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Editorial

The Journal of Institute of Education (JIE-RSU) is an international peer-review journal published yearly by the Institute of Education, Rivers State University, Port Harcourt. The JIE-RSU is a multi-disciplinary, open access scholarly journal in the field of education, business and professional studies. The journals aim is to publish original papers which contribute to the advancement of scientific knowledge in various disciplines in education.

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1. Articles should be typed in Microsoft Word documents with double-line spacing. In New Roman font in 12-point size, a one-inch border all around, a word count of not more than 6000 (including notes and references) and an abstract not exceeding 250 words with minimum of four key words from the paper that readers can use to find it online. The paragraphing style should be indented with one tab in 0.5 inches. Keep in mind that an abstract is crucial to any academic document it serves as a summary of the whole work.
2. Only the Abstract page should contain information about the article's title, author(s) affiliated institution department and contact information (such as a phone number and email address). This is done to support the journal's blind peer-review policy.
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4. The APA style 7th Edition is the appropriate documentation approach in this publication. In text citations and the Reference page both need to follow the documentation style. Additionally, the piece should be well-referenced and include a wealth of literature. The originality of the author's (or author's) thought is crucial.
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9. Typed article(s) should be sent to institute.education@ust.edu.ng or akpomi.margaret@ust.edu.ng as an attachment in Ms word format.

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TABLE OF CONTENTS

Artificial Intelligence (AI) and Skills Development among Business Education Students in Higher Educational Institutions in Delta State Egbule, Nnamdi Collins Ph.D,	1-13
Artificial Intelligence (AI)-Driven School Infrastructure Management: A Paradigm Shift in Nigerian Universities Ebom-Jebose, Abigail Ph.D & Elenwo, Pritta Menyechi Ph.D.	14-28
Artificial Intelligence Support System; a Tool for Management of Higher Education in Nigeria Chibuzor Ellen Umesi & Chukwudi Dike Umesi, Ph.D	29-41
Artificial Intelligence and Educational Management Information System in School Eliphaletphebe Chinyere Amaewhule Ph.D & Sabastine Tagbo	42-68
Stakeholders' Participation in Funding Secondary Education for the Attainment of Sustainable Development Goal 4 in Rivers State. ThankGod James Nwuke Ph.D & Osuji, Catherine U. Ph.D	69-86
Role of Adult Education Programmes in Reducing Harmful Traditional Practices to Maternal Health Among Selected Gestational Females In Ijebu-Ode Local Government Area of Ogun State, Nigeria. Adebimpe Elizabeth Alabi & Okunola, J.L. & Famadewa, A.J.	87-99
Linkage between Political Ideology and Educational Reforms to Enhance Political Stability in Nigeria. Helen Ngozi Elems-Ikwegbu, Ph.D	100-122
Adult Education and Environmental Sustainability: Educating for Climate Action Rabilu Abdu Yahaya	123-134
Counselling as a Transformational Tool in the Management of Anti-Social Behaviour among Educational Management Students in Rivers State University Aleru, Gladys Ejimole, Ph.D & Victoria Osaruchi Sam-Kalagbor, Ph.D	135-156
Impact of Leadership Styles on Teachers' Job Satisfaction in Obio/Akpor Secondary Schools Cynthia Obiageli Patricia Okere, Ph.D	157-173

Effective Teaching and Learning in Adoption of Artificial Intelligence Technology (AIT) in Educational Institutions Ekineh, Dorathy Richmond and Otuturu George Florence.	174-187
Livelihood Activities and Forest Resources Conservation in Obubra Local Government Area of Cross River State: An Assessment of Fuel Wood Extraction. Kujoh, Jude Ubuh, Asuquo, Edung Etim, Abang Thomas Agbor & David Ebri Eni	188-202
Impact of Problem-Solving and Cooperative Teaching Methods and Academic Performance of Students in Business Studies in Rivers State Destiny Woko Ph.D,	203-221
University Education in Nigeria: Access, Issues and Way Forward Nwadike, Ikechukwu Shedrack PhD & Oteyi, Joyce Vadukweenem Ph.D	222-234
Educating Principals for Effective Resources Management in Public Senior Secondary Schools in Rivers State. Dr. Ihua-Jonathan Nwovuhoma & Dr.Dike, Cordelia	235-254
Socio-Demographic Variables and School Adjustment of Secondary School Students in Obio/Akpor L.G.A of Rivers State Wike, Eberechi	255-276
Influence of Parental Monitoring and Supervision on Early Childhood Learning in Portharcourt Metropolis Chinenye Onunkwo & Agochukwu Ogechukwu Perpetual	277-306

**Artificial Intelligence (Ai) and Skills Development among Business Education
Students in Higher Educational Institutions in Delta State**

By

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Abstract

The study explored the role of artificial intelligence in enhancing the skills development of Business Education students in higher educational institutions for economic growth in Delta State. Two research questions guided the study. The study adopted a descriptive research design and was conducted in Delta State. The population comprised 115 Business Educators from five higher educational institutions offering Business Education programmes in the state. Data collection was carried out using a researcher-developed questionnaire. The questionnaire was validated by three experts. A pilot test was conducted on 20 Business Educators in Anambra State, and the application of Cronbach's Alpha yielded reliability coefficients of .81 for Cluster 1 and .78 for Cluster 2, with an overall reliability coefficient of .80. Mean values were used to answer the research questions, while standard deviation was employed to determine the homogeneity of responses. The finding of the study revealed that AI play significant roles in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State. Findings also revealed that artificial intelligence play significant roles in enhancing Office Technology and Management skills of Business Education students in higher educational institutions for economic growth in Delta State. Based on these findings, the researcher recommended that to improve students' entrepreneurship and office technology management skills in higher educational institutions, administrators of Business Education programme should integrate AI-based learning tools into their Business Education curriculum.

Keywords: Artificial Intelligence, Business Education, Economic Growth, Skills Development

Introduction

Business Education is an integral part of vocational training offered at the higher education level, aimed at preparing students for careers in the business sector. It delivers instruction designed to equip individuals with the necessary competencies to teach

business concepts, attitudes, skills, and knowledge. Obiete et al. (2015) described the Business Education programme as a distinctive academic discipline due to its capacity to empower graduates with skills that enable them to operate independently as self-employed individuals and employers of labour. Similarly, Ezenwafor and Onoakpunu (2017) asserted that Business Education focuses on equipping recipients for office careers through initial, refresher, and advanced training, thereby enhancing employability and career progression in office-related occupations. Moreover, the general Business Education programme offers students essential knowledge and competencies required for managing personal and business affairs, as well as effectively engaging with various business services. This means that Business Education contributes to economic growth of a nation.

Economic growth means an expansion in the size of a nation's economy over a given period. The scale of an economy is generally assessed through the total output of goods and services within it, commonly referred to as gross domestic product (GDP) (Reserve Bank of Australia, n.d.). The Central Bank of Nigeria (CBN) defines economic growth as a sustained and positive increase in the total goods and services produced within an economy over a specified period. This growth is typically measured by the gross domestic product (GDP), which reflects the overall value of all final goods and services produced in a country, adjusted for inflation to indicate real expansion (Sanni et al., 2019). The CBN highlighted the significance of economic growth in improving living standards and promoting a more equitable distribution of income among the population.

Research has shown that in order to successfully conduct business operations and support economic growth, Delta State Business Education students need to have improved entrepreneurial abilities, including as planning, marketing, processing and ICT proficiency (Uwazukwe & Okoro, 2023). Graduates could find it difficult to launch profitable businesses or adjust to the changing business environment without these abilities. By developing their entrepreneurial skills, they will be better equipped to spot business possibilities, carry out strategic plans, and use technology to boost their companies' sustainability and efficiency (Umeh & Iyoha, 2023). Furthermore, graduates

of business schools are highly sought after for office technology management skills, which are essential for contemporary corporate operations. In today's workplace, being able to use automated systems, handle office technology and manage digital data is crucial (Amesi & Babalola, 2022). Employers seek individuals with the ability to operate advanced office equipment and software to enhance efficiency and streamline administrative processes. Acquiring these skills ensures that graduates remain relevant and competitive in the ever-changing business world. Some authors suggest that artificial intelligence (AI) can play a significant role in bridging these skills gaps among Business Education students.

Artificial intelligence (AI) is the theory and development of computer systems capable of performing tasks that require human intelligence, such as teaching, visual perception, speech recognition, decision-making, and language translation (Pattam, 2021). It is fundamentally the science of designing machines that can think and act like humans. AI is considered an advanced aspect of information and communication technology (ICT), involving the use of hardware and software to replicate human capabilities. Bartneck et al. (2021) saw AI as the creation of intelligent systems designed to achieve specific objectives, demonstrating cognitive functions similar to those of humans. Additionally, AI is often understood as a machine learning process that aids humans in acquiring new insights. Chauke et al. (2024) defined AI as a scientific and engineering discipline focused on developing systems that exhibit traits commonly associated with human intelligence. Grewal (2014) defined AI as a branch of computer science dedicated to designing machines capable of learning from data, reasoning, problem-solving, understanding language, and observing their environment. Rayhan (2023) further viewed AI as systems that interact with their environment in ways that closely resemble human-like intelligence. This suggests that AI can help in enhancing entrepreneurship skills and office technology management skills.

Business Education students' entrepreneurial skills could be improved by artificial intelligence (AI), which offers sophisticated tools for idea generation, planning, forecasting, and progress assessment (Obigwe, 2024). Voronov et al. (2023) reported that AI technologies help students with competitor analysis, market research, and legal

knowledge, which makes it easier for them to create thorough business plans. Moreover, AI-driven simulations create virtual business environments where students can experiment with entrepreneurial strategies, receive real-time feedback, and refine their decision-making abilities, leading to a more profound understanding of business practices (Obschonka et al., 2020). This could also be replicated in the development of skills in Office technology and management.

AI can also enhance office technology and management skills among Business Education students. AI-powered tools can automate routine administrative tasks, freeing up time for more strategic and creative work (Al-Walai & Liang, 2021). Students can learn to use AI-driven software to manage databases, analyze data, and generate reports efficiently. Faiz and Gasmi (2024) stated that AI can help students develop skills in digital communication, collaboration, and project management, which are essential for modern office environments. By integrating AI into office technology courses, students can gain practical experience in using AI tools to streamline workflows, improve productivity, and enhance decision-making processes (Zhang et al., 2023). Obigwe (2024) opined that AI prepares them to work effectively in contemporary business settings where technology plays a central role. However, these views have not been empirically proven to be the case among Business Education students in higher educational institutions in Anambra State. It is against this background that the researcher sought to determine the role of artificial intelligence in enhancing skills development of Business Education students in higher educational institutions for economic growth in Delta State.

Statement of the Problem

The high rate of poverty and unemployment among youths in Delta State remains a critical socio-economic challenge, contributing to widespread hardship and economic instability. Despite various government interventions and initiatives aimed at job creation and poverty alleviation, a significant proportion of young people still struggle to secure sustainable employment. The persistent lack of job opportunities has exacerbated the prevalence of criminal activities in the state, as many unemployed

youths resort to illicit means of survival. The increasing incidents of cybercrime, armed robbery, and other social vices are linked to the economic hardships faced by the youth, further undermining the state's development efforts.

Several scholars have sought solutions to the issue of unemployment and poverty in Delta State, with studies highlighting skill gaps among Business Education graduates as a major constraint to employability and entrepreneurship (Nte et al., 2024; Edeh & Joseph, 2018). Nte et al. (2024) and Anthony (2020) reported that many graduates lack the requisite competencies in digital technologies, entrepreneurship, and office technology management, limiting their ability to thrive in the evolving business environment. However, despite these findings and various skill development initiatives, the problem persists. The researcher, therefore, wonders whether the integration of Artificial Intelligence in Business Education curriculum could enhance the skill development. Hence, this study sought to explore role of artificial intelligence in enhancing skills development of Business Education students in higher educational institutions in for economic growth in Delta State.

Purpose of the Study

The main purpose of the study was to find out whether the integration of AI could enhance skills development among Business Education students in higher educational institutions for economic growth in Delta State. Specifically the study sought to establish::

1. Artificial intelligence and enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State.
2. Artificial intelligence and enhancing office technology and management skills of Business Education students in higher educational institutions for economic growth in Delta State.

Research Questions

The following research questions guided the study:

1. What is the role of artificial intelligence in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State?
2. What is the role of artificial intelligence in enhancing office technology and management skills of Business Education students in higher educational institutions for economic growth in Delta State?

Methodology

The study adopted a descriptive survey research design and was conducted in Delta State. The population comprised 115 Business Educators from five higher educational institutions offering Business Education programmes in the state. The institutions included; Delta State University, Abraka (36 lecturers), Dennis Osadebe University, Asaba (32 lecturers), University of Delta, Agbor (29 lecturers), Federal College of Education (Technical), Asaba (26 lecturers), and College of Education, Warri. (28 lecturers). The entire population was studied due to its manageable size, hence there was no sampling. Data collection was carried out using a researcher-developed questionnaire titled “*Questionnaire on Artificial Intelligence for Skills Development in Business Education (QAISDBE)*.” The instrument consisted of 20 items divided into two clusters: Cluster 1 contained 10 items on the role of AI in enhancing the entrepreneurship skill development of Business Education students in higher educational institutions, while Cluster 2 contained 10 items on the role of AI in enhancing the office technology and management skills of Business Education students in higher educational institutions. The questionnaire was structured on a 4-point rating scale: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). Three experts from the School of Business Education, Federal College of Education (Technical), Asaba, validated the instrument. A pilot test was conducted on 20 Business Educators in Anambra State, and the application of Cronbach’s Alpha yielded reliability coefficients of .81 for Cluster 1 and .78 for Cluster 2, with an overall reliability coefficient of .80. The researcher with four research assistants administered the questionnaire, allowing

respondents' sufficient time for completion. For those unable to complete the questionnaire immediately, appointments were scheduled for retrieval. Out of 115 copies distributed, 107 were returned in good condition and used for data analysis. Mean values were used to answer the research questions, while standard deviation was employed to determine the homogeneity of responses. Items with a mean rating of 2.50 and above were considered "Agreed," while those below 2.50 were considered "Disagreed."

Results

Research Question 1

What is the role of artificial intelligence in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State?

Table 1: Respondents' Mean Score on the Role of Artificial Intelligence in Enhancing Entrepreneurship Skills of Business Education Students in Higher educational institutions in Anambra State (N=107)

S/N	Item Statements	Mean	SD	Remark
The integration of AI could:				
1	Enhances business decision-making skills among Business Education students.	3.45	0.72	Agreed
2	Improves financial management skills of Business Education students.	3.32	0.88	Agreed
3	Facilitates Business Education students' abilities to identify business opportunity.	3.48	0.65	Agreed
4	Promotes Business Education students digital marketing skills.	3.41	0.75	Agreed

5	Enhances Business Education students' data-driven business analysis skills.	3.50	0.73	Agreed
6	Fosters Business Education students abilities to create innovation in product development.	3.38	0.79	Agreed
7	Enhances customer relationship management skills of Business Education students.	3.47	0.64	Agreed
8	Improves Business Education student supply chain management skills	3.29	0.85	Agreed
9	Improves business risk assessment skills of Business Education students.	3.36	0.77	Agreed
10	Improves Business Education students' skills in automating business operations.	3.42	0.91	Agreed
Grand Mean		3.41		Agreed

Data in Table 1 revealed that artificial intelligence play significant roles in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State with mean ratings ranging between 3.29 and 3.50. The standard deviation scores ranging between 0.64 and 0.91 revealed that the respondents' opinions were close. The grand mean of 3.41 revealed that artificial intelligence play significant roles in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State.

Research Question 2

What is the role of artificial intelligence in enhancing office technology and management skills of Business Education students in higher educational institutions for economic growth in Delta State?

Table 2: Respondents' Mean Score on the Role of Artificial Intelligence in Enhancing Office Technology and Management Skills of Business Education Students in Higher educational institutions in Anambra State.
(N=107)

S/N	Item Statements	Mean	SD	Remark
The integration of AI could:				
11	Improve document processing skills of Business Education students.	3.52	0.73	Agreed
12	Enhance Business Education students' proficiency in digital communication.	3.45	0.93	Agreed
13	Support Business Education students in automating administrative tasks.	3.49	0.62	Agreed
14	Aid Business Education students in data management and analysis.	3.54	0.65	Agreed
15	Strengthen Business Education students' ability to manage virtual meetings.	3.42	0.78	Agreed
16	Facilitate effective scheduling and time management for Business Education students.	3.40	0.87	Agreed
17	Improve organisation and management of office records by Business Education students.	3.51	0.71	Agreed
18	Assist Business Education students in handling customer relations and support services.	3.39	0.69	Agreed
19	Enable Business Education students to improve workplace collaboration.	3.46	0.82	Agreed
20	Provide Business Education students with advanced cybersecurity awareness.	3.44	0.70	Agreed
Grand Mean		3.46		Agreed

Data in Table 2 revealed that artificial intelligence play significant roles in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State with mean ratings ranging between 3.39 and 3.52. The standard deviation scores ranging between 0.62 and 0.93 shows that the respondents' opinions were close. The grand mean of 3.41 revealed that artificial intelligence play significant roles in enhancing entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State.

Discussion of Findings

The findings of this study revealed that artificial intelligence (AI) plays a significant role in enhancing the entrepreneurship skills of Business Education students in higher educational institutions for economic growth in Delta State. This aligns with the increasing recognition of AI as a transformative tool in modern education and business practice. One possible reason for this finding is the ability of AI to provide data-driven insights, automate repetitive tasks, and facilitate innovative problem-solving, all of which are essential in entrepreneurship. Additionally, AI-powered platforms such as intelligent business analytics, automated financial management tools, and digital marketing applications enable Business Education students to develop practical skills relevant to contemporary business environments. This finding is in agreement with Obigwe (2024) who revealed that AI-driven entrepreneurship education enhances students' decision-making, risk assessment, and business strategy development. In the same vein, Voronov et al. (2023) asserted that AI-powered business simulations help students acquire hands-on entrepreneurial experience, improving their capacity to manage startups efficiently. Furthermore, Brunner (2023) reported that AI fosters innovation and creativity among students, equipping them with the skills needed to navigate complex business landscapes.

The study also found that AI significantly enhances office technology and management skills of Business Education students in higher educational institutions for economic growth in Delta State in Delta State. This is likely due to AI's capacity to automate administrative processes, streamline workflow management, and improve organisational efficiency. AI-powered tools such as virtual assistants, document

automation software, and intelligent scheduling systems help students develop competencies in modern office operations. Additionally, AI enhances communication skills through advanced voice recognition systems, chatbots, and digital collaboration tools, making Business Education students more adaptable to evolving workplace demands. These findings are in consonance with Faiz and Gasmi (2024) who noted that AI-based office management systems improve students' ability to handle complex administrative tasks efficiently. Al-Walai & Liang (2021) opined that AI-driven training in office technology equips students with advanced skills in data processing, virtual teamwork, and cybersecurity management.

Conclusion

Based on the findings of the study, the researcher concludes that artificial intelligence plays significant roles in enhancing skills development of Business Education students in higher educational institutions for economic growth in Delta State. The integration of AI in Business Education would enhance entrepreneurship skills and office technology and management skills of Business Education students in higher educational institutions for economic growth in Delta State. It is therefore imperative that measures are put in place to improve the adoption of AI in the Business Education programme in higher educational institutions.

Recommendations

The following recommendations were made based on the findings of the study:

1. Higher educational institutions in Delta State should integrate artificial intelligence-driven entrepreneurship modules into the Business Education curriculum to equip students with innovative thinking, business modeling, and data-driven decision-making skills essential for economic growth in a digital economy.
2. Institutions should provide targeted training and hands-on workshops on AI-based office applications and intelligent management systems to enhance the practical competencies of Business Education students in Office Technology and

Management, thereby fostering a workforce aligned with modern digital workplace demands.

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Artificial Intelligence (Ai)-Driven School Infrastructure Management: A Paradigm Shift in Nigerian Universities

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Abstract

The paper is a discourse of conceptual reviews relevant for the 21st century which encompassed the following areas: conceptualization of artificial intelligence, application of artificial intelligence in school infrastructure management, artificial intelligence powered tools utilized in school infrastructure management and the challenges in implementing artificial intelligence in school infrastructure management in Nigerian universities. Reviewed literature depicted that application of artificial intelligence in school infrastructure management enhances energy management, prediction maintenance, security and safety, space utilization, environmental monitoring, and cost management. The study identified smart spaces, planon, Schneider Electric's Ecostruxure as some of the artificial intelligence powered tools utilized in school infrastructure management. Also identified as challenges of implementing artificial intelligence in school infrastructure management in Nigerian universities are irregular power supply, high implementation costs, data privacy and security concerns, technical infrastructure limitations, lack of expertise and skilled personnel, resistance to change and maintenance and upkeep. It was therefore concluded that by leveraging AI technologies, schools can create a better learning environment, optimize resource usage, and ensure the well-being of their students and staff. Suggestions made among others was that schools can adopt a phased approach to AI implementation by starting with small pilot programmes, schools can test AI systems in specific areas (such as energy management or predictive maintenance) before committing to a full-scale deployment and that schools can seek partnerships with AI technology vendors that offer specialized services for educational institutions. Some vendors may provide subsidized rates, training, or consultation to help schools integrate AI systems effectively.

Keywords: Artificial Intelligence-driven School Infrastructure Management, Paradigm Shift, Nigerian Universities

Introduction

Artificial intelligence (AI) has become an integral part of various industries, transforming traditional practices into more efficient and effective operations. In the realm of education, AI is not just revolutionizing teaching and learning but also the management of school facilities. Integrating artificial intelligence (AI) into school infrastructure management will herald a transformative era for higher education, especially in Nigerian universities and enable universities to enhance efficiency in various ways. With rising enrollment, aging facilities, and limited resources, universities face significant challenges in maintaining functional and sustainable infrastructure. According to Edwards and Baggott (2021) AI offers innovative solutions to these issues by leveraging data-driven insights, predictive analytics, and automation to optimize infrastructure management processes.

Lee, Park, and Choi (2019) averred that predictive maintenance, powered by AI, helps identify potential failures in infrastructure, ensuring timely repairs and minimizing costs associated with emergency fixes. For example, IoT devices equipped with AI capabilities can monitor the condition of critical systems like water, energy, and heating, ventilation, and air conditioning (HVAC) networks, providing actionable data for administrators (Nillson, 2010). Moreover, AI tools assist in resource optimization, improving space utilization in classrooms to cost savings and environmental sustainability (Popenici & Kerr, 2017).

McCarthy (2007) opined that the benefits of AI extend to creating safer and more inclusive environments. Advanced security systems leveraging AI-based surveillance and access control improve campus safety. Additionally, AI applications tailored to educational environment can enhance accessibility for students with disabilities, ensuring equitable access to learning facilities (Popenici & Kerr, 2017). These technologies align with global sustainability and inclusivity goals, which are critical in modern education. By embracing AI technologies, Nigerian universities can modernize their infrastructure management practices, reduce inefficiencies, and improve their standing in global education rankings. Collaboration among stakeholders, including

policymakers, technology providers, and academic institutions, will be essential in overcoming implementation challenges and maximizing AI's impact on higher education (Russell & Norvig, 2021).

However, implementing AI in Nigerian universities comes with challenges, including limited technological infrastructure, skill gaps among personnel, and ethical considerations like data privacy and algorithmic bias (Nilsson, 2010). Despite these obstacles, the long-term benefits of AI-adoption such as improved operational efficiency, cost savings, and enhanced student experiences highlight its potential as a transformative tool in university management. This topic explores how AI can enhance school infrastructure management, ensuring a safer, more efficient, and cost-effective environment for students and staff.

Concept of Artificial Intelligence (AI)

Artificial intelligence is the science and engineering of making intelligent machines, especially intelligent computer programmes. European Parliament (2020) stated that Artificial intelligence refers to systems that can perform tasks that typically require human intelligence, such as visual perception, speech recognition, decision-making, and language translation. Russell and Norvig (2021) on the other hand defined artificial intelligence as a field of computer science dedicated to developing systems that can learn, adapt, and solve problems autonomously.

In the words of Nilsson (2010) artificial intelligence is the branch of computer science that aims to create systems capable of intelligent behaviour, including reasonable, learning, and self-improvement while artificial integration is the simulation of human intelligence in machines programmed to think like humans and mimic their actions (Techopedia,2023).

Concept of School Infrastructure Management

School infrastructure refer to all facilities which are used in educating and motivating teachers and students to teach and learn effectively such as, classrooms, classroom furniture, laboratories, libraries, technical workshops, assembly halls, recreational space, botanical and zoological gadgets, farm land, projectors, chalkboards, whiteboards,

interactive or smart boards, information and communication technology (ICT) gadgets, staff offices, toilet facilities, instructional facilities, educational equipment etcetera. They consist of the basic systems and structures a viable school need to function effectively and to fulfil the purpose for which it was established. They are used in the teaching-learning process to implement the curriculum so effectively as to achieve educational objectives. Obanya (2014), viewed school infrastructure as didactic materials such as books, charts and computers which are supposed to make teaching and learning possible.

The management of physical resources cover the monitoring and supervision, maintenance and ensuring safety of the resources to achieve the goals and objectives of the universities.

AI-driven Infrastructure Management in Nigeria: A Paradigm Shift

The integration of Artificial Intelligence (AI) into school infrastructure management represents a paradigm shift in how Nigerian universities plan, operate, and maintain their physical and digital environments. Traditionally, infrastructure management in Nigerian higher institutions has been largely manual, reactive, and dependent on human judgement and bureaucratic processes. This approach often results in delayed maintenance, resource mismanagement, high operational costs, and inadequate learning environments.

However, the adoption of AI-driven systems marks a transition toward a proactive, data-informed, and automated model of infrastructure governance. AI technologies such as predictive maintenance, smart energy management, automated security systems, and intelligent campus planning now offer the capacity to anticipate faults, optimize resource use, and enhance service delivery. This shift is not merely technological but also strategic as it redefines the roles of facility managers, changes administrative decision-making processes, and promotes sustainability and accountability.

Moreover, this transformation aligns Nigerian universities with global best practices in smart campus development, fostering improved operational efficiency, safety, and student experience. It also supports broader national goals in digital transformation and

innovation in education. In essence, AI-driven infrastructure management signals a move from manual and fragmented systems to intelligent, interconnected, and efficient infrastructure ecosystems, thus representing a true paradigm shift in the management of educational institutions in Nigeria.

The Application of Artificial Intelligence (AI) in School Infrastructure Management

Application of AI technology in school infrastructure management plays an important role in enhancing the following:

Energy Management

One of the primary applications of AI in school infrastructure management is in optimizing energy usage. Russell and Norvig (2021) opined that AI systems can analyze patterns of energy consumption and identify areas where energy is being wasted. According to Techopedia (2023) integrating AI smart meters and sensors, schools can automate lighting, heating, and cooling systems to operate only when necessary. This not only reduces energy costs but also minimizes the school's carbon footprint.

Predictive Maintenance

AI-powered predictive maintenance systems can monitor the condition of school facilities and equipment in real-time. By analyzing data from sensors embedded in various systems, AI can predict when maintenance is needed, preventing unexpected breakdowns, and prolonging the lifespan of equipment (McCarthy, 2007). This proactive approach ensures that repairs are made before problems escalate, reducing downtime and maintenance costs.

Security and Safety

Enhancing security is another critical area where AI can make a significant impact. AI-driven surveillance systems can detect unusual activities and potential threats in real-time, alerting school authorities immediately. In the view of Luckin, Holmes, Griffiths and Forcier (2016) facial recognition technology can help in monitoring and controlling access to school premises, ensuring that only authorized individuals are allowed entry.

Additionally, AI can be integrated with emergency response systems to coordinate swift actions during critical situations, such as fires or natural disasters.

Space Utilization

Efficient use of space is crucial in school infrastructure management. AI can analyze usage patterns of classrooms, labs, and other facilities to optimize scheduling and ensure that spaces are used effectively. This can help in planning future expansions or reconfigurations of the school layout based on actual usage data, leading to better resource allocation (Zhou, Liu, & Zhang, 2021).

Environmental Monitoring

Maintaining a healthy environment within school premises is vital for the well-being of students and staff. AI can monitor air quality, temperature, humidity, and other environmental factors in real-time. By providing insights into these parameters, AI systems can help schools maintain optimal conditions, thereby enhancing comfort and reducing health risks (Carther & Phillips, 2015).

Cost Management

AI can also play a significant role in managing costs associated with school infrastructure operations. By providing detailed insights and forecasts on various operational aspects, AI helps in budgeting and financial planning. Schools can identify areas where costs can be cut without compromising quality or safety, ensuring a more sustainable financial management approach (Hou, Deu, Wong, 2018).

Artificial Intelligence Powered Tools Utilized in School Infrastructure Management

AI technology can be utilized in school infrastructure management across various domains. In the context of school plant management purposes, various types of AI powered tools can be installed to advance environmental monitoring, space utilization, security, and safety and so on. Here are some types of AI powered tools that can be utilized in school plant management in Nigerian universities.

Smart Spaces: Smart spaces in school infrastructure management according to Zhou, Liu, and Zhang (2021) is referred to technology-enhanced environments within schools where interconnected devices and systems use real-time data to improve the efficiency, safety, and comfort of the physical space. In school infrastructure management, smart spaces play a key role in creating intelligent, adaptable, and responsive environments that enhance both operational efficiency and the overall educational experience. Smart spaces can monitor, and control lighting, heating, ventilation, and air conditioning (HVAC) systems based on occupancy and usage patterns, leading to reduced energy for example, lights can automatically turn off in unoccupied classroom or adjust brightness based on natural light availability. By utilizing smart space technology, schools can achieve significant benefits in operational efficiency, safety, and sustainability (Vande-Richter, Martin, Bond & Gouverneur, 2019). Smart spaces create a more adaptive and responsive environment that supports school administrators, maintenance staff, teachers, and students, ultimately leading to a more effective and enjoyable educational experience.

Planon: Planon is an integrated workplace management system (IWMS) designed to streamline facilities and asset management for organizations, including educational institutions. In school infrastructure management, Planon offers a range of tools that help manage space, maintain assets, improve safety, and optimize operational processes (Van de Voort, Jensen, & Olsen, 2022). It enables schools to manage both preventive and corrective maintenance of facilities and equipment. With Planon, staff can schedule routine maintenance, create work orders, track issue resolutions, and assign tasks to specific team members, ensuring timely repairs and reducing equipment downtime. Smith and Anderson (2020) stated that planon assists in planning and executing capital projects such as renovations, expansions, and new construction. The authors stated further that schools can use Planon's budgeting, forecasting, and project management tools to plan facility upgrades, track expenses, monitor progress, and ensure timely completion of projects. Planon helps schools achieve greater efficiency, safety, and cost-effectiveness in facility management. With Planon, schools can create a well-

maintained, complaint, and resource-efficient environment that supports the academic mission and enhances the experience for students, staff, and faculty.

Schneider Electric's EcoStruxure: Schneider Electric's EcoStruxure is an IoT-enabled, open, and interoperable system architecture designed to improve efficiency, safety, and sustainability in facility management. In school infrastructure management EcoStruxure provides tools for real-time monitoring, automation, and data analysis, enabling schools to optimize operations, reduce costs, and create a healthier environment (McCarthy, 2007). EcoStruxure helps schools monitor energy consumption in real-time providing insights into usage patterns and identifying areas for improvement. Through automated controls and energy-efficient settings, schools can reduce unnecessary consumption, optimize HVAC and lighting systems, and lower utility costs. Schneider Electric's EcoStruxure enables schools to create smarter, more efficient, and sustainable facilities by automating and optimizing key building functions. Through its comprehensive and integrated approach, EcoStruxure enhances operational efficiency, reduces energy consumption, improves air quality, strengthens safety, and supports schools in achieving their sustainability goals, ultimately creating a healthier and more conducive environment for learning (Nilsson, 2010).

Hippo CMMS (Computerized Maintenance Management System): According to Kwon and Kim (2020) Hippo CMMS is a cloud-based maintenance management software that helps schools streamline maintenance processes, organize work orders, and manage assets. In school infrastructure management, Hippo CMMS provides essential tools for keeping facilities safe, operational, and well-maintained. Hippo CMMS simplifies work order management, allowing maintenance staff to create, assign, and track work orders from start to finish. Staff can submit work requests, monitor progress, and set priorities, ensuring that maintenance issues are addressed promptly and minimizing disruptions to school activities (Smith & Anderson, 2020). Hippo CMMS streamlines maintenance management in schools by organizing work orders, scheduling preventive maintenance, managing assets, and providing essential data for informed decision-making (Hou, Deu, & Wang, 2018). By using Hippo CMMS, schools can improve maintenance efficiency,

reduce downtime, control costs, and maintain a safe, well-functioning environment that supports learning and well-being.

Siemens' Desigo: Siemens' Desigo is a building management system (BMS) designed to optimize energy usage, comfort, security, and operational efficiency within facilities. In school infrastructure management, Desigo provides tools for controlling and automating various building systems, and efficient learning environments. Desigo consolidates control of HVAC, lighting, fire safety, and security systems into a single platform. This integration allows facility managers to monitor and adjust all building functions from one interface, simplifying operations and improving efficiency (Blaabjerg, Kjaer, & Li, 2021). It also supports fire safety by connecting fire alarms, emergency lighting, and evacuation systems. In the event of a fire or emergency, Desigo can trigger alarms, guide occupants to safety, and coordinate with emergency responders, improving response times and reducing risks. Siemens' Desigo enhances school infrastructure management by providing an integrated, automated, and data-driven approach to facility management. Through its focus on energy efficiency, safety, air quality, and operational simplicity, Desigo supports schools in creating optimized, sustainable, and comfortable environments that contribute to effective learning and overall student and staff well-being (Zhou, Liu, & Zhang, 2021).

EnergyCAP: Edwards and Baggott (2021) defined EnergyCAP as an energy management software designed to help organizations, including schools, monitor and reduce energy consumption and costs. In school infrastructure management, EnergyCAP provides valuable tools for tracking utility usage, identifying inefficiencies, and supporting sustainability efforts. EnergyCAP can break down utility costs by building, department, or cost center, helping schools allocate energy expenses accurately. It also aids in budgeting by providing insights into historical usage trends, allowing schools to forecast future energy costs and plan their budgets more effectively (Luckin, Holmes, Griffiths, & Forcier, 2016). With EnergyCAP, schools can benchmark their energy performance against other buildings within the district or against industry standards. This helps administrators set realistic energy reduction goals, compare performance

across facilities, and prioritize efficiency improvements. Luckin, Holmes, Griffiths, & Forcier (2016) further stated that EnergyCAP empowers schools to gain control over their energy usage use, reduce costs, and meet sustainability goals. By providing actionable insights into energy consumption, EnergyCAP enables school administrators to create more efficient environmentally, responsible, and budget-friendly facilities, ultimately supporting a sustainable and comfortable learning environment.

Challenges in Implementing Artificial Intelligence in School Infrastructure Management in Nigerian Universities

While the integration of artificial intelligence (AI) in school infrastructure management offers many benefits, it also presents several challenges. Schools aiming to leverage AI must address these obstacles to ensure successful implementation. Some key challenges in adopting AI for managing school infrastructure and operations according to (Popenici & Kerr, 2017) include:

Irregular Power Supply

Irregular Power Supply remains a major obstacle to the effective implementation of Artificial Intelligence (AI) in school infrastructure management across Nigerians universities. AI technologies depend heavily on consistent electricity to operate servers, sensors, IoT devices, and automated systems. However, frequent power outages and voltage fluctuations disrupt these operations, leading to system failures, data loss, and reduced efficiency. Universities are often forced to rely on costly alternatives like diesel generators, which are not sustainable in the long term. This challenge not only limits the functionality of AI-driven systems but also discourages wider adoption due to increased maintenance and operational costs. Without addressing the issue of unstable electricity, the benefits of AI in infrastructure planning energy management, and campus automation cannot be fully realized.

High Implementation Costs

One of the biggest barriers to adopting AI in school infrastructure management is the initial cost of implementation. Setting up AI-powered systems, such as predictive maintenance, environmental monitoring, and security, requires significant investment in both software and hardware (e.g., sensors, smart meters). For many schools, especially those with tight budgets, the cost of implementing AI can be prohibitive, leading to slower adoption rates (Nilsson, 2010).

Data Privacy and Security Concerns

AI systems often rely on extensive data collection to perform effectively. In schools, data privacy is especially sensitive due to student information and security needs. Facial recognition for security, environmental monitoring, and usage analytics can raise concerns about how data is collected, stored, and used. McCarthy (2007) opined that adhering to strict privacy regulations, such as family educational rights and privacy act (FERPA) and ensuring compliance can be a complex process for schools implementing AI.

Technical Infrastructure Limitations

Schools often lack the technical infrastructure required to support AI applications. Reliable internet connectivity, advanced systems are often necessary for AI to function efficiently. For schools in rural or underfunded areas, outdated infrastructure may limit their ability to adopt AI technologies effectively, making the benefits of AI inaccessible to many institutions.

Lack of Expertise and Skilled Personnel

Implementing AI systems in school infrastructure management requires expertise in data science, AI algorithms, and system maintenance. Schools may not have the budget or resources to employ in-house AI experts or provide adequate training to existing staff. This lack of expertise can hinder schools' ability to implement and manage AI solutions effectively, often necessitating third-party involvement, which can increase costs (Russell & Norvig, 2020).

Resistance to Change

Introducing AI technologies often involves significant changes to established processes, which may be met with resistance from staff and administrators accustomed to traditional methods. The transition to AI-driven systems may require re-training and adaptation, and resistance to change can slow down or even prevent successful implementation.

Maintenance and Upkeep

AI systems require regular maintenance to perform optimally. Predictive maintenance systems, environmental sensors, and security systems may need ongoing updates, calibration, and troubleshooting. Schools may lack the resources or personnel to perform these tasks, which could lead to system inefficiencies and potential malfunctions over time.

Conclusion

The integration of AI in school infrastructure management presents numerous opportunities for enhancing the efficiency, safety, and sustainability of school operations. By leveraging AI technologies, schools can create a better learning environment, optimize resource usage, and ensure the well-being of their students and staff. As AI continues to evolve, its potential applications in school infrastructure management are likely to expand, promising even greater advancements in the future.

Suggestions

1. Universities should adopt sustainable energy sources such as solar power sources such as solar power with battery storage systems to ensure consistent electricity for critical AI infrastructure. This reduces reliance on unreliable national grid power and costly diesel generators.
2. Schools can adopt a phased approach to AI implementation by starting with small pilot programmes, schools can test AI systems in specific areas (such as

energy management or predictive maintenance) before committing to a full-scale deployment.

3. Schools can seek partnerships with AI technology vendors that offer specialized services for educational institutions. Some vendors may provide subsidized rates, training, or consultation to help schools integrate AI systems effectively.
4. To address privacy concerns, schools should establish robust data privacy and security protocols in line with FERPA and other regulations. This includes adopting secure data storage solutions, anonymizing sensitive information, and conducting regular audits to ensure compliance.
5. Schools can prioritize the upgrade of essential technical infrastructure, such as high-speed internet and secure servers, to support AI applications. Collaborating with local governments, educational agencies, or private organizations can help schools access affordable internet solutions and necessary hardware upgrades.
6. To address resistance to change, schools can implement change management strategies that involve staff, students, and parents in the AI adoption process. Communication campaigns, workshops, and Q&A sessions can educate stakeholders about the benefits of AI initiatives and offering incentives can also help foster a positive attitude toward new technologies.
7. To ensure that AI systems are maintained effectively, schools can establish contracts with AI vendors or third-party providers that offer regular monitoring and maintenance services. These contracts can include routine system checks, software updates, and troubleshooting support, helping schools keep AI systems running efficiently without burdening existing staff.

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Artificial Intelligence Support System; A Tool for Management of Higher Education in Nigeria

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Abstract

The use of Artificial Intelligence (AI) in higher education management could greatly improve the way decisions are made, which would eventually make schools more sustainable and effective. The old way of handling huge amounts of data from different places by hand isn't working anymore and can't be kept up. To really work toward the sustainable development goals, colleges and universities need to use AI technologies like AI-driven decision support systems to help them make smart choices. This will make operations run more smoothly and help students do better. In this essay, we look at AI-driven decision support systems for long-term higher education management, focusing on the pros and cons of using them. The AT-driven decision support systems use artificial intelligence to look at the huge amounts of data. This helps institutions make better decisions about things like managing admissions, predicting student outcomes, allocating resources, and making long-term plans. In the end, this makes higher education more sustainable. This possibility lets the systems deal with problems we're facing now and make way for progress. The last part of the paper gives higher education schools ideas on how to use the benefits of AI to help achieve sustainable development, while also taking into account the difficulties and moral issues that need to be dealt with in order for it to work well..

Keywords: *Artificial Intelligent, Support System, Management, Higher Education*

INTRODUCTION

People think of educational management as an important part of achieving lasting growth. For sustainable growth to happen, resources must be managed in a way that makes sure they will be available for future generations. One of the sustainable development goals (SDGs) is to improve the level of education. To do this, decision support systems based on artificial intelligence (AI) need to be used in many parts of the education process. Artificial intelligence (AI) technologies like adaptive learning platforms, intelligent tutoring systems, and personalized content recommendations are used by AI-driven decision support systems in education to help people make better decisions and help students in schools Aballa, Akintayo, & Eneh, 2024. These systems use methods like data analysis, predictive modeling, and machine learning to make the best decisions about which students to accept, how to use resources, how to plan strategically, and how to create lessons. Khan and Mahade, 2022.

An area of computer science called artificial intelligence (AI) is the study of creating AI algorithms and programming language (ML) that are based on how the human brain makes decisions. These algorithms and ML can learn from huge amounts of data and get better at classifying or predicting things over time. Rouse (1924). Through the use of many technologies, it imitates human abilities so that it can feel, understand, learn, and act as intelligently as humans. Kanade (1922). He went on to say that AI systems can understand their surroundings, recognize objects, copy patterns, and learn from past mistakes. This lets them help make decisions and solve difficult problems, which makes their use successful for long-term growth in many fields, such as education.

The United Nations adopted the Sustainable Development Goals (SDGs) in 2015 as a set of 17 global goals to make the world a better place by 2030. The year 2023 saw Avurakoghene and Oredein. They are meant to deal with important problems that affect people all over the world, like poverty and inequality, economic uncertainty and inequality, climate change and environmental damage, and human rights and social justice. Sustainability is very important in education, and it includes, but isn't limited to, methods that make sure resources are used well and for a long time, as well as

environmental concerns. UNESCO (2024) says that education for sustainable development (ESD) is a process of learning that lasts a person's whole life and gives people of all ages the skills, information, and ideals they need to make smart choices and act to change society and care for the world. Sustainable learning is an educational system that is made to help students of all ages, change with the times in social, environmental, and economic ways, and have less of an effect on the environment. Dashahrani, 2023. To make the SDGs a reality, AI is very important. He does this by making sustainable learning more efficient. When education managers use AI, they can use a decision support system to find and fix slow processes and give workers advice and training to make the school more efficient and grow in a way that lasts.

Nigerian higher education institutions (HEIs) traditionally use a lot of paper for the paperwork needed to enroll students. Each document is often copied and sent to more than one office, sometimes up to three times. This practice cuts down a lot of trees and costs a lot of money when the number of kids involved is thousands across the country. Nigerian higher education institutions waste time and resources on inefficient resource allocation, waste, and duplication, as well as not having enough AI-decision support systems or manual registration processes. This makes it harder for students to succeed and for institutions to work well. A more fact-based way of making decisions is needed. One way to do this would be to use AI-driven DSS to combine data from different silos and use predictive analytics, machine learning, and data visualization to give insights faster and more efficiently. This would help these institutions make a real difference in the long-term management of higher education and boost their reputations.

AI-driven decision support tools are used in many school tasks, Sarjiyus, Goni, and Jamilu (2019) created a smart method to help people make decisions about getting into and being placed in colleges in Nigeria. Through their research, they learned that the system picked the most qualified applicants and put qualified applicants who didn't meet the standards for a certain school into other classes that were open. Neelakrishnan (2024) created a decision support system for rethinking corporate data management with AI-powered automation. This was done to show how AI technologies can improve the

quality of data, the speed with which it is processed, and the ability to make decisions. When AI-driven technology was put into place, the results showed that processing speed and data quality much improved. Some researchers, including Widodo, Korwa, and Nuraini (2023), made a system to find and use plans for adding AI to systems that rate the work of college professors. They looked at ways to make the process of evaluating teachers more effective, fair, and accurate, as well as ways to give lecturers useful comments. The results showed that adding artificial intelligence to the method for judging the work of lecturers did make the evaluations more accurate.

