, Faculty of Engineering, Faculty of Environmental

Science, Faculty of Law, Faculty of Science, Faculty of Management and Social Science. Two (2) research assistants were used in the administration of the questionnaire which was carried out over a period of 2 weeks. A total number of 112 copies of questionnaire were administered to undergraduate students at university of Delta, therefore, 87 were found usable given a return rate of 77.7% response rate. Results were analysed using Statistic Package for the Social Science (SPSS) application software was used for the analysis, and simple percentage was adopted for easy analysis and interpretation

Research Question 1: What is the Academic performance of the undergraduate students at university of Delta, Nigeria?

Table	1:	Academic	performance
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Academics Performance	Frequency	Percentage
Excellent	11	12.6%
Good	15	17.2%
Average	31	35.6%
Fair	25	28.7%
Poor	5	5.7%

Source: Field Survey, 2024

Table 1 reveal that undergraduate students
academic performance is averagely 31(35.6%)
whereas 25(28.7%) of the respondents
academic performance were fair, 15(17.2%) of
the respondents academic performance were
good, while 11(12.6%) academic performance

were excellent and 5(.5.7%) of the respondents academic performance were poor.

Research Question 2: What factors affecting registration system among undergraduate students in university of Delta, Nigeria

Table 2: Factors affecting registration system

Factors affecting registration system	Agree	Disagree
Registration anxiety and depression	67(77%)	20(22.9%)
Unfamiliarity with the registration website	60(68.9%)	27(31%)
Emotional stress	64(73.5%)	23(26.4%)
Non-responsive networks	57(65.5%)	30(34.4%)
Crowd in banks to pay school fees	55(63.2%)	32(36.7%
Poor registration skills	55(63.2%)	32(36.7%)
Endless queues in registration centres	51(58.6%)	36(41.3%)
Inability to open the registration website	45(51.7%)	24(27.5%
Psychological registration stress	45(51.7%)	24(27.5%)
Insufficient fund	47(84%)	40(45.9%)
Filed Survey 2024		

Filed Survey, 2024

Table 2 reveal that undergraduate students at university of Delta, encountered challenges during registration exercise which include registration anxiety and depression 67(77%) agree while 64(73.5%) emotional stress, 57(65.5%) of the respondents agree that nonresponsive networks, 55(63.2%) agree that crowd in banks to pay school fees/ poor registration skills, while, 51(58.6%) of the respondents agree that endless queues in registration centres, 45(51.7%) of the respondents agree that inability to open the registration website/ psychological stress and 47(84%) of the respondents agree that insufficient fund affecting registration system.

Research Question 3: What is the influence of registration pressure on academic performance of undergraduate students at university of Delta, Nigeria?

Table 3: Respondent Influen	ice of Registration
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S Statements	Strongly agree	Agree	Disagree	Strongly disagree
N	-			-
Do you feel that registration stress has affected your motivation	38	46	26 (21.7%)	10 (8.3%)
to study	(31.7%)	(38.3%)		
Does effective registration procedure have an impact on your	29	47	39 (32.5%)	5 (4.2%)
academic performance	(24.2%)	(39.2%)		
Does registration allow you to struggle academically	7 (5.8%)	12	43 (35.8%)	58 (48.3%)
		(10.0%)		
Does your faculty Wi-fi aid you during your registration	3 (2.5%)	13	104	0 (0%)
procedure		(10.8%)	(86.7%)	
Do you think your school provides enough resources for	8 (6.7%)	22	56 (46.7%)	34 (28.3%)
students to manage stress?		(18.3%)		
Have you ever felt physically ill dues to registration stress?	28	53	11 (9.2%)	28 (23.3%)
	(23.3%)	(44.2%)		
Do you think registration stress is a normal experience?	53	57	9 (7.5%)	1 (0.8%)
	(44.2%)	(47.5%)		
Do you think registration stress affect your academic	44	53	15 (12.5%)	8 (6.7%)
performance?	(36.7%)	(44.2%)		

Field Survey, 2024

Table 3 reveals influence of registration academic performance pressure on of undergraduate students in university of Delta, Nigeria. A significant majority of the respondents (45.7%) of the respondents agree that registration pressure is normal experience whereas (44.2%) strongly agree. The study further indicate that. (42.2%) of the respondents agree that stress affect their academic performance whereas. (36.7%)of the respondents strongly agree. Meanwhile, (38.3%) of the respondents strongly agree that registration pressure affects their motivation to study while (31.7%) agree whereas (39.2%) of the respondents agree that effective registration procedures have an impact on academic performance, whereas (24.2%) of the respondents agree.