Overview of AI Applications in Education

The use of AI in education includes many different tools and technologies that are changing the field of education. Some examples of these kinds of apps are personalized learning, smart teaching platforms, ChatGPT, robots, automatic knowledge review, virtual reality, and extended reality. James (2024); Mithu and Ajith (2024). They went on to say that AT adjusts to each student's pace and needs, making the learning experience more personalized, and that smart teaching tools give each student specific feedback and help. It takes care of managerial tasks like organizing, marking, and allocating resources automatically, so teachers can spend more time working with students and students can focus on their schoolwork instead of waiting around for long registration processes. Virtual helpers that are driven by AI help students study and learn better when they're not in class. Saurav (2024) said that AI systems can keep track of students' progress and find those who are about to fall behind, so teachers can help them right away. AI-powered translation tools help students who don't speak English as their first language understand the lessons and also help students with special needs, making the classroom more welcoming for everyone. Artificial intelligence (AI) in education aims to improve efficiency, inclusivity, and impact by giving students with special needs more help, automating administrative tasks, and making it easier to plan resources. It does this by predicting learning outcomes, giving students with individualized learning opportunities, and supporting students with special needs. Using AI in education also deals with important issues like making decisions based on data, moral dilemmas, and

the possibility of future progress in combining virtual reality, adaptive learning systems, and giving everyone access to high-quality education, which will eventually change the way people learn. Pranav, Nausheen, and Surinder, 2024. Michal (2024), on the other hand, pointed out that using AT in higher education comes with problems, such as worries about bias in AI decisions, data privacy, and monitoring. Nargis and Kumari (2024) also said that schools need to build strong structures that can support AI acceptance and teach teachers, students, and office staff how to use AI-powered tools effectively. According to Gulyamov (2024), some teaching and management tasks could be automated, which could mean the loss of jobs. As a result, relying too much on AI could make people less social and less able to think critically. For AI systems to work, they need to be reliable, safe, and able to connect to other systems.

Sustainable Higher Education Management (SHEM)

What is sustainable higher education management (SHEM)? It's when higher education institutions use sustainable development concepts and practices in their management and daily operations Paola, Daiane, & Bruno, 2021; Muentes, Alcivar, Lean, & Chata, 2023. Taking part in:

Environmental sustainability means lowering the institution's effect on the environment by using less energy, managing trash, and using resources in a way that doesn't harm them. Promoting social justice, fairness, and inclusion within the organization and its society is what social sustainability is all about. Making sure the economy is stable financially is part of economic survival. This also means backing economic growth and progress.

Sustainable higher education management is important because it can help students prepare for a sustainable future by giving them the information, ideals, and skills they need to deal with global sustainability problems. Katherine, in 2020. It is very important for reducing the institution's impact on the earth and encouraging eco-friendly actions. The year 2023 saw Muentes, Alcivar, Leon, and Chata. SHEM also improves the institution's image and attraction by showing its commitment to sustainability, which

brings in students, staff, and partners. It also helps the community grow by promoting social justice, economic growth, and participation in the community. It also supports long-term innovation, business, and job creation, and it keeps the organization alive by promoting financial stability and making sure it stays relevant and has an effect. The United Nations' Development Goals (SDGs) can be reached with the help of SHEM's work on world problems.

One big problem is how to include ecology in current lessons. Many institutions have trouble combining sustainability with more standard subjects, usually because their buildings are out of date or they don't have enough experts. Financial problems are a big problem, according to Abdulsalam, Adnan, Alsakkaf, and Yousra (2023) and Uggle and Soneryd (2023). Schools may not have the money they need to adopt environmentally friendly methods or technologies, which slows down progress. To reach environmental goals, everyone in an organization has to be committed. But inconsistent buy-in from stakeholders can make it harder for inclusive environmental efforts to grow. It's hard to figure out how effective green projects are. It can be hard to judge growth and results when there aren't any standard measures available. Schools may face resistance because of cultural views or long-standing practices that don't fit with their sustainable goals. The Funda, 2024. It can take several months to move processes forward at colleges and universities because they deal with a lot of data. It can also take a long time to get a student's file from the records, which can make the students who are getting the services frustrated. AT-driven technologies are set up to handle huge amounts of complicated data faster than people can.

AI Support Systems in Higher Education

AI-driven decision support systems (DSS) are computer programs that help people make decisions by using data, predictive analytics, and suggestions to give them information. Zhang and Goyal, 2024. Using AI-enhanced DSS gives managers a new point of view, which helps them make better choices based on facts. They thought that the role of DSS in higher education had changed a lot, helping managers make decisions and handle resources in a way that can make schools more effective and improve student results.

Khan and Mahade (2022) also said that schools collect a lot of information about their students and use DSS with connected parts to collect, store, analyze, and make decisions. This information is used for things like making administrative decisions, helping students, planning lessons, and managing research to help schools reach their goals. AI-driven DSS give managers powerful tools for making decisions based on data, which is important for schools to deal with the problems they face in a competitive world. Zhang and Goyal (2024) said that entering data by hand is still possible, but automatic systems are now very important for getting data from many different areas and operations, which makes it easier to make broad and strategic administration plans.

Some of the AI methods used in the development of DSS Some of the things that Avurakoghene and Oredein (2023) and Funda (2023) point out are:

1. **Machine Learning (ML):** ML algorithms are used to look at big sets of data, find trends, and guess what will happen next. In this way, this helps DSS make better decisions by learning from past data and getting better over time.
2. **Expert Systems:** Knowledge-based AI is used in these systems to make decisions like a person expert would. They are especially helpful when you need to know a lot about a certain subject, and they are often built into DSS to help with things like diagnosis and fixing problems.
3. **Data Mining:** Data mining methods that are powered by AI can help find secret patterns and connections in big datasets. These can then be used to help make decisions within DSS. Data mining methods that are powered by AI can help find secret patterns and connections in big datasets. These can then be used to help make decisions within DSS.
4. **Natural Language Processing (NLP):** NLP lets DSS talk to users in normal language, which makes the tools easier for everyone to use. It lets you sort and look at written data that isn't organized, like emails and reports.

5. **Fuzzy Logic:** People use this AI method to deal with doubt and ambiguity when making decisions. Fuzzy reasoning systems are built into DSS so that it can make choices when things aren't clear.
6. **Predictive Analytics:** Data mining, statistical models, and machine learning are all used in this AI method to predict trends and results.
7. **Deep Learning (DL):** A part of machine learning called deep learning (DL) uses neural networks to look at complicated data like text and pictures.

AI and Sustainable Management Practices

Artificial intelligence (AI) is used in document management and automation decision support systems (DSS) to make routine tasks faster and more accurate. Kumar, in 2024. The problems with standard document management were pointed out by Belov in 2021. These systems fix these problems by handling jobs like document tracking, finding, and sorting by combining smart solutions. Kumar (2024) also said that using AI in document management not only makes processes easier, but it also helps with allocating resources and making decisions by using prediction analytics and mood analysis. AI-driven DSS change how institutions handle data by using virtual helpers to help with routine tasks and natural language processing to organize emails. This makes sure that institutions get real-time information and that their data is safe. Neelakrishnan, that year. AI has had a huge effect on document management systems because it can simplify tasks, cut down on mistakes, and make shared work settings better. Singh, year 2023.

AI-driven DSS use predictive analytics to handle documents by automatically classifying, tagging, and grouping them. It puts documents that are similar together so they are easier to handle and find. It also makes short descriptions and guesses how relevant and ranked documents will be in the future to improve search results. DSS powered by AI can predict resource needs and requests, plan and assign staff accordingly, and guess what resources will be available in the future. By planning upkeep, it cuts down on the time that tools and equipment are unavailable. Using AI in

DSS for sustainable development can also lower costs, improve accuracy and efficiency, boost productivity, and help people make better decisions.

Ethical Considerations and Future Directions

AI in higher education management faces ethical problems, such as biased data that can lead to unfair outcomes in areas like admissions, grades, and allocating resources. A lot of data collection raises privacy worries, which leads to questions about how to protect personal information. People may not be able to understand how AI makes decisions, which makes it hard to hold institutions responsible. Using AI too much could make people less independent, making them more reliant on automatic systems. Automation is putting people out of work, which makes people worry about the future of work and the need for schools to teach new skills. Gulyamov, that year.

Future study in AI for sustainable higher education management should focus on making decision support systems better so that institutions can make better use of their resources and run more efficiently. AI-powered data can help universities predict trends in enrollment, keep track of budgets, and tailor their courses to meet the needs of each student, all of which promotes sustainability. George and Wooden (2023) said that looking into multimodal learning data can help teachers make unique learning experiences that are more engaging and improve student success. Afolabi (2024) said that to make sure AI is used ethically in education, study should look into data protection and computer bias. Avurakoghene and Oredein (2023) said that AT can help universities handle natural energy sources, make the best use of energy, and cut down on waste in order to support green projects. These attempts can help a lot with the long-term change of colleges and universities.

Case Studies and Applications

Several case studies show that AI-driven Decision Support Systems (DSS) work well in schools around the world. Universities have used DSS driven by AI to predict student success and find students who are at risk, which has led to a higher graduation rate Funda, 2024. Some have also used AI-driven DSS to improve course schedules, which

has cut down on wait times for students. Also, schools have made AI-powered DSS to guess how many students will join and better use resources, which speeds up processing time Zhang & Goyal, 2024.

To make AI-driven Decision Support Systems (DSS) work well in higher education, important lessons and best practices for combining data and making good decisions are needed Zhang & Goyal, 2024. Training and discussion can help make a mindset of making decisions based on data, which can make teachers and staff less resistant to change. For trust and compliance, it's important to have governance models that cover ethics, data protection, and individual data control. Gulyamov (2024) said that experts and stakeholders must work together and keep evaluating AI systems in order to get the most out of AI in decision making. By using these methods, schools can get more out of AI-driven DSS, which can lead to better student results and management efficiency.

Conclusions and Suggestions

AI-driven decision support systems (DSS) are important for long-term management in higher education because they improve operating efficiency and help people make smart choices. These systems look at a huge amount of data to get a clear picture of what's going on. This helps with strategic planning, making the best use of resources, and providing better services to students, which eventually leads to better academic results and higher student happiness. However, using AI successfully in higher education isn't easy. There are problems with data quality, privacy, and the need for constant technology progress. For institutions to get the most out of AI DSS, they need to encourage people to work together and break down data walls. AI-driven DSS has the ability to change everything, but it needs to be used wisely after thinking about its problems and moral effects..

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Artificial Intelligence and Educational Management Information System in School

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Abstract

The paper examined artificial intelligence AI and educational management information system in school. The integration of Artificial Intelligence (AI) into Educational Management Information Systems (EMIS) is transforming school administration by enhancing efficiency, decision-making, and personalized learning. AI-powered EMIS leverages machine learning, data analytics, and automation to streamline administrative tasks such as student enrollment, attendance tracking, performance analysis, and resource allocation. By processing vast amounts of educational data, AI enables real-time insights, predictive modeling, and adaptive learning solutions tailored to individual student needs. One key benefit of AI in EMIS is its ability to improve data accuracy and reduce manual workload, allowing educators and administrators to focus on strategic planning and student engagement. Predictive analytics can identify at-risk students, enabling timely interventions to improve academic outcomes. Additionally, AI-driven chatbots and virtual assistants facilitate seamless communication between stakeholders, including teachers, parents, and students. However, challenges such as data privacy concerns, ethical considerations, and the digital divide must be addressed to ensure equitable AI adoption in schools. The successful implementation of AI in EMIS requires robust infrastructure, teacher training, and policy frameworks to maximize its potential while mitigating risks. This paper explores the transformative role of AI in EMIS, highlighting its applications, benefits, and challenges in school management. It argues that AI-enhanced EMIS can revolutionize education by fostering data-driven decision-making, operational

efficiency, and personalized learning experiences, ultimately contributing to improved educational outcomes. [Review: Add clarity on specific arguments to be discussed in the paper.

Keywords. Artificial Intelligence, Educational Management Information Systems, School Administration, Predictive Analytics, Personalized Learning, Data-Driven Decision Making.

INTRODUCTION

Educational management information system (EMIS). It is a digital platform or software solution designed to collect, store, process, analyze, and report educational data to support decision-making, policy planning, and administrative efficiency in schools and educational institutions. Artificial Intelligence (AI) is revolutionizing Educational Management Information Systems (EMIS) in schools, offering transformative solutions for efficient administration, data-driven decision-making, and personalized learning. Sain, Sain, and Serban, (2024). State that EMIS traditionally manages student records, attendance, performance, and resource allocation, but AI enhances these functions through automation, predictive analytics, and intelligent insights. Ogunode, and Gregory, (2024). Opined that by integrating machine learning and natural language processing, AI-powered EMIS can optimize administrative workflows, identify at-risk students, and support adaptive learning strategies. However, challenges such as data security, ethical concerns, and infrastructure limitations must be addressed to ensure equitable and responsible AI adoption. This paper explores the role of AI in modernizing EMIS, highlighting its benefits, applications, and potential risks in school management. The researcher unveils various gap stated clearly that the use of artificial intelligence tool in educational management will strengthen different area of educational management information system there must be need to implement artificial intelligence AI in educational management for smoot running of process. Another gap is that artificial intelligence AI help administrators for easy assessment of information.

Arannilewa, and Kelving-Nwanwa, (2024). State that One of the most significant impacts of AI in education is its integration with Educational Management Information Systems (EMIS), transforming how schools manage administrative tasks, student

performance tracking, and decision-making processes. Brown, Williams, and Davis, (2021) posited that Traditionally, EMIS has been used to collect, store, and analyze educational data, such as student enrollment, attendance, teacher performance, and resource allocation. However, conventional EMIS often relies on manual data entry and static reporting, limiting its efficiency and responsiveness. Johnson, and Lee, (2023). Stress that with the incorporation of AI technologies—such as machine learning (ML), natural language processing (NLP), and predictive analytic EMIS has evolved into a dynamic, intelligent system capable of automating processes, generating real-time insights, and enhancing personalized learning experiences. Wilson, J. (2023). Asserted that it delves into the intersection of AI and EMIS in schools, examining their applications, benefits, challenges, and future prospects. It highlights how AI-powered EMIS can improve administrative efficiency, support data-driven decision-making, and foster equitable education systems while addressing ethical and implementation concerns.

The Evolution of EMIS and the Role of AI.

Educational Management Information Systems (EMIS) have evolved significantly over the decades, transitioning from manual record-keeping to AI-driven, real-time analytics platform. This evolution reflects broader technological advancements and changing educational needs.

1. Pre-Digital Era (Before 1980s) – Manual Systems Paper-based records: Schools relied on handwritten registers, ledgers, and filing systems. Limited data use: Data was used mainly for administrative purposes (attendance, grades) rather than strategic decision-making.

Challenges: Prone to errors, difficult to analyze trends, and inefficient for large-scale education systems.

2. Early Digital EMIS (1980s–1990s) – Computerization. Introduction of databases: Schools and governments began using spreadsheets (Excel, Lotus) and basic database software** (e.g., dBase).

Centralized data storage: Ministries of Education started digitizing student records, teacher data, and infrastructure details.

.Student Data Management. (enrollment, attendance, academic records). Wilson, and Carter, (2021). Posited that Teacher and Staff Administration (workforce planning, professional development) Resource Allocation (budgeting, infrastructure management) Performance Monitoring (exam results, institutional evaluations) However, traditional EMIS faces several limitations. Williams, Brown, and Davis, (2020). Stress that Manual and Time-Consuming Processes. Heavy reliance on human data entry leads to errors and inefficiencies. Reactive (Not Proactive) Decision-Making. Reports are often historical rather than predictive. Data Silos. Garcia, and Hernandez, (2021). State that Disconnected systems prevent seamless data integration. Limited Personalization. Difficulty in adapting to individual student needs. Martinez. (2023). Opined that AI Transforms Educational management information system (EMIS) AI addresses these challenges by introducing. Automation. AI reduces manual workloads by automating attendance tracking, grading, and scheduling. Predictive Analytics. Taylor and Anderson. (2023). Asserted that Machine learning models forecast student performance, dropout risks, and resource needs. Natural Language Processing (NLP). AI chatbots assist in handling student and parent inquiries. Adaptive Learning Integration. AI links EMIS with personalized learning platforms to tailor education.

Key Applications of AI in Educational management information system (EMIS) for Schools

Thompson, and Green, (2021). Opined that Facial recognition or biometric systems log student presence without manual input. Smart Scheduling AI algorithms optimize class timetables, teacher assignments, and room allocations. Document Processing AI extracts and organizes data from scanned forms, reducing paperwork. Data-Driven Decision-Making. Kumar and Ahmed, (2021). State that AI enables real-time analytics for better decision-making:

Early Warning Systems Identifies struggling students through behavioral and academic data.

Teacher Performance Insights. Analyzes classroom effectiveness using student feedback and test to achieve educational efficiency. Lui, Zhang, and Wang, (2023). Asserted that AI bridges EMIS with Learning Management Systems (LMS) to. Recommend customized learning materials based on student performance. Adjust lesson plans dynamically for students with learning gaps. Provide AI tutors that interact with students via chatbots.

Enhanced Stakeholder Communication. Li, H., & Zhao, Y. (2020). Stress that AI Chatbots Handle parent inquiries about grades, fees, and school events. Automated Alerts Notify parents of student absences or declining performance. Virtual Assistants Help teachers with administrative queries (e.g., leave applications).

Challenges and Ethical Considerations

Despite its benefits, AI-powered EMIS presents challenges:

Data Privacy and Security Risks Student Data Vulnerability. Kim and Patel, (2022). State that AI systems require vast datasets, raising concerns about breaches. Regulatory Compliance Schools must adhere to GDPR, FERPA, and other data protection laws. Ethical and Bias Concerns. Algorithmic Bias. Jones and Sutherland, (2018).

Implementation Barriers. High Costs. Chen and Sun. (2020). Stress that AI integration requires investment in infrastructure and training. Resistance to Change. Teachers and administrators may distrust AI-driven decisions.

Digital Divide. Schools in low-resource areas may lack access to AI-enhanced EMIS.

Future Trends and Conclusion.

Emerging Trends in AI and EMIS. Generative AI. Tools like ChatGPT could assist in report generation and administrative tasks. Blockchain for Secure Data. Decentralized ledgers may improve EMIS data integrity. LoT Integration. Kaja and Suh, (2021). State that Smart classrooms with IoT devices feeding real-time data into EMIS. The Path Forward. For successful AI-EMIS adoption, schools should. Invest in teacher training to

build AI literacy. Implement strong data governance policies Ensure equitable access. To prevent technological disparities

The concept of Artificial intelligence AI

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think, reason, learn, and make decisions. In essence, AI enables machines to perform tasks that typically require human cognition, such as recognizing patterns, understanding language, solving problems, and adapting to new situations. The core idea behind AI is to create systems that can operate autonomously and improve their performance over time without direct human intervention.

The term "artificial intelligence" was first coined in 1956 by computer scientist John McCarthy during a conference at Dartmouth College. Since then, AI has evolved from a theoretical concept into a transformative technology affecting nearly every industry. At its foundation, AI encompasses various subfields, including machine learning, natural language processing, computer vision, robotics, and expert systems.

Machine learning (ML), a major subset of AI, involves training algorithms to learn from data and make predictions or decisions without being explicitly programmed. These algorithms use statistical techniques to identify patterns in data, which they then use to improve performance on specific tasks. Deep learning, a more advanced form of machine learning, utilizes artificial neural networks inspired by the human brain to handle complex tasks like image recognition and speech synthesis.

Another important area of AI is natural language processing (NLP), which enables machines to understand, interpret, and generate human language. This is the technology behind chatbots, virtual assistants, and language translation tools. NLP allows AI systems to engage in conversation, extract meaning from text, and even write coherent sentences.

Computer vision is another key component of AI that enables machines to interpret and understand visual information from the world, such as identifying objects in images or

videos. This technology is widely used in facial recognition, medical imaging, and autonomous vehicles.

Expert systems are designed to mimic the decision-making abilities of a human expert in a specific field. These systems rely on a knowledge base and a set of rules to analyze data and provide recommendations or solutions. They are commonly used in areas like healthcare, engineering, and finance.

AI can be categorized into two main types: narrow AI and general AI. Narrow AI, also known as weak AI, is designed to perform a specific task or a narrow range of tasks, such as voice recognition or playing chess. It is the most common form of AI in use today. General AI, or strong AI, refers to a theoretical machine that possesses the cognitive abilities of a human being and can perform any intellectual task that a human can. General AI remains a long-term goal and is not yet achieved.

In conclusion, artificial intelligence is a broad and rapidly evolving field that seeks to replicate and enhance human intelligence in machines. It combines elements from computer science, mathematics, cognitive science, and engineering to build systems capable of intelligent behavior. As AI continues to advance, it promises to revolutionize how we work, live, and interact with technology.

Liu and Zhang, (2019). Opined that AI enables computers and systems to perform tasks that typically require human cognition, such as problem-solving, language understanding, pattern recognition, and decision-making. The field of AI encompasses various subfields, including machine learning (ML), natural language processing (NLP), robotics, and computer vision.

Almazroi and Almashhadi, (2022). Stress that AI is the development of computer systems capable of performing tasks that normally require human intelligence. Cognitive Science Definition. AI is the study of how to create machines that can mimic human thought processes, such as reasoning, learning, and adaptation. Functional Definition. AI refers to systems that can interpret data, learn from it, and use that knowledge to achieve specific goals.

Types of Artificial Intelligence.

- Narrow AI (Weak AI) Designed for specific tasks (e.g., chatbots, recommendation systems). Cannot perform beyond its programmed function (e.g., Siri, Alexa).
- General AI (Strong AI) Hypothetical AI with human-like reasoning and problem-solving abilities. Can perform any intellectual task a human can (not yet achieved).
- Super intelligent AI An advanced form of AI surpassing human intelligence. Still theoretical and a topic of ethical debate. Based on Functionalities
- Reactive Machines. Basic AI that reacts to inputs without memory (e.g., IBM's Deep Blue in chess).
- Limited Memory AI. Uses past data to make decisions (e.g., self-driving cars).
- Theory of Mind AI Future AI that understands emotions and social interactions (still in research).
- Self-Aware AI. Machines with consciousness (purely hypothetical at this stage).

Core Components of AI.

AI systems rely on several key technologies:

Machine Learning (ML). Wang and Li, (2020). Asserted that AI Algorithms that learn from data without explicit programming. Deep Learning (DL). A subset of ML using neural networks to model complex patterns. Natural Language Processing (NLP). Enables machines to understand and generate human language (e.g., ChatGPT). Computer Vision. Tsai and Chai, (2021). Opined that it Allows machines to interpret visual data (e.g., facial recognition).

Robotics. Combines AI with mechanical systems for automation (e.g., industrial robots).

How AI Works

AI systems follow a structured process:

- Data Collection. Gathering large datasets (text, images, sensor data).
- Data Processing. Cleaning and organizing data for analysis.
- Algorithm Selection. Choosing appropriate ML models (e.g., decision trees, neural networks).
- Training. Feeding data to the model to detect patterns.
- Testing & Validation. Evaluating AI performance using unseen data.
- Deployment. Integrating AI into real-world applications.

Applications of AI. AI is transforming industries, including. Healthcare. AI diagnostics, drug discovery, robotic surgery. Education. Personalized learning, automated grading, AI tutors. Finance Fraud detection, algorithmic trading, chatbots. Transportation. Self-driving cars, traffic management. Entertainment. Recommendation systems (Netflix, Spotify). Hwang and Chang, (2019). State that Ethical and Societal Implications While AI offers immense benefits, it raises concerns. Job Displacement Automation may replace certain jobs. Bias & Fairness. AI can inherit biases from training data. Privacy Issues. Mass data collection poses security risks. Accountability. Ensure fairness, security, and beneficial outcomes for humanity. Selwyn, N. (2019). Asserted that the fusion of AI and EMIS is reshaping school management, making it more efficient, predictive, and student-centered. While challenges like data privacy and bias persist, strategic implementation can unlock AI's full potential in education. As AI continues to evolve, schools must balance technological innovation with ethical responsibility to create inclusive, future-ready education systems. EMIS for Schools. Administrative Efficiency and Automation. AI-powered EMIS streamlines school operations by. Automating Attendance Tracking. Facial recognition or biometric systems log student presence without manual input. Smart Scheduling AI algorithms optimize class timetables, teacher assignments, and room allocations. Papamitsiou and Economides, (2019). Opined that Document Processing AI extracts and organizes data from scanned

forms, reducing paperwork. Data-Driven Decision-Making. AI enables real-time analytics for better decision-making. Early Warning Systems Identifies struggling students through behavioral and academic data. Teacher Performance Insights Analyzes classroom effectiveness using student feedback and test scores.

Personalized and Adaptive Learning. Zheng and Yang, (2021). Stress that AI bridges EMIS with Learning Management Systems (LMS) to Recommend customized learning materials based on student performance. Adjust lesson plans dynamically for students with learning gaps. Provide AI tutors that interact with students via chatbots. Enhanced Stakeholder Communication AI Chatbots. Handle parent inquiries about grades, fees, and school events. Automated Alerts Notify parents of student absences or declining performance. Virtual Assistants. Help teachers with administrative queries (e.g., leave applications).

Challenges and Ethical Considerations

Despite its benefits, AI-powered EMIS presents challenges:

Data Privacy and Security Risks. Student Data Vulnerability AI systems require vast datasets, raising concerns about breaches. Regulatory Compliance. Schools must adhere to GDPR, FERPA, and other data protection laws. Ethical and Bias Concerns.

The integration of artificial Intelligence (AI) in Educational Management Information Systems (EMIS) raises several ethical implications that must be carefully considered to ensure fairness, transparency, and accountability. Below are the key ethical concerns:

1 Privacy and Data Security. Student and Staff Data: AI-driven EMIS collects vast amounts of sensitive data (e.g., academic performance, attendance, behavioral records). Unauthorized access or misuse could lead to breaches.

Consent & Transparency: Are students, parents, and educators aware of how their data is used? Is informed consent obtained?

Compliance with Regulations: AI must adhere to data protection laws (e.g., GDPR, FERPA, COPPA).

3. Bias and Discrimination. Algorithmic Bias: AI models trained on biased historical data may reinforce inequalities (e.g., favoring certain demographics in admissions or grading). Fairness in Decision-Making: AI-driven decisions (e.g., student tracking, resource allocation) should be audited for discrimination.
4. Accountability and Transparency. Black Box Problem: Many AI systems (e.g., deep learning) lack explain ability. If an AI misclassifies a student or recommends unfair policies, who is responsible? Human Oversight: Should AI decisions be final, or should educators have veto power?
5. Impact on Equity and Access. Digital Divide: AI-enhanced EMIS may widen gaps if underprivileged schools lack access to advanced systems. Exclusion Risks: AI-driven automation might reduce human interaction, disadvantaging students needing personalized support.
6. Autonomy and Human Judgment. Over-reliance on AI: Excessive dependence on AI recommendations may erode educators' professional judgment. Student Profiling: AI might label students (e.g., "at-risk") in ways that limit opportunities.
7. Long-term Societal Effects. Job Displacement: AI automation in EMIS could reduce administrative roles, affecting employment.

Behavioral Manipulation: Predictive analytics might influence student behavior in ways that limit creativity or autonomy.

High Costs. Dron and Anderson, (2020). State that AI integration requires investment in infrastructure and training. Resistance to Change Teachers and administrators may distrust AI-driven decisions. Digital Divide. Schools in low-resource areas may lack access to AI-enhanced EMIS.

Overview of Educational Management Information System

Educational Management Information System (EMIS) is a digital platform designed to collect, process, analyze, and report data related to educational institutions, students, teachers, and administrative processes. It serves as a centralized decision-support tool for policymakers, school administrators, and educators.

Key Components of EMIS

1. Student Data. Enrollment, attendance, academic performance, dropout rates.
2. Teacher & Staff Data. Qualifications, training, attendance, payroll.
3. School Infrastructure. Classrooms, labs, ICT facilities, sanitation.
4. Financial & Resource Management. Budgets, expenditures, grants, scholarships.
5. Curriculum & Assessment Data. Exam results, learning outcomes, standardized test scores.
6. Geospatial Data. School locations, accessibility, regional disparities.

Ifenthaler and Yau, (2021). State that AI enhances EMIS by automating administrative tasks, improving data accuracy, personalizing learning experiences, and enabling predictive analytics. This paper explores the importance and functions of AI in EMIS, highlighting its transformative impact on education management.

Importance of AI in EMIS

- Automation of Administrative Tasks

One of the most significant contributions of AI in EMIS is the automation of repetitive administrative tasks. Hart and Dalli, (2020). Opined that Traditionally, educational institutions spend considerable time and resources on enrollment, attendance tracking, grading, and scheduling. AI-powered EMIS can. Automate student registration and admissions processes using chatbots and intelligent forms. Streamline attendance tracking through facial recognition or biometric systems. Miao and Zou, (2022). State that AI Generate automated reports on student performance, reducing manual workload for educators. By reducing administrative burdens, AI allows educators and administrators to focus more on strategic planning and student engagement.

- **Enhanced Data Accuracy and Decision-Making**

AI improves the accuracy and reliability of data in EMIS by minimizing human errors in data entry and analysis. Machine learning algorithms can. Detect anomalies in student records (e.g., duplicate entries, missing data). Provide real-time data analytics for informed decision-making. Generate predictive insights on student performance and institutional efficiency.

Educational leaders can use these insights to allocate resources effectively, identify at-risk students, and implement targeted interventions.

- **Personalized Learning and Adaptive Education**

AI-driven EMIS enables personalized learning by analyzing student data to tailor educational experiences. Key applications include. Intelligent Tutoring Systems (ITS). AI-powered tutors adapt to individual learning styles, offering customized lessons and feedback. Learning Analytics. AI tracks student progress and recommends personalized study plans. Automated Grading & Feedback. AI evaluates assignments and provides instant feedback, helping students improve faster. This personalization enhances student engagement and improves learning outcomes.

- **Predictive Analytics for Student Success**

AI enhances EMIS by predicting student performance and dropout risks. Using historical and real-time data, AI can. Identify students who may struggle academically based on attendance, grades, and engagement levels. Recommend early interventions such as tutoring or counseling. Forecast enrollment trends to help institutions plan resource allocation. Predictive analytics ensures that educational institutions take proactive measures to support student success. (Jansen and Schmitt, 2021).

- **Improved Resource Management.**

AI optimizes resource allocation in educational institutions by analyzing data on Classroom utilization and scheduling efficiency. Staff and faculty workload distribution.

Budget forecasting and financial planning. By optimizing these factors, AI helps institutions reduce costs and improve operational efficiency.

- **Enhanced Security and Fraud Detection.**

AI strengthens EMIS security by Detecting fraudulent activities in student records or financial transactions. Cummings and Kremer, (2023). Stress that Implementing biometric authentication for secure access to sensitive data. Monitoring cybersecurity threats to protect institutional data. This ensures data integrity and compliance with privacy regulations such as GDPR and FERPA. Kauffman and Mierzejewski, (2019). State that AI is revolutionizing Educational Management Information Systems by automating administrative tasks, enhancing data accuracy, personalizing learning, and enabling predictive analytics. Its functions—ranging from NLP to machine learning—empower institutions to make data-driven decisions, optimize resources, and improve student outcomes. While challenges exist, the integration of AI in EMIS promises a more efficient, equitable, and adaptive education system. As AI continues to evolve, its role in EMIS will become even more critical in shaping the future of education management.

School Administration

School administration is the cornerstone of any educational institution, ensuring smooth operations, fostering academic excellence, and maintaining a conducive learning environment. Yang and Xie, (2022). Opined that Effective administration involves leadership, management, policy implementation, and stakeholder engagement. This essay explores the roles, responsibilities, challenges, and best practices in school administration, emphasizing its significance in shaping the future of education.

Roles and Responsibilities of School Administrators

School administrators, including principals, vice-principals, superintendents, and department heads, play a pivotal role in managing schools. Their responsibilities include:

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- Leadership and Vision Setting. Gani and Yusof, (2020). Stress that Administrators provide strategic direction by setting academic goals, promoting a positive school culture, and aligning policies with educational standards. They inspire teachers, staff, and students to strive for excellence.
 - Curriculum Development and Supervision. They oversee curriculum planning, ensuring compliance with state and national standards. Administrators collaborate with teachers to implement innovative teaching methods and assess learning outcomes.
 - Staff Management and Professional Development. Hiring, training, and evaluating teachers and support staff are key duties. Administrators organize professional development programs to enhance teaching skills and keep educators updated with the latest pedagogical trends.
 - Student Welfare and Discipline. Ensuring a safe and inclusive environment is crucial. Administrators enforce disciplinary policies, address behavioral issues, and promote student well-being through counseling and extracurricular activities.
 - Financial and Resource Management. Ranjan and Krishnasamy, (2021). State that Budgeting, resource allocation, and infrastructure maintenance fall under administrative duties. Efficient financial management ensures that schools have the necessary tools and facilities for effective learning.
 - Community and Parental Engagement. Building strong relationships with parents and the community fosters collaboration. Administrators organize meetings, workshops, and events to involve stakeholders in school improvement initiatives.
 - Compliance with Educational Laws and Policies. They ensure adherence to government regulations, accreditation standards, and safety protocols, safeguarding the institution's credibility

Challenges in School Administration.

Despite its importance, school administration faces numerous challenges:

- **Budget Constraints.** Limited funding affects resource availability, teacher salaries, and infrastructure development. Administrators must prioritize spending while seeking alternative funding sources like grants and donations.
- **Teacher Shortages and Retention.** Recruiting and retaining qualified teachers is a persistent issue. Administrators must create supportive work environments and offer competitive benefits to attract talent.
- **Technological Integration.** The rapid evolution of EdTech requires administrators to invest in digital tools and training, which can be costly and time-consuming.
- **Student Diversity and Inclusion.** Managing students with varying learning needs, cultural backgrounds, and socio-economic statuses demands inclusive policies and specialized programs.
- **Policy Changes and Bureaucracy.** Frequent changes in educational policies and excessive paperwork can hinder administrative efficiency.
- **Crisis Management.** Emergencies such as pandemics, natural disasters, or security threats require swift decision-making and contingency planning.

Best Practices for Effective School Administration. To overcome these challenges, administrators should adopt the following best practices:

- **Strong Leadership and Communication.** Transparent communication with staff, students, and parents builds trust. Leaders should be approachable, empathetic, and decisive.
- **Data-Driven Decision Making.** Using student performance data, attendance records, and feedback helps in making informed decisions to improve academic outcomes.
- **Professional Development Programs.** Continuous training for teachers and staff enhances their skills and keeps them motivated.

- Community Partnerships. Collaborating with local businesses, nonprofits, and government agencies can provide additional resources and support.
- Embracing Technology. Implementing digital learning platforms, automation tools, and cybersecurity measures improves efficiency and security.
- Fostering a Positive School Culture. Encouraging teamwork, recognizing achievements, and promoting mental health initiatives create a supportive environment.
- Adaptive Crisis Management Plans. Preparing for emergencies with clear protocols ensures student and staff safety during unforeseen events.

The Impact of Effective School Administration.

When school administration functions efficiently, the benefits are far-reaching: Improved Academic Performance. Bickerstaff and Alderson, (2021). State that Well-managed schools show higher student achievement and graduation rates. Enhanced Teacher Morale. Supportive leadership increases job satisfaction and reduces turnover. Stronger Community Trust. Engaged parents and stakeholders contribute to school success. Better Resource Utilization. Strategic financial planning maximizes available funds for educational needs. Future-Ready Students. A well-administered school prepares students for higher education and careers. Hashem and Hossain, (2023). Asserted that School administration is a dynamic and multifaceted field that directly impacts the quality of education. Effective administrators must balance leadership, management, and innovation to address challenges and create thriving learning environments. By adopting best practices and fostering collaboration among stakeholders, school administrators can ensure that educational institutions fulfill their mission of nurturing knowledgeable, skilled, and responsible citizens. The future of education depends on strong administrative leadership that adapts to changing needs while upholding academic excellence.

Predictive Analytics

Predictive analytics is a powerful branch of data science that uses historical data, statistical algorithms, and machine learning techniques to forecast future outcomes. Businesses, healthcare providers, financial institutions, and even educational systems leverage predictive analytics to make informed decisions, optimize operations, and mitigate risks. Huang and Li (2020). Opined that by analyzing patterns and trends, organizations can anticipate customer behavior, detect fraud, improve efficiency, and gain a competitive edge.

How Predictive Analytics Works.

Predictive analytics follows a structured process:

- **Data Collection.** Gathering relevant historical data from databases, CRM systems, IoT devices, and other sources.
- **Data Cleaning and Preparation.** Removing inconsistencies, handling missing values, and transforming data into a usable format.
- **Statistical Modeling and Machine Learning.** Applying algorithms such as regression analysis, decision trees, neural networks, and clustering to identify patterns.
- **Validation and Testing.** Ensuring the model's accuracy by testing it against new data.
- **Deployment and Monitoring.** Implementing the model in real-world scenarios and continuously refining it for better predictions.

Applications of Predictive Analytics.

- **Business and Marketing.** Companies use predictive analytics to forecast sales, optimize pricing, and personalize marketing campaigns. For example, e-commerce platforms recommend products based on past purchases, increasing customer engagement and revenue.

- Healthcare. Hospitals predict patient readmissions, disease outbreaks, and treatment effectiveness. Predictive models help in early diagnosis, reducing costs and improving patient outcomes.
- Finance and Risk Management. Banks assess credit risk, detect fraudulent transactions, and automate loan approvals. Investment firms use predictive models to forecast stock trends and optimize portfolios.
- Manufacturing and Supply Chain. Predictive maintenance helps industries anticipate equipment failures, minimizing downtime. Supply chain analytics optimize inventory levels and demand forecasting.
- Education. Schools and universities predict student performance, identify at-risk students, and personalize learning experiences using analytics.

Benefits of Predictive Analytics.

Improved Decision-Making. Data-driven insights reduce guesswork and enhance strategic planning.

Cost Reduction. Preventing failures, optimizing resources, and automating processes save money.

Enhanced Customer Experience. Personalized recommendations and proactive service increase satisfaction.

Risk Mitigation. Early detection of fraud, system failures, or health risks prevents major losses.

Predictive analytics is revolutionizing industries by turning raw data into actionable foresight. As technology advances, its applications will expand, making it an indispensable tool for innovation and efficiency. However, organizations must address ethical concerns and ensure transparency to maximize its benefits responsibly. By harnessing predictive analytics effectively, businesses and institutions can stay ahead in an increasingly data-driven world.

Personalized Learning,

Personalized learning is an educational approach that customizes instruction, content, and pacing to meet each student's unique needs, strengths, interests, and learning styles. Unlike traditional one-size-fits-all teaching, personalized learning empowers students to take control of their education while teachers act as facilitators.

Key Components of Personalized Learning

- **Student-Centered Instruction.** Lessons are designed around the learner's goals, preferences, and abilities. Teachers provide differentiated instruction based on assessments and feedback.
- **Flexible Pacing.** Students' progress at their own speed, mastering concepts before moving forward. Advanced learners can accelerate, while others receive additional support.
- **Data-Driven Decisions.** Chen and Huang, (2023). State that Analytics and assessments track student progress in real time. Teachers adjust strategies based on performance data.
- **Choice and Autonomy.** Students have a say in how they learn (e.g., projects, digital tools, group work). Encourages engagement and motivation.
- **Technology Integration.** Adaptive learning software (e.g., Khan Academy, Duolingo) adjusts difficulty based on performance. AI and machine learning help tailor content to individual needs.

Benefits of Personalized Learning.

- **Improved Engagement.** Students learn in ways that interest them, increasing participation.
- **Better Academic Outcomes.** Customized support helps struggling students while challenging advanced learners.
- **Development of 21st-Century Skills.** Encourages critical thinking, self-direction, and problem-solving.

- Inclusion. Supports diverse learners, including those with disabilities or language barriers.

Personalized learning shifts education from a standardized model to one that values individual growth. While challenges exist, advancements in EdTech and progressive teaching methods are making it increasingly feasible. By embracing personalization, schools can create more equitable, engaging, and effective learning experiences for all students.

Data-Driven Decision Making.

Data-driven decision making (DDDM) in education refers to the systematic use of data to guide policy, management, and instructional strategies. Shakya and Thapa, (2022). State that An Education Management Information System (EMIS) plays a crucial role in this process by collecting, processing, and analyzing educational data to improve efficiency, equity, and learning outcomes. Governments, schools, and education stakeholders rely on EMIS to make informed decisions that enhance education systems. An Education Management Information System (EMIS) is a digital platform designed to:

Collect and store educational data (student enrollment, teacher qualifications, infrastructure, exam results, etc.). Process and analyze data for reporting and decision-making. Monitor education policies and programs in real time. Support planning, budgeting, and resource allocation. EMIS is used at national, regional, and school levels to ensure transparency and accountability in education management.

How EMIS Supports Data-Driven Decision Making.

Improving Student Performance. Tracks student attendance, grades, and learning gaps.

- Identifies at-risk students for early intervention. Helps teachers personalize instruction based on data insights.

- **Enhancing Teacher Management.** Monitors teacher attendance, qualifications, and professional development needs. Ensures equitable distribution of teachers across schools.
Evaluates teacher performance based on student outcomes.
- **Optimizing Resource Allocation.** Identifies schools needing infrastructure upgrades (classrooms, labs, sanitation). Tracks budget utilization and funding gaps. Helps policymakers allocate resources where they are most needed.
- **Policy Formulation & Monitoring.** Assesses the impact of education policies (e.g., free education, digital learning). Tracks progress toward Sustainable Development Goal 4 (SDG on quality education). Supports evidence-based reforms in curriculum and assessment.
- **Enhancing Accountability & Transparency.** Reduces data manipulation and fraud in reporting. Provides real-time dashboards for education stakeholders. Ensures compliance with national and international education standards.

Key Features of an Effective EMIS.

- **Real-Time Data Collection.** Automated data entry via mobile apps, web forms, and IoT devices.
 - **Advanced Analytics.** AI and machine learning for predictive insights (e.g., dropout risk).
 - **Interoperability.** Integrates with other systems (finance, HR, student information systems).
 - **User-Friendly Dashboards.** Visualizations (charts, maps) for easy interpretation.
 - **Data Security & Privacy.** Compliance with GDPR, FERPA, and local regulations.
- Data-driven decision-making powered by EMIS is transforming education systems worldwide. By leveraging accurate, real-time data, governments and schools can enhance learning outcomes, optimize resources, and ensure equitable education access. While challenges exist, advancements in AI, cloud computing, and mobile technology are making EMIS more accessible and effective. Investing in robust

EMIS infrastructure is essential for building resilient, future-ready education systems.

Conclusion

The integration of Artificial Intelligence (AI) and Educational Management Information Systems (EMIS) is revolutionizing school administration, making education systems more efficient, data-driven, and student-centered. These technologies are reshaping how schools operate, from administrative decision-making to personalized learning, ensuring that education keeps pace with the digital age.

AI and EMIS are no longer optional they are essential tools for modernizing education. Schools that embrace these technologies will benefit from streamlined operations, improved learning outcomes, and greater equity. However, successful implementation requires strong policies, infrastructure investment, and ongoing training. The future of education lies in harnessing data intelligently and leveraging AI ethically to create dynamic, responsive, and inclusive learning environments. By doing so, schools can ensure that every student receives the best possible education, tailored to their unique needs in an increasingly digital world.

Suggestion

- School should adopt Strategic Implementation Roadmap. Start with a need's assessment Identify pain points in school management where AI/EMIS could help (e.g., attendance tracking, performance analysis) Pilot programs first. Test AI tools in specific grades/subjects before full rollout Phased adoption approach. Begin with basic EMIS functions before adding AI components
- School should use Data Management Recommendations. Ensure data standardization. Use consistent formats for student records across all systems. Implement robust data governance. Clear policies on who can access/modify student data. Regular data quality audits. Cleanse outdated/duplicate records periodically. Interoperability focus. Choose systems that integrate with existing platforms

- School should adopt AI Applications for Schools use. Smart scheduling. AI to optimize class timetables and room allocations. Early warning systems. Machine learning to identify at-risk students Automated reporting AI-generated progress reports for parents/administrators. Chatbots for FAQs. Handle common parent/student inquiries 24/7 Plagiarism detection. AI tools for authenticating student work
- Teacher Support & Training. Professional development programs. Train teachers to interpret EMIS analytics. AI-assisted lesson planning. Provide AI tools that suggest teaching resources. Reduction of administrative tasks. Automate routine paperwork to free up teaching time Peer learning networks. Create communities for sharing AI/EMIS best practices
- Student-Centric Approaches. Personalized learning paths. AI to recommend tailored educational content. Adaptive testing. Dynamic assessments that adjust difficulty based on performance Learning analytics dashboards Give students visibility into their own progress. AI career guidance. Systems that suggest career paths based on skills/interests.
- These suggestions provide a balanced approach to harnessing AI and EMIS technologies while addressing the practical realities of school environments. The focus should always remain on enhancing educational outcomes while protecting student privacy and maintaining ethical standards.

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Stakeholders' Participation in Funding Secondary Education for the Attainment of Sustainable Development Goal 4 in Rivers State.

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Abstract

The study investigated stakeholders' participation in funding secondary education for the attainment of Sustainable Development Goal 4 in Rivers State. The study was guided by three research questions. A descriptive survey design was adopted in the study, and the population of the study consisted of 302 principals and 6557 teachers, totaling 6859 respondents in public senior secondary schools in Rivers State. The sampling technique applied in selecting 378 respondents from a population of 6859 was simple random sampling, in which every member has an equal chance of being selected. Given the disparities in the distribution of the unit population for each school, the stratified proportionate sampling method was applied in the unit sampling using the Taro Yamane formula. The instrument used for data collection was a 15-item questionnaire titled "Stakeholders' Participation in the Funding of Secondary Education for the Attainment of Quality Education Questionnaire" (SPFSEAQQEQ). The reliability of the questionnaire was estimated using Cronbach's alpha and gave a reliability index of 0.84, 0.87, and 0.82, which indicated that the instrument was reliable. Out of the 378 copies of the questionnaire administered, 363 copies were retrieved by the researcher with the help of two trained research assistants which represented a 96% retrieval rate. The research questions raised were answered using mean and standard deviation statistics. The study found that, to a high extent, government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State. It concluded that the active involvement of various stakeholders, such as government bodies, educational institutions, parents, and the community, is essential for ensuring sustainable funding streams and promoting quality education.. It was recommended, among others, that there should be an increase in the allocation of government funds specifically designated for secondary education in Rivers State to ensure adequate resources for infrastructure, learning materials, and teacher training.

Keywords: Stakeholders Participation, Budgetary Allocation, Inclusive Decision Making, Collaborations.

Introduction

The attainment of quality education is a fundamental goal for any society, as it plays a significant role in shaping the future of its citizens. In Rivers State, Nigeria, the provision of quality education in government-owned schools is a critical endeavour that requires the active participation of various stakeholders. One vital aspect of this participation is the funding of secondary education. Adunola (2011)

Sustainable Development Goal 4 (SDG 4) aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. It is a global objective that the United Nations has set as part of the 2030 Agenda for Sustainable Development. In the context of Rivers State, Nigeria, SDG 4 is of utmost importance as it addresses the educational needs and challenges faced by the state's increasing population. Rivers State, like many other states in Nigeria and around the world, faces various educational issues that SDG 4 aims to tackle. Some of the key challenges include access to education, quality of education, gender disparities, infrastructure and facilities, teacher training and professional development, curriculum and relevance, and school dropouts. Oluwadamilola et al. (2018) posited that to work towards achieving SDG 4 in Rivers State, various stakeholders play crucial roles in funding secondary education to work towards achieving this goal.

By involving stakeholders such as the government, community, parents, and private organisations, a collective effort can be made to ensure sustainable and effective funding, subsequently improving educational outcomes for students.

Government at both the federal and state levels is a primary source of funding for education. They allocate budgets to support secondary schools and implement policies and initiatives aimed at improving the quality and accessibility of education. The Ministry of Education is responsible for planning and implementing educational policies

and programmes in Rivers State. They oversee the distribution of funds and resources to schools and collaborate with other agencies to enhance education standards. Non-governmental organisations (NGOs) are dedicated to improving education in Nigeria. These organisations often work in partnership with schools and communities to provide financial assistance, infrastructure development, and educational resources to support secondary education. International organisations like the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), the United Nations International Children's Emergency Fund (UNICEF), and others also support secondary education in Rivers State. They provide grants, technical assistance, and expertise to enhance educational programs. Local communities and parent associations often play an active role in supporting secondary education. They organise fundraising, contribute financially, or volunteer to improve school facilities and resources. It is essential to recognise that the involvement of these stakeholders varies depending on the locality, as most stakeholders tend to donate more in urban areas as opposed to going to rural areas for fear of being kidnapped (Elmore, 2004).

Stakeholders in education have drawn more attention in recent years as educational systems have realized how crucial it is to include those who are most directly affected by educational practices and to engage diverse perspectives. Traditionally, stakeholders in education primarily included parents, the government, teachers, and school administrators. However, the scope of stakeholders has expanded to encompass policymakers, community members, non-profit organisations, and even business owners. The involvement of stakeholders in education is essential for several reasons. First, stakeholders bring valuable insights and perspectives that can inform decision-making processes and educational policies. By actively involving stakeholders, policymakers can ensure that decisions are responsive to the needs and aspirations of the education community. Stakeholders in education contribute to creating a sense of ownership and commitment to educational goals. When stakeholders are actively engaged, they are more likely to feel invested in the educational process and take proactive steps to

support student learning and success that enhance the attainment of sustainable development goals.

Researchers conducted studies with respect to stakeholders' participation in funding secondary education for the attainment of Sustainable Development Goal 4 in Rivers State. Ugwuanyi (2008) carried out a study on the extent of implementation of the Universal Basic Education Programme at the junior secondary school level in the Nsukka education zone of Enugu State. Emphases were laid on the availability and adequacy of personnel and teacher factors, instructional materials, facilities, and equipment, monitoring and supervision, funding, community participation, and sensitization. The findings of the study revealed that the personnel/teacher factor, instructional materials, monitoring, and supervision were moderately provided at the JSS level in the Nsukka education zone of Enugu state. The findings also showed that the extent of community participation and sensitization in the achievement of the objectives of UBE was still low. Infrastructural facilities, equipment, and funds were not adequately provided, and students still pay school fees at the JSS level. Recommendations were made based on the findings of the study, including the need for the use of ICT facilities in the UBE schools in the education zone.

Again, Aduwa-Ogiegbaen (2006) conducted a study on the assessment of the provision of educational services under the Universal Basic Education (UBE) scheme in southern Nigeria. The findings of the study revealed that the majority of primary school teachers in southern Nigeria were of the opinion that educational services were not adequately provided in their schools under the UBE programme, which limited their service delivery. It was also revealed that parents still buy books and report cards for their children. Educational facilities such as libraries, instructional materials, guidance and counselling services, and information and communication technology were not adequately provided. It was recommended that these facilities be provided in the right quality and quantity.

Furthermore, Nakpodia (2011) similarly conducted a study to investigate the integrative funding of universal basic education (UBE) and its effective implementation in the Central Senatorial District of Delta State, Nigeria. The study revealed that the government contributed adequate finance towards the effective implementation of the UBE programme. The study also showed that the parent-teacher association (P.T.A.) contributed immensely to the UBE programme's effective implementation. Also, non-governmental organisations (NGOs) equally contributed greatly to the provision of instructional materials, sports and health equipment, furniture, and classroom blocks for the programme. Based on the findings, it was recommended that the government maintain the policy of making an adequate budget for the funding of the UBE and that a monitory supervisor be set up to see to the judicious expenditure of such funds.

The funding of secondary education in government-owned schools in Rivers State poses significant challenges to attaining quality education. One crucial aspect contributing to this challenge is the lack of effective stakeholder participation in the financing of secondary education. Insufficient involvement of stakeholders, including parents and policymakers, in the funding process creates barriers that hinder the achievement of quality education in government-owned schools in Rivers State. One problem arises from the limited engagement of stakeholders in decision-making processes related to education funding. The lack of active involvement denies these key actors the opportunity to contribute their perspectives, expertise, and insights into resource allocation, leading to potential mismatches between funding priorities and the actual needs of government-owned schools in Rivers State. This limited participation not only excludes crucial voices in the decision-making process but also fails to leverage local knowledge and context-specific considerations that are essential for effective resource utilization. Furthermore, the absence of stakeholder participation in education funding undermines transparency and accountability in the allocation and utilisation of financial resources. The lack of mechanisms for stakeholders to monitor and assess the use of funds creates an environment that is vulnerable to corruption, embezzlement, and

mismanagement. This lack of oversight not only compromises the quality of education but also erodes public trust in the education system.

When stakeholders are excluded from the funding process, they may perceive a lack of responsibility or agency in shaping the quality and effectiveness of education. This limited participation can diminish their willingness to contribute additional resources, time, or effort to support the improvement of government-owned schools in Rivers State. The overall consequence of the problem is that the education system in Rivers State may not receive sufficient financial support, hindering the provision of quality education in government-owned schools. This problem negatively impacts student learning outcomes, teacher effectiveness, infrastructure development, and the overall quality of education across the state. To address these challenges and ensure the attainment of quality education in government-owned schools in Rivers State, there is a need to investigate and improve stakeholder participation in the funding of secondary education. By increasing the active involvement of stakeholders, promoting transparency and accountability, and fostering a sense of ownership, it is possible to enhance the allocation and utilisation of resources, leading to improved educational outcomes and the overall development of government-owned schools in Rivers State.

These show that there is a need for stakeholders' participation in the funding of secondary education for the attainment of quality education in government-owned schools in Rivers State, and the researchers tend to find the gap by engaging various stakeholders in Rivers State government-owned schools to address the challenges of funding and ensure the provision of quality education to all students. This paper explores stakeholders' participation in the funding of secondary education and highlights key strategies to promote sustained and effective funding practices.

Purpose of the Study

The purpose of the study was to investigate stakeholders' participation in funding secondary education for the attainment of Sustainable Development Goal 4 in Rivers State. The study sought to:

1. Identify the extent to which government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State.
2. Examine the extent to which inclusive decision-making processes enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State.
3. Investigate the extent to which collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.

Research Questions

The following research questions guided the study:

1. To what extent does government budgetary allocation enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State?
2. To what extent do inclusive decision-making processes enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State?
3. To what extent does collaboration enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State?

Methodology

A descriptive survey design was adopted in the study, and the population of the study consisted of 302 principals and 6557 teachers, totaling 6859 respondents in public senior secondary schools in Rivers State. The sampling technique applied in selecting 378 respondents from a population of 6859 was simple random sampling, in which every

member has an equal chance of being selected. Given the disparities in the distribution of the unit population for each school, the stratified proportionate sampling method was applied in the unit sampling using the Taro Yamane formula. The instrument used for data collection was a 15-item questionnaire titled "Stakeholders' Participation in the Funding of Secondary Education for the Attainment of Quality Education Questionnaire" (SPFSEAQEQ). The questionnaire had two sections: Section A was used for gathering demographic data about the respondents, while Section B contained the 15 questionnaire items, which were responded to on a modified Likert scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE). These weights were summed and divided by 4 to arrive at 2.50, which was the criterion mean score used for agreeing or disagreeing with the questionnaire items. The questionnaire was face-to-face and content-validated by two experts in educational management at Rivers State University, and the reliability of the questionnaire was estimated using Cronbach's alpha and gave a reliability index of 0.84, 0.87, and 0.82, which indicated that the instrument was reliable before it was presented to the respondents for their responses. Out of the 378 copies of the questionnaire administered, 363 copies were retrieved by the researcher with the help of two trained research assistants at a date and time agreed upon with the respondents, which represented a 96% retrieval rate. The research questions raised were answered using mean and standard deviation statistics.

Results

Research Question One: To what extent does government budgetary allocation enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State?

Table 1: Mean and standard deviation scores on the extent to which government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State

S/N	The extent of government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State.	Principals		Teachers'		Mean set (x_1+x_2)	Remarks
		1	SD ₁	2	SD ₂		
1	Increased budgetary allocation has positively influenced teacher training and professional development.	2.91	0.83	2.58	0.96	2.75	High Extent
2	The government allocates sufficient funds for education in Rivers State.	2.42	1.02	2.43	1.03	2.43	Low Extent
3	Lack of budgetary allocation has hindered the implementation of educational programmes.	2.73	1.05	2.71	0.89	2.72	High Extent
4	The allocated budget for education is effectively utilised in government-owned schools.	2.44	1.01	2.47	1.01	2.46	Low Extent
5	Adequate budgetary allocation has led to improved infrastructure in government-owned schools.	2.81	0.99	2.64	0.96	2.73	High Extent
Average Mean/Standard Deviation		2.66	0.98	2.57	0.97	2.62	High Extent

Data presented in Table 1 above shows the mean ratings and standard deviation of responses of principals and teachers' on the extent to which government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State. The data shows that the respondents agreed to a low extent that government allocates sufficient funds for education in Rivers State and that the allocated budget for education is effectively utilised in government-owned schools, as seen in items 2 and 4, which have weighted mean values below the criterion mean of

2.50. The respondents agreed to a high extent that increased budgetary allocation has positively influenced teacher training and professional development, lack of budgetary allocation has hindered the implementation of educational programmes, and adequate budgetary allocation has led to improved infrastructure in government-owned schools, as seen in items 1, 3, and 5, having weighted mean values above the criterion mean of 2.50. The grand mean of **2.62** indicates that the answer to research question one is that, to a high extent, government budgetary allocation enhances attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State.

Research Question Two: To what extent do inclusive decision-making process enhance attainment of sustainable development goal 4 in government owned schools in Rivers State?

Table 2: Mean and standard deviation scores on the extent inclusive decision-making process enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.

S/N	Extent inclusive decision-making process enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.	Principals		Teachers'		Mean set (x_1+x_2)	Remarks
		$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂		
6	Inclusion of stakeholders in decision-making processes positively influences access to and equity in education	2.79	0.83	2.82	0.96	2.81	High Extent
7	Inclusive decision-making contribute to a more holistic and effective approach to addressing educational challenges	2.67	0.82	2.76	0.63	2.72	Low Extent
8	Mechanisms are put in place to encourage the participation of different stakeholders in decision-making related to education	2.05	0.85	2.01	0.68	2.03	High Extent
9	Decision-making processes consider the diverse needs and perspectives of all stakeholders	2.64	0.71	2.56	0.57	2.6	High Extent

10	involved in education involvement of stakeholders in decision-making contribute to the improvement of the quality of education	2.68	0.69	2.56	0.96	2.62	High Extent	
Average Deviation		Mean/Standard	2.57	0.78	2.54	0.87	2.56	High Extent

Data presented on Table 2 above shows mean ratings and standard deviation of responses of principals and teachers' on the extent inclusive decision-making process enhance attainment of sustainable development goal 4 in government owned schools in Rivers State. The data shows that the respondents agreed to a low extent that inclusive decision-making contribute to a more holistic and effective approach to addressing educational challenges as seen in item 7 having weighted mean values below the criterion mean of 2.50. The respondents agreed to a high extent that inclusion of stakeholders in decision-making processes positively influences access to and equity in education, mechanisms are put in place to encourage the participation of different stakeholders in decision-making related to education, decision-making processes consider the diverse needs and perspectives of all stakeholders involved in education and involvement of stakeholders in decision-making contribute to the improvement of the quality of education as seen in items 6, 8, 9 and 10 having weighted mean values above the criterion mean of 2.50. The grand mean of **2.56** indicates that the answer to research question two is that to a high extent inclusive decision-making enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.

Research Question Three: To what extent do collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State?

Table 3: Mean and standard deviation scores on the extent collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.

S/N	Extent collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.	Principals		Teachers'		Mean set (x_1+x_2)	Remarks
		$\bar{X}_1$	SD ₁	$\bar{X}_2$	SD ₂		
11	Engage with external organizations to evaluate and promote secondary education	2.08	0.74	2.46	0.69	2.27	Low Extent
12	(NGOs) collaborate with government-owned schools in Rivers State to enhance the attainment of Sustainable Development Goal 4	2.26	0.81	2.42	0.85	2.34	Low Extent
13	Collaboration positively influenced the attainment of Sustainable Development Goal 4 in government-owned schools	3.17	0.79	3.18	0.79	3.18	High Extent
14	Engage in Joint teacher training programs to promote Sustainable Development Goal 4.	2.27	0.71	2.05	0.76	2.16	Low Extent
15	Receive adequate support from educational authorities to facilitate collaboration for the achievement of Sustainable Development Goal 4	2.07	0.76	2.10	0.79	2.09	Low Extent
Average Mean/Standard Deviation		2.37	0.76	2.44	0.78	2.41	Low Extent

Data presented on Table 3 above shows mean ratings and standard deviation of responses of principals and teachers' on the extent collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State. The data shows that the respondents agreed to a low extent that engage with external organizations to evaluate and promote secondary education, (NGOs) collaborate with government-owned schools in Rivers State to enhance the attainment of Sustainable

Development Goal 4, engage in Joint teacher training programs to promote Sustainable Development Goal 4 and receive adequate support from educational authorities to facilitate collaboration for the achievement of sustainable Development Goal 4 as seen on items 11, 12, 14 and 15, having weighted mean values below the criterion mean of 2.50. However, the respondents agreed to a high extent that collaboration positively influenced the attainment of Sustainable Development Goal 4 in government-owned schools as seen on item 13 having weighted mean values above the criterion mean of 2.50. The grand mean of **2.41** indicates that the answer to research question three is that to a low extent collaboration enhance attainment of sustainable development goal 4 in government owned schools in Rivers State.

Discussion of Findings

The result of the study in Table 1 indicated to what extent government budgetary allocation enhanced attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State. The assessment includes perspectives from both principals and teachers, as well as a mean value calculation and corresponding remarks for each item. One notable finding is highlighted in Item 1, which indicates that an increased budgetary allocation has been perceived as having a positive influence on teacher training and professional development. This aligns with Iliyasu's (2009) finding that higher investment in education can enhance the quality of teacher training and consequently improve the overall educational experience. On the other hand, Item 2 reveals that both principals and teachers hold the perception that the government's allocation of funds for education in Rivers State is insufficient. Amadioha (2008) posited that the perceived lack of sufficient funds for education aligns with concerns commonly raised regarding the challenges faced by education systems in acquiring the necessary resources for effective implementation. Item 3 emphasises that a lack of budgetary allocation has hindered the implementation of educational programs. Amuchie et al. (2013) highlight the critical role of adequate funding in facilitating the successful execution of educational programmes, including curriculum development and extracurricular activities. Furthermore, Item 4 suggests that there is a perception that the

allocated budget for education is not effectively utilised by the government. This finding agrees with Damar (2003) on the importance of transparent financial management and accountability in ensuring that allocated funds are maximally beneficial for educational purposes. Lastly, Item 5 reveals that an adequate budgetary allocation has led to improved infrastructure in government-owned schools. This finding aligns with the understanding that increased funding can address infrastructure deficiencies, creating a conducive learning environment (Edho, 2009).

Again, the result of the study in Table 2 indicated the extent to which inclusive decision-making processes enhance attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State. Item 6: Inclusion of stakeholders in decision-making processes positively influences access to and equity in education. This finding agrees with Emeka & Vaaseh (2015) that the inclusion of stakeholders in decision-making processes is perceived as having a positive impact on improving access to education and promoting equity. Both principals and teachers agree to a high extent with this positive influence. Item 7: Inclusive decision-making contributes to a more holistic and effective approach to addressing educational challenges. The data indicates that while there is a perception that inclusive decision-making can lead to a more effective approach to addressing educational challenges, the level of agreement on this impact is relatively low.

Item 8: Mechanisms are put in place to encourage the participation of different stakeholders in decision-making related to education. Igbuzor (2006) suggests that there are mechanisms in place to encourage the participation of different stakeholders in education-related decision-making. Item 9: Decision-making processes consider the diverse needs and perspectives of all stakeholders involved in education. Iliyasu (2009) underscores the perception that decision-making processes in education consider the diverse needs and perspectives of all stakeholders involved. While both groups agree to a high extent, there is a slight difference in the ratings between principals and teachers. Item 10: Involvement of stakeholders in decision-making contributes to the

improvement of the quality of education. The data indicates that involving stakeholders in decision-making processes contributes to improving the quality of education.

Finally, the result of the study in Table 3 indicated to what extent collaboration enhanced attainment of Sustainable Development Goal 4 in government-owned schools in Rivers State. Item 11: Engage with external organisations to evaluate and promote secondary education. This item suggests that there's a perceived low degree of engagement with external organisations to evaluate and promote secondary education. Item 12: (NGOs) collaborate with government-owned schools in Rivers State to enhance the attainment of Sustainable Development Goal 4. The data shows that the collaboration between non-governmental organisations (NGOs) and government-owned schools for SDG 4 attainment is perceived to be of relatively low extent.

Item 13: Collaboration positively influences the attainment of Sustainable Development Goal 4 in government-owned schools. This item highlights the high degree of perception that collaboration has positively influenced the attainment of SDG 4 in government-owned schools.

Item 14: Engage in joint teacher training programmes to promote Sustainable Development Goal 4. The data indicates a low degree of engagement in joint teacher training programmes to promote SDG 4. Item 15: Receive adequate support from educational authorities to facilitate collaboration for the achievement of Sustainable Development Goal 4. This item suggests that there's a perception of inadequate support from educational authorities to facilitate collaboration for SDG 4 achievement. Both principals and teachers rate this impact as relatively low. This finding aligns with the result of the study by Mekonnen et al. (2019), which found that knowledge sharing helps in the implementation of evidence-based education policies and practices, ultimately enhancing the quality of education and student learning outcomes. Research by Chiachiri and Hlohlo (2020) emphasised the significance of collaborations in fostering a culture of research and innovation in education. Okwilagwe and Aluede (2017) equally

agreed on the importance of collaborations in ensuring effective monitoring and evaluation of education programmes.

Conclusion

Stakeholders' participation in funding secondary education is crucial for the attainment of Sustainable Development Goal 4 (SDG 4) in Rivers State. The active involvement of various stakeholders, such as government bodies, educational institutions, parents, and the community, is essential for ensuring sustainable funding streams and promoting quality education. By collaborating and pooling resources, stakeholders can support the provision of adequate infrastructure, learning materials, and teacher training, ultimately enhancing access to and the quality of secondary education. Through their participation, stakeholders play a pivotal role in creating an enabling environment that fosters lifelong learning opportunities and contributes to the achievement of SDG 4 in Rivers State.

Recommendations

1. Increase the allocation of government funds specifically designated for secondary education in Rivers State to ensure adequate resources for infrastructure, learning materials, and teacher training.
2. Establish inclusive platforms and forums that facilitate the meaningful participation of various stakeholders, including students, parents, teachers, community representatives, and education officials, in decision-making processes related to funding secondary education.
3. Foster collaborations between government bodies, educational institutions, non-profit organizations, the private sector, and community groups to mobilise additional resources and expertise for funding secondary education.

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Role of Adult Education Programmes in Reducing Harmful Traditional Practices to Maternal Health among Selected Gestational Females in Ijebu-Ode Local Government Area of Ogun State, Nigeria.

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Abstract

Traditional health practices are a part of African societies. However there are ones that promotes good health while some don't. The nature of women makes their health a critical concern especially -reproduction. There are concerns on the rate of maternal mortality in Africa with Nigeria recording high incidences. This study examines the effect of traditional health practices on maternal mortality; and how this can be reduced through maternal health education. Guided by two research questions and hypotheses; the research employed qualitative and quantitative research methods. The study employed the simple percentage to analyze the data collected; and Chi-Square statistic to test the null hypothesis at 0.05 level of significance. Study affirmed that there is a significant relationship that exist between traditional practices and maternal mortality. Findings of the study reveal that 46.3% and 23.6 of the sample population reported that women who have undergone female genital mutilation; and other traditional health practices are at risk of gynecological complications that led to maternal mortality respectively. Maternal health education aimed at reducing maternal mortality; and providing training for traditional health service providers such as traditional birth attendants in Nigeria is recommended.

Keywords: Adut Education, Adult Education Programme, Harmful Traditional Practices, Maternal Health, Maternal Mortality,

Introduction

Health has always caught the interest of stakeholders for numerous reasons. It has also enjoyed positive changes from various medical and scientific discoveries and successes (WHO, 2015). In the field of academics, health is a front burner issue and various scholars have submitted their recommendations through a process of well-informed researches, deductive and inferential conclusions. In other word, modern human health treatments has enjoyed progressive researches in order to build healthy individuals for progressive communities and wholesome societies compared to the age long traditional practices the world all over. Chukuezi (2010) and Shamaki and Buang (2015)

In most African countries, gender inequality is still a predominant phenomenon. This has also affected the women of childbearing age to make decisions on matters that relates to their reproductive health and conception choices. (Awolayo, 2015). Africa as a patriarchal society has men as fathers, husbands or even brothers still making many of the decisions that affects the women's health especially in the low income and rural society. Since, there are still issues around low self-esteem, cultural biases, lack of education, lack of economic independence, etc. that many African women grapple with; these poses as huge restrictions for them to make decisions for themselves at different levels.

The nature and role of women is dynamic in the society at all levels role so as issues involving them such as health requires special attention. Due to the limitations placed on women in patriarchal society and observable overreaching financial incapacitations owing from the myraids of subjugations and marginalisations that has feminized poverty as one of its consequences, women in developing societies often result to adopting the culture of seeking home services and traditional health services as well as crude healers (e.g. herbalist or Traditional Health Practitioners) in the matters that relate to their health as well as the health of their unborn child and that of their children (Awolayo, 2015). These limitations spread through constraints by cultural beliefs and perception and expectations; religion, husband lordship and lack of economic power. The effect of this is that women become subjected to traditional practices that causes many avoidable

pains, tears, loss of child and loss of their own lives (Okwuwa & Adejo, 2022). The World Health Organization (WHO) estimates that 830 women die every day owing to complications related to pregnancy or childbirth. Despite global efforts to combat maternal mortality, 99% of the maternal mortality occurs in developing countries, with Sub-Saharan African countries like Nigeria accounting for about 70% of the annual global phenomena; and the continuous use of traditional practices and health service providers in Africa fuels the increasing alarming numbers of maternal mortality involving neonates and often times the mothers especially in the rural areas of the region.(UNICEF, 2018; WHO, 2015)

Nigeria's maternal mortality rates rank second highest in West Africa after Sierra Leone with 814 and 1360 maternal deaths in 100,000 live births respectively (UNICEF, 2018). Although there exists traditional beliefs that are informed by the motive to promote the health and wellbeing of members of African societies, there are several traditional practices that does not promote the health and wellbeing of the women and girl child when viewed from an holistic perspective. This cuts across different categories of women and girls; and of circumstances such as maternal health.

Chukuezi (2010) stated the traditional practices that compromises nutritional health of women such as protein and non-protein food restrictions; and eating limits or food taboos in pregnancy as common among diverse ethnic groups in Nigeria. Traditional childbirth practices such as inserting herbs into the birth canal for cleansing or use of concoctions for labour induction is prevalent among pregnant women. Chukuezi (2010) . Female genital mutilation or cutting (FGM/C) is another practice. This involves surgical removal of parts or all of the most sensitive female genital organs (WHO, 2015). FGM forms an important part of the rites of passage ceremony for some communities, marking the coming of age of the female child. It is believed that, by mutilating the female's genital organs, her sexuality will be controlled; but above all, it is to ensure a girl remains a virgin before marriage and remain chaste thereafter. In fact, FGM imposes on women and the girl child a catalogue of health complications and untold psychological problems which may impact negatively on the woman and her child during child birth when there are present complication as a result of the mutilations

to the woman's genitals. In the countries where the Female Genital Mutilation still persists in the open; and there exist a gendered socialization that has formed subtle perceptions and beliefs in the mind of women and girls that they have to undergo the mutilations to their genitals to be considered chaste, pure and clean by their communities. Hence, to be considered clean and proper, fit for marriage, female circumcision becomes a fad and craved by women as a precondition to be accepted. Also, women or girls in Djibouti, Ethiopia, Somalia and the Sudan, must undergo circumcision to reduce sexual desire and also to maintain virginity until marriage. A circumcised woman is considered clean. Among the Bambara in Mali, it is promoted that, if the clitoris touches the head of a baby being born, the child will die. The clitoris is seen as the male characteristic of the woman; in order to enhance her femininity, this male part of her has to be removed- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW, 1979). These are merely informed by patriarchal beliefs and value systems. (WHO, 2015)

Ariyo, Ozodiegwu, & Doctor (2017) posits that a traditional practice which involves a combination of early marriage and Female Genital Mutilation (FGM) further compromise maternal health outcomes in Nigeria. The effects of female genital mutilation have short-term and long-term implications. Haemorrhages, infections and acute pain are the immediate consequences while Keloid formation, infertility as a result of infection, obstructed labour and psychological complications are identified as later effects. These consequences of FGM often results to complications that causes maternal deaths especially in rural areas where untrained traditional birth attendants perform the operations. In addition, complications resulting from deep cuts and infected instruments may cause the death of the child while religious practices, such as child marriage influences maternal mortality rate. (Ariyo, Ozodiegwu, & Doctor., 2017; Chukuezi, 2010; Odekunle, 2016; Ogu et al., 2016; Shamaki & Buang, 2015).

World Health Organization (WHO) estimates that about 140 million women give birth every year globally. (WHO, 2015) In 2016, about 50 million births took place outside a health facility. Majority of these cases were in Sub-Saharan Africa where nearly half of all births occurred at home without skilled birth attendants. (WHO, 2015).

In low economies such as African countries, majority of births are attended to by traditional birth attendants (TBAs) who happen to be the only source of help most women can rely on during delivery. Teresa, et al , (2021) Obioha, Obioha and Martin (2020) state that this affects even Nigerian women and makes their health impacted negatively which negates the principle of social justice and right to self determination contained in the Ottawa Charter which makes it mandatory for governments to make health care accessible and affordable. The rate of maternal mortality is increasing in Nigeria and one of the indicators that promotes the use of traditional health practices associated with contributing to maternal mortality is still prevalent hence making it critical to deal in order to reduce incidences drastically in the Nigeria society in the nearest future. Hence, this article to explore possible approach to leverage on Traditional Health related practices and services to bring about a wholistic approach in improving maternal health and reduce maternal mortality in Nigeria. Also, since the welfare of women and child health is important to all stakeholders as significant adult members in the lives of woemn, as community members and largely as members of the society , we look at the of adult educational approach in the form of a maternal health education programme and training to ensure that women patronize the modern health facilities and professional practitioners; and where they chose to patronise the traditional health service providers; adequate trainings would have been given to such service providers to give appropriae care and make informed recommendations to women inorder to reduce incidences of maternal mortality.

Traditional Health Practices and Services; and Maternal Mortality

Maternal and child health refers to the promotive, preventive, curative and rehabilitative health care of mother and children is a great consideration for understanding Maternal mortality which has been a global health challenge and remains unresolved largely because of various factors such as patriarchy, poverty and gross illiteracy of women, especially in developing countries. (WHO, 2015). Traditional practices with respect to health including that of women are ingrained and have wider acceptance owing to various reasons; and the advent of medical progresses and advancements have not deterred this nor gained enough patronage in many African society owing cultural

health beliefs; poverty and illiteracy. Africans are usually critical of changes that challenges their cultural perception and ways of doing things thus the persistence prevalence of the preference for traditional health practices and associated services in Africa. For example, nursing mothers are seen hiding their children from being immunized, and taking the use of health facility like health centres and hospitals with levity for proper health consultation and treatment, until complications occurs. Many families in Africa have regular consultations with traditional medicine sellers that makes and mixes concoction for them; and blindly diagnose and prescribe herbs to cure ailment or sickness. The gross inadequate and appropriate health facilities in so many communities especially rural areas and remote urban centres makes residents, family members or individuals go several kilometers before they can access medical services which are often scarcely equipped with medical professionals as well as unavailability of medical supplies or its unaffordability.

Traditional health providers (THPs) and Traditional Birth Attendants (TBAs) provides short-term solution until such a time where there are adequate midwives in the rural communities to reduce maternal mortality; and provides education on nutrition during pregnancy and lactation. however, the World Health Organization (WHO) estimates that 830 women die every day owing to complications related to pregnancy or childbirth. Culture is an apparent and uncompromising facilitator for patronising these providers; and it is also facilitated through different ways such as women obtaining permission from their husbands before accepting or adopting any contraceptive method. Unfortunately, these patriarchal systems are still maintained in many part of Nigeria, to subjugate women and render them vulnerable to obnoxious cultural practices, which violate the “rights” of girls or women. Women are arbitrarily deprived of their liberty to express and exercise their fundamental rights thus have overreaching implication even on maternal health and maternal mortality. In spite of the high risk of maternal morbidity or too closely spaced birth; women often cannot exercise control over their own fertility. Ibe, (2017) states that culture is a barrier and has a compelling nature that regulates all the aspects of human life, which include: food, religion, dressing and language of the people, housing, marriage and family relations..Therefore, it influences

health. {United Nation Educational Scientific and Cultural Organization, [UNESCO], 2012). Different studies evidence that the provision of professional care adapted to cultural needs generates a positive impact on women, their babies and their family (Benza & Liamputtong, 2014). Also, level of education or health literacy and poverty of a woman can impact maternal health-seeking behaviour including access and utilization of health care services (Odekunle, 2016; Ogu, 2016).

More Empirical Evidences

Although, there are good and bad side of traditional practices. Studies has indicated that TBA provided maternal healthcare is affordable, accessible, and culturally acceptable; it is the adverse effects THP/TBA-provided services have on mothers and newborns or the use of TBA provided maternal health care as a response to a failed modern maternal health system in Nigeria that helps to reveal that the costs of THP/TBA-provided maternal healthcare are more than the benefits. THP/TBA provided maternal health care is very popular with the typical Nigerian household, especially in the rural communities, because they provide social support, cultural competence and psychosocial supports for the mothers and babies (Yousuf, Nigatu & Seyum, 2010). Also, to be noted is the notion that childbirth, been a natural phenomenon, should be welcomed by a pregnant woman's kin and kith. A descriptive study undertaken as part of a preliminary part of safe motherhood campaign in Akwa-Ibom state of Nigeria, posits that 72% of maternal mortality occurred among women who were either registered for hospital antenatal care or were registered but nevertheless attempted deliveries with TBAs (Itina 2007).

According to Okwuwa & Adejo (2020) THPs and TBAs are trusted by women that they provide culturally appropriate pregnancy care in line with the traditional expectations of the community. Many pregnant women in the country often chose to deliver their babies at traditional home with no access to skilled healthcare workers (doctors, nurses or midwives) (NPC 2014; Dahiru & Oche, 2015). As reveal in Adewuyi, Khanal, Zhao, *et al.* (2019) It is worth noting that many developing countries like Ghana, Kenya, Indonesia, Nepal, Niger Republic, have recorded considerable progress in the reduction of home delivery births (Malqvist M, Pun & Kc, 2017). For example, the prevalence of home delivery decreased from 54% in 2003 to 27% in 2014 in Ghana; and from 79.2%

in 2006 to 46.5% in 2014 in Mozambique but this challenge of home delivery is still rampant in Nigeria with preference for hospitals when complications arises with the TBAs. (Malqvist M, Pun & Kc, 2017)

In the study of Obioha & Martin (2022), associations between FGM/C and breastfeeding outcomes were measured using multi-logistic regression. About 32% of women underwent FGM/C, and 23% believed FGM/C should continue even in this present century. Their study also revealed that women exposed to FGM/C were less likely to initiate early breastfeeding (OR = 0.56, [95% CI = 0.47–0.66]) or to breastfeed exclusively (0.64, [0.57–0.73]) which has effect on the healthy development of the child and reduced necessary nutrient for child survival in the few days after birth and such increased mortality. FGM/C acceptance reduced odds of early initiation of breastfeeding (0.57, [0.45–0.73]) (p for interaction < 0.001) and exclusive breastfeeding (0.65, [0.59–0.78]) (p for interaction < 0.001).

Achieving universal health coverage and reducing the global burden of maternal as well as neonatal mortalities are major health-related targets of the Sustainable Development Goals (SDGs). These targets were a high priority in Nigeria considering the poor indices of maternal and newborn health outcomes in the country (UNICEF, 2014). From 2015 through to 2030, an estimated 1.6 million maternal lives are at stake and Nigeria alone is projected to account for about 33.3% of this estimate (McArthur, Rasmussen & Yamey, 2018). To be on track for SDGs, the annual rate of maternal mortality reduction in Nigeria needs to accelerate from 1.5% (2005–2015 rates) to 15.1% during 2015–2030 ((McArthur, Rasmussen & Yamey, 2018).

A typical THP/TBA is an illiterate (WHO 1986, Imogie, 2000, Ofili & Okojie 2005, Titaley, Hunter, Dibley & Heywood 2010). Findings revealed that TBAs play a critical role in supporting women during pregnancy and after birth. However, they are not able to attend to complications associated to delivery; and don't have adequate knowledge that accounts for appropriate prescription value. (UNICEF, 2021).

Maternal Health Education as an Adult Education Programme

Adult education programmes are multivaried and multi faceted cutting across every areas of human life and interplays across different disciplines such as in health. Maternal

Maternal Health Education is a critical adult education programme suitable for addressing the incidences of maternal mortality and serves as an intervention programme to curb or reduce it appropriately. The National Academy of Sciences, National Academy of Engineering, and Institute of Medicine (2005) reiterated the importance of interdisciplinary researches in the science and medical sciences especially in respect of social issues. According to Collins (2021) adult education borrows from many fields because it is so variable; and has always been interdisciplinary, intertwined with other formal academic disciplines hence acquiring knowledge from different disciplines including sociology, psychology, business, biology, anthropology, neuroscience, feminist theory, critical race theory, indigenous knowledge, vocational education, performance improvement, and many other sources as long as the central focus in this interdisciplinary work is adult learners.

Women and other members of the society whether as men or traditional health services practitioners can be regarded as adult members of the society hence the suitability of the maternal health education programme to be regarded as an adult education programme where provided. Merriam and Baumgartner (2020) state that indicated that “adult education includes activities intentionally designed for the purpose of bringing about learning for those whose age, social roles, and self-perception define them as adults”

Maternal health education is beyond the educational status or formal schooling level of a woman or mother. In fact, it encompasses all forms of educational activities that are organised for women with children and expectant mother to have information and armed with the skills sets required to be good mother and protect themselves and their children whether they are born or unborn. According to World Health Organisation (2018) Maternal health education equips individuals, particularly pregnant women and their families, with the knowledge and skills to make informed decisions about their health and well-being during pregnancy, childbirth, and the postpartum period, ultimately promoting positive maternal and child health outcomes.

Godwin and Sally (2017) state that maternal health education is critical to addressing maternal mortality; it puts a distinctive gap between women who have been empowered

with information and skills during pregnancy and after child delivery to make informed decision about service patronage from traditional practitioners and even modern medicine practitioners. Bicerger and Boerma (2013) posits that one year in increment in maternal health education improves the health of women and their children; and reduces the incidences of maternal mortality by 7-9 percent. reiterated the important role of maternal health education by showing that there is a causal connection between the lack of maternal education and increased maternal mortality. Smith et al (2021) write that maternal health education facilitates several opportunities for women's decision making and promotes logical reasoning and careful handling of peri or post delivery issues through earlier skills and information that have been accessed from it.

Mizzi (2021) explorative study on the discourses on adult education strategies, approaches, models and theories of learning show its relevance to educational activities that promotes health well being of adult members of different societies when the dynamics of group peculiarities are well acted upon.

Conclusion

Cultural and traditional influences on maternal and child health practices are predominant in rural settings, with positive or indifferent cultural disposition to recommended practice being commonly associated with such practices. Adult Education in form of Maternal health education programmes should be leveraged with a rich curriculum that will facilitate empowering women; and build engagement with traditional leader and as well as traditional health service delivery such as birth attendants continuously. These are highly recommended (Ikechukwu, Ofonime, Kofoworola, Asukwo, 2019). This should be focused as a corrective reorientation while sustaining the effort at encouraging best practices. The maternal health education provided should make women and the society have increased and early maternal health related education from secondary schools to address and deconstruct perception on beliefs and cultural systems supporting harmful traditional practices to discourage it and promote the healthy approach to healthy living and reduced child mortality.

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Linkage between Political Ideology and Educational Reforms to Enhance Political Stability in Nigeria.

By

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Abstract

This paper explores the intricate linkages between political ideology and educational reforms, focusing on their potentials to foster political stability in Nigeria. Employing a desk-base historical literature exploration based on Neo-Marxist theory and Liberalism, this paper delves into how political ideological shifts have influenced educational policies by analysing case studies and policy implementations. The paper identifies key reforms that have either contributed to or hindered political stability. For example, the Universal Basic Education programme has improved literacy rates and educational access; while the Quota System and Federal Character Principle in Education which intended to promote inclusivity, sometimes resulted in perceived favouritism and regional imbalances. The study argues that aligning educational reforms with inclusive and progressive political ideology can bridge ethnic and religious divides, and foster a cohesive society. Based on the synthesized results, it concludes that educational reforms in Nigeria have had complex and multifaceted impacts on political stability. Reforms that promote inclusivity, quality education, and civic engagement tend to enhance stability, while those that increase inequality or are poorly implemented can hinder it. It therefore recommends among others a comprehensive and integrative policy that synchronises political and educational strategies.

Key words: Educational Inclusiveness, Educational Reforms, Political Ideology, Political Stability

Introduction

Educational reforms and political ideology are intricately linked to the political dynamics and national development of a country. These elements not only shape the governance and policy-making processes, but also influence the socio-economic landscape of a nation. In Nigeria, the interplay between educational reforms and political ideology has been particularly significant in shaping the country's developmental trajectory. Political ideology provides the framework within which policies, including educational reforms, are conceptualized and implemented. It also influences the priorities set within the educational sector, determining which reforms are adopted and how they are implemented. This connection is crucial because educational reforms have the potential to mould the cognitive and moral fabric of the populace, thus shaping future political landscapes and economic capacities.

Niemi (2021) emphasizes that educational reforms, when executed within the framework of a supportive political ideology, can significantly enhance equity and quality in education, which are vital for national development. By examining the Finnish education system, Niemi illustrates how comprehensive educational strategies aligned with egalitarian political ideology can lead to remarkable educational outcomes, which in turn contribute to social stability and economic prosperity. This is particularly relevant to Nigeria, where educational reforms need to be strategically aligned with political ideology that promotes inclusivity and equal opportunity in order to rectify historical imbalances and foster national cohesion.

Political ideology is fundamentally a set of beliefs about the proper order of society and how it can be achieved. Ogunnoiki (2018) articulates that political ideology often manifests through varied and sometimes competing views on governance, economy, and social policies. In the Nigerian context, political ideology has fluctuated significantly, influenced by colonial legacies and post-independence political developments (Akinlotan, 2023). The ideological shifts have been instrumental in shaping the country's

political landscape, influencing policy decisions and governance styles that directly impact societal structures, including the educational sector.

Educational reforms refer to the systematic changes implemented within the educational sector aimed at improving the quality and accessibility of education. In Nigeria, reforms such as the Universal Basic Education programme have sought to enhance literacy and educational access across diverse demographics (Abdullahi & Abdullah, 2014). However, as Lawan, Jacob, Gregory and Lawan (2020) note, the implementation of these reforms has often been marred by challenges such as inadequate funding, poor policy implementation, and regional imbalances, which underscore the complexity of actualizing educational objectives in a politically and ethnically diverse society.

Political stability in this context refers to the state of enduring peace and minimal political disruption that allows for the continuous function of governmental and societal institutions. Yusuf, Amana and Zekeri (2022) argue that Nigeria's democratic experience has been significantly affected by the interplay of ideology, ethnicity, and nationalism, which often lead to political instability. Educational reforms have the potential to either mitigate or exacerbate these tensions depending on how they are conceptualized and implemented.