Discussion of the Findings

In considering the academic performance of undergraduate students at university of Delta, revealed that undergraduate students academic performance during registration was not good but averagely balanced and fear. This finding is in consonance with that of Igere, & Akporhonor (2020) who established that academic performance of the students were under fair and average consistent. The finding of the study in table 2 showed that undergraduate students at university of Delta, encountered challenges during registration exercise which include registration anxiety and depression, emotional stress, non-responsive networks, crowd in banks to pay school fees/ poor registration skills, endless queues in registration centres, inability to open the registration website/ psychological stress and insufficient fund affecting registration system. This findings is related to that of Davidson (2015) who highlighted some factors affecting registration of students as physical registration pressure which is associated with physical body pains, fatigue and tiredness due to long queue. Supported by Yildrim, et al, (2005); Igere and Akporhonor (2020) who affirmed that endless queues in registration centre, crowd in banks for payment of school fees, poor registration skills, inability to open the registration website, psychological stress, unfamiliarity with the institution, non-responsive network were some of the factors affecting registration system in the university.

The finding of the study in table 3 showed that undergraduate students influence of registration pressure on academic performance that registration pressure is normal experience, stress affect their academic performance, registration pressure affects their motivation to study, and effective registration procedures have an impact on academic performance were strongly agreed and agreed by the respondents. This findings is related to that of Agbatogun et al (2011) suggest that the stress of registration that newly admitted university students experience during the registration process may be a contributing factor in their low achievement.

Conclusion

From the study, it is well-known that undergraduate students at university of Delta, academic performance were averagely and students faced a lot of challenges in the beginning of their academic session on campus such as endless queues in registration centre, crowd in banks for payment of school fees, poor registration skills, and inability to open the registration website among others. Undergraduate students experiencing a high amount of pressure during their registration exercise.

The following recommendations are made from the study:

- The administration of the university should devise plans to enable effective online registration and payment from any place in other to ease stress encountered by the undergraduate students during registration.
- 2) Undergraduate students should be familiar with the registration procedure beforehand.
- 3) Management should provide a reliable and sufficient internet access in the campus.

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Trend Analysis on the Adoption of Environmental Education into the Teacher Education Curriculum in Selected Colleges of Education in Southwestern Nigeria

By

Adebile Ruth Foluke, and Irinoye James Department of Curriculum and Instruction, Adeyemi Federal University of Education Ondo, Ondo State, Nigeria <u>bile.ruth@gmail.com</u>, irinoyejames@gmail.com +2348038483048 and +2348100379201

Abstract

This study assessed the trend on the adoption of environmental education into teacher education curriculum as a course of study in the colleges of education in Southwestern Nigeria; two colleges of education were purposively selected amongst the nine (9) colleges of education in the study location. The purposive selection was done in order to place environmental education and learning process as against the peculiar nature of technical and special education studies in some other colleges of education in Southwestern Nigeria. Four (4) research questions guided the findings of the study. Descriptive survey research design was adopted in the study. The population comprised all lecturers in the selected colleges of education in southwestern Nigeria, while purposive sampling technique was used to select one hundred (100) lecturers from the two selected colleges of education in the study location. The only instrument used for the study was a self - developed questionnaire based on the research questions raised for the study and this was used for data collection. Frequency count and mean scores were used for data analysis. The findings showed a very high level of relevance of environmental education to teacher education curriculum in colleges of education in the study location. A high level of constraints towards the total adoption of environmental education was revealed among others. The research findings recommend greater awareness of environmental education to teachers, students, parents and the community at large, through regular conferences, workshops and seminars, among other recommendations.