The linkage between political ideology, educational reforms, and political stability is intricate and multifaceted. Political ideology shapes the objectives and implementation of educational reforms, which in turn can influence the broader political landscape by shaping citizens' values and civic engagement (Kam & Palmer, 2008). For instance, educational policies that are inclusive and cater for diverse ethnic and religious groups can foster national unity and stability, while exclusionary policies can exacerbate divisions and lead to unrest. Recent scholarship has rigorously explored the dynamics between political ideology and educational reforms within various geopolitical contexts, underscoring their profound impact on societal structures. Zebarjadi, Adler, Kluge, Sams and Levi (2023) have delved into the evolutionary underpinnings of political ideology and its consequent influence on educational systems. Similarly, Strielkowski, Volchik,

Maskaev and Savko (2020) and Niemi (2021) have examined the mechanisms through which leadership in educational reforms can drive equitable and quality education, thereby fostering an environment conducive to national development. These studies form a crucial part of the contemporary discourse, highlighting the transformative potential of educational policies when intertwined with political ideology.

Despite extensive studies on political ideology and educational reforms, there remains a lacuna in the specific exploration of how these elements interact to affect political stability in Nigeria. This paper seeks to bridge this gap by providing a comprehensive analysis of the historical and contemporary influence of political ideology on educational reforms and its consequent impact on political stability. The main aim of this paper is to explore the linkage between political ideology and educational reforms in Nigeria and how both can be harmonized for political stability in Nigeria. In a much more specific terms, the paper explored the following: to analyse the relationship between political ideology and educational policies in Nigeria; to evaluate how political ideologies and educational reforms in Nigeria impact political stability in Nigeria; and to explore how to maximize the relationship between political ideology and educational reforms to promote political stability.

Understanding Political Ideology and Nigeria Political Ideology

A more comprehensive definition might consider political ideology as a set of ethical ideals, principles, doctrines, myths, or symbols of a social movement, institution, class, or large group that explains how society should work, and offers some political and cultural blueprint for a certain social order. In the context of Nigeria, the political ideology landscape is complex and has evolved significantly over time, reflecting the country's diverse ethnic, religious, and social compositions. The political ideology in Nigeria has shifted from the communalistic and traditional systems pre-colonization, through colonial and military regimes, to the current federal democratic governance. The ideology during the military regimes, for instance, was characterized by authoritarianism

and statism, where the state had control over resources and authority without much public accountability (Ogunnoiki, 2018).

Post-military rule, Nigeria embraced democracy, but the political ideology has often been criticized as being neopatrimonial, where the state apparatus is used to serve the personal interests of elected officials and their networks rather than the public good (Joseph, 1987). This form of governance is influenced significantly by both the legacy of colonial administrative practices and the traditional patron-client systems prevalent in Nigerian society (Bratton & Van de Walle, 1997).

Current Nigerian political ideology also reflects a blend of liberal democratic principles and strong central federal authority, aimed at managing the country's ethnic and religious diversity while striving for economic development and modernization. The ruling politicised parties since the return to democracy in 1999, mainly the People's Democratic Party (PDP) and the All Progressives Congress (APC), have both professed ideologies centered on democracy, development, and unity, though the practical implementation has often been marred by corruption and inefficiency (Ake, 2000; Diamond, 1985). Hence, the political ideology in Nigeria is a tapestry of traditional, authoritarian, and democratic elements, continually evolving as the nation negotiates its complex social and political terrains.

Educational Reforms in Nigeria (1976-2020)

Educational reforms as earlier defined refer to a broad range of organized and sustained efforts to improve educational systems. Such reforms encompass changes in policy, pedagogy, curriculum, educational theory, and administration, aimed at enhancing outcomes across various levels of education. Typically, reforms are initiated to address specific issues such as educational inequity, outdated curricular content, poor school performance, and changing societal needs (Fullan, 2007).

In Nigeria, educational reforms have been a critical focus since the return to civilian rule in 1999, driven by the necessity to overhaul an education system fraught with challenges like underfunding, poor infrastructure, teacher inefficiency, and curriculum irrelevance. The reforms in Nigeria have aimed at increasing access, improving quality, and ensuring the relevance of education to the society (Adeyemi & Adeyinka, 2003).

From 1976 to 2020, the Federal Government of Nigeria undertook several significant educational reforms. One of the landmark initiatives was the introduction of a six-year Universal Primary Education (UPE) in 1976, which aimed to unify primary and secondary education. This was followed by the establishment of the Federal Ministry of Education (FME) in 1977 to regulate educational policy across all states (Elems-Ikwegbu, 2023). Included also were the expansion of access to vocational and technical training (FRN, 2004); revising curriculum standards by the Nigerian Educational Research and Development Council (NERDC) in 2004 to be responsive to economic needs and to meet international benchmarks (Okebukola, 2004); developing robust assessment systems and providing increased funding to infrastructural development. These have resulted in an impressive outcomes in the enrolment rates. To crown it, was the launching of Universal Basic Education (UBE) programme in 1999, which aimed to provide free, compulsory, and universal basic education for every Nigerian child aged 6-15 years (FRN, 2004). This initiative was a response to the country's alarming dropout rates and was designed to ensure a solid educational foundation for all children.

However, the implementation of these reforms faced significant hurdles. Despite the ambitious aim of the UBE, issues such as inadequate funding, corruption, lack of teacher training, and poor infrastructure hindered its success. Studies like those by Uwakwe and Kanu (2010) observe that while enrolment numbers increased, the quality of education did not substantially improve, largely due to these systemic challenges.

Moreover, the National Policy on Education has been revised several times, notably in 1981, 1998, 2004, 2007, and 2013 (reprinted in 2014), to align with global changes and internal advancements in science and technology. These revisions emphasize technical

and vocational education to foster self-reliance and reduce unemployment among youth—a critical issue in Nigeria’s socio-economic landscape (Fafunwa, 2004; Obioma, 2010).

In a nut shell, educational reforms in Nigeria from 1976 to 2020 have been characterized by a blend of ambitious policy formulations and challenging implementations. While significant strides have been made in expanding access to education, persistent issues of quality and equity remain. These reforms reflect Nigeria's ongoing struggle to adapt its education system to both internal pressures and global trends, which underline the complex interplay between policy ambitions and practical realities in a developing nation’s educational landscape.

Political Stability: The situation in Contemporary Nigeria.

Political stability refers to the durability and integrity of a current government regime and its policies. Stability in this context means that the political environment is predictable, that government functions are not severely disrupted by violence or other crises, and that there are mechanisms in place to manage political transitions and policy adjustments smoothly. Political stability is crucial as it affects economic performance, governance quality, and overall societal peace and security (Alesina & Perotti, 1996).

Contemporary Nigeria presents a complex picture of political stability. Since the transition to democracy in 1999, Nigeria has experienced several peaceful transitions of power through elections. However, the political landscape is often marred by instability due to factors such as ethnic conflict, corruption, economic disparities, and insurgencies, most notably by Boko Haram in the Northeast (Adesoji, 2015). The issue of corruption significantly undermines political stability in Nigeria. The pervasive corruption erodes public trust in government and exacerbates tensions between different societal groups. Despite various anti-corruption campaigns and measures implemented by successive governments, corruption remains a persistent issue (Smith, 2015).

Economic challenges also play a crucial role in political stability. Nigeria's economy, heavily reliant on oil, suffers from fluctuations in oil prices, which in turn affect government spending and could lead to socio-political unrest. The recent economic recession, triggered by global oil price drops and the COVID-19 pandemic, has intensified unemployment and poverty, further straining political stability (World Bank, 2019; Akinola, 2015). Ethnic and religious divisions continue to impact Nigeria's political stability. The country's diverse ethnic landscape sometimes fuels regional disparities and conflicts. Political parties and leaders often exploit these divisions for electoral gains, which could lead to violence and unrest (Agbiboa, 2020). Furthermore, the security challenges, including terrorism and banditry, significantly disrupt political stability. The activities of Boko Haram and other insurgent groups have not only caused immense human suffering, but also displaced millions of people, creating severe humanitarian crises and straining governance structures (Onuoha, 2016).

Despite these challenges, there are efforts toward stabilizing the political environment. Recent elections have shown some levels of improvement in electoral processes with increased transparency and participation, although electoral violence and vote-rigging claims persist (Falola, 2015). While Nigeria has made notable strides towards consolidating its democratic institutions and processes, the country's political stability is continually tested by corruption, economic volatility, ethnic conflicts, and security challenges. Addressing these issues comprehensively requires robust governance mechanisms, effective economic policies, and genuine efforts to foster national unity (Obi, 2019).

Theoretical Discourse

For the theoretical underpinnings that relate to the interplay between political ideology, educational reforms, and political stability in Nigeria, we can draw from three pertinent theories identified in the existing literatures: the Conflict Theory, Structural Functionalism, and the Theory of Social Reproduction. These theories provide a robust

framework for analysing how educational reforms influenced by political ideology can influence political stability.

Conflict Theory originally formulated by Karl Marx, implies that society is in a state of perpetual conflict due to competition for limited resources. Applying this theory to the Nigerian context, it can be argued that political ideology significantly shapes educational reforms as tools for maintaining or challenging the status quo. Political leaders often use educational policies as instrument to consolidate power and control over resources, which often lead to conflicts that destabilize the political landscape (Ballantine, Stuber & Everitt 2021; Elems-Ikwegbu, 2023). This theory helps to explain why different political regimes in Nigeria might push for educational reforms that align with their ideological views to strengthen their base and marginalize opposition voices, thus impacting political stability.

Structural Functionalism, advocated by Émile Durkheim, views society as a complex system whose parts work together to promote solidarity and stability. From this perspective, educational reforms are crucial in creating a cohesive society by instilling a common set of values and knowledge that promotes national unity. However, when educational reforms are heavily influenced by fluctuating political ideology, they may fail to perform this function effectively. Instead of uniting, they might end up creating more divisions and instability, especially if the reforms are perceived as favouring certain groups over others (Niemi, 2021).

Theory of Social Reproduction, which stems from the work of Pierre Bourdieu, suggests that schools function to reproduce the class structure of society. In Nigeria, where educational reforms are influenced by deep-seated political ideology, these reforms can often reinforce existing inequalities by ensuring that the elite maintain their economic and cultural capital. This, in turn, affects political stability as it entrenches systemic inequalities and hampers the democratic process, where all citizens have equal opportunities to participate and benefit from the system (Apple, 1978).

These theories provide a comprehensive understanding of the dynamics at play. Conflict Theory elucidates the power struggles inherent in the implementation of educational reforms; Structural Functionalism highlights the role of education in maintaining societal stability, and the Theory of Social Reproduction reveals how education can perpetuate social inequalities under the guise of reform. These theoretical insights suggest that for Nigeria to achieve true political stability through educational reforms, these reforms must be carefully crafted to transcend immediate political gains, address systemic inequalities, and genuinely aim to unify the diverse demographic landscape of the country.

The Linkage between Political Ideology and Educational Policies in Nigeria

In Nigeria, the interplay between political ideology and educational policies is a pivotal area of governance, profoundly impacting the direction and substance of education across the nation. As observed by Omotola (2009), the shifts in politics, from colonial legacies to post-independence military and civilian rules, have left indelible marks on the educational system. During military regimes, for instance, education policies were notably steered by authoritarianism which emphasized discipline and regime loyalty, deeply ingraining these values within the curriculum and educational administration. This approach to education was reflective of a broader political agenda aimed at consolidating power and instilling a unified national identity, often at the expense of academic freedom and critical thinking. However, the significant relationship between political ideology and educational reforms is pendulum in nature (Table 1). This is simply because, education affects human belief just as a structured system born out human belief affects educational system. For instance, Meyer (2017) and Elems-Ikwegbu (2023) note that educational attainment can shift political ideology and political ideology can reflect in the education system, which suggest a reciprocal relationship where education both influences and is influenced by political currents. This dynamic is particularly visible in Nigeria, where shifts in political power often lead to

substantial overhauls in educational policies, affecting curriculum content, educational access, and the ideological orientation of educational content (Ogunnoiki, 2018).

The impact of these ideologically driven educational policies on the quality of education and its accessibility is significant. Zajda (2020) points out that globalization has led to an international convergence towards uniformity in educational reforms, a trend that complicates the interplay between local political ideologies and global educational norms. In Nigeria, this convergence is often at odds with local socio-political realities, leading to educational reforms that do not always align with the community's needs or expectations (Niemi, 2021).

To address the ideological manipulations in educational policies, it is imperative to advocate for reforms that prioritize educational equity and quality over political gains. Claessens, Fischer, Chaudhuri, Sibley, and Atkinson (2020) discuss the dual evolutionary foundations of political ideology, suggesting that a deeper understanding of these foundations can inform more balanced educational policies that transcend political biases and are responsive to the diverse needs of the populace. In the Nigerian context, this means developing policies that not only reflect global educational standards but also respect and incorporate local cultural values and historical contexts.

In conclusion, the interconnection between political ideology and educational policies in Nigeria underscores the need for a more nuanced approach to educational reforms—one that considers the complex socio-political dynamics and aims to foster an educational system that is both globally competitive and locally relevant. Such reforms should be grounded in empirical research and led by a diverse coalition of stakeholders, including educators, policymakers, and community leaders, to ensure that the educational policies formulated are equitable, sustainable, and beneficial to all segments of the Nigerian populace (Westheimer & Kahne, 2004). This collaborative approach can help mitigate the ideological manipulations that have historically skewed educational developments in Nigeria, paving the way for a more inclusive and effective educational system.

Table 1: Empirical Evidence of the Linkage between Political Ideology and Educational Reforms

Author (Year)	Aim	Method	Findings	Conclusion
Meyer (2017)	To examine the impact of education on political ideology using evidence from compulsory education reforms.	Regression discontinuity design using compulsory education laws as an exogenous factor.	Education significantly shifts individuals' political ideology to the right, particularly in self-interest-driven economies.	Education plays a crucial role in shaping political ideology, often aligning individuals with right-wing identities.
Apple (1978)	To analyze the role of ideology in educational reforms and the reproduction of social structures.	Comparative education review of various educational reforms and their ideological underpinnings.	Education often reproduces dominant ideology, perpetuating existing social structures and power relations.	Educational reforms serve as a mechanism for ideological reproduction, maintaining the status quo.
Delands here & Petrosky (2004)	To investigate the political rationales and ideological stances behind standards-based reform of teacher education in the US.	Critical analysis of policy documents and interviews with educators, policymakers, and administrators.	Educational reforms are frequently used to propagate political ideology, limiting teacher autonomy and flexibility.	Standards-based reforms are influenced by political ideology that seek to control the narrative and restrict teacher independence.
Zajda (2020)	To explore the relationship between globalization, ideology, and education reforms in emerging paradigms.	Literature review and analysis of educational reforms across global contexts, focusing on ideological influences.	Globalization pushes towards uniformity in educational reforms, often clashing with local ideological and cultural contexts.	Educational reforms must balance global standards with local ideology to be effective and sustainable.
Claessens et al. (2020)	To examine the dual evolutionary foundations of	Empirical research combining evolutionary	Political ideology has deep evolutionary	Political ideology is deeply ingrained in human

	political ideology and how they inform political behavior.	psychology and political behavior analysis to assess ideological foundations.	roots and significantly shapes educational and political reforms.	behavior, and understanding it is a key to effective educational policy.
Ogunnoi ki (2018)	To critically examine the origin and proliferation of political parties and their ideology in Nigeria from colonial to post-colonial era.	Historical analysis using qualitative methods and secondary data from political party histories in Nigeria.	Political parties in Nigeria are often ideologically barren, with reforms driven more by power consolidation than democratic values.	Nigeria's political parties lack strong ideological foundations, leading to inconsistent educational reforms and policies.

How Political Ideology and Educational Reforms in Nigeria Impact Political Stability in Nigeria

Political ideology and educational reforms are integral components that significantly influence political stability in Nigeria. The interplay between these elements shapes the governance, social cohesion, and overall democratic processes within the country. Political ideology in Nigeria, deeply rooted in various ethnic, regional, and religious identities, has a profound impact on the country's governance structures. As political ideology drives the political agenda of parties and leaders, it affects educational policies due to their influence on policy formulation and implementation. For instance, the ideological orientations of ruling parties often determine the allocation of educational resources, and curriculum design (Osaghae, 2016).

Educational reforms in Nigeria, aimed at addressing the deficiencies in the education system, are often influenced by the prevailing political ideology. These reforms are crucial for equipping citizens with the necessary skills and knowledge to participate effectively in the democratic process and for fostering a sense of national cohesion. However, the effectiveness of these reforms is frequently undermined by political

instability, which is fueled by corruption, ethnic divisions, and electoral violence. As Harber (2014) points out that the management and implementation of education can either promote democracy and peace or contribute to intolerance and violence.

The link between educational reforms and political stability is also evident in how education policies impact youth engagement and employment. Unemployment among educated youths is a ticking time bomb that can exacerbate instability. According to Ukiwo (2016), the increase in youth restiveness and violence is as a result of the failure to provide adequate educational opportunities. Agbiboa (2019), highlights that one of the direct consequences of inadequate educational reforms is that disenfranchised youths often find themselves vulnerable to recruitment by insurgent groups, which hampers social stability.

Moreover, the role of education in fostering political participation cannot be overstated. A well-informed citizenry, empowered by quality education, is more likely to engage in democratic processes and less likely to be swayed by divisive political rhetoric. This is supported by findings from Bratton (2015), who asserts that education contributes to more stable and democratic political regimes. However, the politicization of education, where educational policies and appointments are manipulated for political gains, can lead to disillusionment and apathy among the electorate (Majekodunmi, 2017).

Political instability further complicates the implementation of educational reforms. Frequent changes in government often lead to shifts in educational policies, resulting in inconsistency and disruption of the education system. As Ayodele (2018) points out that lack of continuity in policy implementation from one government to another has been a major setback in Nigeria's educational development.

In conclusion, the reciprocal relationship between political ideology, educational reforms, and political stability in Nigeria is complex and multi-faceted. For Nigeria to achieve political stability, there must be a concerted effort to depoliticize educational reforms and ensure that they are geared towards the holistic development of the citizenry

and the promotion of national unity. This requires a commitment to implementing long-term educational policies that transcend political regimes and are resistant to ideological manipulation (Falola, 2020; Olaniyan, 2019).

Table 2: Empirical Evidence Showing how Political Ideology and Educational Reforms in Nigeria Impact Political Stability in Nigeria

Author (Year)	Aim	Method	Findings
Bratton (2015)	To examine the relationship between educational policies and political stability.	Quantitative analysis using survey data on political participation and stability.	Educational policies that are inclusive and consistent promote political stability.
Osaghae (2016)	To explore how political ideology influences educational reforms in Nigeria.	Qualitative analysis based on policy reviews and interviews with policymakers.	Political ideology directly influences the design and implementation of educational reforms.
Ukiwo (2016)	To analyze the impact of political ideology on youth engagement and political stability.	Mixed-methods approach, combining quantitative data and qualitative interviews.	Political ideology affecting youth policies can either stabilize or destabilize political environments.
Majekodunmi (2017)	To study the effects of politicization of education on political stability in Nigeria.	Case studies of recent educational policies and their political implications.	Politicization of educational reforms leads to reduced public trust and increased political volatility.
Harber (2014)	To investigate the role of education in promoting democracy and peace.	Comparative study of educational systems and their impact on democratic processes.	Effective education promotes democracy and reduces the likelihood of violence and intolerance.
Agbibo (2019)	To assess the impact of disenfranchised youths on political stability.	Fieldwork and interviews with youths in conflict-prone regions.	Disenfranchised youths often engage in activities that undermine political stability.

Ayodele (2018)	To evaluate the consistency of educational policies across different governmental regimes in Nigeria.	Historical analysis of educational policy continuity across different administrations.	Lack of policy continuity leads to educational and political instability.
Falola (2020)	To review the long-term impact of educational policies on political stability.	Longitudinal study examining the effects of educational reforms over several decades.	Long-term stability in educational policies contributes to greater political stability.
Olaniyan (2019)	To understand stakeholder engagement in educational reforms in Nigeria.	Qualitative interviews and focus groups with various educational stakeholders.	Stakeholder's engagement in educational reforms leads to policies that are more widely accepted and effective.
Smith (2015)	To analyze the public trust in government and its effect on political stability.	Survey of public opinion and trust in governmental institutions and policies.	Low public trust in government correlates with lower political stability.

Maximizing the Linkage between Political Ideology and Educational Reforms to Promote Political Stability.

Maximizing the linkage between political ideology and educational reforms is pivotal for promoting political stability. By strategically aligning educational reforms with a broad spectrum of political ideologies, while ensuring these reforms are insulated from political volatility, nations can foster a stable and progressive political environment. Five key strategies shown in figure 1 can be effective in ensuring that Nigeria political ideology and educational reforms improve political stability.

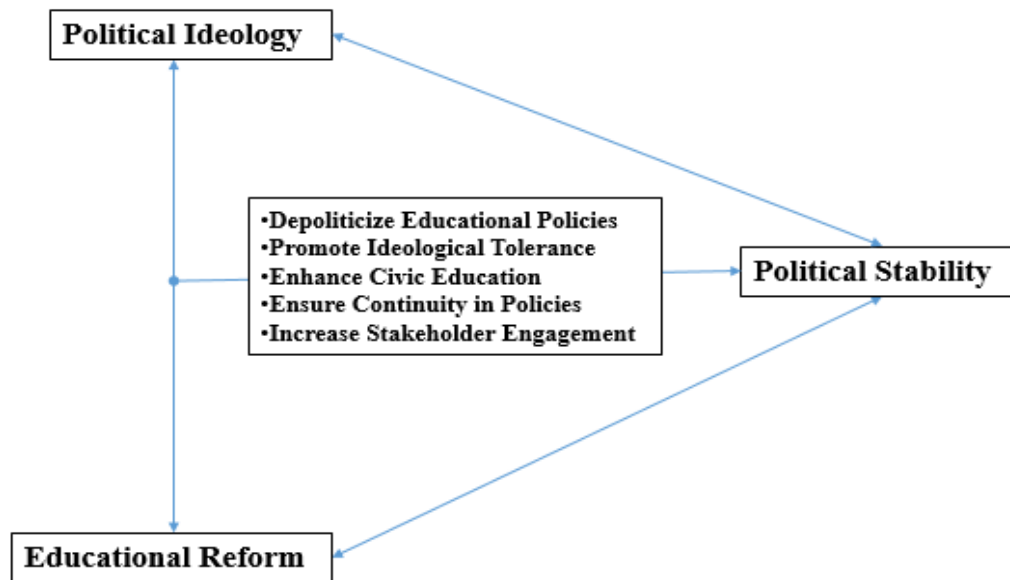


Figure 1: Triangular relationship between political ideology, educational reforms and strategies for promoting political stability

Firstly, depoliticizing educational policies is crucial. Educational reforms should transcend current political divides and be resilient to changes in political leadership. This approach minimizes disruptions and maintains a steady course towards educational enhancement, regardless of which party is in power (Bratton, 2015; Osaghae, 2016).

Secondly, promoting ideological tolerance within educational systems can mitigate conflicts arising from diverse political beliefs. Schools should serve as arenas for open dialogue where political ideology is discussed and respected, rather than suppressed. This fosters a politically aware and tolerant citizenry, reducing ideological conflicts (Ukiwo, 2016; Majekodunmi, 2017).

Enhancing civic education is another strategic approach. By embedding strong civic education in curricula, students develop a deeper understanding of democratic processes and the importance of their involvement in such processes. Educated citizens are more likely to contribute to political stability as they are better equipped to make informed decisions and participate in governance (Harber, 2014; Agbiboa, 2019).

Ensuring continuity in educational policies across different governmental regimes stabilizes the educational landscape. Policies that are consistently applied provide a stable framework for educational institutions to operate effectively and for students to reap long-term benefits (Ayodele, 2018; Falola, 2020).

Finally, increasing stakeholder's engagement in the development and implementation of educational reforms ensures these reforms are reflective of the needs and aspirations of the broader society. When stakeholders from diverse backgrounds are involved, the resulting policies are more likely to be comprehensive and inclusive, which in turn enhances their acceptance and effectiveness (Olaniyan, 2019; Smith, 2015).

In summary, by intertwining political ideology thoughtfully with educational reforms and employing strategies that promote political stability, nations can achieve a more cohesive and stable political climate. This synergy enhances the quality of education and strengthens the foundations of democracy.

Conclusion

The paper effectively highlights the intricate dynamics between political ideology, educational reforms, and political stability in Nigeria, demonstrating how these elements interconnect to influence the nation's socio-political landscape. It emphasizes that depoliticizing educational policies is crucial for ensuring sustainable reforms that transcend political changes. Promoting ideological tolerance through inclusive civic education is vital for fostering respect and reducing conflicts arising from ideological differences, thereby enhancing political stability. Ensuring continuity in educational policies prevents disruptions in the learning environment and maintains quality education, while stakeholder's engagement in policy formulation and implementation ensures that educational reforms are comprehensive and reflect the diverse needs of society. Overall, the paper argues for a holistic approach to educational reforms in Nigeria, one that integrates respect for political ideology and builds a stable, democratic society through informed, inclusive, and continuous educational strategies.

Suggestions

From the foregoing of this paper, the following suggestions are made:

1. The Federal Ministry of Education should establish non-partisan educational committees that include educators, scholars, community leaders, and representatives from multiple political backgrounds to oversee and guide educational reforms.
2. State and local educational authorities should institutionalize civic education across all levels, focusing on teaching the rights and responsibilities of citizens as well as the importance of tolerance and democratic engagement in Nigeria's diverse society.
3. The Federal Government of Nigeria should implement mechanisms for transparency and accountability in the administration of educational reforms, including regular audits, public reporting, and stakeholder reviews to ensure effective implementation and prevent corruption.
4. Community leaders and local education departments should enhance engagement with local communities, parents, students, and teachers in the planning and implementation of educational reforms, ensuring that policies are well-suited to meet the diverse needs of the population.
5. The National Assembly should create and enforce continuity protocols for educational policies to protect effective educational reforms from being dismantled due to changes in political leadership, thereby providing stability and consistency in the educational sector.

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Adult Education and Environmental Sustainability: Educating for Climate Action**By****Rabilu Abdu Yahaya**

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Abstract

As climate change worsens, adult education's critical role in promoting environmental sustainability has become increasingly clear. Adult education inspires sustainability habits and action by raising awareness, building knowledge, and encouraging critical thinking. However, challenges such as limited resources, varying learner needs, and systematic barriers can hinder effective implementation. This paper investigates how adult education drives climate action and sustainable development grounded in Sustainability Education Theory. Adult learning boosts climate awareness and confidence, enabling individuals to understand climate challenges and take meaningful action. Adults are encouraged to participate in community environmental initiatives and adopt sustainable practices in areas like agriculture and energy use through inclusive education. Adult education also fills critical knowledge gaps by equipping learners with tools for adapting to environmental change. However, implementing climate education for adults faces obstacles like outdated curricula, limited access for marginalized groups, cultural resistance, and inadequate funding. These challenges limit the reach and impact of adult education programs aimed at addressing climate change. This study draws on global frameworks like the UN's Sustainable Development Goals, especially SDG 13 on climate action and empirical evidence to advocates for policy changes, community-based learning, and cross-sector collaboration. This study concludes that adult education is essential not just for personal growth but also for building climate resilience and creating a sustainable future.

Keywords: Adult Education, Climate Change, Sustainability, Sustainable Practice, Climate Literacy.

Introduction

Climate change is one of the most urgent global challenges requiring immediate and sustained action from every part of society. As the climate crisis worsens, educational

systems, especially adult education play an important role in equipping individuals and communities with the knowledge and skills needed to drive sustainability and meaningful climate action (UNESCO, n.d.). Adult education, which includes lifelong learning and community-based programs, empowers learners by boosting their environmental awareness and enabling them to participate in sustainable development initiatives. According to the World Bank (2023), education enhances individual resilience and provides people with the tools to transition into green jobs and adopt climate friendly behaviors.

Research by Nelson, Ira and Merenlender (2022) shows that adult climate change education boosts confidence and motivation, enabling participants to take action in their communities. Similarly, Kautsoris et al. (2020) found that sustainability-focused adult education strengthens values, empathy, and behaviors that support environmental stewardship. Organizations like the European Association for the Education of Adults and UNESCO's Institute for Lifelong Learning emphasizes the importance of integrating environmental sustainability into adult learning, particularly through community-based programs that build local capacity for climate resilience.

The North American Association for Environmental Education (NAAEE) developed guidelines to assist educators in creating effective climate education programs. These guidelines emphasize inclusivity, equity, and action-oriented learning, aiming to empower learners to make meaningful decisions and take collective action on climate issues (NAAEE, 2024). Climate education is increasingly being integrated across various educational disciplines, reflecting its relevance to diverse fields. For instance, universities are incorporating climate topics into curricula ranging from architecture to humanities, including adult education, highlighting the interdisciplinary nature of climate issues (Worland, 2021). This holistic approach ensures that learners from all backgrounds, including adult education, are equipped to contribute to climate solutions.

This study investigates the connection between adult education and environmental sustainability, arguing that adult education is crucial in promoting climate awareness,

driving sustainable practices, and empowering individuals to take action on climate change in their communities.

Conceptual Clarifications

Concept of Adult Education

Adult education is any form of education (formal, informal or non-formal) given to adults based on their felt social, economic, political, and cultural needs/problems to enable them adjust fully to life challenges (Nzeneri, 2008). Adult education places great emphasis on the lifelong education, as a process and agent of liberation, a tool for adjustment, for self and national survival or development for cultural awareness and integration for conscientization and for group dynamism.

Concept of Environmental Sustainability

Environmental sustainability is a condition of balance, resilience, and interconnectedness that allows human society to satisfy its needs while neither exceeding the capacity of its supporting ecosystems to continue to regenerate the services necessary to meet those needs nor by our actions diminishing biological diversity (Morelli, 2011). Environmental sustainability refers to the ethical management of natural resources and ecological system to preserve their health and productivity for future generations. Key aspects of environmental sustainability include:

1. **1.Preservation of Natural Resources:** Coordinating resources like water, forests and minerals ecologically sound.
2. **Pollution Reduction:** Reducing pollution and trash to keep our air, water, and soil clean.
3. **Protection of Biodiversity:** Preserving ecosystems and animals that call our planet home.
4. **Climate Change Mitigation:** Doing our part to reduce greenhouse gasses and slow down global warming.

5. **Sustainable Consumption and Production:** Making choices that balance our needs with the planet's needs, so we can grow together.

Concept of Climate Change

Climate change refers to the long-term warming of the planet due to an increase in average global temperatures. This warming is primarily caused by the levels of greenhouse gasses in the Earth's atmosphere which trap heat from the sun and prevent it from being released back into the space (IPCC, 2021). The main cause of climate change is human activity, especially the burning of fossil fuels such as coal, oil, and gas which release large amounts of carbon dioxide (CO₂) into the atmosphere (IPCC, 2021). Also, other human activities that cause climate change include deforestation, land-use changes, and industrial processes. Key aspects of climate change are global warming, greenhouse gases and climate variability. Climate change impacts include rising sea levels, extreme weather events and impacts on ecosystems.

Theoretical Framework.

Sustainability Education Theory

The Sustainability Education Theory offers a critical framework for understanding how education can help address pressing environmental and social issues. This theory emphasizes transformative learning that fosters critical thinking, systems thinking, and active engagement with sustainability challenges. Stephen Sterling, a leading figure in this field, argues in his influential work: *Sustainable Education: "Re-visioning Learning and Change"* (2001) that education should shift from simply transmitting information to transforming minds. The theory suggests that learners should not only absorb knowledge but also be empowered to question unsustainable norms and practices, while developing the skills and values needed for sustainable living. Key principles include thinking that connects ecological, social, and economic systems, learner-centered approaches, and promoting values like respect for life, social justice, and responsibility for future generations.

Sustainability education theory is a great fit for this study because it aligns perfectly with the goals of adult education in tackling today's environmental challenges. This theory focuses on transforming individuals and communities through education that is collaborative, holistic, and action-driven (Sterling, 2001). Given the complexity of climate change and environmental issues, this theory provides a solid foundation for investigating how adult learners can engage in lifelong learning that promotes climate awareness, sustainable living, and shared responsibility.

The Role of Adult Education in Promoting Sustainable Thinking

Adult education plays an important role in promoting sustainable thinking by:

- 1. Raising Awareness and Building Knowledge:** Adult education provides learners with a deeper understanding of environmental challenges, sustainability concepts, and the impact of our daily choices. This foundation of knowledge enables individuals to make meaningful decisions and adopt sustainable habits.
- 2. Thinking Critically and Systematically:** Sustainability education in adult learning encourages a comprehensive approach, recognizing the complete connections between the environment, society, and economy. Adult learners are motivated to think critically about their actions and make choices that promote long-term sustainability.
- 3. Empowering Active Citizens:** By incorporating sustainability issues into adult education, individuals are motivated to take action and become advocates for a better future. They are encouraged to speak out for policies that promote sustainability in their communities, countries, and worldwide.
- 4. Building Sustainable Habits:** Adult education provides learners with the practical skills to live more sustainably. This means adopting simple yet impactful habits like reducing waste, conserving energy, and supporting local farmers who use sustainable practices.
- 5. Transforming Mindsets:** Adult education has the power to transform the way we think about our relationship with the environment and society. Through this process of

transformative learning, individuals undergo a new understanding of their role in creating a more sustainable future (Sterling, 2001).

The Role of Adult Education in Promoting Climate Action

1. Enhancing Climate Literacy and Self-Efficacy: Adult education programs such as the University of California (UC) climate stewards certification course have shown significant improvements in participants' understanding of climate issues and their confidence in addressing them. This program empowers individuals to contribute to climate solutions by combining climate science education with community engagement. This approach highlights the importance of combining knowledge acquisition with practical application to enable individuals community-based initiatives (Nelson, Ira & Merenleder, 2022).

2. Encouraging Community Involvement and Sustainable Practice: Lifelong learning programs at the local level play an important role in promoting climate action. The UNESCO Institute for Lifelong Learning emphasizes the importance of adult education in helping communities transition towards a more sustainable future. These programs empower local governments and stakeholders to develop strategies that build climate resilience through community-based learning by supporting initiatives like the Greening Education Partnership (UNESCO, 2023).

3. Bridging Knowledge and Skills Gaps: Education is a powerful tool for addressing the knowledge and skills gaps that hinder effective climate action. According to the World Bank, better-educated individuals are more resilient and adaptable, able to create green jobs and drive innovative solutions. Investing in education not only helps mitigate the impacts of climate change but also equips individuals with the skills needed for sustainable development (World Bank, 2023).

4. Integrating Climate Education into Formal and Informal Settings: UNESCO champions the integration of climate change education across all levels of learning, recognizing its power to empower individuals and communities. UNESCO aims to raise

awareness, inspire behavioural change and equip future generations with the skills needed to develop sustainable solutions by promoting climate education as a fundamental tool (UNESCO, n.d.)

Case Studies of Successful Adult Education in Climate Action and Sustainability

1. Grassroots/ Local Green Initiative: When communities come together, amazing things can happen. The ‘Transition Towns’ movement is a shining example. Born in the UK, this initiative has spread globally, inspiring local communities to take charge of their environmental futures. These towns promote sustainable practices like reducing carbon footprints, growing local food, and energy conservation by focusing on residents. It’s all about community-driven solutions to climate change where everyone works together towards a shared goal of environmental sustainability (Hopkins, 2008).

2. Eco-friendly Farming Training Programs/ Farming for the Future: Sustainable farming practices are important for reducing agriculture's environmental impact. In Kenya, the ‘Agaecology’ trading program is leading the way. Run by the World Agroforestry Center, this program teaches farmers about eco-friendly practices like organic farming, agroforestry, and soil conservation. Farmers not only boost their productivity but also reduce their carbon footprint, improve soil health, and promote biodiversity by adopting these methods (Alteiri, 2002).

3. Climate Literacy Courses: As the world grapples with the challenges of climate change, education is becoming an essential tool in the fight against this global threat. The climate reality project founded by former US Vice President Al Gore, is a shining example of this effort. This innovative initiative offers training courses that transform individuals into ‘climate leaders’. Armed with scientific knowledge and advocacy skills, these leaders are equipped to sound the alarm about climate change and mobilize their communities to take action (Gore, 2009). These programs have reached thousands of individuals worldwide, contributing to increased climate awareness.

4. UNESCO Education for Sustainable Development (ESD): The UNESCO Education for Sustainable Development (ESD) initiative has been a game-changer in

promoting climate action and sustainability worldwide. ESD enables individuals to live sustainably through both formal and informal learning by integrating sustainability into education systems. A typical example is UNESCO's Global Action Program (GAP), launched in 2014. This initiative collaborates with local communities, governments, and organizations to promote sustainability education, engaging with youth, educators, and community leaders to highlight the interconnectedness of social, environmental, and economic issues (UNESCO, 2014).

Challenges in Implementing Climate Action Education for Adults

1. Barriers to Access: Imagine wanting to learn about climate action, but being unable to access the resources one needs. This is the harsh reality for many adults in rural or marginalized communities. Limited access to education, lack of infrastructure, geographical isolation, and restricted digital resources all limit their ability to actively participate in climate education programs (UNESCO, 2016). It's time to fill the gap and ensure everyone has an equal opportunity to learn and take action.

2. Curriculum Gap: Many adult education programs fall short of incorporating sustainability and climate topics in a meaningful way. The curriculum often lacks practical, real-world applications that resonate with adults' daily experiences. As Sterling (2001) points out, sustainability education must be interdisciplinary and relevant to the local environment. However, many programs remain too theoretical, leaving adults without the knowledge and skills they need to bring change.

3. Cultural and Socio-Economic Factors: Sometimes, the major obstacles to climate action education are deeply rooted in our cultures and socio-economic realities. In some communities, traditional practices can clash with new sustainable methods, making it difficult to break old habits. And for adults struggling to make ends meet, the immediate need for economic survival can dominate long-term climate goals. This can result to an unwillingness to learn about climate change and adopt sustainability practices, especially when job security and livelihoods are at stake (Robinson, 2004)

4. Political Will and Governance: Effective climate action education heavily depends on strong political will and government support. But in many regions, policy inaction, political conflict, or a lack of prioritization for environmental education limits progress. Governments may not have the necessary infrastructure or capacity to implement widespread educational reforms, leaving local communities without the support they need to take action on climate change (Leal Filho, 2010).

5. Funding and Resource Allocation: Climate action education programs require one important thing to succeed: adequate funding. But all too often, climate education is left out in the cold struggling to secure financial support from governments, NGOs, and international agencies. It's easy to see why- pressing issues like poverty, healthcare, and infrastructure development often take center stage. Lack of funding for climate education has real consequences, restricting access to life-changing programs and curriculum development (UNESCO, 2017).

The Importance of Integrating Climate Education into the Adult Learning Frameworks

1. Holistic Approach to Education: When we integrate climate education into adult learning, we are giving people the full picture. It's not just about understanding climate change; it's about gaining the skills and confidence to take action. This holistic approach integrates social, economic, and environmental threads, helping adult learners see how our daily choices impact the planet (Sterling, 2001). Adults can develop critical thinking, make meaningful decisions, and grasp the far-reaching consequences of climate change by embracing this broader perspective.

2. Cross-Sector Collaboration: Climate change is a complex problem that demands teamwork. Adult education can bring people together from different sectors- education, health, agriculture, policy, and more. Through collaboration, stakeholders can share expertise, resources, and creative solutions to tackle climate challenges. This cross-sector approach ensures climate education translates into practical real-world actions,

such as sustainable farming, energy efficiency, and disaster preparedness (Leal Filho, 2010).

3. Action-Based Learning: Action-based learning is all about turning knowledge into action. In climate education, this approach is a game-changer. Adults can apply what they have learned to real-world challenges by getting hands-on. Imagine participating in community sanitation, planting trees, or implementing energy-efficient practices experiences not only reinforce sustainable habits but also enable learners to make a tangible difference (Walls, 2007). This approach bridges the gap between knowledge and action, benefiting both individuals and communities.

Conclusion

This study confirms that adult education is a powerful tool in the fight against climate change and environmental sustainability. Adult education equips individuals and communities with the skills and knowledge needed to take action on climate change by promoting sustainable thinking and habits. It fills knowledge gaps, boost climate awareness, and empowers adults to participate in sustainable practices. This study, grounded in Sustainability Education Theory and empirical studies, shows that adult learning benefits not only individuals but also community resilience and environmental stewardship. However, challenges like limited access, outdated curricula, cultural barriers, and inadequate funding need to be addressed to fully tap into potential of adult education. This paper advocates for stronger policy integration, inclusive education, and cross-sector collaboration to put adult education at the forefront of climate strategies. Ultimately, educating adults for sustainability is important for building a more just, equitable, and climate resilient future for all.

Recommendations

1. The governments should prioritize climate education by integrating it into national educational frameworks and policies. Policymakers should ensure that climate literacy is a mandatory component at all levels of education, especially in adult learning programs to promote widespread awareness and action.

2. Educational institutions should develop and implement a curriculum that incorporates climate change, sustainability, and environmental stewardship. These curricula should be context-specific, engaging, and action-oriented, enabling adult learners to directly apply sustainable practices to their communities.
3. Governments, NGOs, and international organizations should increase investment in climate education programs. Funding should support the development of educational resources, teacher training, and community-based learning initiatives that equip adults with the necessary tools to address climate challenges effectively.

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Counselling as a Transformational Tool in the Management of Anti-Social Behaviour Among Educational Management Students in Rivers State University

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Abstract

This study examined counseling as a transformational tool in the management of anti-social behaviours among educational management students in Rivers State University. Two objectives, research questions and two null hypotheses guided the study. The population of the study consisted 440 Educational Management lecturers (51) and students(389) in Rivers State University. The entire population was studied because the population was not too large to warrant sampling. The instrument used for the study was a self-structured questionnaire titled “counseling as a Transformational Tool in the Management of Anti-Social Behaviour Among Educational Management Student (CTMASBEMS)”. The instrument was validated by two experts, one from the Department of Educational Management and another from Measurement and Evaluation Departments all in the Faculty of Education. The test retest method was used to measure the reliability of the instrument which yielded a reliability coefficient of 0.72. It was analyzed using Cronbach Alpha Formula which indicated that the instrument was reliable for the study. Out of 440 copies of the questionnaire distributed only 266 were properly filled and retrieved. The data collected were analyzed using mean and standard deviation while z-test was used to test the null hypotheses at 0.05 level of significance. Findings from the study showed that, the respondents acknowledged that to a high extent counseling as a transformational tool can be used to manage examination malpractice and drug abuse among educational management students in Rivers State University. Based on the findings, it was recommended among others that Management of university should regularly organize workshop, and conferences as regards counseling

services among students in order to eliminate the propensity for drug abuse for a healthy living.

Keywords: Counseling, Transformational Tool, Anti-Social Behaviour and Educational Management

Introduction

Human behaviour that is observed at any particular time may be tiny fraction or aspect of the unconscious behaviour. Most times, a human being is able to fake his apparent behaviour to suit any particular occasion provided he gains favour or escape punishment by so faking. Denga (2018) asserted that understanding human behaviour is certainly more precious than mining gold or Uranium. Denwigwe (2018) opined that guidance and counseling services are part of the school educational services. The author buttressed that guidance and counseling provide within the educational setting experiences that help learners to acquire skills needed for self understanding and actualization. By so doing, guidance and counseling could be used to help students in the universities, especially Educational Management Students to manage their anti-social behaviour. Denwigwe noted that counseling services could also help individuals to attain the desired positive change in behaviour and through educational counseling normal development is guided, assisted and enhanced with the aim of downplaying abnormality and maladjustment. Supporting the above assertion, Nkechi, Ewoma, Oghene and Egenti (2016) in Denwigwe (2018) postulated that guidance and counseling services are significant educational tools used in shaping and managing the orientation in students from the negative ideas that have been planted in the students by his/her peers.