Keywords: Environmental education, trend analysis, adoption, curriculum, teacher education

Introduction

Teacher education in Nigeria has unique characteristics shaped by the country's cultural, historical and socio-economic content. Teacher education is distinguished from some other countries by offering pre-service training which is a mandatory teaching qualification offered by colleges of education and Bachelor of education offered by universities, focusing on subject specialization and pedagogy; that is, National Certificate in Education (NCE), and Bachelor of Education (B. Ed) respectively. Also, there is a strong focus and emphasis on Nigerian languages and cultures, integration of traditional teaching methods with modern approach, focus on community involvement and social responsibility among others. Whereas, other countries have strong emphasis on teacher autonomy and research-based practice and focus on teacher well-being and mental health in Finland and Australia respectively.

The intent for considering the study on the adoption of environmental education into teacher education curriculum and programmes is based on the UNESCO's recommendations on environmental education which include the following:

- Integrate environmental education into national curricula
- Develop environmental education standards and guidelines
- Provide teacher training and support, and
- Encourage community involvement. Source: The Berlin Conference Declaration on Education for Sustainable Development, adopted in May, 2021.

The Nigeria teacher education programmes is meant for developing the professional knowledge, pedagogical skills and dispositions of prospective teachers within the various subject areas and different disciplines. As such, the process and product of such education should deliver and enhance the idea of professional learning and the evolving teacher education programmes. However, the trend analysis of adopting environmental education into teachinglearning process as being a course of study in the teacher education curriculum seems relatively slow.

Various curriculum interactions by educators reveal that teacher education programmes, training, methodological issues and provisions had created implications for inadequate teaching – learning procedures about the environment and environmental issues which are very important to achieving professional knowledge and pedagogical skills of teaching and its ethics. However, the trend analysis of adopting environmental education into teacher education curriculum has not enjoyed the serious attention of all stakeholders in education in the southwestern Nigeria (Arenas, 2021, Arjen 2015).

The notions of Evans (2020) and Hung (2014), inform that environmental education as it were could be a strong catalyst for sustainable development in education in support of teacher education curriculum and programmes; as long as the stakeholders in education can realize the fact that different communities have series of different environmental challenges all over the globe. Therefore, from the perspectives of social and environmental changes, with close reference sustainable development in education; to environmental education can be broadly defined as a means which enables students and teachers to participate in the planning, development, implementation and evaluation of educational activities identified aimed at resolving environmental issues; which might be physical, academical, developmental or educational (Fang and Lee, 2016, Boon, 2010).

In all teacher training programmes, whether inservice, on the job teachers or continuous, professional developments are seriously in need of a verse knowledge about environmental education. Indeed, many environmental conditions and challenges are desperately in need of urgent attention. This informs the necessity of educating both adults and young people through well- established contents of environmental education into the curriculum of teachers' education as a pre-requisite to solving such identified environmental problems as mentioned previously. As such, environmental education is an essential tool to successfully integrate the principles, values and practices of solving environmental challenges and learning to live in a sustainable environment through education and smooth teaching and learning and understating the content of the environment where we live (Carter, 2007). Adoption of environmental education to the curriculum of teacher education in colleges of education, could lead to true information by science- driven practices, relevant curriculum objectives, workable educational polices, empowered action on environmental issues and transformative changes at local, state, national and international levels (Sally, 2023; Kaplan, Liu and Steining, 2005).

Trend Analysis on the adoption of environmental education to the teacher education programmes in colleges of education is like a truth not yet fully discovered by all responsible stakeholders in education. Findings over the years, have shown that advancing and identifying the importance and essence of environmental education at all levels of education should be supported by all responsible stakeholders in education. As such, adopting and developing a future strategy for the sustainability of environmental education cannot be carried out effectively without supporting teacher training programmes on environmental education in selected colleges of education in southwestern Nigeria. Some research reports suggest that teacher training on

environmental education should be a necessary requirement for successful education in the southwestern Nigeria specifically because of their cultural aesthetics and socio-economic context. (Bregeon, Faucheux and Rochet, 2008; Bonhoure and Hagnerelle, 2003; UNESCO, 2009).

Across the world, education is a vital process in development and human environmental management. Education is a process of transmitting, refining and preserving the collective values embedded in the culture of any society; all of which are a by-product of acknowledging the content of environmental education and putting up adequate resources for the global practice and training as a content in the teacher education curriculum in colleges of education in southwestern state. (Oyekan, 2006, Adebile, 2023).