According to Nkechi et al (2016) effective counseling is a channel for implementing the university educational curriculum and reforms in the field of education are facilitated through counseling services. The authors stressed that university counseling services are integral and essential part of the educational process for all students as they progress through the university educational system. In furtherance, counseling makes concerted efforts to change behaviour, provide insight and promote abilities for right choices, it helps proper functioning of individuals, making them to be in tandem with university rules and regulations and societal values. Counseling also cuts across all academic

disciplines in that for one to make reasonable progress in education, counseling must be involved. Meanwhile, Uzoeshi (2013) envisaged that guidance counselor is a professional and as such possess some unique qualities, which make him/her distinct from other professionals. The counselor deals with human problems on daily affairs, discusses with clients in a bid to helping them maximize their potentials and the counselor is therefore someone who is trained to helping and managing others resolve their incapacitating problems. Ozoeshi noted that counselors working tools are human beings whom they assist to be useful in their environments. In other words, a counselor is a helper of mankind. Consequently, any person who chooses counseling as a profession must have likeness for human beings, must be somebody who likes to have people around him/her and does not discriminate. His/her friendly relationship with people makes him/her to be liked and approachable.

Khan (2019) posited that individuals working in an organization or students in a school are very important and quite a valuable asset. Similarly, they too have emotions and feelings. However, sometimes emotions as well as feelings become overwhelming and people lose their confidence. Khan buttressed that there are many reasons behind the above stated that they have a negative impact on the quality of their life. Counseling according to Khan (2019) is a type of therapy which helps individual(s) overcome their problems. In other words, it is a process of helping a person face their problem and overcome it. Mehta (2022) sees counseling as a therapy which allows people to speak out what is in their mind without having a feeling of being judged or commented on. Mehta added that counseling leads to self-discovery, develop confidence, hope and encouragement, helps in the management of emotions, contribute to self-acceptance, point of direction, provides mental peace, improve one's skill, helps in improving lifestyle, give insight to problems, contribute in overcoming drugs and alcohol and eradicate negative emotions. The author further stated that counseling is important and at the same time beneficial as well. Sakshi (2020) defined counseling as professional relationship that empowers diverse individuals, families, and groups to accomplish mental health, wellness, education, and career goals. Sakshi stressed that it does not only

focus on client's goals but also help them to attain those goals and it is a dynamic, engaging and a lively process involving making choices as well as resolutions.

Meanwhile, Aldridge (2018) envisaged that counseling has been a feature of everyday life since the second half of the twentieth century yet even when experts are employed to carry out the tasks, they find that the counseling sector is difficult to define. British Association for Counseling in Aldridge (2018) asserted that counseling takes place when one person accepts responsibility for helping another to decide upon a course of action or to understand or change pattern of behaviour which distress, disturb or affect his/her social behaviour. Also, it is a way of enabling choice or change of reducing confusion, it provides a regular time and space for people to talk about their troubles and explore difficult feelings, in an environment that is dependable, free from intrusion and confidential. In the view of Russell as cited in Aldridge (2018) counseling is an activity entered into by a person seeking help, it offers the opportunity to identify things for the client themselves that are troubling or perplexing. The author further opined that its activities are designed to help self-exploration and understanding, help to identify thoughts, emotions and behaviours that, once accessed, may offer the client the chance for a greater sense of personal resources and self determined change. In furtherance, the author affirmed that counseling is an important tool for transformation in the world today. Anyachebelu in Ocholi (2017) construe counseling as a form of education which the challenged students receive from their counselors. Similarly, Palmer in Ocholi (2017) refers to counseling as an educational process used in solving problems of learners. In line with the above assertions, United Nation Educational Scientific and Cultural Organization (UNESCO) in Ocholi states that counseling is actively listening to an individual's story and communicating, understanding, respect and empathy, clarifying goals and assisting challenged students with the decision making process. Onyilofofor in Ocholi (2017) emphasizes that counseling is a process by which a professional counselor helps the client to comprehend himself or herself better, and it is the assistance that a professional counselor gives to challenged students on issues of education, social-personal, and career choice. However without adequate counseling and

guidance many challenged students lose focus and direction, engage in illegal activities/immoral acts such as truancy, alcoholism, drug abuse, stealing, examination malpractice, plagiarism, sexual immorality, cultism, prostitution, indecent dressing and drop out, therefore, they lack focus and direction resulting to total failure in life (Ocholi, 2017).

In corroboration with the above views, Aho (2019) postulated that counseling does not only prepare students for future vocation but that it helps the attitudinal maladjustment students to adjust their behavioural patterns and be transformed to better citizens. Katamei and Omwolo in Ebuk and Owan (2020) posited that students' maladjusted behaviour could be corrected through behaviour modification counseling therapy, whereby students will be trained on how to access their behaviour to do away with the unaccepted ones. The authors stressed that counseling education will enable students to acquire life skills which will aid them to adopt positive acceptable attitudinal patterns, help them to deal effectively with challenges in life, thereby transforming them to mature well behaved individuals. This will also help them to succeed in school and outside the school as this is believed to bring transformation in the lives of students. Transformation is a multifaceted directional process which is liken to change and innovation. It is a process by which one figure, expression or function is converted into another one of similar value, renewing, reshaping, renovation or remoulding as the case maybe (Aleru, 2015). Aleru observed that the vision of Institute for National Transformation is the positive transformation of individuals, families, organization, communities, nations and Africa in general to their highest levels of performance. Cambridge Advanced Learner's Dictionary Online (2023) defined transformation as the process of changing completely the character or appearance of something in order to improve it. Furthermore, it is an act, proves, or instance of transformation or being transformed. Meanwhile, Merrian-webster Online (2022) sees transformation as a dramatic change in form or appearance, an extreme and radical change.

In line with the above assertion, Aho (2019) buttressed that transformation is a process of changing in form, appearance, nature, character/attitude that are counterproductive to

imbibe productive ones. Olayinka in Ebuk et al (2020) averred that counseling services are provided in tertiary institutions to cater for the collective and individual needs of the students to make them productive. Egbo as cited in Ebuk et al (2020) affirmed that counseling enables the students to overcome their problems, enhance their self-determination to learn, comprehend and advance to greater height in life. Amie and Amie-Ogan (2019) noted that transforming students to enviable personality of substance in schools and the society will be through refocusing on guidance and counseling education. Anyanene, Owokolo and Anyachebolu in EBuk et al (2020) stated that counseling should be given to all the students at all time since it is a life time thing, and should be offered at different stages of growth, development at all levels of education. Kataei and Omwono (2015) remarked that transformation is noticed in the way students keep good relationships and in taking their study vigorously and positive change observed in students' lives. The authors opined that counseling can help the students to be transformed to have exemplary behavioral pattern. Nwachukwu in Ebuk et al (2020) emphasized that good counseling services where the counselor has one on one interaction with the students will enable the counselor to enter into the students' inner world to diagnose his academic, personal, social needs and problems. This will go a long way to transform the students' lives etc. Aho in Ebuk et al (2020) postulated that counseling in schools promotes life skills. Life skills are abilities of students to attain adoptive positive behaviour which will enable them to deal effectively with the demands and challenges of everyday life. The author furthermore asserted that life skills education will enable students to be assertive, think creatively, communicate effectively, cope with stressful situations, able to solve life problems be judgmental and will not involve themselves with any disruptive behaviours, be disciplined, have caring attitude and create opportunities which can transform their whole life.

Moreover, Katamer and Omwono (2015) remarked that behaviour modification and counseling technique should be applied to students with unacceptable character. The authors further buttressed that behaviour modification therapy will help to train students to monitor and evaluate their behaviour and set goals. Also, the counseling therapy will

help the students adopt and adhere to acceptable attitude. However, Ebuk et al (2020) opined that counseling as a transformational tool can be used in the management of anti-social behaviour among Educational Management Students in higher institutions. Anti-social behaviour according to Aleru (2015) is any condition that exists to threaten the quality of peoples' lives and the most cherished values of a people. It could be seen as a condition affecting a significant number of people in the society in ways considered undesirable, about which it is felt something should be done through collective or social action. Encyclopedia of Children's Health (2023) sees anti-social behaviours as disruptive acts characterized by covert and overt hostility and intentional aggression towards others. Anti-social behaviour exist along a severity continuum and include repeated violations of social rules, defiance of authority and of the rights of others, deceitfulness, theft, and reckless disregard for self and others. Anti-social behaviour can be identified in students at all levels and if left unchecked, these coercive behaviour patterns will persist and explode in severity over time, becoming a chronic behavioural disorder (Encyclopedia of Children's Health, 2023). ECH stipulated that anti-social behaviour may be overt, involving aggressive actions against siblings, peers, parents, teachers, or other adults, such as verbal abuse, bullying and hitting or covert, involving aggressive actions against property, such as theft, vandalism and fire setting and also anti-social behaviours include drug and alcohol abuse and high risk activities involving self and others.

In acknowledgement with the above assertion, Kennedy (2022) asserted that anti-social behaviour develops and is shaped in the context of force social interactions within the family, community, and educational ecosphere. It is also influenced by the student's temperament and irritability, cognitive ability, the level of involvement with deviant peers, exposure to violence, and deficit of cooperative problem – solving skills. Kennedy stated further that anti-social behaviour is frequently accompanied by other behavioural and developmental problems such as hyper activity, depression, learning disabilities and impulsivity. Moreover Aleru (2015) emphasized that anti-social behaviour is a condition that the university community view as being undesirable and

such behaviour can be found at the state, national and international universities. The author stressed that the most prevalent anti-social behaviour in Nigeria universities and especially among undergraduate students include indiscipline, examination malpractice, cultism, sexual harassment, drug addiction, alcoholism, rape, apathy to school, extortion, excessive unionism among others. Supporting the above view, Denwigwe (2018) posited that a good number of educational challenges encountered by students in the universities are addressed and managed through counseling such as issues of misconducts, examination malpractice, militancy, drug abuse, and cases of riotous living among the students. Denwiwge added that counseling therefore, assist students to develop their potentials socially, intellectually, physically and morally.

Examination malpractice according to Ampofo (2020) is a deliberate wrong doing contrary to official examination rules designed to place a candidate at an unfair advantage or disadvantage. Akpa in Ampofo (2020) refers to examination malpractice as a misconduct or improper practice, before, during or after any examination by examiners or others with a view to obtaining good results by fraudulent means. Olushola as cited in Nganchi and Charlotte (2020) sees examination malpractice as an unlawful behaviour or activity engaged in by students to have personal benefit in an examinations over their mates who are taking the same examination. From the psychological point of view, Dike in Nganchi et al (2020) saw examination malpractice as all forms of cheating which directly or indirectly falsify the ability of the students. It refers to counter practice that is against the ethics of examination and also on act of disrespect to all rules and regulations guiding the good conduct of any examination or any evaluation process..

According to Udim, Abubakur and Essien (2015) examination malpractice could be encouraged as a result of students being sometimes left without any direction or are pushed too hard and too far by parents to achieve the desires of such parents. Oko and Adie (2016) opined that examination malpractice has done a lot of harm to students since many of them have neglected their books with the hope of performing the magic they are used to in every examination. Oko et al buttressed that examination malpractice in Nigeria educational system has been widely discussed and viewed as a major

challenge not only to examination bodies but to school administrators, the entire education system, the government and society at large. West Africa Examination Council (WAEC) in Oko et al (2016) described examination malpractice as any irregular behaviour or act exhibited by candidate or by anybody charged with the onus of conducting examination in or outside the examination hall, before, during or after such examination with the aim of taking undue advantages. The following were identified as causes of the prevalent cases of examination malpractice such as fear of failure, crave for certificates, desire of parents to have their children in choice of professions and university, pressure on students to pursue courses which they have no aptitude for pressure from teachers who want to gain favour of students, sorting of courses in universities and overcrowded environment (Peter & Okon in Oko et al, 2016).

George and Ukpong in Oko et al (2016) linked the increasing rate of examination malpractice to poor teaching, ineffective preparation by students, ill-equipped library facilities and dubious admission policy. Akaranga and Ongong in Oko et al (2016) viewed the cause of examination malpractice to parental upbringing, social status and economic ability, most parents are easily coerced to pave their way through for the sole success of their children and self –gratification. Meanwhile, Onyibe, Uma and Ibina (2015) identified the following as types of examination malpractice such as impersonation, giraffing, inscription, bribery, intimidation/assault on examination officials, leakage of question papers, use of coded sign language by some candidates, scientific malpractice (i.e the use of mobile phones during examination, etc.), irregular activities inside and outside the examination, collusion among candidates themselves and between them and examination officials. Peter and Okon, Uzoigwe, Jimoh and Onyibe et al in Oko et al(2016) identified the following as possible solutions to curb examination malpractice. These include, societal re-engineering and re-orientation to revamp moral values, engagement of only honest persons in examination management, effective counseling services in schools at all levels to assist students to acquire techniques of effective study habit, teachers need to be equipped for the technologically-driven world, training and retraining of teachers will re-equip them to impact

knowledge, enhance salary of teachers and special welfare packages should be given to examination officials to dissuade them from materials and financial inducements from students, parents, and others who may want to subvert the examination process. Also, there should be provision of current and quality textbooks, well equipped laboratory equipment, workshop, libraries, instructional materials/aid for effective teaching and learning activities and conducive human habitation in all schools.

Drug abuse which is identified as one of the anti-social behaviour among students according to Aleru (2015) is the taking of drugs or a deliberate use of drugs for purposes other than its intended purpose without the supervision of a physician or a medical practitioner. It also refers to the misuse or wrong use of drugs which have adverse effects on the central nervous system, mind, mood, behaviour and personality of the individual. Furthermore, it interferes with an individual's health or with his economic or social adjustment. It also involves self-administration of drugs in a manner that deviates from the approved medical and social patterns within a given culture. Amosun, Ige and Ajala (2016) opined that drug abuse is a social problem that has spread and increase rapidly in our educational institutions especially among the undergraduates' students. In Nigeria, this social maladaptation is considered an issue of serious concern as it adversely affects the lives and performance of students involved as well as the harmonious functioning of the entire structure of the society. The authors affirmed that drug abuse and other associated problems are inimical to the survival and effective functioning of human societies and also a significant number of untimely deaths and accidents have been ascribed to the activities of persons under the influence of one drug or the other. The use and abuse of drugs by student in higher institution have become one of the most disturbing health related phenomena in Nigeria today, the consequences of drug abuse are diverse, including acute and chronic health, social as well as psychological problem. The authors observed that there is disruption of interpersonal relationships particularly within the family, criminal behaviour, school failure, vocational problems and failure to attain normal undergraduates' milestone, yet these undergraduates are expected to be the leaders of the country in the future when they do not even have any focus for the future.

Drug abuse has become such an issue of great concern to all well meaning Nigerian and particularly the Federal government to the extent that an agency was established to tackle the social disease with a view to controlling the spread of drug abuse to the barest level or eradicate it completely but the impact of the agency is yet to be felt as drug abuse among undergraduate students pervades.

The Nigerian National Drug Law Enforcement Agency (NDLEA) posited that drug abuse is a major catastrophe in schools (NDLEA in Josephine, 2014). Josephine explained that many of these behaviours are heavily tied to the peer culture, as children learn from and imitate the peers they like and admire. Josephine also envisaged that majority of the Nigerian undergraduates ignorantly rely on one form of drug or the other for their various daily activities such as social, educational, political, moral, etc. The drugs include tobacco, heroine, alcohol, morphine, cocaine, Indian hemp, ephedrine, madras, caffeine, glue, barbiturates, amphetamines etc. Ohikoya and Alli as cited in Josephine (2014) postulated that the alarming evidence in the prevalence of drug abuse, the effects and consequences among undergraduates has called for concern and challenge to all helping professions to mount strategies of equipping youths with skills of living devoid of drug abuse. The author noted that this act of drug abuse among students constitute a major threat to the well-being of the society at large. This major threat includes gang formation, armed robbery, mental illness and cultism etc. The following are possible solutions to drug abuse among students and youths such as avoidance of peer pressure, develop close family ties, learn healthy coping mechanism, complete abstinence, educational programme on drug usage, living a healthy well balanced life, adequate relaxation, employ mindfulness activities, usage of prescribed medication only, and seek professional help (Touch Point, 2019). However, it is believed that guidance and counseling services if employed in any organization/institutions could be of help in the management of anti-social behaviour among students or youths.

Statement of the Problem

Counseling as a transformational tool can be used effectively in the management of anti-social behaviour among youths, Denwigwe (2018) opined that counseling is a significant educational tool used in shaping and managing the orientation in students from the negative ideas that have been planted in the students by his/her peers. Katami et al (2015) affirmed that students' maladjusted behaviour could be corrected through proper counseling which will help them to adopt positive acceptable attitudinal patterns and deal effectively with challenges in life. The authors buttressed that counseling services are part of the school educational services and also to provide certain experiences that could help its recipients to acquire skills needed for self understanding and actualization. Again, to remould students in higher institutions.

However, Olujuwon in Aleru (2015) lamented that the tertiary institutions that are established to promote intellectual excellence and good virtues among others have deviated from the original goals of the universities. Aleru noted that counseling is a part of the guidance programme or one of the services rendered through guidance (mostly for anti-social activities and behaviour perceived among students) in the higher institutions. These anti-social behaviours among students include drug abuse, indiscipline, cultism, alcoholism, sexual harassment, rape and examination malpractice etc. Furthermore, the author averred that anti-social behaviours among students have inhibited goal attainment and are raising questions, doubts and fears, all of which combine to suggest that the system is at a cross road and nearing extinction. Aleru added that, there is need for adequate counseling services in order to manage the anti-social behaviour among students in higher institutions. It is against this backdrop, the research was carried out to examine the extent to which counseling as a transformational tool can be used in the management of anti-social behaviour among educational management students in Rivers State University.

Purpose of the Study

The main aim of this study was to examine counseling as a transformational tool in the management of anti-social behaviour among Educational Management students in Rivers State University. Specifically the study sought to:

1. Determine the extent to which counseling as a transformational tool can be used to manage examination malpractices among Educational Management Students in Rivers State University.
2. Determine the extent to which counseling as a transformational tool can be used to manage drug abuse among Educational Management Students in Rivers State University.

Research Questions

The following research questions posed guided the study.

1. To what extent does counseling as a transformational tool be used to manage examination malpractice among Educational Management Students in Rivers State University?
2. To what extent does counseling as a transformational tool be used to manage drug abuse among Educational Management students in Rivers State University?

Hypotheses

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

1. There is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage examination malpractice among Educational Management Students in Rivers State University.

2. There is no significant difference in the mean responses of lecturers and students on the extent to which counseling as transformational tool can be used to manage drug abuse among Educational Management Students in Rivers State University.

Methods

The study adopted descriptive survey research design. The population of the study consisted of 440 Educational Management lecturers (51) and students (389) in Rivers State University. The entire population was studied because the population was not too large to warrant sampling. The instrument for data collection was a self-structured questionnaire titled “Counseling as a Transformational Tool in the Management of Anti-Social Behaviour Among Educational Management Students (GTTMABEMS)”. The instrument has two parts. Part ‘A’ focused on the respondents personal data, while part ‘B’ contains two cluster B1 and B2 with 10 items covering the research questions. The instrument was designed on a four (4) points rating scale of High Extent (HE – 4points), Moderate Extent (ME – 3points), Low Extent (LE – 2points) and Very Low Extent (VLE – 1 point) respectively.

The instrument was validated by two experts, one from the Department of Educational Management and another from Measurement and Evaluation Department all in Faculty of Education in Rivers State University. The reliability of the instrument was determined using test-retest method for a measure of its stability. Copies of the instrument was administered to 15 lecturers and 15 students in University of Port Harcourt who were not part of the study sample. The data collected were analyzed using Cronbach Alpha method and a reliability coefficient of 0.72 was obtained which indicated that the instrument was reliable for the study. Out of 440 copies of the questionnaire distributed only 266 were properly filled and retrieved which is sixty (60) percent retrieval. The data retrieved were analyzed using mean and standard deviation to answer the research questions, while z-test was used to test the null hypotheses at 0.05 level of significance. A hypothesis was accepted if the z-calculated value was less than z-critical value and was rejected when the z-calculated value was higher than the z-critical value.

Results

The results from the study were presented as follows:

Research Question 1: To what extent does counseling as a transformation tool be used to manage examination malpractice among educational management students in Rivers State University?

Table 1: Mean Responses on the Extent to which Counseling as a Transformational Tool is used to Manage Examination Malpractice Among Educational Management Students in Rivers State University
(N= 266)

S/No	Items	Lecturers (N36)			Students (N230)		
		$\bar{X}$	S.D	RMK	$\bar{X}$	S.D	RMK
1	Proper counseling can be used to manage improper preparation of students towards examination	3.03	1.07	HE	3.04	0.81	HE
2	Effective counseling can be used to enhance students' study habit.	3.02	1.06	HE	3.50	0.97	HE
3	Inadequate counseling can affect low academic performance of students	2.94	1.10	HE	2.75	0.66	HE
4.	Effective counseling can be used to manage students lack of self-motivation in their academics.	2.97	0.93	HE	2.79	0.61	HE
5	Proper counseling can be used to manage students inclination for cheating	2.92	1.01	HE	2.60	0.67	HE
	Grand Mean/S.D	2.98	1.03	HE	2.94	0.74	HE

Source: Field Survey, 2023

Data presented in table 1 show that the respondents unanimously agreed that proper counseling can be used to manage improper preparation of students towards examination, can be used to enhance students study habit, inadequate counseling can affect low academic performance of students, effective counseling can be used to

manage students' lack of self-motivation in their academic and to manage students inclination for cheating to a high extent. This is evident in the grand mean and standard deviation scores for lecturers and students as 2.98 (S.D =1.03) and 2.94 (S.D = 0.74) respectively. The implication is that counseling as a transformational tool can be used to manage examination malpractice among Educational Management students to a high extent in Rivers State University.

Research question 2: To what extent does counseling as a transformational tool be used to manage drug abuse among educational management students in Rivers State University?

Table 2: Mean Responses on the Extent to which Counseling as a Transformational Tool be used to Manage Drug Abuse Among Educational Management Students in Rivers State University (N = 266)

S/No	Items	Lecturers (N36)			Students (N230)		
		$\bar{X}$	S.D	RMK	$\bar{X}$	S.D	RMK
1	Effective counseling can be used to manage students inclination for alcohol	2.89	1.05	HE	2.75	0.82	HE
2	Proper counseling can be used to manage students propensity for cultism	3.23	0.97	HE	2.72	0.92	HE
3	Tobacco inclination among students can be managed through effective counseling	2.94	1.10	HE	3.04	0.81	HE
4.	Students propensity for Indian hemp can be managed through proper counseling	2.97	0.93	HE	2.97	0.61	HE
5	Proper counseling can be used to manage students inclination for codeine	2.72	1.07	HE	3.05	0.82	HE
Grand Mean/S.D		2.95	1.02	HE	2.91	0.80	HE

Source: Field Survey, 2023

Table 2 reveals that the respondents unanimously acknowledged that effective counseling can be used to manage students inclination for alcohol, manage students propensity for cultism, tobacco inclination among students can be managed through effective counseling, manage students propensity for Indian hemp and manage students inclination for codeine to a high extent. This is evident in the grand mean and standard deviation scores for lecturers and students as 2.95 (SD = 1.02) and 2.91 (SD = 0.80) respectively. The implication is that counseling as a transformational tool can be used to manage drug abuse among Educational Management Students to a high extent in Rivers State University.

Hypotheses

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

Hypothesis 1: There is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage examination malpractice among educational management students in Rivers State University.

Table 3: Z-test Analysis of Mean Responses of Lecturers and Students on the Extent to which Counseling as a Transformational Tool can be used to Manage Examination Malpractice Among Educational Management Students in Rivers State University

Respondents	N	$\bar{X}$	S.D	DF	L/S	z-cal	z-crit	Decision
Lecturers	36	2.98	1.03	264	0.05	0.22	1.96	Accepted
Students	230	2.94	0.74					

Source: Field Survey, 2023

Data presented in table 3 showed a z-calculated value of 0.22 at 264 degree of freedom and 0.05 level of significance. Since the calculated z-value of 0.22 is less than the z-

critical (z-crit) of 1.96, the hypothesis was therefore accepted. This implies that there is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage examination malpractice among educational management students in Rivers State University.

Hypothesis 2: There is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage drug abuse among educational management students in Rivers State University.

Table 4: Z-Test Analysis of Mean Responses of Lecturers and Students on the Extent to which Counseling as a Transformational Tool can be used to Manage Drug Abuse Among Educational Management Students in Rivers State University

Respondents	N	$\bar{X}$	S.D	DF	L/S	z-cal	z-crit	Decision
Lecturers	36	2.95	1.02					
				264	0.05	0.25	1.96	Accepted
Students	230	2.91	0.80					

Source: Field Survey, 2023

Table 4 revealed a z-calculated value of 0.25 at 264 degree of freedom and 0.05 level of significance. Since the calculated z-value of 0.25 is less than the z-critical (z-crit) of 1.96 the null hypothesis was therefore accepted. This implies that there is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage drug abuse of Educational Management students in Rivers State University.

Discussion of Findings

The discussion of findings was done under the following subheadings

Extent Counseling as a Transformational Tool can be used to Manage Examination Malpractice Among Educational Management Students

The findings of the study revealed that counseling as a transformational tool can be used to manage examination malpractice to a high extent among Educational Management students in Rivers State University. The findings of this study is in corroboration with the finding of Oko et al (2016) who opined that counseling services assist students acquire techniques of effective study habit, manage improper preparation of students towards examination, enhance students academic performance, manage students lack of self-motivation in their academics and reduce students inclination for cheating. Egbo as cited in Ebu et al (2020) asserted that counseling should be administered to students to help them overcome their problems and also enhance their determination to learn and discourage them from every form of examination malpractice. Supporting the above view, Aho in Ebuk et al (2020) maintained that counseling does not only prepare students for future vocation but that it also helps the attitudinal maladjustment students to adjust their behavioural patterns and be transformed to better citizens.

Furthermore, findings from hypothesis one revealed that there is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage examination malpractice among Educational Management students in Rivers State University.

Extent Counseling as a Transformational Tool can be used to Manage Drug Abuse of Educational Management Students

The findings of th study showed that to a high extent counseling as a transformational tool can be used to manage drug abuse among Educational Management students in Rivers State University. The findings is in line with the finding of Katamel and Omwoho (2015) who found that students' maladjusted behaviour could be corrected through behaviour modification counseling therapy, whereby students will be trained on

how to access their behaviour to do away with the unaccepted ones such as drug abuse, rape, examination malpractice, cultism etc. Ebuk et al (2020) affirmed that counseling considers the holistic approach of students learning in schools. The authors added that it takes care of the academic, vocation and social personal aspects of the students's life and also students' personality adjustment and their general behavioural patterns which will help them succeed in school and outside the school. Conclusively, Ebuk et al remarked that counseling should be administered to students in order to help them conquer their problems and also improve their determination to learn and discourage them from all form of drug abuse.

Hence, it was deduced from hypothesis two that there is no significant difference in the mean responses of lecturers and students on the extent to which counseling as a transformational tool can be used to manage drug abuse among Educational Management students in Rivers State University.

Conclusion

The evidence obtained in this study showed that counseling as a transformational tool can be used in the management of anti-social behaviour such as examination malpractice, drug abuse, cultism, indecent dressing, alcoholism, lawlessness, indiscipline, students unrest and absconment from class etc. Therefore, the study has proven that counseling is very important and is instrumental in guiding and protecting students from all forms of anti-social behaviour which may cause disaster or be detrimental to their lives. However, adequate support should be given to the counseling units of higher institutions to help in reducing anti-social behaviour among students and for a better future.

Recommendation

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

1. Government and management of university should encourage and support counseling programme through conference, seminar and workshop in higher institutions in order to manage or eradicate students' inclination for examination malpractice.
2. Management of university should regularly organize workshop, and conferences as regards counseling services among students in order to eliminate the propensity for drug abuse for a better and healthy living.

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Impact of Leadership Styles on Teachers' Job Satisfaction in Obio/Akpor Secondary Schools

By

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Abstract

This study examined the impact of school leadership styles on teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. Guided by two research questions and two hypotheses, the study adopted a descriptive survey design with a sample of 22 male and female principals. Data were collected using a self-designed questionnaire with a reliability coefficient of 0.76. Mean and standard deviation were used to answer the research questions, while t-test was used to test the hypotheses at the 0.05 level of significance. Findings revealed that transformational leadership style positively influenced teachers' motivation, commitment, and job satisfaction, while laissez-faire leadership style had a less consistent but still significant impact. The study concludes that leadership style plays a critical role in shaping teachers' job experiences. It recommends that educational authorities prioritize leadership training for school heads to promote more effective leadership practices that enhance teacher satisfaction and improve the overall teaching and learning environment.

Keywords – School leadership styles, Teachers' job satisfaction, Public secondary schools, Obio/Akpor, Rivers State, Transformational leadership, Laissez Faire leadership, Job motivation, educational administration.

Introduction

School leadership plays a critical role in determining the effectiveness and success of educational institutions. The leadership styles adopted by school administrators significantly influence key aspects of school management, including teacher motivation, job satisfaction, and student achievement. In secondary schools, effective leadership promotes a collaborative work environment, improves communication among staff, and fosters a shared vision for school improvement (Olaleye and Oluremi, 2020). On the

other hand, ineffective leadership can contribute to teacher dissatisfaction, reduced professional commitment, and increased turnover, all of which undermine the quality of education delivery. Understanding how different leadership styles impact teachers' job satisfaction is essential for enhancing the overall teaching and learning process.

In public secondary schools within Obio/Akpor Local Government Area of Rivers State, school leaders employ various leadership styles, including democratic, autocratic, transformational, and laissez-faire approaches. However, these leadership styles are often exercised in the face of pressing local challenges such as inadequate infrastructure, excessive workload, poor funding, and declining teacher morale. These issues not only hinder effective teaching but also negatively impact job satisfaction among teachers. In Obio/Akpor, where many schools struggle with overcrowded classrooms, insufficient instructional materials, and a lack of administrative support, leadership becomes a determining factor in teachers' ability to remain committed and motivated. A principal who practices inclusive, supportive, and transformational leadership can help address these challenges by creating a more engaging and supportive work environment. In contrast, a rigid or indifferent leadership style may exacerbate existing problems and further demoralize teachers (Uthman and Kassim, 2016). While various studies have explored leadership in education, there is limited empirical research focused on the specific impact of leadership styles on teacher job satisfaction in Obio/Akpor, Rivers State. This study, therefore, seeks to fill this gap by examining how school leadership styles influence job satisfaction among teachers in public secondary schools within this local context.

Transformational Leadership Approach

Transformational leadership is a style that motivates followers by creating a compelling vision, encouraging innovation, and fostering strong interpersonal relationships. It emphasizes four key components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Riggio, 2006). Transformational leaders inspire trust, empower staff, and promote collaboration qualities essential for improving school culture and teacher satisfaction. Recent studies

have shown that transformational leadership has a positive influence on teacher morale, motivation, and overall job satisfaction. In the Nigerian context, transformational leadership has been associated with enhanced teacher performance and commitment, particularly when principals engage staff in goal-setting and professional development (Akomolafe & Ogunmakin, 2020; Aladejebi, 2022). However, transformational leadership requires emotional intelligence, time investment, and a strong vision, which not all school leaders may consistently demonstrate. Additionally, schools with systemic infrastructural or resource deficits may limit the full impact of this leadership style.

Laissez-Faire Leadership Approach

Laissez-faire leadership, characterized by minimal supervision and decentralized decision-making, allows teachers to function with autonomy. While this can be empowering for self-directed and experienced staff, it often results in unclear expectations, poor coordination, and lack of accountability when improperly applied. In environments where teachers require support or direction, such as under-resourced Nigerian schools, this style may lead to reduced morale and job dissatisfaction (Okoro & Eze, 2021). Current research in developing countries highlights that laissez-faire leadership may contribute to low teacher engagement and lack of motivation, especially in settings where leaders are perceived as disengaged or indifferent (Adejoh & Edinyang, 2019). While autonomy can be beneficial, it must be balanced with adequate communication and strategic involvement to prevent decline in productivity and teacher performance.

Teachers' Job Satisfaction

Teachers' job satisfaction reflects the degree to which educators feel content and fulfilled with their roles. It is influenced by factors such as working conditions, recognition, support from administrators, involvement in decision-making, and opportunities for growth. Satisfied teachers demonstrate higher levels of commitment, reduced absenteeism, and a stronger desire to remain in the profession (Angwaomaodoko, 2023; Ogbonnaya & Okoli, 2018). In the Nigerian education system,

job dissatisfaction is often linked to leadership issues, poor infrastructure, inconsistent policies, and lack of involvement in school management (Abdulkareem, Fasasi & Akinnubi, 2020). Therefore, exploring the role of leadership styles in influencing teacher satisfaction, particularly in regions like Obio/Akpor, is vital to improving retention and performance. This study aims to examine the extent to which school leadership styles impact teachers' job satisfaction in public secondary schools in Obio/Akpor LGA. It offers empirical insights into how leadership practices shape teacher engagement, with the goal of helping stakeholders design effective leadership interventions that enhance teacher morale and overall school outcomes.

Statement of Problem

Effective school leadership is a critical factor influencing teachers' job satisfaction, which, in turn, affects the quality of education delivered in public secondary schools. In Obio/Akpor Local Government Area, concerns have been raised regarding the leadership styles adopted by school administrators and their impact on teachers' motivation and job fulfillment. Previous studies suggest that leadership approaches, whether transformational, or laissez-faire, can significantly shape the teaching experience and overall performance of educators. However, there is a lack of empirical studies focusing on how these leadership styles specifically affect teachers' job satisfaction within this local context. This study, therefore, seeks to examine the extent to which school leadership styles influence teachers' job satisfaction, identifying the most effective approaches for fostering a conducive teaching and learning environment.

Research Significance

This study is significant as it provides valuable insights into how different school leadership styles influence teachers' job satisfaction in public secondary schools within Obio/Akpor Local Government Area, Rivers State. Teachers play a crucial role in shaping students' academic success and overall school performance, and their satisfaction directly impacts their motivation, commitment, and productivity. By examining leadership approaches such as transformational, and laissez-faire styles, this

research can help school administrators and policymakers identify the most effective strategies to foster a supportive and engaging work environment for teachers. A better understanding of leadership's role in job satisfaction can lead to improved teacher retention, reduced burnout, and enhanced student learning outcomes. Academically, this study contributes to the body of knowledge on educational leadership and human resource management in the Nigerian education sector. It provides empirical evidence on the relationship between leadership styles and job satisfaction, offering a foundation for future research and policy formulation. The findings can serve as a reference for school heads, educational planners, and government agencies in designing leadership training programs that promote effective school management and teacher welfare. Furthermore, it expands the discourse on leadership effectiveness in public schools, highlighting context-specific challenges and best practices that can be applied in similar educational settings.

Purpose of the study

The purpose of the study is to examine the impact of school leadership styles on teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Objectives

1. To identify the extent transformational leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.
2. To examine the extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State

Research Questions

1. To what extent does transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State?
2. To what extent does laissez faire leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State?

Hypotheses

1. There is no significant difference between the mean ratings of male and female principals on the extent transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.
2. There is no significant difference between the mean ratings of male and female principals on the extent laissez faire leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Methodology

This study adopted the descriptive survey design to investigate the impact of school leadership styles on teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. The population of the study comprised 22 public secondary schools in the area, with 12 male principals and 10 female principals. A sample size of 22 principals was selected using purposive sampling, ensuring that all public secondary schools within the local government area were represented. The researcher employed a self-designed questionnaire titled "The Impact of School Leadership Styles on Teachers' Job Satisfaction of Public Secondary Schools in Obio/Akpor Local Government Area, Rivers State (TISLSTJSPSOLGA)" to elicit data from the respondents. The instrument was validated by experts in educational research

and measurement to ensure content and face validity. It was structured on a 4-point modified Likert scale:

- Very High Extent (4)
- High Extent (3)
- Low Extent (2)
- Very Low Extent (1)

To determine the internal consistency of the instrument, a pilot test was conducted, and the reliability coefficient was established at 0.76 using the Cronbach Alpha method. All 22 copies of the questionnaire were retrieved and used for data analysis. Descriptive statistics, specifically mean and standard deviation, were used to answer the research questions. Independent samples t-test was used to test the hypotheses at 0.05 level of significance. Prior to the use of the t-test, assumptions of normality and homogeneity of variance using Shapiro-Wilk test (recommended for small samples, $n < 50$) were examined and met, ensuring the appropriateness of the statistical test.

Result Presentation

Research Question One: To what extent does transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State?

Table 1: Mean and standard deviation of respondents on the extent transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State

S/N	Items	Male Principals (n=12)		Female Principals (n=10)		Mean Set (n=22)	Remarks
		Mean	SD	Mean	SD	Mean	
1	Transformational leaders inspire teachers by setting a clear vision, encouraging innovation, and creating a sense of purpose, which enhances job satisfaction.	3.28	0.76	3.22	0.82	3.25	High Extent
2	Transformational leadership fosters a supportive work environment for teachers in public secondary schools	3.08	0.89	3.06	0.94	3.07	High Extent
3	Transformational leadership encourages teachers to take initiative, and implement creative teaching strategies.	3.11	0.84	3.01	0.81	3.06	High Extent
4	Transformational leadership recognize teachers' unique strengths and needs, providing personalized mentorship, feedback, and professional development opportunities that boost morale and satisfaction.	3.11	0.87	3.12	0.87	3.12	High Extent
5	Transformational leadership approach encourages teachers through, incentives, and career advancement opportunities, reinforcing motivation and job satisfaction.	3.13	0.79	3.17	0.93	3.15	High Extent
Grand Mean		3.14	0.83	3.12	0.87	3.13	High Extent

Source: IBM SPSS, Version 26

The data in Table 1 show that the extent to which transformational leadership styles influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State is high (Mean=3.13). The table showed that transformational leadership style inspires teachers (Mean=3.25), fosters a supportive work environment (Mean=3.07), encourages teachers to take initiatives (Mean=3.06), recognizes teachers unique strength (Mean=3.12), encourages teachers through incentives and career advancement opportunities (Mean=3.15).

Research Question Two: To what extent does laissez faire leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State?

Table 2: Mean and Standard deviation of respondents on the extent laissez faire leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

S/N	Items	Male Principals (n=12)		Female Principals (n=10)		Mean Set (n=22)	Remarks
		Mean	SD	Mean	SD	Mean	
1	Laissez Faire leadership approach allows teachers to make independent decisions in teaching methods and classroom management	3.44	0.80	3.53	0.74	3.48	High Extent
2	Laissez Faire leadership approach enhance innovative teaching methods which influence teachers' job satisfaction	3.18	0.79	3.27	0.74	3.22	High Extent
3	Laissez Faire leadership approach reduces pressure and stress on the teachers due to a relaxed work environment	3.23	0.84	3.13	0.87	3.19	High Extent
4	Laissez Faire leadership	3.11	0.76	3.23	0.80	3.16	High Extent

	approach allows teachers to thrive in self-directed environments which leads to stronger problem-solving skills						
5	Laissez Faire leadership approach improves teachers' self-confidence.	3.33	0.73	3.47	0.67	3.39	High Extent
	Grand Mean						High Extent
		3.26	0.78	3.33	0.76	3.29	High Extent

Source: IBM SPSS Version 26

The data in table 2 show that extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State high (Mean=3.29).

H01: There is no significant difference between the mean ratings of male and female principals on the extent transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Table 3: Summary of t-test on the difference between the mean ratings of male and female principals on the extent transformational leadership style influence teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Male Principals	12	3.14	0.83	20	0.579	0.722	NS
Female Principals	10	3.12	0.87				

NS= NOT SIGNIFICANT

Source: IBM SPSS Version 26

The result presented in the table shows the mean ratings of male and female principals on the extent to which transformational leadership style influences teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. The male principals had a mean score of 3.14 with a standard deviation of 0.83, while the female principals had a mean score of 3.12 with a standard deviation of 0.87. An independent samples t-test was conducted to determine whether the observed difference in means was statistically significant. The calculated t-value was 0.579, with an associated p-value of 0.722 at 20 degrees of freedom. Since the p-value (0.722) is greater than the 0.05 level of significance, the result is not statistically significant. Therefore, the null hypothesis (H_{01}) which states that there is no significant difference between the mean ratings of male and female principals on the extent to which transformational leadership style influences teachers' job satisfaction is retained. This suggests that gender does not significantly influence principals' perceptions of the impact of transformational leadership style on teacher job satisfaction in the study area.

H02: There is no significant difference between the mean ratings of male and female principals on the extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Table 4: Summary of t-test on the difference between the mean ratings of male and female lecturers on the extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Gender	N	Mean	SD	Df	t-test	Sig.	Remark
Male Principals	12	3.26	0.78	20	0.410	0.608	NS
Female Principals	10	3.33	0.76				

NS= NOT SIGNIFICANT

Source: IBM SPSS, Version 26

The result presented in the table shows the mean ratings of male and female principals on the extent to which laissez-faire leadership style influences teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. The male principals had a mean score of 3.26 with a standard deviation of 0.78, while the female principals had a mean score of 3.33 with a standard deviation of 0.76. An independent samples t-test was conducted to determine whether the difference in their mean ratings was statistically significant. The calculated t-value was 0.410, with a corresponding p-value of 0.608 at 20 degrees of freedom. Since the p-value (0.608) is greater than the 0.05 level of significance, the result is not statistically significant. Therefore, the null hypothesis (H_{02}) which states that there is no significant difference between the mean ratings of male and female principals on the extent to which laissez-faire leadership style influences teachers' job satisfaction is retained. This indicates that gender does not significantly affect how principals perceive the influence of laissez-faire leadership style on teacher job satisfaction in the selected public secondary schools.

Summary of Findings

The following summarized the findings of the study.

1. The extent transformational leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State is high. Also, transformational leadership style inspires teachers, fosters a supportive work environment, encourages teachers to take initiatives, recognizes teachers' unique strength, encourages teachers through incentives and career advancement opportunities.
2. The extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State is high.
3. There is no significant difference between the mean ratings of male and female principals on the extent transformational leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

4. There is no significant difference between the mean ratings of male and female principals on the extent laissez faire leadership style influences teachers' job satisfaction of public secondary schools in Obio/Akpor local government area, Rivers State.

Discussion of Findings

The first objective of this study sought to identify the extent to which transformational leadership style influences teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. The findings revealed that transformational leadership style has a high influence on teachers' job satisfaction. It was also found that there is no significant difference between the mean ratings of male and female principals on this influence, suggesting a consistent perception of its impact regardless of gender. This result supports the findings of Okoroma and Agbo (2024), who reported that transformational leaders lead by example, instil confidence in their teams, and foster creative problem-solving. These qualities are particularly essential in educational settings that face systemic challenges, such as underfunding, high workloads, and low teacher morale all of which are present in many public secondary schools in Obio/Akpor. In resource-constrained environments, transformational leadership becomes especially effective because it provides teachers with psychological support, recognition, and a sense of purpose, which may not be readily available through material means. According to Aladejebi (2022) and Akomolafe and Ogunmakin (2020), transformational leaders who offer individualized consideration and inspirational motivation tend to improve teacher morale and reduce burnout, even when infrastructure and funding are inadequate. By engaging teachers in decision-making, encouraging professional development, and acknowledging their contributions, transformational leaders help create a positive school climate that enhances job satisfaction.

The second objective examined the extent to which laissez-faire leadership style influences teachers' job satisfaction in public secondary schools in Obio/Akpor. The findings also showed a high influence, with no significant gender-based differences in

perception. This suggests that both male and female principals recognize the same trend in how laissez-faire leadership affects teacher satisfaction. These findings align with Okoro and Eze (2021), who found that laissez-faire leadership can promote autonomy, creativity, and innovation, particularly among experienced educators. In the context of Obio/Akpor, where teachers may often have to work independently due to limited administrative oversight or support, a hands-off leadership style could empower them and foster a sense of responsibility. However, as Adejoh and Edinyang (2019) observed, laissez-faire leadership also carries the risk of poor coordination and low productivity in schools where staff require clear direction and guidance conditions common in many under-resourced Nigerian secondary schools.

Therefore, while both leadership styles positively influence job satisfaction, transformational leadership appears to be more effective and sustainable in environments like Obio/Akpor, where educational leadership must compensate for limited physical resources and teacher support. The consistency in perceptions across genders further suggests that leadership behavior, rather than leader gender, is the critical factor influencing teacher satisfaction.

Conclusion

This study investigated the impact of school leadership styles on teachers' job satisfaction in public secondary schools in Obio/Akpor Local Government Area, Rivers State. The findings revealed that both transformational and laissez-faire leadership styles significantly influence teachers' job satisfaction, with transformational leadership demonstrating a particularly strong potential to enhance teacher motivation, morale, and professional commitment. The absence of significant gender-based differences in principals' responses further suggests that effective leadership practices transcend demographic characteristics and are more closely tied to the quality of engagement and support provided by school leaders. In the context of Obio/Akpor, where schools often contend with inadequate infrastructure, limited resources, and high teacher workloads, the role of leadership becomes even more critical. Transformational leaders who foster

collaboration, provide emotional and professional support, and involve teachers in decision-making can help mitigate the effects of these systemic challenges. Similarly, while laissez-faire leadership may grant autonomy and flexibility, its effectiveness is largely dependent on the experience and self-direction of the teaching staff. The findings underscore the importance of adopting leadership styles that prioritize teacher empowerment, recognition, and continuous development. School leaders who model inclusive, visionary, and supportive behaviors create an enabling environment that not only enhances teacher satisfaction but also contributes to overall school improvement. Strengthening leadership capacity through ongoing training and reflective practice is therefore essential to sustaining teacher morale and retention in the public secondary school system. Ultimately, this study contributes to the growing body of empirical evidence supporting the link between effective leadership and teacher job satisfaction, particularly in under-resourced educational settings. By drawing attention to the leadership dynamics within Obio/Akpor's public secondary schools, the research provides a valuable foundation for future policy interventions, leadership reforms, and professional development initiatives aimed at improving educational quality and teacher well-being.

Recommendation

Based on the findings, the following recommendations were made;

- 1. Educational policymakers should develop and implement leadership development programs that emphasize transformational leadership principles**, including inspirational motivation, individualized support, and teacher involvement in decision-making. This will enhance job satisfaction and overall teacher performance in public secondary schools in Obio/Akpor.
- 2. School administrators should be mandated to undergo regular, government-supported training workshops** focused on building effective leadership skills, particularly those associated with transformational leadership. Such training will equip them to inspire, motivate, and support teachers more effectively.

3. **The Ministry of Education and other stakeholders should create policies that institutionalize mentorship programs, teacher recognition schemes, and professional development initiatives.** These programs will foster a culture of support and accountability that directly impacts teachers' morale, commitment, and satisfaction.
4. While some degree of teacher autonomy is valuable, **excessive reliance on laissez-faire leadership can lead to confusion and reduced motivation.** Therefore, school authorities should develop clear administrative policies that balance autonomy with sufficient supervision, ensuring that teachers are supported while maintaining professional independence.
5. **School leaders should adopt a flexible leadership approach** that integrates the strengths of transformational leadership with controlled delegation. This will ensure teachers receive adequate guidance while being empowered to take initiative and innovate in their instructional practices.

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Effective Teaching and Learning In Adoption of Artificial Intelligence Technology (AIT) in Educational Institutions

By

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Abstract:

Artificial Intelligence in Education(AIED) has been around for over 60 years according to (Hardman 2023), He said, it's that process where humans teach computers how to do things which normally require human intelligence like recognizing images, understanding speech, responding to instructions or making decisions. They do this by training machine to identify and reproduce structural patterns. For instance back in '60s', computer scientists taught a computer to be able to predict if an image contained a cat or dog by feeding the machine images of cats and dogs and training the machine to understand the differential characteristics of each of them. Artificial intelligence (AI) recently become important part of modern society and has made significant contributions to various sectors such as health care service delivery, finance, transportation and even entertainment industries. This paper therefore aimed at highlighting what artificial intelligence is, its potential benefits based on its present status on education, challenges in implementation and to make recommendations on how to effectively integrate Artificial Intelligence (AI) into educational institutions while preserving the crucial role of teachers and maintaining the human element of the teaching- learning process.

Keywords: Adoption, Artificial Intelligence, Effectiveness, Education, Institution.

Introduction:

Our country and the entire world is witnessing the beginning of a new era of industrial revolution, which we believe will bring a profound impact in industries across the globe (Aazam, Zeadally,& Harras, 2018). Xu et al,(2018) pointed out that, this is a new era of bridging the gap of the physical with the digital world, fostering automation through the

integrations between smart machines and intelligent software (Ibarra, Ganzarain,& Igartua, 2018).

What is Artificial Intelligence (AI)? Artificial Intelligence technology simply means the ability of electronic machines to perform task that would typically require human intelligence such as teaching and learning process, problem solving, decision making and perception. Artificial Intelligence(AI) which has its origin in philosophy, mathematics, computation, psychology and neuroscience Kumar and Thakur, (2012) is becoming the ‘new normal’ in both manufacturing and service industries (Muller, Buliga & Voigt, 2020).AI is aimed at making machines think like humans but surpassing the way human work,(misselhorn,2018).AI is increasing incorporated at work to improve task execution and performance, it is associated with computer-based systems and applications involving among others things machine learning, where systems are learn and improve from data language processing where machine can understand and respond to human language (Chui, Manyika &Miremadi, 2015).

Artificial Intelligence (AI) is used in a variety of applications including voice recognition, autonomous vehicles and medical diagnosis. It is becoming increasingly integrated into our daily lives, (Heath,2020).

Artificial Intelligence Technology in Education (AITED)

Hardman,(2023) pointed out that the same machine learning technology and expertise that enabled computer scientists to train computers to understand the differential characteristics of cats and dogs has been used and continues to be used to design and deliver education for over 60 years. Some compelling used cases of artificial intelligence in education are:

- i. **Automated Essay Grading:** machine learning algorithms can be used to automatically score essays and written assignments, based on factors such as grammar, organization and coherence. This can save teachers time and provide students with more immediate feedback.

- ii. **Personalized Learning paths:** one of the most well known and robust examples in this artificial intelligence area is Carnegie Mellon University tool called **Opensimon** which analyses students data and provides real-time personalized feedback based on both student's performance (eg how well they performed on a knowledge check) and student behavior (eg how long they spent on certain activities). This data is then used to train an algorithm, which learn to predict which learning activities or interventions are most effective for each individual student.
- iii. **Intelligent Tutoring Systems:** finally, one of the most interesting for any educator in artificial intelligence learning process is a tool called "Intelligent Tutoring System". Unlike personalized learning pathways, intelligence tutoring systems are delivered through more "humanized", dialogue based interface and can provide personalized feedback and support that is both academic and social emotional. The most famous and successful examples of Artificial Intelligence Technology is called Jill Watson-an intelligent tutor system developed by Georgia Technology University; that uses machine learning to adapt to the learning needs of individual students. Like when a student interacts with Jill Watson, the system collects data on their performance, such as how well they do on quizzes or how quickly they complete assignments. One major benefit of intelligent tutoring system like Jill Watson is that they can provide personalized support and feedback to each individual student, even in large classes where it may be difficult for the instructor to provide individual attention to each student.

Five major branches of Artificial Intelligence Technology exist, namely: Expert system, Natural Language Processing, Neural Networks, Fuzzy Logics and Robotics. The five branches are a combination of Rule-Based Systems, machine learning, deep learning and cognitive computing (tutoring point,2021).

Rule-Based Systems are mainly to make decisions and solve problems. They are straight forward and can be highly effective in certain domain, but they lack the flexibility of more advanced AI system (Grosan & Ajith, 2011).

Machine Learning: This approach has to do with training algorithms on large amounts of data to enable them to identify patterns and make predictions. There are several different types of machine learning, namely reinforcement learning, supervised learning, unsupervised learning (char et al, 2018).

Deep Learning: This is a type of machine learning that uses artificial neural network to model complex relationships between inputs and output it has been particularly successful in areas such as image and speech recognition (Ciresan et al, 2023).

Cognitive Computing: Has to do with the development of system that can understand reason, and learn like humans. This involves modeling human cognition and developing algorithms that can perform tasks that typically require human intelligence, (Kelly, 2015).

Benefits of Artificial Intelligence in Education (AIED) According to Nelson Mandela, former south African president “Education is the most powerful weapon which you can use to charge the world. In the dictionary of education edited by Good (1973), Education is defined as the aggregate of all the processes by which a person develops abilities, attitude and other forms of behavior of practical values in the society in which he or she lives. The social process by which people are subjected to the influence of selected and controlled environment especially that of the school, so that they may obtain social competence and optimum individual development. In a world that is constantly evolving, the field of education is no exception. Artificial Intelligence system provides a lot of alternatives to assist and support students, teachers and education administrators.

One major benefit of Artificial Intelligence in Education is: The ability to support learning in a personalized and adaptive manner (Zawacki-Richer et al,2019). The system can monitor the real time scanning process and emotional state of each student. AI tool or systems like ChatGPT have the potential to advance and enhance the personalized adaptive learning (PAL) approach to a greater extent (Rudolph, et al 2023). Teachers now have options for enhancing their educational environments with supplementary materials starting from preparing lesson plans (Atlas, 2023). With this Artificial intelligence system, there is a radical change in teachers workloads, while the traditional

method of teaching workloads decrease. Teachers are required to focus more on the personalized development of individual students in the classroom. Moreover, they have the potential to create a much more innovative and interactive learning environment, moving away from conventional methods of teaching and learning (Rudolph et al, 2023). Teachers, educators can actively use Artificial Intelligence (AI) technology to prepare teaching materials, exams, conducting assessments, providing feedback to students, developing interactive and innovative learning environments (Grassini, 2023; Khan et al, 2023). Particularly, the assumption that each student is unique increases the possibility of personalized or individualized learning in the classroom.

Another **benefit** also is that, teachers can use intelligent tutoring systems (ITS) to offer personalized education, thus the development of an individual student can be unmonitored and resources tailored to their development can be provided. These resources are not limited to school settings or environment, their accessibility outside the school environment can enhance the support of education in non-school settings, (Grassini, 2023; Rudolph et al, 2023). There is an increasing opportunity for teachers to actively use Artificial Intelligent Systems in tasks ranging from assigning home work to generating questions. This allows teachers to spend the time they would use in preparing such materials or reviewing to improve the generated materials instead (Grassini, 2023; Sok and Heng, 2023).

Another **benefit is that**, the widespread use of Artificial Intelligence technology is observed to transform classroom teaching activities leading to much more interactive educational experiences (Sok & Heng, 2023). In fact, thanks to these systems like the flipped learning classroom approach, where education continues not only in the classroom but also remotely, as pointed out by Rudolph et al (2023). The use of ChatGPT enables the generation and utilization of interactive sessions that support students' collaborative problem-solving abilities. These systems especially with ChatGPT usage, enhance students' potential for collaboration with peers, allowing for group discussions in projects and increasing opportunities for real-time feedback (Gilson et al, 2023 & Kasneci, et al, 2023).

Artificial Intelligence Technology (AIT) is much more beneficial in that its application facilitate the interaction between human and machine as well as within human in a digital context (Seo et al, 2021). AI enables more repetitive tasks to be completed easily, as well as providing more opportunities for creative and complex tasks (UNESCO, 2019). It can also learn the level of students in a group and present diverse and individual options tailored to the needs of each individual and group,(Bhutoria, 2022& Kamalor, et al 2023). Artificial Intelligence System (AIS) offers different options for assessing and evaluating students assignments and exams (Babitha & Sushma, 2022). Teachers in addition can use these systems to create open ended questions and provide rapid feedback. Automated or semi-automated assessment systems can be established to provide feedback to enhance students learning outcomes (Kasneli et al, 2023; Sok & Heng, 2023).

Challenges of Artificial Intelligence in Education

Challenges as outlined by Chiu et al 2023 includes:

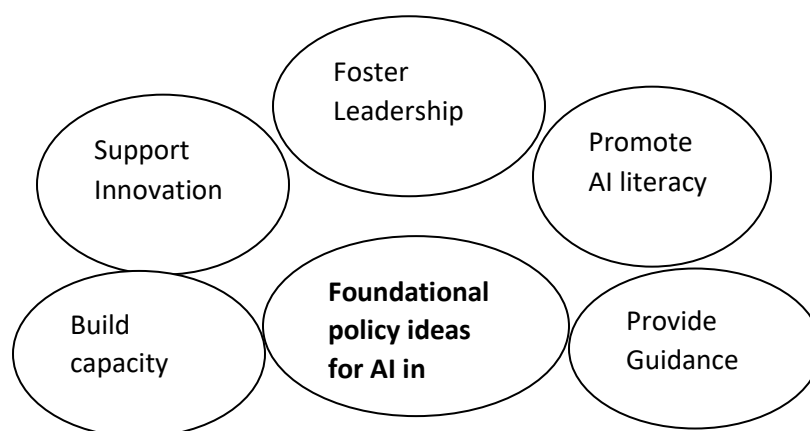
- i. Lack of relevant learning resources for personalized adaptive learning:** Teachers, education have reported that the teaching methods, strategies and learning resources recommended for personalized adaptive learning platforms are overtly homogenous.
- ii. Selecting appropriate data for Artificial Intelligence predictive models:** More effort is needed for research work into what types of data should be used in artificial intelligence models, with careful consideration of ethical issues.
- iii. Lack of connection between the Artificial Intelligence technology and their use in teaching:** Emerging (AI) technologies look to offer instructional assistance like through chatbots, robots etc. to provide teachers with rich information supporting their pedagogical. However teachers may not also have sufficient understanding of the technologies to apply them sufficiently.

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- iv. **Lack of interdisciplinary Artificial Intelligence technologies for learning:** As learning is complicated, AI technologies developed for a particular discipline may not be effective for all students learning.
 - v. **Worsening educational inequity by widening the digital device among students:** Most of the reviewed Artificial Intelligence technology in education studies highlighted that AI technologies could motivate students engagement and foster 21st Century skills. However, the benefits often accrued mostly to the most competent and motivated students.
 - vi. **Insufficient knowledge of Artificial Intelligence technologies among teachers:** Most teachers lack an understanding of how AI technologies work. As a result, they cannot fully utilize the technologies for teaching- learning and assessment. The need for teachers to have knowledge of AI and its application to pedagogy should therefore be considered in future research.
 - vii. **Negative attitudes towards Artificial Intelligence among students and teachers:** Some students and teachers have reported feeling anxious and less confident teaching and learning with AI generating negative attitudes toward Artificial Intelligence Technology in Education (AIED). Most studies of (AIED) have been devoted to cognitive outcomes and adaptive learning, with few having examined socio-emotional outcomes.
 - viii. **Lack of education perspectives in Artificial Intelligence technology in education (AIED) research:** Most AIED research have a strong engineering background and therefore tend to focus on technological design and development and to take an engineering approach to AIED research. This approach fails to capture the perspectives of educational researchers and teachers.
 - ix. **Ineffective evaluation methods of Artificial Intelligence Technology education (AIED).** The most commonly and simplest methods of evaluation used in schools or classroom environment may not be effective for AIED research.

Recommendation on how to effectively integrate Artificial Intelligence (AI) in educational institutions.

The Khan Academy's Chief learning officer, **Kristen Dicerbo**, believes Artificial Intelligence (AI) holds the promise to tackle many of the persistent problems we see in education, including unfinished learning and teacher burnout. 'By providing access to one on one learning support and true teacher assistance, including using data to drive recommendations, we can improve learning outcomes for all', she says. Policy makers and education leaders can prepare the future workforce by implementing **Five Foundational Policies to help realize the potential benefits of Artificial Intelligence (AI) in education.**

The five foundation polices are seen in the diagram below;



Five key policy ideas for AI in education

Integration. Image. Teach AI.

Transforming education requires the engagement of all those serving school systems. The **Teach AI** technology initiative is honoured to bring education leaders, policymakers, technology creators, researchers, and civil society together to create resources such as these foundational policy ideas, "Says **pat youngpradit**, (chief academic officer of **code.org**).

The world economic forum's **Saadia Zahidi** says "As we navigate the uncertainties of Artificial Intelligence (AI) in education, Teach AI's guidance in this swiftly evolving environment becomes Indispensable. Embracing a multistakeholder approach to developing and implementing the foundational policies will be paramount for optimizing AI's benefits.

The five key polices approach:

- i. **Foster Leadership:** Educational institutions need to create an Artificial Intelligence (AI) in education taskforce with experts, educators, students, community members and policy makers to guide policy and oversee implementation. These task force can drive innovation and ensure (AI) aligns with educational goals.
- ii. **Promote Artificial Intelligence (AI) Literacy:** Integrate AI concepts into curricula and teach students to evaluate AI and its outputs critically. Students can become informed consumers and creators of AI-powered technologies by understanding AI's potential and limitations.
- iii. **Provide guidance:** Establish clear guidelines for the safe and responsible use of AI in education. We must ensure that AI tools are used ethically, focusing on students privacy and responsible usage. By providing guidance, we can ensure that Artificial Intelligence enhance learning experience without compromising safety or privacy.
- iv. **Build Capacity:** Support educators and Staff in Integrating Artificial Intelligence (AI) into teaching- learning, school management and operators. Professional development programmes can help staff Understand AI, its Limitations and ethical Consideration. By building capacity, we can ensure that leaders develop the expertise to serve their Communities and that all staff are equipped to use AI responsibly and effectively throughout the education System.
- v. **Support innovation:** find research and development to advance Artificial Intelligence in education. Pedagogy, curriculum and tools. By supporting

innovation, we can drive the development of new AI technologies that enhance learning experiences and improve student outcomes.

- vi. **Build Capacity:** Support educators and Staff in Integrating Artificial Intelligence (AI) into teaching- learning, school management and operators. Professional development programmes can help staff Understand AI, its limitations and ethical Consideration. By building capacity, we can ensure that leaders develop the expertise to serve their Communities and that all staff are equipped to use AI responsibly and effectively throughout the education System.
- vii. **Support innovation:** Find research and development to advance Artificial Intelligence in education. Pedagogy, curriculum and tools. By supporting innovation, we can drive the development of new AI technologies that enhance learning experiences and improve students outcomes.

Overcoming Resistance of Integrating Artificial Intelligence (AI) in Education

Open learning Blog (2024) outlined ways of overcoming resistance of integrating Artificial Intelligence (AI) in education. He pointed out that given the challenges of implementing (AI) in education, it is unsurprising that there is resistance among stakeholders. Here are some strategies of overcoming the resistance;

- i. **Educated Stakeholders should** provide clear and accurate information about the potential benefits of (AI) in education and address any mis conception of fears.
- ii. **Highlight the role of teachers:** It should be emphasized that Artificial Intelligence (AI) is meant to enhance, not replace, the role of teaching by automating administrative tasks and providing personalized learning experiences.
- iii. **Ensure privacy and security:** Address concerns about learner privacy and data security by implementing robust privacy policies and security measures. Communicate these measures to stakeholders to build trust in this technology.

- iv. **Involve stakeholders in decision-making:** Teachers, learners and administrators should be involved in decision-making process regarding the implementation of Artificial Intelligence (AI) tools. This collaborative approach can help address concerns and ensure buy-in from all stakeholders.
- v. **Share success stories about Artificial Intelligence:** Examples of successful Artificial Intelligence (AI) implementation in education should be highlighted and showcase the positive impact on students learning outcomes. This can help alleviate fears and demonstrate the potential of Artificial Intelligence in Education.

However there are also many ethical and societal concerns associated with Artificial Intelligence (AI). For example, as AI system become more advanced, there is risk that they could be used for malicious purposes. Like cyber attacks or autonomous weapons. There is also concern about the potential impact of AI on employment, as some jobs may become automated and there is the potential for AI systems to perpetuate and simplify existing biases in society (sample, 2017).

Conclusion.

This paper highlighted what Artificial Intelligence Technology tool is, its benefits and challenges in education. Artificial Intelligence in technology tool is the simulation of human intelligence in machines that are designed to think and act like humans. It is a technology which may have its challenges for usage but equally beneficial. It is where system can learn and improve from data and natural language processing where machines can understand and respond to human language. Artificial Intelligence Technology integration in education has a lot to affect the system positively as outlined in the body of the work (ie benefits). The paper equally outlined strategies implementation of this innovative technology in our educational sectors and how to prevent it. However ethical and societal concerns are associated with the use of AI technology in that, if Artificial Intelligence Technology advance and there is increase on the its usage, there may be risk that it could be used for malicious purpose like cyber

attacks or autonomous weapons. There is also concern about the potential impact of Artificial Intelligence (AI) on employment, as some jobs may become automated and there is the potential for AI systems to perpetuate and amplify existing biases in the society (Sample,2017).

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Livelihood Activities and Forest Resources Conservation in Obubra Local Government Area of Cross River State: An Assessment of Fuel Wood Extraction.

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Abstract

This study is on livelihood activities and forest conservation in Obubra local government area of cross river state: An Assessment of fuel wood extraction and forest resource conservation. A research question and hypotheses were formulated to guide the study. The population of this study consists of all 6433 indigenes. Purposive and accidental sampling techniques was used for this study to select a total of three hundred and twenty one indigenes (321). Fuel wood extraction Questionnaire (FEQ) was used for data collection. The data were analyzed with Pearson product moment correlation. The result revealed that fuel wood extraction significantly contributes to forest resource conservation in Obubra local government area of cross river state. Base on the findings and conclusion, it was recommended that energy sources should be made available, accessible and more cheaper for people to afford and also make more alternative

sources of energy available too so as to shift interest from fuel wood extraction as the only source of energy within the study area.

Keywords: livelihood, forest conservation, fuel wood extraction, forest resource conservation, assessment.

Introduction

Two billion people-about 40 percent of the total world population depend on firewood and charcoal as their primary energy source. Of these people, three-quarters (1.5 billion) do not have an adequate, affordable supply. Most of these people are in the less-developed countries where they face a daily struggle to find enough fuel to warm their homes and cook their food. The problem is intensifying because rapidly growing populations in many developing countries create increasing demands for firewood and charcoal from a diminishing supply.

As firewood becomes increasingly scarce, women and children, who do most of the domestic labor in many cultures, spend more and more hours searching for fuel. In some places, it now takes eight hours, or more, just to walk to the nearest fuel wood supply and even longer to walk back with a load of sticks and branches that will only last for few days.

For people who live in cities, the opportunity to scavenge firewood is generally nonexistent and fuel must be bought from merchants. This can be ruinously expensive. In Addis Ababa, Ethiopia, 25 percent of household income is spent on wood for cooking fires. A circle of deforestation has spread more than 160 km (100 mi) around some major cities in India, and firewood cost up to ten times the price paid in smaller towns.

The poorest countries such as Ethiopia, Bhutan, Burundi, and Bangladesh depend on biomass for 90 percent of their energy. Often, the harvest is sustainable, consisting of deadwood, branches, trimmings, and shrubs. In Pakistan, for example, some 4.4 million tonnes of twigs and branches and 7.7 million tonnes of shrubs and crop residue are consumed as fuel each year with destruction of very few living trees.

In countries where fuel is scarce, however, desperate people often chop down anything that will burn. In Haiti, for instance, more than 90 percent of once-forested land has been almost completely denuded and people cut down even valuable fruit trees to make charcoal they can sell in the market place. It is estimated that the 1,700 million tons of fuel wood now harvested each year globally is at least 500 million tons than is needed. By 2025 the worldwide demand for fuel wood is expected to be about twice current harvest rates while supplies will not have expanded much beyond current levels. Some places will be much worse than this average. In some African countries such as Mauritania, Rwanda, and the Sudan, firewood demand already is ten times the sustainable yields. Reforestation projects, agroforestry, community wood-lots, and inexpensive, efficient, locally produced woodstoves could help alleviate expected fuel wood shortages in many places.

Wood fuel (or fuelwood) is a fuel such as firewood, charcoal, chips, sheets, pellets, and sawdust. The particular form used depends upon factors such as source, quantity, quality and application. Fuelwood extraction has to do with excessive cutting of trees, processing them and moving them to a location for transport. It is the beginning of a supply chain that provides raw materials for many products use for housing, construction, energy and consumer paper products. Logging systems are also used to manage forests, reduce the risk of wildlife, and restore ecosystem functions (Bisong, 2004).

According to Pauline (2004), wood products are believed to be the third most valuable commodity in the world trade after petroleum and natural gas. Global trade in wood and related products is projected to grow for the next fifty years. The author also noted that, at present, 45,000 of primary tropical forest are logged annually. Fallings account for a further 5,000sq.km each year. Less than 2% consumption of the timber is balanced between the three major markets; Japan, the United States and Europe worth \$88 billion annually. Each taking about one third of the tropical timber that enters international.

Exports of tropical hardwoods represent an extreme important source of foreign exchange for at least fifteen developing nations. Yet overexploitation and lack of proper management have left twenty three tropical nations, many of which were once exporters of hardwood in a position where they now have to import manufactured forest products, paying out in excess of 50 million naira a year (Pauline, 2004)

Linus (2007) noted that, environmental crisis often times are the consequences of nature's responses to man's actions. This is so because changes which man imposes upon the physical environment also impose equally important changes upon the ecosystem. This calls for informed policy responses and actions from all nations in order to check the modes of operations and changes. According to the scholar, nations of the world are responsible for these responses (problems) from the environment to manage the modes employed in exploitation and utilization of the natural resources located in their territorial definition through effective surveillance. When this is properly done, the goals of sustainable development and environmental security will be achieved in Ikom Education Zone.

Uduigwomen (2007) pointed out that man depends on the abundant resources of the earth for his survival. In his quest to satisfy his needs and to harness the environment to meet these needs, man has altered his natural environment thereby causing untold damage to the biosphere – the life support system. The more limited the resources, the greater the potential for conflict in the Ikom Education Zone. This conflict could be between the rural dwellers in the zone who benefit from the forest resource, and/or between Agriculturists (farmers) and Foresters/Environmentalists. Economists believed that human needs are unlimited but the resources to satisfy them are limited. Based on this fact, limited resources make individuals, groups and communities struggle to maximize their share of these limited resources for themselves or their constituencies.

Consequently, based on this fact, Owor (2014) maintained that demand for forest resources, majorly log extraction will continue to increase as long as they remain the basis for development, while the balance between population, resources, environment and development will become more distorted. Agbera, Ajegeye and Jimoh (2009), in their defence, declared that there is no economic justification in leaving mature trees to

continue growing after lots of them have exceeded their rotation period for a particular purpose. Forest exploitation should however not determine the sustainable supply of the forest product from generation to generation (Bisong, 2004).

Opeyemi, Enefiok, Udo and Dan (2015) noted that the rainforest has been widely and indiscriminately exploited for timber with little or no attention given to the conservation of the much more valuable non-timber products. They affirmed that vast tracts of the rainforest have been degraded, denuded and eventually cleared to accommodate other forms of land use. Consequently, many tree species are threatened by extinction and considerable genetic resources have been lost. Opeyemi, Enefiok, Udo and Dan (2015) maintained that among the species being threatened by extinction are trees that produce in addition to timber, economically viable non-timber products which are important food and medicinal items and raw materials to cottage industries. This category of trees that produce both timber and economically valuable non-timber products have been tagged “Timber Plus Tree”.

It has been estimated that over 40 percent of the global economy is based on biological products and processes (Yager, Alarape, Enogela and Tyowua, 2018). These scholars noted that knowledge about biodiversity conservation challenges is valuable in stimulating technological innovation and providing the framework for sustainable development. Thus, reliable institution mandated to protect these natural endowments need to be strengthened and supported. The protected areas are meant to promote sustainable harvest, conservation, education and ecotourism, and benefit the host community.

Besides, fuel wood has been another channel through which forest resources are being utilized. The vast majority of Ikom Education zone depend directly or indirectly on fuel wood. However, Yunana, Shat, Galadimawa and Obassi (2014) noted that meeting rural household fuel wood energy needs in the country has become a herculean task due to the enormous quantity of wood required. According to these scholars, daily consumption of firewood by rural communities in Nigeria is estimated at 27.5million kilogram per day. In the drive to satisfy fuel wood requirements, most lands have been stripped bare of vegetation cover.

Consequently, this has resulted in soil exposure and erosion, thereby placing a heavy burden on the environment and on the resources base. Yunana, Shat, Galadimawa and Obassi (2014) maintained that the scramble for fuel wood has resulted in a massive destruction of many wood resources, leading to deforestation and increasing desertification in parts of Nigeria and other parts of sub-Saharan Africa. The rate of deforestation in Nigeria is estimated at 400,000 hectare per annum. The increasing current demand on the natural purifiers (trees) for fuelwood without concomitant replenishment is an indication that the forest area will disappear fast, which the environment might not be able to support life after a few years, particularly in savanna ecological zone that is more fragile relative to the rainforest. It follows from the above that, the utilization of wood resources in the savanna lands should be done with caution.

Hassan (2002) as cited by Yunana, Shat, Galadimawa and Obassi (2014), observed that due to high costs of electricity and electrical appliances, Nigeria's rural households are highly dependent on natural woodland and forest resources for fuel and as a source of income. These, coupled with open access, high levels of poverty, weak management regimes and lack of coordination between local and traditional governance on local woodlands and forests, have led to overexploitation of woodland and forestry resources. In similar vein, Ajedire (2002) as cited by Akpan-Ede (2015), estimated that 95% of rural families in Nigeria rely on fuelwood as domestic energy source, while Okoji (2001) as cited by Akpan-Ede (2015) noted that over 30% of urban dwellers in Southeastern Nigeria also use fuelwood in cooking as a result of prohibitive prices of cooking appliances and scarcity of kerosene and domestic gas.

With vast exploitation of timbers, woodland and forest resources thereby resulting to extinction of biodiversity in Ikom Education zone, Opeyemi, Enefiok and Dan (2015) noted that the government of Cross River State has not yet demonstrated appreciable political will in tackling the issue of illegal removal of forest resources (timber) in the state. While Akpan-Ede (2015) states that state government, who are the managers of these forests in their domain, encourage the exploitation of forest resources to boost their internally generated revenue..

Empirically, biodiversity and poverty have recently experienced interesting trends. On the other hand, the Millennium Ecosystem Assessment (2005) shows that degradation of biodiversity is still very significant. Over half of the 14 biomass that the MA assessed have experienced a 20 – 50% conversion to human use between 1960 and 2000. Findings clearly suggest that, compared with the average environmentally adjusted GDP, the lower-income, rural and resource-dependent households are highly dependent on ecosystems, thus are much more vulnerable to any loss in biodiversity (Raphael, Renard and Romain, 2012).

Enuoh and Ogogo (2018) carried out a research work on “Assessing Tropical Deforestation and Biodiversity Loss in the Cross River Rainforest of Nigeria. The study was cross sectional, cutting across government forest reserves and community forests in Cross River State. The finding shows that tropical deforestation in the Cross River rainforest has over the years been exacerbated by a combination of human factors. In their findings, it was discovered that the nationalization of forest territories hitherto belonging to communities as government forest reserves in the 1930s (during British colonial rule), and subsequent commercialization (approval of logging concession) in government forest reserves (from the 1950s), marked the beginning of tropical deforestation in Cross River State. The Cross River State forestry project (ODA assisted) of 1991 carried out a proper scientific assessment of the forest still remaining in Cross River State.

However, ownership of forest commons had a trade-off relationship with carbon storage vs. livelihood benefits, which is inconsistent with what Nagendra (2007) found. Thereafter, they discussed the implications of their findings in terms of improving livelihood and carbon storage benefits from devolution of forest governance by government and gaining greater rights to make rules by communities, as well as the ongoing debates about the implementation of REDD+ initiatives. Because ownership and local autonomy in rulemaking played an important role in their analysis, they provided an extended account of how these variables were constructed. In the IFRI database, a nominal variable with seven categories indexes different ownerships. Two of these categories pertain to ownership

Van Laerhoven (2010), carried out a study on Governing community forests and the challenge of solving two-level collective action dilemmas—A large-N perspective, van Laerhoven (2010) used a cross-national dataset to show that (1) monitoring—and to a lesser extent, maintenance—is correlated with improving forest conditions; (2) social capital, organization, leadership, and autonomy contribute to the development of institutions for collective action; and (3) two-level (within and between groups) collective action dilemmas may hinder the emergence of effective governance regimes, which is a novel idea. His work included two stages. In the first stage, he examined whether or not governance matters in forest condition change. In the second stage, he treated monitoring as the dependent variable to explore the likelihood that good governance regimes would emerge.

Groups of respondents using the forests were asked whether tree density, the density of shrubs and bushes on the forestland, the density of the ground cover on the forestland, and the area over which vegetation exists, had changed during the five years. If the sum of the responses to those four questions was positive, he coded the forest as “1” (improved); if the score total was negative, the he coded the forest as “0” (decreased). In the case that the sum of the answers equaled zero, he further checked if forest conditions were evaluated overall as above or below the regional average. If no net change in forest conditions was reported, but the forest was in good condition to start with, a “1” was assigned. If no net change was reported and the forest conditions were below average for the region, a “0” was assigned. The IFRI database contains 10 rules regarding the use of forest products by a user group (e.g., restrictions concerning location, timing, and techniques of harvesting, and rules regarding transport, processing and commercialization). This variable was operationalized by calculating the percentage of IFRI rules applied in the area. Similarly, if a user group indicated that they engaged in either seasonal or year-round monitoring of the forest, the monitoring variable was coded as “1”, and “0” otherwise. The maintenance variable measures the number of tasks (11 in total) that the forest user group undertakes, including the planting of trees and clearing of undergrowth.

The key findings were summarized in two words: governance matters! That is, forests used by groups that have rules and engage in monitoring and maintenance are more often improving than forests used by groups that do not engage in these expressions of governance. Specifically, being organized, having learned from other collective problem-solving experiences, having leaders, and having the autonomy to craft their own governance regime are among the variables that seem to contribute significantly to a group's ability to

According to a report by Cross River State REDD-Strategy, November 2017, shows forest cover in Cross River State decreasing from 849,845ha in 2000 to 809,578ha in 2007 and 642,195ha in 2014. As of 2016, there are 10 deforestation hotspots in Cross River State, spread across six local government areas (LGAs) with a combined total area of 28,015.88 hectares, all mostly caused by itinerant subsistence agriculture, commercial agriculture, new settlements, illegal logging and fuelwood harvesting. The report shows the drivers of deforestation study projected that forest cover in Cross River State is likely to decline to 550,000 hectares by 2040, if no preventive measures are put in place.

Laufer, Michalski and Peres (2013), in their study on Assessing Sampling Biases in Logging Impact Studies in Tropical Forests, stated that the ecological responses of tropical forest wildlife to selective timber extraction have received considerable attention in the last few decades, yet there is little consensus among the large number of studies about the most appropriate sampling design. Here, we reviewed 26 years of tropical forest logging literature to evaluate the relationship between sampling design and the quality of information reported, which varied greatly among 75 studies. Most studies (88%) failed to include a pre-logging baseline condition in the sampling design, and the temporal scale of post-logging studies was generally inadequate. Studies also usually failed to report key information on study areas; only half of the articles reported some information on the spatial scale of the study, and only one-third presented some quantitative metric to describe forest habitat structure. Additionally, most studies (64%) failed to report the type of forest management and almost half(45%) did not describe the intensity of timber harvest in the logged areas. These sampling and reporting biases in

logging studies hugely undermine the comparability among studies. We conclude with some general guidelines to maximize comparability among studies, and to enhance the potential usefulness of future logging studies for wildlife conservation strategies in tropical forest regions

Theoretical background

Abraham Maslow's Hierarchy of Needs Theory(1954)

The Hierarchy of need theory was propounded by Abraham Maslow's (1954). Maslow's hierarchy of needs is a theory of psychology explaining human motivation based on the pursuit of different levels of needs. The theory states that humans are motivated to fulfill their needs in a hierarchical order. This order begins with the most basic needs before moving on to more advanced needs. The ultimate goal, according to this theory, is to reach the fifth level of the hierarchy: self-actualization. These needs make up five basic needs which are the major reasons for environmental resource depletion and degradation.

These needs are physiological needs, safety needs, social needs, esteem needs and self-actualization needs. Our concern is on the physiological needs which represent basic needs such as food, water, clothing, shelter, oxygen, sex and elimination of waste products. These are also called biological biogenic or survival needs. Safety needs come in once physiological needs are satisfied. Safety needs include danger, economic security and job security. So, when physiological need has been satisfied to a certain extent, safety needs become the most dominant controller of human beings. These two needs become the most paramount to living organisms. As earlier stated there are five main levels to Maslow's hierarchy of needs. These levels begin from the most basic needs to the most advanced needs. Maslow originally believed that a person needed to completely satisfy one level to begin pursuing further levels. A more modern perspective is that these levels overlap. As a person reaches higher levels, their motivation is directed more towards these levels. However, though their main focus is on higher levels, they will still continue to pursue lower levels of the hierarchy but with less intensity.

The implication of Maslow's needs theory to this study is that, since man according to Maslow is a wanting being, and there are always some needs he will always want to satisfy, and he sees forest resources as free gift for exploitation, this simply implies that once a particular resource is exploited to his satisfaction, that resource no longer motivates him, he turns to another resource seeking for satisfaction, and the quest to exploit other resources continues and will lead to overexploitation of forest resources.

Statement of problem

The effectiveness of fuel wood extraction in Obubra Local Government Area in Cross River State is highly compromised by inadequate consideration of human activities, such as firewood extraction as a source of energy and other human activities which are important to the livelihood of the local communities. The rural area play host to most of the resources that is needed for human existence, most local economy deals with the rural economic activities that yield income to the rural investors. The rural dwellers economy focuses on optimal harnessing of the rural resources for enhancement of the living conditions of the rural dweller. The rural dwellers deal with agriculture and agriculture related activities (wood extraction, livestock farming, land cultivation, etc)forest and forest products exploitation such as logging, Non-Timber forest products (NTFPs).these activities have upset and outbalanced the nature in biological resources. Therefore, despite their significance, the impact of these practice remains poorly understood, leading to potential conflicts between human needs and environmental preservation. Presently, communities in Obubra local government area are experiencing massive increase in the rate of deforestation, as a result of unsustainable logging activities, crude method of harvesting non-timber forest products (NTFPs), etc this awesome activities in the area have affected biodiversity in the zone, despite government and non- government actors intervention for sustainable forest utilization of forest resource for conservation purposes, yet it's human impact are still felt.

The lack of clarity on the contributions of fuel wood extraction to forest resource conservation hinders the development of inclusive and sustainable strategies, ultimately

threatening the long-term viability of conservation initiatives. This knowledge gap necessitates an in-depth examination of the relationship between these land-use activities with environmental protection.

Objectives of the study

Specifically, the study seeks to:

- 1) Examine the relationship between fuel wood extraction and forest resource conservation in Obubra local Government Area of Cross River State.

Research Question

The following research question were posed to guide the study;

How does fuel wood extraction contribute to forest resource conservation in Obubra local government area of cross river state.

Statement of hypotheses

The following hypotheses were formulated to guide the study;

There is no significant relationship between fuel wood extraction and forest resource conservation in Obubra local government area of cross river state.

Methodology

Descriptive survey research design was used for the study. The research design studies situations as they exist at the time of a research (Salaria, 2012).this research is therefore considered appropriate for this study because it will allow the researcher to make use of a representative sample of the population from where generalization of the study result will be made. Purposive and accidental sampling techniques was used for the study to select a total of three twenty one (321) indigenes. Fuel wood extraction Questionnaire (FWEQ) was used for data collection. The data were analysed with Pearson product moment correlation (PPMC).the data were analysed at .05 level of significance and 319 degrees of freedom.

Analysis and Result

Result

Hypothesis: There is no significant relationship between fuelwood extraction and forest resource conservation.

Table1: Summary of data and Pearson Product Moment Correlation between fuelwood extraction and forest resources conservation (N=321).

Variables	$\bar{x}$	SD	r-ratio	Df	p-level
fuelwood extraction(X)	11.37	2.0209	-.291*	319	.000
Forest conservation (Y)	27.47	2.332			

*Significant at .05 level; $p < .05$.

The finding Table 1 showed that fuelwood extraction had a mean score of 11.37 with a standard deviation of 2.0209 while forest resource conservation had a mean score of 27.47 with standard deviation of 2.332. The outcome further showed that the r-calculated value of -.291 is greater than critical-r of 0.166, tested at .05 level of significance and 319 degrees of freedom. Also, the $p < .000$ is less than $p < .05$. With reference to this result, the null hypothesis which stated that there is no significant relationship between fuelwood extraction and forest resource conservation in Obubra Local Government Area of Cross River State was rejected showing that there is a significant negative relationship between fuelwood extraction and forest resource conservation in Obubra Local Government Area of Cross River State. The result implies that cutting down of trees for fuelwood destroys the forest structure and the biodiversity generally through habitat displacement etc.

Discussion of Findings

It was discovered from hypothesis one analysis that the null hypothesis was rejected. This means that indeed there is a significant negative relationship between fuelwood extraction and forest resource conservation in Obubra Local Government Area of Cross River State. The result of this analysis is in harmony with Opeyemi, Enefiok,

Udo and Dan (2015) who noted that the rainforest has been widely and indiscriminately exploited for timber with little or no attention given to the conservation of the much more valuable non-timber products. They affirmed that vast tracts of the rainforest have been degraded, denuded and eventually cleared to accommodate other forms of land use. Consequently, many tree species are threatened by extinction and considerable genetic resources have been lost.

Conclusion

In view of the findings of the study, this study conclusively establishes that fuel wood extraction as a land use practice within the study area, makes significant contribution to forest resource conservation, therefore underscoring the importance of integrating these activities into conservation strategies. By recognizing the negative impact of fuel wood extraction on forest resource conservation, policymakers and stakeholders can develop more effective, inclusive, and sustainable conservation initiatives that balance human livelihoods with environmental protection in Obubra Local Government Area Of Cross River State.

Recommendation

Based on the findings of the study, the following recommendations were given by the researcher.

- Policy makers, state actors and non-state actors, conservation stakeholders should prioritize and incentivize selective felling of trees and also encourage afforestation practice among local forest communities, providing training and resources to enhance its adoption and effectiveness in resource conservation.
- Effective law against insensitive logging activities, while training and retraining activities be carried out within the community on the danger and effect of excessive logging of the forest area.

There should be proper inclusiveness of the community into activities within forest area, that make them see themselves as stewards of the forest environment. And

also new high breed of fast growing seedlings be shared among community for effective afforestation practice within the environment.

Farming and forest resource conservation: the impact of farming activities and environmental degradation in Obubra local government area of cross river state.

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Impact of Problem-Solving and Cooperative Teaching Methods and Academic Performance of Students in Business Studies in Rivers State

By

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Abstract

This study investigated the impact of problem-solving and cooperative teaching methods on the academic performance of junior secondary school students in Business Studies in Rivers State. Specifically, it examined the extent to which problem-solving and cooperative methods are utilized by Business Studies teachers and compared the academic performance of students taught using each method. The study was guided by three research questions and three null hypotheses tested at a 0.05 level of significance. A mixed-method approach was employed, combining a descriptive survey and a quasi-experimental design. The population comprised 750 Business Studies teachers and 31,621 JSS 3 students in 289 public junior secondary schools in Rivers State. A sample of 260 teachers (115 male and 145 female) and selected JSS 3 students from three schools was drawn using stratified random and purposive sampling techniques. Data were collected using two instruments: a structured questionnaire and a 24-item multiple-choice performance test on advertising. The questionnaire titled “Utilization of Problem-Solving and Cooperative Teaching Methods in Business Studies Questionnaire (UPSCTMBSQ)” was validated by experts and had a reliability coefficient of 0.82. The performance test, validated using a table of specifications, yielded a reliability coefficient of 0.89. Descriptive statistics (mean and standard deviation) were used to answer the research questions, while Z-test and F-test analyses were conducted to test the null hypotheses at a 0.05 significance level. Findings revealed that both problem-solving and cooperative methods were utilized in teaching Business Studies, with the cooperative method demonstrating a significantly greater impact on students’ academic performance than the problem-solving approach. Additionally, no significant differences were observed in the responses of male and female teachers regarding the use of the two methods. The study concluded that cooperative learning is a more effective strategy for enhancing academic achievement in Business Studies. Based on these findings, recommendations include the institutionalization of cooperative learning strategies in Business Studies curricula, provision of in-service teacher training, and improved classroom infrastructure to facilitate group-based learning activities.