There is a strong concern by all the responsible stakeholders in education to provide sufficient professional education and training, motivation, adequate resources and conducive teaching – learning environment for the teacher – trainees, in order to imbibe self-concept, diligence, honesty and commitment to teaching as a vehicle of continuous human engineering and better understanding of mental, physical and emotional power of environment and learning. This informs the concern of this paper towards the adoption of environmental education into the curriculum of teacher education in selected colleges of education. Hence, teacher education is the provision of professional education and specialized training within a specified period for the preparation of individuals who intend to develop and nurture the young ones into responsible and productive citizens in any developing nation (Oyekan, 2006). All things being equal, and with the expression of the policy of teacher education in Nigeria provide; environmental education should be considered relevant to teacher education curriculum and programmes as it prepares teachers to educate students on sustainable practices, ensuring a livable future. It integrates environmental concepts into various subjects promoting interdisciplinary learning; it encourages community involvement, promoting environmental stewardship and equips teachers to address climate change, its impacts and potential solutions. (Adebile, 2023). This is to empower the future generation to address pressing environmental challenges and become successful like other nations of the world. For instance, Australia, Canada and Finland's environmental education policies and programmes had successful implementation and practices (Michal & Lynda, 2020).

Objectives of the study

The aim of the study is to access the trend of the adoption of environmental education into the curriculum of teacher education in Southwestern Nigeria. The specific objectives are to:

- i. examine the trends on the adoption of environmental education into the curriculum of teacher education
- assess the relevance of environmental education to the teacher education curriculum as a course of study.
- iii. identify the constraints towards the full adoption of environmental education programme into the teacher education curriculum.
- iv. proffer possible solutions to the constraints facing the adoption of environmental education to the teacher education curriculum.

Statement of the problem

Studies have shown that prospective teachers in colleges of education in southwestern Nigeria acquire low levels of environmental competences and basic environmental knowledge during their higher education training, and that students' attitude towards environmental issues as sources of effective learning is not relatively positive. It also observed that there is lack of is understanding about environmental values among trained and prospective teachers in southwestern Nigeria. The lack of environmental understanding among the future teachers' trainers at the higher education institutions calls for strong attention of the stakeholders in education. Hence, the most appropriate methodologies to teach environmental education as a course of study in the teachers' education institutions like other nations of the world is not well catered for

by educator and responsible stakeholders. Therefore, this study examines the trends of the adoption of environmental education into teacher education curriculum in the colleges of education in southwestern Nigeria.

Research Questions

The following questions will guide the study.

1. Is environmental education relevant to the teacher education curriculum for teacher training programmes in the southwestern Nigeria?

2. What is the trend on the full adoption of environmental education into the teacher education curriculum in Southwestern Nigeria?

3. What are the constraints towards the full adoption of environmental education programme into the teacher education curriculum in southwestern Nigeria?

4. What are the possible solutions towards the constraints facing the adoption of environmental education into teacher education curriculum in southwestern Nigeria?

Methodology

The study employed a descriptive research design where the options of the participants were sought for. The research design was selected because the study intended to check the trend at which the adoption of environmental education could be adopted into the curriculum of teacher education as a course of study in the southwestern Nigeria. The population of the study comprised one hundred (100) lecturers, from two colleges of education: Adeyemi College of Education, Ondo, Ondo state and Alayande College of Education, Oyo, Oyo state purposively selected from nine (9) Colleges of Education: (College of Education, Akoka, Lagos, Lagos State; Federal College of Education Special, Oyo, Oyo state; Adeyemi College of Education, Ondo, Ondo state; Alayande College of Education, Oyo, Oyo state; Ekiti State College of Education, Ikere-Ekiti; Adeniran Ogunsanya College of Education, Otto/Ijanikin; Micheal Otedola College of Primary Education, Epe; Federal College of Education, Abeokuta; Tai Solarin College of Education, Ijebu-ode). The two colleges of education purposively selected do not have programmes for technical and special education but purely training of teachers for subjectcentered curriculum implementation process. One instrument used was a questionnaire which was validated by two experts in Test and Measurement from O.A.U (Obafemi Awolowo University, Ile – Ife, Osun State). The reliability of the instrument was ensued using Crobach alpha that yielded r = 0.82 which was high enough to be adjudged suitable for the study. The questionnaire has a response format of Likert scale of Strong Agreed (SA), Agreed (A), Disagree (D) and Strongly Disagree (SA) with weighted mean values 4, 3, 2 and 1 respectively, this makes the mean value to be 2.50. The mean value 2.50 forms the bench mark for agree and disagree. If the mean value is 2.50 or above, that indicates agree while values below 2.50 indicates