Keywords: Problem-solving, Cooperative, Teaching methods, Academic performance, Business Studies

Introduction

Education is a cornerstone for developing individuals equipped with the critical and creative thinking skills necessary to address the evolving demands of the social and economic landscape. In Nigeria, however, the educational system struggles to fulfil its promise of delivering quality education to all, particularly in fostering innovative thinkers capable of thriving in a dynamic global economy (Kettunen, 2015; Ferrari, Cachia & Punie, 2019). The Nigerian educational framework, structured across primary, secondary, and tertiary levels, aims to cultivate national consciousness, practical skills, and competencies for societal contribution, as outlined in the National Policy on Education in 2004. Yet, the secondary school system, which includes three years of junior secondary education followed by three years of senior secondary education, faces challenges in effectively preparing students for both practical living and further academic pursuits. Business Studies, a compulsory prevocational subject introduced into the junior secondary school curriculum under Nigeria's 6-3-3-4 educational system in 1982, plays a pivotal role in equipping students with foundational business knowledge and skills (Okoro, 2013). Comprising integrated components such as book-keeping, commerce, office practice, shorthand, and typewriting, Business Studies is designed to foster competencies essential for navigating the business world and contributing to economic development (Ahmed, 2012). The subject's objectives, as articulated by the Federal Republic of Nigeria in 2004, include enabling students to acquire basic business knowledge, develop office-related skills, prepare for advanced training, and apply these skills for personal and economic benefit. Despite its significance, the teaching of Business Studies often relies on outdated, teacher-centered methods, such as the lecture approach, which may not adequately engage students or promote the active learning required for mastering its practical and theoretical components (Daluba in Ochogba, 2019).

The need for pedagogical innovation in education has never been more pressing, particularly in subjects like Business Studies, where practical application and critical thinking are paramount. Traditional teaching methods, while foundational, are most

effective when integrated with innovative, student-centered approaches that encourage interaction, collaboration, and problem-solving (Aliyu, 2006). Two such methods, problem-solving and cooperative teaching. Teaching offers significant potential to transform the learning experience. The problem-solving method empowers students to identify challenges, analyze weaknesses, and develop evidence-based solutions, fostering self-directed learning and adaptability (Cantrell, 2004). Cooperative teaching, on the other hand, promotes collaborative learning through small group interactions, where students work interdependently toward shared goals, enhancing comprehension and peer support (Adeyemi, 2008). These methods align with the broader goals of education by cultivating skills that are directly applicable to real-world business contexts. However, the extent to which these innovative teaching strategies are employed in Nigerian junior secondary schools, particularly in Rivers State, remains underexplored. Questions persist about whether teachers are effectively utilizing problem-solving and cooperative methods to teach Business Studies and how these approaches influence students' academic performance. The reliance on conventional methods, coupled with a lack of emphasis on active learning strategies, may limit students' ability to fully grasp the subject's practical and theoretical dimensions, potentially undermining their preparedness for future economic challenges (Ibe, 2013). Moreover, there is a need to examine whether one method outperforms the other in fostering academic success in Business Studies, given the subject's integrated nature and its demand for both individual initiative and collaborative effort. This study seeks to address these gaps by investigating the impact of problem-solving and cooperative teaching methods on the academic performance of junior secondary school students in Business Studies in Rivers State. By determining the extent to which these methods are utilized and comparing their effectiveness, the study aims to provide insights into how pedagogical innovations can enhance learning outcomes in a subject critical to Nigeria's economic future. Through this exploration, the research underscores the importance of aligning teaching practices with the needs of learners and the demands of a rapidly changing world, ensuring that education fulfils its role in preparing students for useful living and higher education, as envisioned by the National Policy on Education in 2004.

Statement of the Problem

The teaching and learning of Business Studies in junior secondary schools face significant challenges that impact students' academic performance. Ezeani (2013) highlighted that poor academic performance in Business Studies has been consistently recorded in public examinations such as the Junior Secondary Certificate Examination (JSCE) conducted by the West African Examination Council (WAEC) in Nigeria. Key issues include the lack of application-based classroom practices, negative attitudes of students toward Business Studies, and inappropriate teaching methods. Uwameiye and Ogunbameru (2018) emphasized that Business Studies requires more than memorization, demanding determination, sound theoretical knowledge, and intensive practical application. However, the use of effective teaching strategies, such as problem-solving and cooperative methods, remains underutilized or poorly implemented, potentially limiting students' engagement and mastery of the subject. Therefore, this study investigates the impact of problem-solving and cooperative teaching methods on the academic performance of junior secondary school students in Business Studies in Rivers State.

Aim and Objectives of the Study

The aim of the study was to investigate the impact of problem-solving and cooperative teaching methods and academic performance of junior secondary school students in business studies in Rivers State. The specific objectives of the study were to:

1. Determine the extent to which problem-solving method is utilized in teaching Business Studies in junior secondary schools in Rivers State.
2. Determine the extent to which cooperative method is utilized in teaching Business Studies in junior secondary schools in Rivers State.
3. Determine the difference in the academic performance of students who were taught Business Studies using problem-solving method and those who were taught the same concept using cooperative method.

Research Questions

The following research questions were formulated for this study:

1. To what extent are Business Studies teachers utilizing problem-solving method in teaching Business Studies in junior secondary schools in Rivers State?
2. To what extent are Business Studies teachers utilizing cooperative method in teaching Business studies in junior secondary schools in Rivers State?
3. What is the difference in the academic performance of students who were taught Business studies using problem- solving method and those who were taught the same concept using cooperative method?

Hypotheses

The following hypotheses were formulated to guide this study;

- H₀₁:** There is no significant difference in the mean responses of male and female teachers on the utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State.
- H₀₂:** There is no significant difference in the mean responses of male and female teachers on the utilization of cooperative method in teaching Business Studies in junior secondary schools in Rivers State.
- H₀₃:** There is no significant difference in the academic performance of students who were taught Business studies using problem- solving method and those who were taught the same concept using cooperative method.

Methodology

This study employed a mixed-method approach, combining a descriptive survey and a quasi-experimental research design. The descriptive part utilized a survey research design to investigate teachers' utilization of problem-solving and cooperative methods in teaching Business Studies, as described by Wali (2019), who notes that survey designs ascertain the current status of a problem by studying a representative population sample. The quasi-experimental part adopted a randomized complete block design to compare

the academic performance of students taught Business Studies (advertising) using problem-solving and cooperative methods, without a control group. For the quasi-experimental component, two experimental groups of JSS 3 students from three selected junior secondary schools (blocks) in Rivers State were exposed to different treatments. Experimental group one (E1) was taught using treatment one, T1 (problem-solving method), and experimental group two (E2) was taught using treatment two, T2 (cooperative method). Each school represented a block to account for potential variations due to school location. The design is presented below:

Quasi Experiment One

Group	pre-test	treatment	post-test
E ₁	O ₁	x ₁	O ₂
E ₂	O ₁	x ₂	O ₂
C ₁	O ₁	-	O ₂
E ₁	=	Quasi-Experimental group 1 (teaching with problem-solving method)	
E ₂	=	Quasi-Experimental group 2 (teaching with cooperative method)	
O ₁	=	Pre-test administered to all groups before application of treatments	
O ₂	=	Post-test administered to all groups after the application of treatments	
X ₁	=	application of treatment 1 (teaching with problem-solving Method)	
X ₂	=	application of treatment 2 (teaching without the use of cooperative method)	

The study population included all 750 Business Studies teachers and 31,621 JSS 3 students in the 289 public junior secondary schools in Rivers State, as reported by the Education Management Information System (EMIS) of the Rivers State Universal Basic Education Board, Planning, Research and Statistics Unit, 2021. Rivers State, located at latitude 4°45'N and longitude 6°50'E, covers 11,077 km² with a population of 5,185,400 (Rivers State Population Statistics, 2017). The state, with Port Harcourt as its capital, comprises 23 Local Government Areas and is divided into three senatorial zones: Rivers East, Rivers West, and Rivers South-East. A stratified random sampling technique, using the Taro Yamane formula, was employed to select 260 Business Studies teachers

(115 male, 145 female) from the 750 teachers. For the survey, 69 public junior secondary schools were selected from 267 schools, with 23 schools from each senatorial district. The strata included senatorial zones and school location (urban and rural). For the quasi-experimental component, three schools were purposively selected to represent different blocks, and two groups of JSS 3 students per school were assigned to the treatments. The exact student sample size was not specified, but each group was taught the topic of advertising. The sample distribution for the survey is presented below:

Table 1: Sample Selected for the Survey

Senatorial Districts	Total Number of Public Junior Secondary Schools	Total Number of Sample Schools	Total Number of Business Studies Teachers
Rivers West	89	23	87
Rivers East	89	23	89
Rivers South-East	89	23	84
Total	267	69	260

Two instruments were used: a questionnaire for the survey and a performance test for the quasi-experiment. The survey questionnaire, designed on a 4-point rating scale (Strongly Agree = 4, Agree = 3, Disagree = 2, Strongly Disagree = 1), was divided into sections. Section A collected demographic information (e.g., name, sex, age, qualifications), Section B addressed the utilization of the problem-solving method, and Section C addressed the utilization of the cooperative method across Business Studies components (office practice, book-keeping, commerce, keyboarding, computer studies). The quasi-experimental instrument was a 24-item multiple-choice objective test on advertising, designed for JSS 3 students, with a total score of 24 marks. A table of specifications ensured content validity:

Table 2: Table of Specifications.

Topics	Specific Objectives						No. of items	Total
	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation		
Definition of advertising	-	1	1	1	1	-		4
Types of advertising : Informative advertising	1	1	-	1	1	1		5
Persuasive advertising	1	1	1	-	1	1		5
Competitive advertising	2	-	2	1	-	-		5
Speak advertising	-	1	-	1	1	2		5
Total no. of items	4	4	4	4	4	4		24

The face and content validity of both instruments were confirmed by the researcher's supervisor and two senior lecturers in the Department of Curriculum Studies and Instructional Technology. The questionnaire's reliability was established using the split-half method with 10 teachers outside the main sample, yielding a half-test correlation coefficient of +0.69 and a full correlation coefficient of +0.82 via the split-half formula. The performance test's reliability was similarly established with 10 students, yielding a half-test coefficient of +0.80 and a full coefficient of +0.89, confirming high reliability. The researcher explained the study's purpose to participants to build rapport. For the

survey, 260 questionnaires were administered to teachers and retrieved immediately, achieving a 100% return rate (115 male, 145 female). For the quasi-experiment, the performance test was administered post-treatment to both student groups in the three schools, with scores adjusted for pretest sensitization and guessing penalties. Data collection lasted two weeks. Survey data were analyzed using mean and standard deviation, with a standard reference mean of 2.50 to determine the extent of method utilization (≥ 2.50 indicating agreement). Hypotheses 1 and 2, comparing male and female teachers' responses, were tested using the Z-test at a 5% significance level. Quasi-experimental data were analyzed using mean scores and the F-test to compare treatment effects (Hypothesis 3), with block effects tested to check for school location interactions, all at a 5% significance level.

Results

Research Question 1: To what extent are Business Studies teachers utilizing problem-solving method in teaching Business Studies in junior secondary schools in Rivers State?

Table 3: Male Teachers' Response on the extent of Utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State.

Business studies components Items	Male Teachers' Response				Mean $\bar{x}$	Std. dev. δ	Total no. of male teachers'	Decision
	4	3	2	1				
Office practice	11	59	44	1	2.70	0.65	115	Agree
Book- keeping	23	50	35	7	2.77	0.84	115	Agree
Commerce	29	63	20	3	3.03	0.73	115	Agree
Keyboarding	27	66	14	8	2.97	0.80	115	Agree
Computer studies	31	53	26	5	2.96	0.82	115	Agree
Grand mean					2.90	0.77		Agree

Standard reference mean $\bar{x} = 2.50$

Table 3 shows that mean values of 2.70, 2.77, 3.03, 2.97 and 2.96 respectively, which are greater than the standard reference mean of 2.50 indicates that male teachers were of the view that problem- solving method was utilized in teaching the following Business Studies components such as office practice, book- keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. Small values of standard deviations obtained, that is; 0.65, 0.84, 0.73, 0.80 and 0.82 respectively indicates that the male Business Studies teachers were homogeneous in their response.

Table 4: Female Teachers' Response on the extent of Utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State.

Business studies components	Female Teachers' Response				Mean $\bar{x}$	Std. dev. σ	Total no. of female teachers'	Decision
Items	4	3	2	1				
Office practice	37	77	30	1	3.04	0.70	145	Agree
Book- keeping	25	73	42	5	2.81	0.75	145	Agree
Commerce	31	67	44	3	2.87	0.76	145	Agree
Keyboarding	11	82	51	2	2.70	0.62	145	Agree
Computer studies	33	71	37	4	2.92	0.77	145	Agree
Grand mean					2.87	0.72		Agree

Standard reference mean $\bar{x} = 2.50$

Table 4 shows that mean values of 3.04, 2.81, 2.87, 2.70 and 2.92 respectively, which are greater than the standard reference mean of 2.50 indicates that the female teachers were of the view that problem- solving method was utilized in teaching the following Business Studies components such as office practice, book- keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. Small values of standard deviations obtained, that is; 0.70, 0.75, 0.76, 0.62 and 0.77 respectively indicates that the female Business Studies teachers were homogeneous in their response.

Research Question 2: To what extent are Business Studies teachers utilizing cooperative method in teaching Business Studies in junior secondary schools in Rivers State?

Table 5: Male Teachers' Response on the extent of Utilization of cooperative method in teaching Business Studies in junior secondary schools in Rivers State.

Business studies components	Male Response	Teachers' Response				Mean $\bar{x}$	Std. dev. σ	Total no. of male teachers'	Decision
Items	4	3	2	1					
Office practice	17	54	40	4	2.73	0.75	115		Agree
Book- keeping	21	57	35	2	2.84	0.73	115		Agree
Commerce	9	64	37	5	2.67	0.68	115		Agree
Keyboarding	25	52	34	4	2.85	0.80	115		Agree
Computer studies	27	65	22	1	3.03	0.68	115		Agree
Grand mean					2.84	0.73			Agree

Standard reference mean $\bar{x} = 2.50$

Table 5 shows that mean values of 2.73, 2.84, 2.67, 2.85 and 3.03 respectively, which are greater than the standard reference mean of 2.50 indicates that the male teachers were of the view that cooperative method was utilized in teaching the following Business Studies components such as office practice, book- keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. Small values of standard deviations obtained, that is; 0.75, 0.73, 0.68, 0.80 and 0.68 respectively indicates that the male Business Studies teachers were homogeneous in their response.

Table 6: Female Teachers' Response on the extent of Utilization of cooperative method in teaching Business Studies in junior secondary schools in Rivers State.

Business studies components	Female Teachers' Response				Mean $\bar{x}$	Std. dev. σ	Total no. of female teachers'	Decision
Items	4	3	2	1				
Office practice	33	71	36	5	2.91	0.78	145	Agree
Book- keeping	35	74	23	13	2.90	0.87	145	Agree
Commerce	30	92	21	2	3.04	0.64	145	Agree
Keyboarding	14	69	55	7	2.62	0.73	145	Agree
Computer studies	22	88	30	5	2.88	0.70	145	Agree
Grand mean					2.87	0.74		Agree

Standard reference mean $\bar{x} = 2.50$

Table 6 shows that mean values of 2.91, 2.90, 3.04, 2.62 and 2.88 respectively, which are greater than the standard reference mean of 2.50 indicates that the female teachers were of the view that cooperative method was utilized in teaching the following Business Studies components such as office practice, book- keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. Small values of standard deviations obtained, that is; 0.78, 0.87, 0.64, 0.73 and 0.70 respectively indicates that the female Business Studies teachers were homogeneous in their response.

Research Question 3: What is the difference in the academic performance of students who were taught Business Studies using problem- solving method and those who were taught same concept using cooperative method?

Table 7: Mean Scores of Students in the Three Sample Schools Taught Business Studies (advertising) using problem- solving method and those who were taught same concept using cooperative method

Block (school location)	Treatment		Total _(Y+j)
	T ₁ (Problem- solving method)	T ₂ (Cooperative method)	
B1	12.4	17.8	30.2
B2	11.8	16.9	28.7
B3	10.7	16.7	27.4
Total _(Y+j)	34.9	51.4	Grand total
Grand mean ($\bar{y}$)	11.63	17.13	86.3

Table 7 shows the mean scores obtained in treatments 1 (teaching advertising using problem- solving method) and 2 (teaching advertising using cooperative method) in the sample schools. The grand mean performance of the students taught Business Studies (advertising) using problem- solving method is 11.63, while the grand mean performance of the students taught the same topic with cooperative method is 17.13. These data were deduced from the 24 - item multiple-choice objective test that attracts a total of 24 marks. These mean scores were the net scores obtained after pretest sensitization effects have been removed and penalty for guessing applied. The relevant hypothesis in this regard, will be tested to determine whether the difference in the mean performance of the two experiment is significant or not.

Testing of Hypotheses

H₀₁: There is no significant difference in the mean responses of male and female teachers on the utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State.

Table 8: Z-Test of Differences in the Mean Responses of Male and Female Teachers on the extent of utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State.

Group	Mean	Std. dev	N	Df	Std. error	Z _{cal}	Z _{table} α=0.05	Decision
Male teachers	2.90	0.77	115					
	2.87	0.72	145	258	0.094	0.32	1.96	H ₀ accepted
Female teachers								

Table 8 shows that the null hypothesis on Z-test of difference in the mean responses of male and female teachers on the extent of utilization of problem-solving method in teaching Business Studies in junior secondary schools in Rivers State, was accepted at 5% level of significance, where the degree of freedom (258) is at infinity (∞), because the critical or tabular value of Z (1.96) is greater than the calculated value of Z (0.32), this means that there is no significant difference in the mean responses of male and female Business Studies teachers. Hence, male and female teachers agreed that problem-solving approach was utilized in teaching Business Studies components such as office practice, book-keeping, commerce, keyboarding and computer studies respectively in junior secondary schools in Rivers State.

H0₂: There is no significant difference in the mean responses of male and female teachers on the utilization of cooperative method in teaching Business Studies in junior secondary schools in Rivers State.

Table 9: Z -Test of Differences in the Mean Responses of Male and Female Teachers on the cooperative method in teaching Business Studies in junior secondary schools in Rivers State.

Group	Mean	Std. dev	N	Df	Std. error	Z _{cal}	Z _{table} α=0.05	Decision
Male teachers	2.84	0.73	115					
	2.87	0.74	145	258	0.092	0.33	1.96	H ₀ accepted
Female teachers								

Table 9 shows that the null hypothesis on Z-test of difference in the mean responses of male and female teachers on the utilization of cooperative method in teaching Business Studies in junior secondary schools in Rivers State, was accepted at 5% level of significance, where the degree of freedom (258) is at infinity (∞), because the critical or tabular value of Z (1.96) is greater than the calculated value of Z (0.33), this means that there is no significant difference in the mean responses of male and female Business Studies teachers. Hence, male and female teachers agreed that cooperative approach was utilized in teaching Business Studies components such as office practice, book-keeping, commerce, keyboarding and computer studies in junior secondary schools in Rivers State.

H0₃: There is no significant difference in the academic performance of students who were taught Business Studies (advertising) using problem-solving method and those who were taught same concept using cooperative method.

Table 10: F-test of differences in the effects of teaching Business Studies (Advertising) using problem- solving method and those who were taught same concept using cooperative method.

Source of variation	Degrees of freedom	Sum of squares	Mean square	$F_{(cal)}$	F_{table}	Decision
Treatment	1	45.38	45.38	51.6	18.51	H_0 rejected
Block (schools)	2	1.97	0.99	1.13	19.00	H_0 accepted
Error	2	1.75	0.88			
Total	5	49.1	47.25			

Table 10: Shows that the calculated value of F-ratio (51.6) for treatment is greater than the tabular value (18.51) at 1,2 degrees of freedom and 5% level of significance. Hence, the null hypothesis H_0 is rejected. This means that the treatment effects of using problem- solving method and cooperative method are not the same. There is significant difference in the effects of treatment one, use of problem- solving method (T_1) and treatment two, cooperative method (T_2). Recall that the grand mean performance of students exposed to treatment one, use of problem- solving method (T_1) is 11.63, while the grand mean performance of students exposed to treatment two, cooperative method (T_2) is 17.13. Hence, the use of cooperative method of teaching, improves the academic performance of students than the use of problem- solving method. Block effects were tested to check, if there is any interaction due to block (school) on treatment effects. The null hypotheses on block effects was accepted at 2,2 degrees of freedom and 5% level of significance, because the calculated value (1.13) is less than the tabular value (19.00). hence the block effects are the same which, means that there is no interaction of treatment and school location.

Discussion

In research question one and hypothesis one, the study found out that problem-solving approach was utilized in teaching Business Studies components such as office practice, book-keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. This is in line with Bawa (2011) that Problem-Solving Instructional Strategy (PSIS) have positive effects on students' achievement in any subject, when properly utilized. In research question two and hypothesis two, the study found out that cooperative approach was utilized in teaching Business Studies components such as office practice, book-keeping, commerce, keyboarding and computer studies respectively, in junior secondary schools in Rivers State. This is in line with the findings of Olorukooba (2001) that cooperative learning was furthermore effective than lecture method. In research question three and hypothesis three, the study found out there is significant difference in the effects of treatment one, use of problem-solving method (T_1) and treatment two, cooperative method (T_2). Exposure of students to classroom learning through the use of cooperative method of teaching improves the academic performance of students than those taught with problem-solving method. This finding is in line with Luntungan (2012) who reports that cooperative method has a significant effect on students' academic performance.

Conclusion

The study powerfully demonstrates that both problem-solving and cooperative instructional strategies are skillfully employed in teaching Business Studies components office practice, book-keeping, commerce, keyboarding, and computer studies in junior secondary schools across Rivers State. These findings resonate strongly with prior research, reinforcing the transformative impact of the Problem-Solving Instructional Strategy (PSIS) on student success, as highlighted by Bawa (2011), and the marked superiority of cooperative learning over conventional methods, as evidenced by (Olorukooba, 2001). Most strikingly, the cooperative method significantly outperformed the problem-solving approach in boosting students' academic achievements, echoing

Luntungan's (2012) compelling insights. These robust results spotlight cooperative learning as a dynamic and highly effective strategy for elevating student outcomes in Business Studies, urging educators to embrace its widespread integration into classroom practices to unlock unparalleled academic excellence.

Recommendations

In light of these findings, some recommendations were made:

1. The government and school authorities should prioritize the integration of cooperative learning strategies across Business Studies curricula in junior secondary schools, providing guidelines and resources to ensure teachers effectively implement group-based activities to maximize student academic performance.
2. Education stakeholders should organize regular in-service training programmes, such as workshops and seminars, to equip teachers with skills to effectively deliver cooperative learning and problem-solving instructional strategies, focusing on fostering teamwork and critical thinking in subjects like book-keeping, commerce, and computer studies.
3. The government should ensure schools are equipped with adequate materials and classroom setups (e.g., flexible seating arrangements and activity-based resources) to support cooperative learning environments, enabling students to engage collaboratively in Business Studies components like office practice and keyboarding.

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University Education in Nigeria: Access, Issues and Way Forward**By**

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Abstract

Education at all level is a fundamental right of citizens and needs to be accessed by all, at all times and from all angle. Therefore, this paper examines university education in Nigeria: access, issues and way forward. To achieve access, the following factors were discussed the role of technology in enhancing access to University education, the role of government in enhancing access to university education. Also, the issues and way forward discussed include the issue of finance and fund, socio-economic issues, government policy and implementation. Short-term plan, medium-term plan and long-term plan were also examined. The paper concluded that university education and its accessibility in Nigeria are not working properly and so many factors militate against gainful access by the students. It was suggested amongst others that there is need to jettison and abolish the policy of educationally developed area (EDAs) and less educationally developed areas (LEDAs) and also the quota system should be encouraged and adopted. That mutual cooperation and collaboration of triple helix in providing standardized education to be accessed by all should be established.

Key word: University Education, Access to University Education, Issues Affecting Access to University Education, Way Forward to Issues Affecting Access to University Education.

Introduction

University education is seen and referred to as the post-secondary education which is acquired in other to help in the transformative process of student which is mostly done

in a secure and serene classroom. Agamue (2018) stated that, it is a developmental process which is geared towards growth and discovery of knowledge for mankind. In agreement to that, Okazi (2017) opined that university education combines knowledge and truth for the development and production of competent manpower in the society. Education itself starts from birth but university education which is post-secondary education is aimed towards producing skilled manpower and as well helps to mold and restructure the emotional and psychological wellbeing of an individual in the society. Furthermore, through the help of a well-structured curriculum, university education helps in boosting the confidence level of students, ability to make positive decisions and career development. Economically, socially and otherwise post-secondary education is a major driver of entrepreneurial skills and global knowledge of the economy. University education is an investment for human capital development Okazi (2017).

At same time, accessing university education in Nigeria is an age long problem that is pressing the willingness of many intending students from pursuing their dreams via university education. The increasing nature of quest for higher education and the country's increase in population, mounts more pressure on that educational sector with less or minimal availability of educational resources. Akuzie (2018) stated that, every secondary school graduate tries to secure admission to the university to study for a better life. In the same vein, Okaka (2019) narrated that people have the conviction and believe that university education and its degree is the only way to good life. The demand for university education currently if not checked will outweigh the number of available universities and its resources in the country. On the other hand, approach to university education is very complex and multifaceted task for the prospective students in Nigerian because of the uncoordinated arrangement and processes within and around the school especially public universities. Again, in most developing countries like Nigeria it is very difficult for the vulnerable, marginalized and disadvantaged individual to access university education freely. Kelvin (2020) proposed that, having free and good access to tertiary education should be government sole responsibility to her citizens. More so, accessibility and usability of university education is a fundamental human right that

most not be denied of a person that is willing, able and ready to access the advanced level of education.

Furthermore, every aspect in acquiring knowledge has its own peculiar and unique issues and challenges that must be addressed for smooth running of educational institutions. One of the basic issues in accessing university education in Nigeria is fund and finance. Odoh (2019) agreed that tuition fees and other financial obligations in the university remains a major challenge for both the students and parents in accessing university education in Nigeria. The implication of the above challenge is that only the few financially stable individuals and family can access education freely which leads to exclusion, discrimination and denial of basic right of citizens. Secondly, other issues that hinders the accessibility of advanced learning in Nigeria is the unstructured and less uniformity of university curriculum and instruction for the discharge and acquisition of knowledge. Okaka (2019) stated that institutional policies and admission guidelines contribute majorly to the challenges of accessing university education in Nigeria. Soft university policies and all-inclusive admission guideline goes a long way in bringing people closer to the university. Nwadike and Godwins (2017) identified lack of educational resources as one of the major issues working against accessibility of university education. Going further, educational resources which include human resources, material resources and liquid resources all contributes towards achieving the aim of education in Nigeria. Issue and challenges of accessing university education in Nigeria cannot be over emphasized.

In every problem there is a corresponding solution that helps to solve and address the challenges for a better tomorrow. The way forward to the issues around university accessibility remains with the major financier of education which is the government. According to Agamue (2018), the solution to the challenges of university education and its accessibility lies on educational stakeholders in Nigeria. Educational stakeholders include both the government, the private institutions, the non-governmental organizations and the parents teachers association (PTA). Therefore, to achieve the aim of university education through unfiltered access by the students' stakeholders,

managers of education and policy makers needs to come together and align on the best possible way forward.

Finally, the study is aimed to address and expatiate on the following conceptual review. Theoretical review, Concept of university education in Nigeria, Access to University education in Nigeria, Issues affecting access to university education, Way forward to issues affecting access to university education, conclusion and suggestions.

Theoretical Review

Theories act as catalyst to studies by helping to expatiate on the subject matter so as to draw a comprehensive conclusion from the findings of the study. Therefore, the theory this study will be anchored on is the organization productivity theory propounded by Gilbert in the year (1947) as was cited by Kpee (2018). The theory states that, organizational productivity outcomes are dependent on the quality and quantity of the resources employed in the production. The theory implies that the number of students enrolled into university for university education as a production factor is dependent on the quality of outcome that will be recorded. Therefore, the theory is suitable for the study because it gave an insight on the availability of resources and its usage,

Concept of University Education in Nigeria

University education generally is structured to avail the students with advanced skills, knowledge, leadership styles competences to enable them prepare more on life after school in the wider society. Etymologically, university education started back then in the (1940s) with the country's first university of Ibadan been introduced as the first-generation school to be established in the country. According Osuji and Nwadike (2023), Nigeria has a total of 268 universities in the country comprising of both federal, state and private. Federal universities are 61 which included universities of agriculture, special education and the Nigerian defence academy. State universities are of 42 in the country. Private universities in the country that are approved and licensed to function are 165 in total. Regardless of the increase in the number of institutions in the country, higher institutions in the country keep having same reoccurring challenge of access

whereby students find it very difficult to access the university and gain admission so as to further their career.

The population of students and the limited number of educational resources in Nigerian makes it very difficult for a smooth running of teaching and learning within the university education. This as a factor has led to loss of interest in accessing university education. The national policy on education NPE (2014) outline the following as the aims of university education.

1. To develop the and quip it with the needed skills and knowledge to live a meaningful and fulfilling life: this aim encourages acquisition of skill, intellectual development and sound knowledge applicable in all areas.
2. To develop a sense of value and to inculcate a sense of duty and responsibility: this aim is geared towards giving sense of responsibility and duty with ethical values to individuals for the betterment of the community, society and the nation at large.
3. To develop the ability to think critically and solve problems: this aim focused on the importance of critical thinking and good decision making so as to solve societal problems.
4. To develop a sense of national consciousness and patriotism: this aim looked at being patriotic, loyal and symbol of national identity to the country.
5. To develop the ability to adapt to changing situations and to acquire the skills and knowledge necessary for self-employment: this aim emphasizes on the need to develop entrepreneurial skill so as to be able to adapt in any given condition.
6. To promote national unity and integration: this aim focuses on using university education to promote national unity and peaceful cohesion.
7. To develop a sense of global citizenship and to prepare individuals for global competitiveness: this aim establishes the importance of developing cultural awareness and highly competitive economy in a global perspective.

The above aims of university education are structured to boost the development of university education in Nigeria. Additionally, it also ensures that university graduates

are equipped with the necessary skills and knowledge for societal development. Similarly, university education according to Osuji and Nwadike (2023) has the following benefits for its beneficiaries. (A.) personal benefits: increase financial earnings, increase in career pursuit, increase in skills, knowledge and growth. (B.) social benefits: it helps in boosting school-community relationship, create room for cultural diversity and mutual understanding, helps in linking colleagues from all corner of life together. (C.) economic benefits: increase in man power production for economic utility, boost entrepreneurial spirit and innovative mindset. (D.) societal benefits: civic and civil responsibility, moral and ethical coordination. Summarily, university education offers unquantifiable benefits to seekers of higher education that can help to transform both the psychological and emotional mindset of individuals.

Access to University Education in Nigeria

Access or accessibility refers to as a way of approaching or entering into a place or a means of getting something. Same way, access to university education means an avenue of getting more advance formal education. In clarity terms, access in this study is seen to be a way of getting into university. Access to university education is given wide and open equal chance to students to study regardless of their race, religion, ethnic group, tribe and financial status. However, an act of discrimination and segregation on the grounds of religion, sex, financial status, high school fees, unequal distribution of educational resources to the needed schools can deny students access to university education. Ezeugo (2018) posited that, access to university education in Nigeria is not only stressful but very hard in securing admission due to the limited available resources in school. Economically speaking, when the demand for a good is higher than the supply there seems to be the problem of satisfaction among the consumers of such good. Therefore, the high demand for university education with less available resources to contain the demand and the increasing population of students obviously makes access to university education highly competitive.

The Role of Technology in Enhancing Access to University education

Technology has come to stay and for that, the role technology plays in actualizing the aim of university education cannot be ignored. The accessibility of quality education by the developing nations is achievable with technology (Brown, 2019). Teaching and learning with knowledge impacting in this contemporary world is seamless because of the invention and introduction of technological tools like Artificial Intelligence (AI), Robotic machines for assisted learning, meta etc. These tools contribute towards enhancing smooth accessibility to university education in Nigeria. Odoh (20219), outlined online and distance learning, mobile technology and technological support as the roles of technology in access to university education.

- a) Online and distance learning: the increasing nature of online class and distance learning is as a result of the introduction and inclusion of technology and technological tools into educational settings and curriculum. This educational idea is highly beneficial to students who cannot afford physical access into university education or students who are disabled and finds it difficult to move around and access the school.
- b) Mobile technology: with the help of smart phones and other communication gadgets in the world nowadays, academic meetings, classes, talks, presentations and other gatherings can now be possible making very easy for students to participate and access university education anywhere in the world.
- c) Technological support: service providers play a vital role in accomplishing the aim of technology in enhancing access to university education. MTN, GLO, AIRTEL etc to a high extent helps in making technology work in Nigeria.

Finally, technology in this contemporary world plays a vital role in reducing stress in access to university education in Nigeria.

The Role of Government in Enhancing Access to University Education

Government as the major financier of university education to a larger extent contribute towards enhancing access to university education through the type of policies, laws,

decrees and finance. Ezeugo (2018) stated that, no level of education functions well without the help and full support of the government of the country. Federal government, in a push to perform its function and play her role in enhancing smooth access to university education by qualified individuals, made more approval and provision of universities in the country so as to make access easier and more palatable. The following are the role of government in enhancing education.

- I. Creation and financing of more universities: issuance of licenses for the operation of university education remains the sole responsibility of the government and with the high demand of that level of education, many schools were established and funded by the government.
- II. Policy creation and implementation: making good policies and implementation by government aids access to education. Policies like admission quota system, federal character, educationally developed and less educationally developed areas, regulatory and monitoring bodies within the school.
- III. Investment in technology: purchasing and subsidizing the amount or usage of technology of students by the government boost the strength of access to university education

Finally, government plays a very significant role in enhancing and promoting access to education.

Issues Affecting Access to University Education

The right to education is a fundamental human right of every citizen, which means it is an obligation for government to provide or make education very accessible either by subsidizing it or making it free for all. In considering that, there are still many hindering issues surrounding university education which needs to be really looked into if this advanced level of learning is to be achieved. Okaka (2019) stated that the issues surrounding access to university education are segmented into three phases. The issue are as follows:

1. **The Issue of Finance and Fund:** (A) exorbitant tuition fees: the provoking nature of tuition fees of university education is so alarming and highly discouraging. Significant number of students mostly the low-income earners finds it difficult to cope with the high tuition fees thereby making it difficult to access education freely by all instead, only the privileged few that can access education and leaving out the majority. (B) lack of finance by the government: educational expansion and growth should be matched with aggressive finance and funding by the government to quickly argument the loop holes in university activities. Unfortunately, government of nowadays finds no reason in properly assisting educational institutions financially thereby creating a lacuna in the running and administering of university education. Poor funding is a major issue that works against unlimited access to education in Nigeria. The implication of poor funding is that, good and specious infrastructures will not be provided, wear and tear will not be attended to, less provision of human and material resources and reduction in the number of students to be admitted. (C) lack of aids and unsubsidized scholarships: before now, both the government, nongovernmental organizations (NGOs), communities and private individuals' rollout fully funded or subsidized scholarships mainly for the vulnerable in the society as a way to encourage them into accessing university education. But nowadays, hardly will these group of people again offer scholarships that can be of help and renewal of hope to the less privilege people in the society. (D) expenses: the living standard in the university environment is to high that many persons cannot afford to meet up. Accommodation, feeding, transportation and other logistics contributes to financial constraints of students.
2. **Socio-Economic Issues:** (I) topographic and geographic site: the location of school and student matters a lot when siting school for public use. Many students from remote areas may find it difficult in accessing university education situated in urban areas due to the fact that transportation, lack of internet facilities and other logistics might be a barrier to students of that nature. (II) cultural diversity: minority tribes in the society might face discrimination and marginalization

thereby disconnecting them from freely accessing university education just like any other majority tribes. (III) natural disaster: floods, fire outbreak, earthquakes, accidents all are contributory factors that can hinder good access to university education both in Nigeria and anywhere in the world. (IV) communal crises: religious, communal and cult clash can spring up heavy crises between two or more groups in the society which can limit access to good university education. (V) language problem: speaking different international and local languages by difference student pose a major challenge in accessing university education.

- 3. Government Policy and implementation:** (1) rigidity of policy: government policies in most cases are rigid, hard and uncomfortable for the suitability of students. For instance, admission into the access for university education policy like age policy, quota system, high cut off scores and some must have professional examination results all these constitute rigid instead of flexible policies as applicable to other countries of the world. (2) complex and confusing admission processes: admission process is said to be confusing when the merited are not considered because of tribe, race and cultural diversity instead the unmerited candidates are considered because of the kind of persons supporting and standing by them. (3) lack of implementation and adherence to policies: lack of full implementation and adherence of educational policies by the owners of the said policy is alarming.

Finally, addressing the issues of affecting access to university education is paramount in ensuring that all qualified individuals who are willing and able irrespective of their background have unfiltered access to quality education.

Way Forward to Issues Affecting Access to University Education

The solution to issues affecting access to university education is hinged on planning and execution which are short-term, medium-term and long-term plans (Agamue, 2018). The following are the basic way forward to issues affecting access to university education:

- A. Short-Term Plans:** (A) increase in government financial support: government ability to increase funding and financing major projects like sponsoring scholarship, subsidizing Jamb and WAEC forms for students. Temporal financial support or loans to students especially to the low-income earners in the society helps to ease the difficulty in accessing university education among seekers of that level of education (Nwadike, 2024). (B) admission process: improvement in the admission processes by counseling students in career choice, academic guidance to enable students succeed also helps gain the right admission and access the school smoothly. (C) encouragement of online and distance learning: developing websites, computer gadgets and encouraging online programs to enable students from far and near to access advanced learning and participate fully in any program of their choice is a way forward to accessing university education in Nigeria.
- B. Medium-term plans:** (1) infrastructural development: investing, providing and properly distributing educational resources is a key to accessing education. A school with state-of-the-art infrastructural facilities attract more student and as well makes access to education easy. (2) collaboration with triple helix: mutual collaboration and cooperation between the school, community and the industry (triple helix) brings more development and broadens wider the scope to accessing university education in Nigeria. (3) developing special programs: developing and floating special needs programs by the university makes it easier for the needed students to access the university.
- C. Long-term plans:** (I) national policy: governmental policies by the federal government of a country can mere or mare university education and its accessibility by her citizens and other foreign nationals. In that case, there is need for government to make friendly policies and laws that can encourage students to find university education. (II) funding: educational expansion should be accompanied with drastic increase in funding. Unfortunately, in Nigeria nowadays the budgetary allocation to the educational sector is to insignificant thereby making it difficult to for schools to carry out their obligations smoothly.

On that note, the need for an increased funding of university education makes it easier for students to access. (III) recognition of cultures: incorporation and integration of different cultures and languages into the school curriculum gives hope for students from other geopolitical zones to access universities in different location. (IV) monitoring and evaluation: setting up a monitoring and evaluation unite nationwide to ensure adherence to stipulated plans to way forward to issues affecting access to university education in Nigeria helps to boost and reduce the stress of accessing university education.

Conclusion

Based on the discussions so far, it could be concluded that university education and its accessibility in Nigeria are not working properly and so many factors militate against gainful access by the students and lack of access by all leads to only the privileged few accessing university education with a very high corruptive practice. However, access to university education by qualified individuals should be made possible and less stressful.

Suggestions

To achieve a smooth access to university education and accomplishment of educational goals and objectives, the following suggestions are made:

1. Increasing or multiplying the number of universities in the country will not encourage access, rather an increase in the financing and funding pattern of universities by the government should be adopted so as to help in providing the necessary resources to education.
2. The need to jettison and abolish the policy of educationally developed area (EDAs) and less educationally developed areas (LEDAs) and also the quota system should be encouraged and adopted.
3. Examination bodies like Joint admission and matriculation board (JAMB), West African examination council (WAEC) etc should stick to their rules and regulations guiding them and lessen the burden on students.

4. Mutual cooperation and collaboration of triple helix in providing standardized education to be accessed by all should be established.
5. Age should not be a barrier to accessing university education in Nigeria.

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**Educating Principals for Effective Resources Management in Public Senior
Secondary Schools in Rivers State.**

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Abstract

This paper examined educating principals for effective resources management in public senior secondary schools in Rivers State. The design used was descriptive Survey design and the population was 311 senior secondary school principals drawn from public senior secondary schools in Rivers State. Two research questions and two hypotheses guided the study. Census involving the whole population of 311 principals in public senior secondary school was carried out. So, the entire 311 population of principals also made up the sample of the study. Data collection was by instrument which was duly validated by experts and 0.84 reliability index was established using Cronbach alpha. A criterion mean of 2.50 was use as cut-off mark. Mean and standard deviation was used to answer all research questions while A t- test inferential statistics was used to test all null hypotheses at 0.05 level significance. Statistical analysis was done using the statistical package for social science, SPSS version 23. Findings of the study revealed that seminars, conferences, training were the various method used in educating secondary school principals on effective resource management and that educating secondary school principals on resource management had positive impact on the administration of schools as well as enhanced productivity amongst the students. The study recommends amongst all others that heads of institutions should be encouraged to periodically attend training and re-training on resource managements in schools and that government and stake holders of education should provide the necessary resources needed to enhance teaching and learning in institutions of learning.

Keywords: Educating, Effective Management, Effective Resources Management, Principals.

Introduction

Education is considered as the cornerstone for development. It forms the basis for nous, dexterity acquisition, advancement in technology as well as the aptitude to bind natural resources of the environment into development. No wonder Ogbonaya (2014) aver that education is a balance helm of apparatus that drives nations to bearable progress and evolution. Thus, education is seen as the life wire of every nation growth and development so also is the ability of a secondary school principal to manage resources in his /her coven the life wire of the school system. Resource management in every institution of learning is very important since it has the potentials to ensure optimum educational outcome. The secondary school education is that level of education that students receive after going through the primary school, this level of education ushers an individual to tertiary education and its main objective is to ensure that students or learners are properly trained to read, write, and be numerically literate (Akporehe 2011). In line with the Federal Republic of Nigeria (2008), secondary education was established to achieve several objectives like inculcating on the students the passion for self-development and excellence, and providing skills and knowledge acquisition for entrepreneurial, vocational and professional self-fulfillment.

Heads of secondary institutions known as the school principals play an essential role in managing resources such as personnels, finance, school plants and instructional materials in the school system since the effectual apportionment and use of these resources has the tendency to influence the eminence of education provided to the learners, the gratification of staff as well as the performance of the school as a whole.

Observation reveals the secondary school principals could be seen most times as superintendents, supervisors, planners, managers, problem solver, administrators (Maduabum 2012). Principals as institutional leaders occupy important position in the secondary educational system since such position is saddled with responsibility of answerability and management. They are usually tasked with the responsibility of ensuring that the school environments are conducive enough to enhance productivity for both the teachers and students, like earlier said, the responsibilities of the secondary

school head such as the secondary school principal extend beyond administrative duties to include budgeting, strategic planning, encouragement ethos of answerability, and continuous improvement. With this, one can deduce that for secondary education to achieve its protagonists in making sure that it creates positive impact in the life of students or learners, school head such as the principals, need to be properly trained and equipped with knowledge and skills especially in the aspect of resource management in the school system. No wonder Wahab et al (2017) and Ike (2017) avowed that the strength of any organization such as the school system is resolute not only on the quality of its resources but also on how these resources are properly managed.

The secondary school principals in the course of carrying out their duties could be saddled with numerous challenges in managing resources in the school system such as inadequate fund, dilapidated structures and its maintenance, and ensuring that staff gets professional developments. These challenges require all-inclusive tactics to resource management, one that is adaptive and forward- intellectual.

The main objectives of educating school heads such as the secondary school principals on effective resource management is to empower them with the essential tools and tactics to make official decision in the system in the areas of financial management, facility managements, instructional resources management, human resource managements, and so on. Training of principals can be done through workshops and seminars, case studies, mentorship and coaching as well as continuous professional development.

Educating principals on effective resource management is very important for efficiency and effectiveness in the school system. Equipping secondary school heads with the necessary skills and knowledge can navigate the complexities of resource allocation and utilization ultimately leading to improved educational outcomes and a more effective learning environment.