disagree. The instrument was administered by the researcher by giving it to the lecturers in the selected schools through their heads of Departments and retrieved after completion. Data were analyzed using frequency counts and mean scores. The mean cluster forms the basis for the inferences drawn for each research question. Research Question 1: Is environmental education relevant to the teacher education curriculum for teacher training programmes in the southwestern Nigeria?

Tabla1. Despendent's views on relevance	of environmental education to teacher education curricul	um
Table1. Respondent 5 views on relevance		um

	N= 100, Bench Mark ($\overline{x} = 2.50$)						
Item	SA	Α	D	SD	(Efx)	\overline{x}	Decision
It is most relevant because it takes about experiential teaching and learning process	35 (140)	35 (105)	10 (20)	20 (20)	100 (285)	2.85	Agree
It is not relevant because our environmental is not yet built up for such skills of teaching and learning	3 (12)	10 (30)	60 (120)	27 (27)	100 (180)	1.80	Disagree
The curriculum of teacher education needs some practical skills to improve the productivity of teachers and learning outcomes of learners.	40 (160)	30 (120)	10 (20)	20 (20)	100 (320)	3.20	Agree
It introduces engagement in problem solving and action process therefore it is relevant	20 (80)	40 (120)	20 (40)	20 (20)	100 (260)	2.6	Agree
Incorporating environmental learning into the teacher education curriculum would create deeper learning beyond the four-walls of the classroom.	40 (160)	30 (120)	15 (30)	5 (5)	100 (315)	3.15	Agree
Mean Cluster (\bar{x})						2.75	Agreed

Table 1 depicts that the respondents agreed on items 6, 8, 9, and 10 with mean values (\bar{x} = 2.85; 3.20; 2.60 and 3.15) respectively. However, item 7 shows respondents' disagreement on statement of non- relevance of environmental education programme to teacher education ($\bar{x} = 1.80$) which is lower than the bench mark ($\bar{x} = 2.50$). The assertion that the programme is not yet built for environmental education skills of teaching and learning was rejected. The results further show that the mean cluster (($\bar{x} = 2.75$) which is of higher numerical value than bench mark (($\bar{x} = 2.50$) is an indication that environmental education is relevant to the teacher education curriculum for teacher training programmes in sothwetern Nigeria. Therefore, the result has high relevance of environmental education in teacher training programes in the study location.

Research Question 2: What are the trends in the full adoption of environmental education into the teacher education curriculum in southwestern

A 30 (90) 35 (105) 35 (105)	D 20 (40) 15 (30) 15 (30)	SD 10 (10) 25 (25) 20 (20)	(<i>Ef x</i>) 100 (300) 100 (260) 100 (275)	x 3.00 2.60 2.75	Decision Agree Agree Agree
(90) 35 (105) 35	(40) 15 (30) 15	 (10) 25 (25) 20 	(300) 100 (260) 100	2.60	Agree
(105) 35	(30) 15	(25) 20	(260) 100		-
				2.75	Agree
		(20)	(375)		
40 (120)	10 (20)	20 (20)	100 (280)	2.80	Agree
	10 (20)	20 (20)	100 (290)	2.90	Agree
				2.81	Agreed
	30 (90) which	(90) (20)	(90) (20) (20)	(90) (20) (20) (290)	(90) (20) (20) (290)

Table 2: Respondents' Views on Adoption of Environmental Education into Teacher Education Curriculum.

Table 2 depicts that the respondents agreed on all items 1 to 5 with mean values ($\bar{x} = 3.00$; 2.60; 2,75; 2.80 and 2.90) respectively. The mean cluster value ($\bar{x} = 2.81$) is a numerical indicator that the trend of adoption of environmental education into teacher education curriculum in the study locate is low as a result of aforementioned opinion responses. The mean cluster value of ($\bar{x} =$ 2.81) which is greater than the bench mark value of ($\bar{x} = 2.50$) further affirmed the low trend of adoption of environmental education in the study locate.

Research Question 3: What are the constraints towards the full adoption of Environmental Education program into the teacher's education curriculum in the southwestern Nigeria.

	N= 100, Bench Mark ($\overline{x} = 2.50$)							
Item	SA	А	D	SD	(Efx)	\overline{x}	Decision	
The awareness about environmental education is	30	40	10	30	100	2.90	Agree	
relatively shallow even in teacher education programmes	(120)	(120)	(20)	(30)	(390)		C	
Environmental issues are often taken for granted by	40	35	15	10	100	3.05	Agree	
individual and families	(160)	(105)	(30)	(10)	(305)		-	
Environmental education for school wide	30	30	20	20	100	2.70	Agree	
sustainability projects is not easily accessible in teacher education programmes.	(120)	(190)	(40)	(20)	(270)		-	
The urge to make environmental education a core	35	35	10	20	100	2.85	Agree	
component of teacher education curriculum of often stepped down by lack of effective commitment	(140)	(105)	(20)	(20)	(285)		U	
The lack of environmental competence by pre-service	40	30	20	10	100	3.00	Agree	
teachers and the professional trainers regarding environmental education is a serious set-back.	(160)	(90)	(40)	(10)	(300)		C	
Mean Cluster (\overline{x})	-1					2.90	Agreed	

 Table 3: Respondents' views on constraints towards Adoption of environmental Education Programme into the teachers Education Curriculum.

Table 3 shows that the respondents agreed on all items 11-15 with mean values ($\bar{x} = 2.90$; 3.05; 2.70; 2.85 and 3.00) respectively. A cursory look at the mean cluster value indicates ($\bar{x} = 2.90$) which is a numerical indicator that numerous constraints exist towards the full adoption of environmental education into teacher education curriculum in the Southwestern Nigeria. The attestation of lack of environmental competence by preservice and the professional teachers regarding environmental education posed serious set- back ($\bar{x} = 3.00$). Furthermore, the result shows that the mean cluster ($\bar{x} = 2.90$) is greater than the bench mark ($\bar{x} = 2.50$).

Research Question 4: What are the possible solutions towards the constraints facing the adoption of the environmental education into teacher education curriculum in southwestern Nigeria?

			N=	N= 100, Bench Mark (\overline{x} =			
Item	SA	Α	D	SD	(Efx)	\overline{x}	Decision
The government should provide enough funding for	90	8	1	1	100	3.87	Agree
environmental education	(360)	(24)	(2)	(1)	(387)		
There should be sincere urge by the government to	60	30	5	5	100	3.05	Agree
supply all necessary resources for environmental	(240)	(90)	(10)	(5)	(345)		-
education							
There should be adequate commitment to provide a	90	8	1	1	100	3.87	Agree
strong awareness on environmental education	(360)	(24)	(2)	(1)	(387)		
There should be wide sustainability projects on	90	10	1	1	100	4.00	Agree
ground to prove government interest in environmental education	(360)	(40)	(2)	(1)	(400)		
The curriculum planners should be prepared by the	95	5	1	1	100	9.95	Agree
government for the adoption of environmental	(380)	(15)	(2)	(1)	(395)		e e
education.							
Mean Cluster (\bar{x})						3.83	Agreed

 Table 4: Respondents' views on possible solutions towards constraints facing the Adoption of Environmental Education into the Teacher Education curriculum.

Table 4, shows that the respondents agreed on all item statements 16-20 with mean ($\bar{x} = 3.87$; 3.45; 3.87; 4.00; and 3.95). respectively. The result further shows that respondents attested mainly to adequate funding for environmental education in implementation by the government wide sustainability projects coupled with adequate preparation by curriculum coupled with adequate preparation by curriculum planners for the adoption of environmental education into teachers training education pogrommed in the study location.

A cursory look at the table indicates that mean cluster value ($\bar{x} = 3.83$) is greater than the bench mark value ($\bar{x} = 2.50$) which further shows possible solutions towards constraints the facing the adoption of environmental education.

Discussion of the findings

One of the results of the findings revealed that environmental education is relevant to the teacher education curriculum as a course of study in southwestern Nigeria. As posited by Kaplan and Steinig (2005), Environmental education would bring the understanding, ways of environmentally educating and engaging learners in non-effective way which is an essential tool for environmental educators for rewardable communication and interaction environmental education. Also, Balog (2018) documented the fact that learning environment as a part of environmental education could be considered as the second teacher since the environmental factors around the learners has the power to organize and promote smooth and pleasant learning outcomes. As such. environmental education is relevant for adoption into the teacher education curriculum. Also, the findings show that the trend of adoption of environmental education into teacher education curriculum is low. Okeke and Mich (2011) observed that environment and education can

hardly be separated while trying to influence effective learning and rewardable learning outcomes, yet the needs for effective environmental education has never been taken into a more urgent and necessary option in a world of limited resources like Nigeria. As such, essential tools to successfully integrate values and practices of environmental education are not easily accessible.

Moreso, the study revealed that there are numerous constraints towards the full adoption of environmental education into teacher education curriculum in the southwestern Nigeria. (Bonhourse and Hagenerrelle (2003) reported certain constraints on the full adoption of environmental education in the perspectives of sustainable development, they opined that it is still a proposal for an action plan. This is to buttress one of the results of the findings that there exist some constraints towards the full adoption of environmental education, especially in the southwestern Nigeria.

On a final note, the study showed that there could be possible solution to the constraints facing total adoption of environmental education into the curriculum of teacher education in the study location. This explains the assertion of Boom, (2010) that environmental education provides a vision and pathway to solving social, environmental and economic challenges, as such educators and students – teachers should act as change agents in advancing the environmental literacy of future generation in work against the barriers encountered and proffer sustainable solutions for the full adoption of environmental education in Nigeria as a whole.

Conclusion

While there have been some initiatives towards the adoption of environmental education into the curriculum of teacher education as a course of study, the trend seems to be very slow with a kind of understanding that environmental education is not easy to fit into general teacher education programmes. Although the awareness is becoming very strong, yet, there is a relatively universal lack of success in introducing consistent environmental education programmes, in teacher education curriculum and generally at all levels of education.

However, the findings of this current study show a greater improvement on increasing awareness and interest about environmental issues and on environmental content knowledge, understanding, methodologies and skills of onthe-job teachers and prospective teachers especially in the study location. The analysis of this data on study suggests a higher enlightenment to the fact that environmental education is a necessary ingredient for teachers and prospective teachers who should be trained to provide an education that promotes what could be described as environmental value and analytical skills which should bring changes in behaviour through the nature of environmental values.

Recommendations

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

- Environmental education should be adopted to the curriculum of teacher education since it is relevant to teacher education programmes in colleges of education.
- 5. There should be greater awareness through seminars, conferences and workshops because of the low trend of adoption of environmental education to the curriculum of teacher education in colleges of education in southwestern Nigeria.
- 6. There should be a serious attempt at supporting the adoption of environmental education into the teacher education curriculum as a course of study in colleges of education and in general teacher education programmes by all responsible stakeholders in education
- 7. All difficulties and barriers as regards policy imperatives toward the full adoption of environmental education into teacher education curriculum in colleges of education should be resolved through progressive practices related to environmental learning and experimental pedagogies.

- 8. The teacher education policies and programmes should be reviewed to make particular and explicit reference to environmental education and environmental learning in the curriculum of teacher education in colleges of education in southwestern Nigeria.
- Qualified environmental educators should be recognized and encouraged to assist in institutionalizing environmental education and implement the desired programmes successful.
- 10. While considering the already listed recommendations for action, environmental education training should be a requirement for a successful completion of any aspect of teacher education programmes in southwestern Nigeria, so that prospective teachers will be able to apply the knowledge of environmental education to their teaching strategies.
- 11. Teacher Education qualifications minimum requirements should include environmental education studies with the aim of developing ideas and practice that could support the adoption of environmental education in teacher education programmes.

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