Purpose of the Study

The main aim of this study was to investigate educating principals for effective management of resources in public senior secondary schools in Rivers State. Specifically, the study sought to identify:

1. The various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State,
2. The impact of educating principals for effective management of resources in public senior secondary schools in Rivers State.

Research Questions

1. What are the methods for educating principals for effective resources management in public senior secondary schools in Rivers State?
2. What are the influence of educating principals for effective resource management in public senior secondary schools in Rivers State?

Hypothesis

1. There is no significant difference in the mean rating of male and female principals on the various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State.
2. There is no significant difference in the mean rating of male and female principals on the effect of educating principals on effective management of resources in public senior secondary schools in Rivers State.

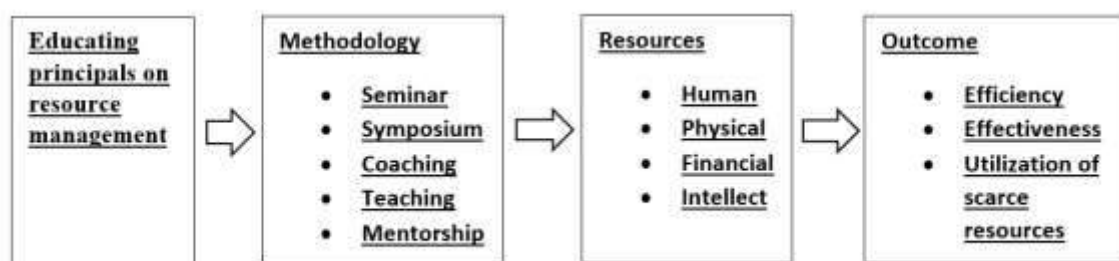
Theoretical Framework

This study was supported by Resource Based Theory (RBT) that was propounded by Jay Barney (1991). This theory posits that the key to a firms sustained competitive advantage lies in its internal resources and capabilities rather than its external positioning in the market. This theory emphasizes that the unique resources and

capabilities that a firm possesses can be a source of competitive advantage if they meet certain criteria.

Applying Resource-Based Theory (RBT) to the management of resources in education involves identifying and leveraging the unique resources such as human, physical, financial, intellectual, reputation and relationship and skills within educational institutions to achieve competitive advantages and improve educational outcomes. Furthermore, applying RBT in school setting requires the school administrator such as the secondary school principal to stand the test of time by focusing on recognizing, developing and leveraging on resources and competences that are valuable, rare and non- substitutable to achieve and sustain competitive advantage in the educational sector. In essence, educating principals as school administrators in the aspect of resource management will help the school system utilize the available resources to improve educational outcome and efficiency and effectiveness in the school system.

Conceptual Framework



Researchers View 2024

Conceptual Review

Educating

Educating could be defined as the act of divulging knowledge, abilities, skills, principals, morals and attitudes to individuals. It involves teaching, mentoring, training, coaching and guiding an individual to gain an insight for future dealings. The main aim of educating an individual is to foster intellectual and personal growth, making the individual to be well informed, capable and responsible member of the society. This

process could be done in a formal or informal setting. The Collins Dictionary defined educating as the process of teaching an individual or persons better ways of doing things or better ways of living. So, educating principals or school heads on effective resource management has to do with the process of teaching school heads on adequate ways of handling resources in the school system.

Concept of Resource and Educational Resources

Resources could be defined as whatever that impacts to economic bustle. Ibukun (2009) opined that resources include natural and human resources. in the educational setting, educational resources could be defined as all those resources whether human and material resources such as staff, instructional materials, workshop, equipment's, tools, gadgets, library, ICT and so on that could be used to enhance teaching and learning processes in the school system. From the above, one can deduce that resources in the school system comprises of financial, human, and material resources. These resources most times could be scarce or limited in number so as such, there is need for every school head to be educated on effective resource management for proper utilization in the school system

Concept of Resource Management

Resource Management could be defined as a system of managing all available resources in the school system such as school plants and facilities, staff, financial resources etc efficiently and proficiently to ensure optimal educational outcome. It actually has to do with adequate planning, arranged organizing, proper directing and close supervision in the utilization of resources in the school system (Noorhapizah et al 2023). It is essentially aim to ensure that resources in the system are employed actively to support learning process as well as in making sure that the educational environment is very conducive for scholars to develop various skills and enhanced productivity (Donkoh et al, 2023). So, from the forgoing, for productivity to be efficient and effective in the secondary school system, heads of institutions should be properly trained on efficient resource management in the school system.

Concept of Effective Resource Management

Effective management has to do with the aptitude to plan, organize, lead and control resources such as human and material resources in every organization such as the school system. It is on this premise that Vyas (2011) defined effective resource management as the process of planning, scheduling and allocating resources in the organization in such a way that efficiency can be maximized in the system.

Benefits of Effective Resource Management

Effective resource management is one of the most crucial responsibilities of school administrators such as the secondary school principals. Though the federal and state government still fund public institutions of learning, however, these funds allocated to these institutions are not enough to meet up with the demands of education in their various schools or stations, so there is need for school heads to manage these scarce or limited resources to ensure that they align to the goals of secondary education as well as use these funds properly to efficiency and effectiveness in the system and these can only be done if these leaders of secondary education are properly educated on the importance of utilizing these scarce resources in the school system. The importance of managing resources in education cannot be overlooked. Meanwhile these resources in the school system are limited in number. These resources which are limited in number must meet miscellaneous and evolving learning needs while expectations for educational outcome is always in the increase. Without adequate training or educating heads of institutions on effective resource management, secondary education may find it very difficult to provide quality education for quality outcome and products (Sucuoglu et al 2021). A perusal of literature reveals that resource management in schools have so many benefits as stated by Nwakpa,(2015), Hansen,(2018), Wahab et al 2017. These benefits according to them include; evasion of setbacks, averts over – apportionment or dependency on resources, planning on resource utilization, forecasts the success and failure of projects, planning to know strength and weakness, sets standards for others to follow and assist in building transparency, measurement of efficiency, easier to measure return on investment as well as improve in students' academic performance. Additionally,

resource management in education can impact positively on novelty and malleability in education. Through adequate resource management, institutions of learning can adapt easily to new developments in education such as introduction and utilization of tech-innovations, emerging erudition plans and ensuring educational sustainability amongst contests which has the tendencies to improve educational qualities (Mncube et al 2023).

Achieving the efficient management of resources is strongly dependent on the ability of institutions such as secondary school to assign the accurate resources at the exact place at the precise time. Efficient management of resources in the school system enables schools or institution of learning to retort fast to the needs of education which are novel in nature, provides appropriate and current education that unswervingly improves the value of education delivered (Mwanza & Silukuni 2020). Furthermore, efficient resource management has momentous influence on the employment and retaining of teachers who are eminence in their profession. So, when secondary school educators such as principals are invested upon through training and workshops it could lead to high job quality, increase morale and motivation (Ernawati et al 2022) as well as reduced managerial burnout (Ihua-Jonathan 2013).

Educating Principals on effective Resource Managements in Schools

Educating school heads on effective resource management is a key for improved education and quality assurance. This is because through it, resources such as school personnel, school plant and other teaching and learning gadgets in the school system can be adequately used in such a way that it will increase teaching and learning processes in the school. It is on this note that Komen et al (2023) aver that effective resource management unlocks the potentials to create inclusiveness, novels and conducive learning atmosphere which are the vital ingredients of quality education in any given country.

Educating school heads in the aspect of resource management of the school system is very important for effective running of the school system. It is on this premise that Udongwo (2022) aver that organizing and sponsoring seminars by secondary school

stakeholder will aid to equip school head with current techniques of resource management for efficiency and effectiveness in the system. Hence, educating secondary principals on resource management is crucial for the effective running of schools. Several Methods can be used to achieve this. These methods include;

Proficient Improvement Workshops: These can be done in the areas of

- Financial Management: Workshops on budgeting, financial planning, and fiscal accountability.
- Human Resources: Training on recruitment, staff development, and performance management.
- Facilities Management: Seminars on maintaining school infrastructure, safety protocols, and optimizing physical resources. No wonder Iloh (2021) opined that educational leaders such as secondary school principals should be trained sufficiently in the management of educational resources to achieve high academic performance of students and for efficiency and effectiveness in the school system.

Online Courses and Webinars

- E-Learning Platforms that focuses on resource managements
- Webinars: Frequently booking for live sessions with experts in school managements and resource management

Mentorship / Tutor Agendas

Pairing the experienced principals with the less experienced ones can go a long way in providing insight on how the work looks also, providing network where heads of institutions can share the best of ideas.

Collaboration with Local and National Organizations

- Workshops and Conferences: Participating in events organized by educational leadership organizations.

- Partnerships: Collaborating with local businesses and community organizations to learn about resource allocation and management.

Technology and Data Management Training

Giving heads of institution training on how to use data in decision making especially in the aspect of resource allocation is very important also, teaching them how to make the school environment a smart one through the integration of technology to optimize resources is worthwhile

In-School Training Programs

On-the-Job Training: Hands-on training within the school environment focusing on daily resource management tasks.

- Team-Based Learning: Encouraging collaboration among school staff to manage resources collectively.

In support of this, an Intoo staff writer (2024) opined that leaders can be educated in resources managements through the following ways;

Train the administrators: School administrators such as principals can be giving managerial training on resource management. This can enhance lead to lead to an increased desire to maintain an excellent work ethic as well as increase ideas on how both human and material resources can be managed in schools. These training could include reskilling and upskilling courses and cross- training on resource management. This will help in case there is shortage of resources such as material and human resources.

Mentorship programs: leaders such as school heads and administrators may be allowed to attend programs to help them get conversant with their positions and workplace by forming in-house connection with someone more experienced.

Coaching: This occurs when an individual may not be sure on how to advance in the workplace such as the school environment as a result of lack of direction or as a result of

being transferred to a new station or school. Getting professional guidance can give the school administrator an edge on how to handle resources in the school system.

On the same note, Uko et al (2015) in a work titled administrators resource management practices and teachers job performance in secondary schools in Eket Education Zone of Akwa Ibom State, Nigeria found out that school administrators such as the secondary school principals should be exposed to regular seminars and workshops on resource management for enhanced productivity in school.

Similarly, Udongwo (2022) in a work title Effective School Administration and Resource Management Capability among Male and Female Principals in Akwa Ibom State. The study sought to find out the influence of school administration of the principals on resource management in secondary school in Akwa Ibom state and the population comprised of 100 principals. findings of the results showed a significant influence of school administration of the principals on the extent of resource management. The study further recommends that government should organize and sponsor seminars to equip school heads with current techniques of resource management for efficiency and effectiveness in the system

Statement of the Problem.

Heads of institutions most times are saddled with conditions of insufficient resources in the school system so they try as much as possible to make do with the little once available by ensuring that these resources are adequately put in place. However, these heads of institutions such as the secondary school principals may not have the requisite skills needed to ensure that these resources are put in place and as a result, there is need for principals to be well educated on the use of these scarce resources for efficiency and effectiveness in the system. Could this be the case of secondary school principals? Could training and retraining of senior secondary school principals usher in an era where resources in the school system can be properly utilized for enhanced teaching and learning? These and other issues prompted the researcher to explore on educating

secondary school principals for effective resource management in public senior secondary schools in Rivers State.

Methodology

The design used was descriptive Survey design and the population was 311 senior secondary principals drawn from public senior secondary schools in Rivers State. Two research questions and two hypotheses guided the study. Census involving the whole population of 311 principals in public senior secondary school was carried out. So, the entire 311 population of principals also made up the sample of the study. A self - structured questionnaire titled “Educating Principals for Effective Resource Management in Senior Secondary Schools in Rivers State Questionnaire “(EPERMSSRSQ) with 12 items was used for data collection. The questionnaire adopted a 4- point Likert rating scale of Strongly Agreed (SA-4 points), Agreed (A-3 points), Disagreed (D -2 points) and Strongly Disagreed (SD-1). The instrument was duly validated by experts and 0.84 reliability index was established using Cronbach alpha. A criterion mean of 2.50 was use as cut-off mark. Mean and standard deviation was used to answer all research questions while A t- test inferential statistics was used to test all null hypotheses at 0.05 level significance. Statistical analysis was done using the statistical package for social science, SPSS version 23.

Results

The results were presented in line with research questions and null hypotheses that guided the study as shown in the tables below;

Answers to Research Questions

Research Question 1

What are the various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State?

Table I: Methods of educating principals for effective management of resources in public senior secondary schools.

S/N	Variables	Male=100		Female=211		X of X's	Remark
		X	SD	X	SD		
1	Training	2.78	0.14	2.68	0.10	2.73	Agreed
2	Seminars	2.79	0.83	2.66	0.14	2.72	Agreed
3	Mentorship	2.86	0.44	2.55	0.33	2.70	Agreed
4	Coaching	2.96	0.10	2.67	0.32	2.81	Agreed
5	Workshops	2.66	0.16	2.84	0.33	2.75	Agreed
6	On-line courses	2.88	0.18	2.96	0.19	2.92	Agreed
Grand mean		2.82	0.30	2.73	0.24	2.77	Agreed

Source: Survey Data 2024

Data in table I shows the mean rating and standard deviation of the methods used in educating senior secondary school principals for effective resource management in schools. The table shows that both male and female respondents agreed that item 1-6 in the table are the methods used in educating principals for effective management of resources with means of 2.88 and 2.92 for male and female respondents respectively.

Furthermore, the overall grand mean of 2.77 shows that the respondents agreed that the items 1-6 are the various method of educating principals for effective management of resources in public senior secondary schools in Rivers State.

Research Question 2: What effect does educating secondary school principals have on effective management of public senior secondary schools in Rivers State?

Table 2: Effect of educating principals on effective management of resources in senior secondary schools in Rivers State.

S/N	Variables	Male n= 100		Female n=211		X of X's	Remark
		X	SD	X	SD		
	Effect of educating principals on resource management						
7	Effective utilization	3.10	0.26	2.81	0.22	2.96	Agreed
8	Cost savings	2.98	0.71	2.72	0.12	2.85	Agreed
9	Improves planning	3.50	0.33	3.00	0.28	3.25	Agreed
10	Enhanced productivity	2.90	0.41	2.61	0.01	2.75	Agreed
11	Risk mitigation	3.33	0.33	3.34	0.28	3.34	Agreed
12	Better decision making	3.61	0.41	2.84	0.34	3.23	Agreed
	Grand mean	3.24	0.40	2.89	0.20	3.07	Agreed

Source: Survey data 2024

Data in table 2 show the mean rating and standard deviation of the effect of educating principals on effective management of resources in public senior secondary schools in Rivers State.

The table shows that both male and female respondents agreed that items 8-12 are the effects of educating principals in effective resource management in senior secondary schools in Rivers Sate with mean scores of 3,24 and 2.89 for male and female respondents respectively.

Furthermore, the overall grand mean of 3.07 shows that the respondents agreed that item 8-12 are the effects of educating principals on effective resource management in public secondary schools in Rivers State.

Test of Hypotheses

Ho1: There is no significant difference on the mean rating of male and female principals on the various methods of educating principals for effective resources management in public senior secondary schools in Rivers State

Table 3: Independent Sample t-test in the mean rating of the respondents on the various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State.

Gender	N	Mean	SD	DF	t-value	p-value	Remark
Male	100	2.82					
			0.27	209	1.484	0.085	Accept
Female	211	2.73					

Alpha level: 0.05

The result of hypothesis 1 shows the various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State, Nigeria. From the table, it was revealed that the independent sample t-test yielded a p-value of 1.484 with a corresponding p-value of 0.085 at 0.05 level of significance. From the reported result, it is seen that the p-value obtained (0.085) was greater than the chosen alpha 0.05, thus the null hypothesis is accepted. The result, therefore reveal that there is on significant difference in the mean rating of the respondents on the various methods of educating principals for effective management of resources in public senior secondary schools in Rivers State.

Ho2: There is no significant difference on the mean rating of male and female principals on the effect of educating principals for effective resource management in public senior secondary schools in Rivers State.

Table 4: Independent sample t-test on the mean rating of the male and female respondents on the effect of educating principals on effective resource management in public senior secondary schools in Rivers State.

Gender	N	Mean	SD	DF	t-value	p-value	Remark
Male	100	3.24					
			0.30	209	1.366	0.084	Accept
Female	211	3.89					

Alpha level 0.05

The result of hypothesis 2 on the effect of institutional leadership skills in the effective administration of public university in south-south Nigeria. From this table, it was revealed that the independent t-test yielded a t-value of 1.366 with a corresponding p-value of 0.084 at 0.05 level of significant. From this reported result, it is seen that the p-value obtained (0.084) was greater than the chosen alpha value of 0.050, thus the null hypothesis is accepted. The results therefore suggest that there is no significant difference in the mean rating of male and female correspondence on the effect of educating principals on effective resource management of public senior secondary schools in Rivers State.

Discussion of Findings

Methods used in educating principals for effective resource management in public senior secondary schools in Rivers State.

Findings on various methods of educating principals for effective resource management in public senior secondary schools in Rivers State revealed that the respondents agreed that the items listed in table 1 are the various methods of educating heads of secondary institutions in public senior secondary schools in Rivers State. The various methods use include; training and re-training, conference attendance, seminars, workshops on capacity building and so on. This finding is in line with the findings of Uko et al (2015) opined that out that school administrators such as the secondary school principals should be exposed to regular seminars and workshops on resource management for enhanced

productivity in school. The result of hypotheses one reveal that there is no significant difference in the mean rating of the respondents on the various methods of educating principals for effective resource management in public senior secondary schools in Rivers State.

Influence of educating principals for effective resource management in public senior secondary schools in Rivers State.

Findings on the influence of educating principals for effective resources management in public senior secondary schools in Rivers State revealed that the respondents agreed that the items listed in table 2 are effect of educating principals for effective management of resources in public senior secondary schools in Rivers State. The effects include; efficient utilization of resources, cost saving, improved planning, enhanced productivity, risk mitigation, enhanced decision making. This is in line with Iloh (2021) opined that educational leaders such as secondary school principals should be trained sufficiently in the management of educational resources to achieve high academic performance of students and for efficiency and effectiveness in the school system. This finding is also in line with the finding of Udongwo (2022) who aver that government and stake holders of education should organize and sponsor seminars for heads of institutions so as to equip school head with current techniques of resource management for enhanced productivity, better decision, efficiency and effectiveness in the system. The results of hypotheses two suggest that there is no significant difference in the mean rating of male and female correspondence on the effect of educating principals for effective management of resources of public senior secondary schools in Rivers State.

Conclusion

The study concludes that educating school heads in the aspect of resource management in the school system is very important for effective running of the school system since it has the capability to increase productivity, enhance the management of human and material resources in the system as well as improved educational performance of the students.

Recommendations

1. Government should encourage the periodic training of principals on efficient resource management in public senior secondary schools.
2. Scarce resources in schools should be provided by the government and stake holders of education for enhanced job performance in schools.

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Socio-Demographic Variables and School Adjustment of Secondary School Students in Obio/Akpor L.G.A Of Rivers State

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Abstract

The study investigated Socio-demographic variables and school adjustment of secondary school students in Obio/Akpor L.G.A of Rivers State. The ex-post facto and correlational research designs were adopted for this study. Four objectives and research questions guided the study while four corresponding null hypotheses were tested in the study at 0.05 level of significance. A sample of 633 senior secondary school students were used for the study drawn from a population of all senior secondary school students in Obio/Akpor LGA of Rivers State at 14,784. A stratified random sampling technique with proportionate allocation was used to compose the sample. Three instruments were used for the study which are the Socio-Demographic Questionnaire (SDQ), School Adjustment Scale (SAS) and Parenting Styles Scale (PSS). The instruments were validated by the researcher's Supervisor and experts in measurement and evaluation. The reliability of the instruments was determined using the Cronbach Alpha reliability technique. The reliability coefficient obtained were 0.81 and 0.74 for SAS and PSS respectively. Research questions 1-3 were answered using mean and standard deviation. Hypotheses 1 and 3 were tested using independents sample t-test while hypothesis 2 was tested using Analysis of Variance (ANOVA). Research question 4 was answered using multiple regression while its corresponding hypothesis was tested using ANOVA and t-test associated with multiple regressions. The findings revealed that family type (monogamous and polygamous) significantly influence school adjustment of secondary school students. It was also revealed that parental level of education significantly influence students school adjustment in Obio/Akpor LGA of Rivers state to high level. Based on the findings, it was recommended among others that School counsellors and teachers should provide individualized psychosocial support and mentoring programs that recognize the unique dynamics of both polygamous and monogamous family structures, to ensure balanced support and adjustment opportunities for all students regardless of family type. It was concluded that It was concluded that students from polygamous families show a higher average level of school adjustment than those from monogamous families, indicating that family type may influence students' adjustment in school.

Keywords: *Demographic, Monogamous, Polygamous, School Adjustment.*

Introduction

Adolescence is a critical phase of development characterized by significant physical, emotional and social changes. During this period, adolescents face numerous challenges that can impact their adjustment to school life. In Rivers State, Nigeria, adolescent students encounter unique difficulties that affect their academic performance, social relationships and overall well-being. Adolescent school adjustment is a complex and dynamic process that reflects how young individuals adapt to the various demands and expectations of the school environment. This period in life is marked by rapid physical, cognitive and emotional development, which makes adjustment particularly difficult. In the context of schooling, adjustment includes academic achievement, participation in school activities, formation of peer relationships and emotional alignment with school values and culture. Successful school adjustment is widely recognized as a foundation for long-term educational attainment and psychological well-being.

Several studies have examined the core attributes of school adjustment, with many researchers defining it as the capacity to cope with academic pressure, manage interpersonal relationships and maintain emotional balance within the school setting. According to Moral de la Rubia et al. (2010), students who are well-adjusted are those who can meet the academic expectations of school, interact constructively with peers and teachers and feel emotionally connected to the school environment. This emotional connection is essential, as it encourages a sense of belonging and commitment, which are vital for sustained engagement and performance in school. Personal characteristics such as emotional intelligence and self-esteem have a profound influence on how well adolescents adjust to school. Adolescents with high emotional intelligence are typically more adept at recognizing and regulating their emotions, which allows them to handle stress, resolve conflicts and build supportive relationships. Rodríguez-Fernández et al. (2018) noted that self-esteem also plays a protective role, enhancing resilience and reducing the likelihood of adjustment-related issues such as anxiety and depression. These internal resources enable adolescents to navigate the school environment with greater confidence and adaptability.

The role of the family cannot be overlooked in discussions of school adjustment. Parental involvement, emotional support and positive parenting practices create a secure base that supports the adolescent's capacity to adjust effectively in school. Research by Pomerantz and Moorman (2010) underscores the importance of parental academic encouragement and emotional responsiveness, which are linked to higher levels of motivation and emotional well-being in adolescents. These supportive home environments serve as buffers against school-related stress and foster stronger academic identities.

Equally important is the influence of the school environment itself. A positive school climate characterized by mutual respect, supportive teacher-student relationships and clear behavioural expectations has been shown to facilitate smoother school adjustment. Longobardi et al. (2019) highlighted that students who perceive their school as supportive and inclusive are more likely to engage academically and socially. A well-structured and emotionally safe school context reduces the risk of behavioural problems, increases feelings of safety and enhances students' willingness to participate in school life.

Evangelou et al. (2008) pointed out that economic disadvantage often correlates with poor academic outcomes and reduced emotional well-being, both of which can hinder school adjustment. These students may also encounter stigmatization or marginalization, further complicating their school experiences. Moreover, the transition from primary to secondary school presents a significant challenge for many adolescents. This transition often involves a shift in teaching style, increased academic expectations and new social dynamics, all of which demand a high degree of adaptability. Research shows that students who lack adequate preparation or support during this transition are at greater risk of adjustment difficulties, including academic disengagement and peer-related stress (Evangelou et al., 2008).

One of the primary challenges facing adolescents in Rivers State is family-related stress. According to a study by Nwankwo (2018), family conflicts, parental neglect and poverty can significantly impact adolescent adjustment to school life. When parents are not

supportive or are absent, adolescents may feel disconnected from their families, leading to emotional distress and decreased academic motivation (Ezeh, 2020). Furthermore, adolescents from low-income families may struggle to access basic learning materials, worsening their academic struggles. Therein, this study examined socio-demographic variables like family types, parental level of education, location and parenting styles in relation to school adjustment of secondary school students.

The family is the most important primary group in the society and immediate social environment to which a child is developed and exposed (Adhiambo et al., 2011). A family is a bio-social group (Adani, 2001). It is primarily made up of father, mother and children. Notwithstanding, there are other types of families like nuclear, extended, monogamous and polygamous families. A child learns to adjust in various fields of life according to the values and virtues provided by his or her family. Children grow up in families which provide consistent and relatively permanent relationship which affects their adjustment level to a large extent (Dudley, 2012). They spend a great deal of time in the home with their families or family members. The family also provides support for children while they explore new situations and learn about new people especially in their late childhood commonly referred to as adolescent stage (Dhyani & Singh, 2013). This is a period when children are directed or drifted away from the family group and centered around the wider world of peer relationships (Dudley, 2012).

The families in which children grow up in or are being nurtured vary in structure or type. Family type then can be said to be a kind of arrangement or organization that exists in a home or family setting where each of the members are saddled with some responsibilities or tasks in order to make for harmony and move the family forward (Dhyani & Singh, 2013). A family structure could be nuclear or extended, divorced or separated, intact, monogamous or polygamous. In nuclear families, we have the father, mother and children. In extended families, there exists a much wider kinship network, of which the primary family is only a very small part. An extended family includes grandparents and grandchildren, aunts and uncles, nieces, nephews, cousins and even more (Lewis, 2006). Muntreal (as cited in Loury, 2006) agreed that children from small

size or nuclear family perform better than those from large size or extended family. Fraser (as cited in Frosch et al., 2019) also supported the argument that children of extended families have limited opportunities hence, they are at disadvantage not only in terms of school, but also in the process which depend so largely on the acquisition of survival skills.

According to Ekiran (2003), the polygamous family is any type of plural marriage in which a man is married to two or more women at the same time and has many children. He further observed that in most cases the husband of the house may not be wealthy to take care of all the members of the family, as such the educational career of the children suffers a lot of set-backs. Nkemdirim (as cited in Loury, 2006) stressed that most children who come from the polygamous homes hardly perform well in their academic work. He opined that children from the monogamous homes perform better than their counterparts who come from the polygamous families. In a polygamous family where the size of the family is quite large, the man who is the bread-winner, may not be able to pay the school fees of the children, purchase their educational materials such as books, school uniforms, pocket money and other items necessary for the children's success in school. When a student lacks the opportunity of being provided for and supported to succeed in his or her education, the child may not have high educational achievement (Ayo as cited in Schlechter & Milevsky, 2010). Adeogun as cited in Schlechter & Milevsky (2010) is of the opinion that children do well in school when they are supported by their parents and on the other hand, do not perform well if their parents fail to support their educational career.

Parental level of education is another variable that may affect the school adjustment of students. Parental level of education refers the educational or school height attained or completed by one's parent (Yasan as cited in Schlechter & Milevsky, 2010). Gratz as cited in Schlechter & Milevsky (2010) opined that the education that children get is very much dependent on the educational level of their parents. That is say that the literacy of parents may influence the school adjustment of students. Jacquelyn as cited in Schlechter & Milevsky (2010) maintained that there is a positive relationship between

parents' education level and adolescents' school adjustment, expectancy beliefs and educational outcomes. The study's result concluded that, a mother's education has more influence than father's education, so mother's education is more important. Karshen (as cited in Schlechter & Milevsky, 2010) observed that students whose parents are well educated are better informed, skilled and proactive than those whose parents are less educated.

Educated parents are more involved in their children's education, they provide a home environment that positively impact on the schooling of their children and usually help their children in school work (Panneer as cited in Schlechter & Milevsky, 2010). Dave and Dave (2001) explained that high achievers in school usually come from homes with parents' higher education level, whereas students whose parents are less educated experience difficulties adjusting to the school system. They further opined that high educated parents often serve as model for learning. Onochie and Okpalla (2005) also opined that children of illiterate parents may see school as boring and their parents may not motivate them adequately. Omoregbe (2010) further observed that literate or highly educated parents are more sensitive and passionate about how and what will help their children cope in school. Therefore, they provide a conducive atmosphere for the formation of good study habits and interest in school for their children (Omoregbe, 2010).

Another factor that may influence school adjustment of students is location. An individual's location can be classified as urban or rural. Omoregbe (2010) conceptualized urban location cosmopolitan town or city having increasing population with many social amenities. He further explained that rural location is a countryside, remote village or a geographical area that is located aside cities and towns, that is characterized by low population density fewer social amenities. Oladinma (as cited in Schlechter & Milevsky, 2010) observed that students of rural areas lack the necessary learning materials hence it makes learning uninteresting and can prevent a child from attending school. Owolabi (as cited as cited in Schlechter & Milevsky, 2010) observed that students prefer attending schools in urban areas than rural areas because the

conditions are not up to the expected standard, facilities are poor, playground are without equipment, libraries are without books. Aside location, the pattern of parenting giving to these students could also go a long way to determine their level of adjustment in school.

Parenting styles refer to the various parenting approaches and manners in which parents raise their children. Parenting is mostly adjudged on the parental expectations, performance demands, attentiveness to rules and regulations by the children. Spera (2005) saw parenting style as a psychological construct representing standard strategies that parents use in their child upbringing. Baumrind (as cited in Aunola et al., 2000) described three different parenting styles: (1) authoritative parenting, characterized by high levels of both parental responsiveness (e.g., warmth, support and affection) and demandingness (e.g., limit setting, maturity demands), (2) authoritarian parenting, characterized by high demandingness (e.g., harsh and punitive control) and low responsiveness, (3) permissive parenting, characterized by high responsiveness but low demandingness.

The authoritative parent affirms the child's present qualities, but sets the standards and limits for future activities. He/she uses power, reason and shaping by reinforcement and regime to achieve desired objectives and does not base decisions on group consensus or the individual child's hopes (Hart, 2003). The authoritarian parenting style attempts to control, shape and evaluate the behaviour and attitudes of a child in accordance with a standard of conduct (Hart, Newell and Olsen 2003). Barber et al. (2005) observed that authoritarian parents usually display low affection, use physical coercion, verbal hostility and other disciplinary strategies in raising their children. Kiuru et al. (2012) maintained that permissive parenting style allows children to regulate their own activities as much as possible, avoiding the exercise of control and standards of parenting limits. Permissive parenting style is a type of parenting style where the parents expect little from the children as regards to standard and progress. These parents are highly friendly and their children are allowed to make decisions as well as to carry them out at will (Landry et al., 2006).

Adolescents with school adjustment problems are likely not to perform well academically and are usually withdrawn, shy and display anti-social behaviour among their mates. The end result of poor school adjustment is maladaptive behaviour such as fighting, truancy, bullying, examination malpractice, school violence, cultism, absenteeism and school drop-outs. Students not well adjusted to school often stay away from school without permission, they experience difficulty coping with anxiety, confusion and poor study habit. Most secondary school students are adolescents who are faced with lots of crises as they strive to adjust to environmental and school demands. In course of their struggle to adjust and also maintain their identity they sometimes run into problem that places them in a dilemma. Sometimes too, they find themselves compromising and falling into more dangerous problems. Some students are out of school due to ugly experiences they had either from their teachers or from their colleagues hence were unable to manage such situations. If the adjustment problem of these children is not handled with immediate and frantic measures, the future of our young stars, posterity and this great nation will be bleak and hence more social vices. It is on this backdrop the researcher investigated socio-demographic variables of school adjustment of secondary school students in Rivers State.

The study aimed at investigating socio-demographic variables and school adjustment of secondary school students in Rivers State. Specifically, the objectives of this study are:

1. to determine the influence of family type (monogamous and polygamous) on school adjustment of secondary school students in Obio/Akpor LGA of Rivers State
2. to find out the influence of parental level of education on school adjustment of secondary school students in Obio/Akpor LGA of Rivers State
3. to determine the influence of location on school adjustment of secondary school students in Obio/Akpor LGA of Rivers State.
4. To examine the extent to which parenting styles (authoritative, authoritarian and permissive parenting) jointly and independently predict school adjustment of secondary school students in Obio/Akpor LGA of Rivers state

This study was guided by four research questions as follows:

1. To what extent does family type (monogamous and polygamous) influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?
2. To what extent does parental education influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?
3. To what extent does location (rural/urban) influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?
4. To what extent does parenting styles (authoritative, authoritarian and permissive parenting) jointly and independently predict school adjustment of secondary school students in Obio/Akpor LGA of Rivers state?

The following null hypotheses were tested at 0.05 level of significance to guide this study.

1. Family type (monogamous and polygamous) does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State
2. Parental level of education does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State
3. Location does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State.
4. Parenting styles (authoritative, authoritarian and permissive parenting) jointly do not significantly predict school adjustment of secondary school students in Obio/Akpor LGA of Rivers state.

Methodology

The researcher adopted the ex-post-facto and correlational research designs. The ex-post facto design was used because the researcher collected nominal variables on the adolescent's family type, parental level of education and their location while the

correlational design was adopted because the researcher collected data on the respondents' parenting styles through ordinal variable of four-point Likert scale. The population of the study consists of all senior secondary school students in Obio/Akpor LGA of Rivers State. As at the time of the study, the total number of senior secondary school students in the LGA was 14,784 (Rivers State Senior Secondary Schools Board, 2017). A sample size of 633 senior secondary school students was used for the study. A stratified random sampling technique with proportionate allocation was used to select a sample of 633 senior secondary school students (SSS 1-3) from the 16 public secondary schools in Obio/Akpor Local Government Area of Rivers State, ensuring that the number of students selected from each school and class level was proportionate to their respective population sizes and individual students were then randomly selected from each stratum using simple random sampling. Three instruments were used for the study which are the Socio-Demographic Questionnaire (SDQ), School Adjustment Scale (SAS) and Parenting Styles Scale (PSS). The SAS of each respondent was determined by their individual score. Respondents who scored above average were assumed socially adjusted while the reverse was the case. The instruments were adapted to fit the objectives of the study. The SAS and PSS were answered using a four-Likert scale while the SDQ was using a closed-ended question. Instruments were validated by experts in Educational Psychology/Measurement and Evaluation. The reliability coefficient of School Adjustment Scale (SAS) was 0.81 and Parenting Styles Scale (PSS) was 0.74 which are high enough to confirm that the instruments were reliable for the study. Research questions 1-3 were answered using mean and standard deviation. Hypotheses 1 and 3 were tested using independents sample t-test while hypothesis 2 was tested using Analysis of Variance (ANOVA). Research question 4 was answered using multiple regression while its corresponding hypothesis was tested using ANOVA and t-test associated with multiple regressions. The Statistical Package for Social Sciences (SPSS) version 23 was used for the analysis.

Research Question 1: To what extent does family type (monogamous and polygamous) influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?

Table 1: Mean and standard deviation of the extent family type (monogamous and polygamous) influence school adjustment of secondary school students.

Family Type	N	$\bar{x}$	SD
Monogamous	456	51.86	20.89
Polygamous	177	61.62	13.75
Total	633		

From table 1, the data analyzed showed that students from monogamous family had a mean score of 51.86 and SD of 20.89 for school adjustment, while students from polygamous family had a mean score of 61.62 and SD of 13.75. This implies that students from monogamous family type are better adjusted to school, hence family type influences students' school adjustment. Family type does influence school adjustment to a moderate extent.

Research Question Two: To what extent does parental education influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?

Table 2: Mean and standard deviation of the extent parental education influence school adjustment of secondary school students.

Educational Qualification	N	$\bar{x}$	SD
PhD	48	33.00	.000
M.Sc	130	56.78	24.15
B.Sc	198	48.60	19.69
HND	113	62.88	12.98
OND	73	60.97	15.64
Secondary School Only	71	62.13	12.60
Total	633		

From table 2, the mean score of students whose parents had PhD is 33.00 with SD of .000, MSc is 56.78 with SD of 24.15, BSc is 48.60 with SD of 19.69, HND is 62.88 with

SD of 12.98, OND is 60.97 with SD of 15.64, secondary school certificate only is 62.13 with SD of 12.60 for school adjustment respectively. It can therefore be deduced that students whose parents had HND as their highest educational qualification are better adjusted to school compared to other educational cadre, hence parental level of education influences students' school adjustment. Parental education does influence school adjustment to a high extent.

Research Question Three: To what extent does location (rural/urban) influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State?

Table 3: Mean and standard deviation of the extent location (rural/urban) influence school adjustment of secondary school students.

Location	N	$\bar{x}$	SD
Urban	351	50.01	21.31
Rural	282	60.29	15.61
Total	633		

From table 3, the result showed that students from urban location had a mean score of 50.01 and SD of 21.31 while student from rural location had a mean score of 60.29 and SD of 15.61 for school adjustment. The mean score of students from rural location was found to be higher than that of students from urban location. By this result, rural location tends to influence students school adjustment to a moderate extent than urban location among secondary school students in Obio/Akpor LGA of Rivers State.

Research Question Four: To what extent does parenting styles (authoritative, authoritarian and permissive parenting) jointly and independently predict school adjustment of secondary school students in Obio/Akpor LGA of Rivers state?

Table 4: Analysis of variance associated with multiple regression showing the extent parenting styles (authoritative, authoritarian and permissive parenting) jointly predict school adjustment of secondary school students.

Model	R	R ²	Adjusted R ²
1	.659	.434	.432

From the result on table 4, the joint correlation coefficient ($R = 0.659$) between parenting styles (authoritative, authoritarian, permissive parenting) and school adjustment is strong and positive. The adjusted R square of 0.432 indicates that 43.2% of variation in students' school adjustment is jointly accounted for by parenting styles (authoritative, authoritarian and permissive) while other factors not considered in this study accounted for the remaining 56.8%.

Table 4.1: T-test associated with multiple regression showing the extent parenting styles (authoritative, authoritarian and permissive parenting) independently predict school adjustment of secondary school students.

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	5.088	2.611		1.949	.052
	Authoritative	.636	.042	.587	15.275	.000
	Authoritarian	.106	.043	.394	2.472	.014
	Permissive	.318	.037	.264	8.676	.000

Table 4.1 showed that authoritative parenting style independently predict school adjustment in the positive direction with a beta value of 0.587 while authoritarian parenting style independently predict school adjustment at 0.394 permissive parenting style independently predict school adjustment at 0.264. This implies that parenting styles (authoritative, authoritarian and permissive) independently predict school adjustment of secondary school students. Moreso, considering the beta values of authoritative parenting = 0.587, authoritarian parenting = 0.394 and permissive parenting = 0.264, it could be deduced that authoritative parenting style had the highest influence on students' school adjustment, followed by authoritarian and then permissive parenting style.

Hypothesis 1: Family type (monogamous and polygamous) does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State.

Table 5: Independent t-test analysis of the significant influence of Family type (monogamous and polygamous) on school adjustment of secondary school students.

Family type	N	Mean	SD	Df	t	Sig.
Monogamous	456	51.86	20.89	631	5.746	0.00
Polygamous	177	61.62	13.74			

Table 5 revealed that t ratio of 5.746, degree of freedom of 631 (df), p value of .00 (Sig. for 2-tailed) at 95% certainty. Therefore, since the p value (Sig.) of .00 for 2-tailed test is lower than the chosen alpha of 0.00, the null hypothesis is therefore rejected. This implies that there is significant influence of family type (monogamous and polygamous) on school adjustment of secondary school students.

Hypothesis 2: Parental level of education does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State

Table 6: Summary of One-Way ANOVA analysis of the influence of parental level of education on school adjustment of secondary school students in Rivers State.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	44863.127	5	8972.625	28.250	.000
Within Groups	199148.080	627	317.621		
Total	244011.207	632			

Table 6 showed that the sum of squares for between groups and within groups are 44863.127 and 199148.080 with mean squares of 8972.625 and 317.621 respectively. The degrees of freedom are 5 and 627 with F-calculated value of 28.250. Based on the decision rule, the null hypothesis is rejected since the significant value of 0.000 ($P < 0.05$) is less than the alpha level of 0.05. Therefore, parental level of education significantly influences school adjustment of secondary school students in Rivers State.

Hypothesis 3: Location does not significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers State.

Table 7: Independent t-test analysis of the significant influence of location (rural and urban) on school adjustment of secondary school students.

Location	N	Mean	SD	Df	t	Sig.
Rural	351	50.01	21.31	631	6.767	0.00
Urban	282	60.29	15.61			

Table 7 revealed that t ratio of 6.767, degree of freedom of 631 (df), p value of .00 (Sig. for 2-tailed) at 95% certainty. Therefore, since the p value (Sig.) of .00 for 2-tailed test is lower than the chosen alpha of 0.00, the null hypothesis is therefore rejected. This implies that there is significant influence of location (rural and urban) on school adjustment of secondary school students.

Hypothesis 4: Parenting styles (authoritative, authoritarian and permissive parenting) jointly do not significantly predict school adjustment of secondary school students in Obio/Akpor LGA of Rivers state.

Table 8: Summary of ANOVA on the prediction of Parenting styles (authoritative, authoritarian and permissive parenting) jointly on school adjustment of secondary school students.

Model		Sum of Squares	Df	Mean Square	<i>F</i>	Sig.
1	Regression	106002.954	3	35334.318	161.043	.000
	Residual	138008.253	629	219.409		
	Total	244011.207	632			

Table 8 reveals that an *F*-value of 161.043 was obtained at degree of freedom of 3 and 629 at .000 level of significance ($p = .000 \leq 0.05$). Thus, the null hypothesis which states that parenting styles (authoritative, authoritarian and permissive parenting) jointly do not significantly predict school adjustment of secondary school students is rejected. In other words, parenting styles (authoritative, authoritarian and permissive parenting) jointly significantly predict school adjustment of secondary school students.

Discussion of findings

The findings of the study are discussed as follows:

The result of this study showed that family type (monogamous and polygamous) significantly influence school adjustment of secondary school students in Obio/Akpor LGA of Rivers state to a high extent. Nkemdirim (2005) found out that that children from the monogamous homes are often well adjusted to school and perform better than their counterparts who come from the polygamous families. He further observed that in a polygamous family where the size of the family is quite large, the man who is the bread-winner, may not be able to pay the school fees of the children, purchase their educational materials such as books, school uniforms, pocket money and other items necessary for the children's success in school. Onyeji (2001) also found out that most polygamous homes do not support the education of their children, because the children are too many to be educated, whereas children from monogamous homes tend to be more educated than their counterparts in the polygamous homes. Reason is that children are few in the monogamous homes and this helps parents to sponsor them through school because they can afford to pay their school fees and provide adequately for the education of their children.

This study also revealed that parental level of education significantly influence students school adjustment in Obio/Akpor LGA of Rivers state to high level. This therefore implies that the null hypothesis of no significant influence of parental level of education on students' school adjustment was rejected. The finding of the present study is in agreement with an earlier study by Jacquelyn, as cited in Schlechter & Milevsky (2010) who found out that parental level of education positive influence students' school adjustment, expectancy beliefs and educational outcomes. Karshen (2003) found out that students whose parents are well educated are better informed, skilled and proactive in helping their children become properly adjusted in school and perform better academically than those whose parents are less educated. He further stressed that educated parents are more involved in their children's education, they provide a home environment that positively impact on the schooling of their children and usually help their children in school work. Dave and Dave (2001) found out that high achievers in

school usually come from homes where parents have higher education level, whereas students whose parents are less educated experience difficulties adjusting to the school system.

This study also revealed that location had a significant influence on the school adjustment of secondary school students in Obio/Akpor LGA of Rivers state. The null hypothesis was however rejected. The result of this study supports the findings of Oladinma (2003) who observed that location significantly influence students school adjustment and that students of rural areas lack the necessary learning materials which makes learning uninteresting and prevent students from attending and participating in school activities. Owolabi (as cited as cited in Schlechter & Milevsky, 2010) found out that students prefer attending schools in urban areas than rural areas because the school conditions are not up to the expected standard, facilities are poor, no playground, libraries are without books.

It was finally revealed that parenting styles (authoritative, authoritarian and permissive parenting) jointly predict school adjustment of secondary school in Obio/Akpor LGA of Rivers state to a high extent. However, further analysis of the result of the study revealed that when parenting styles (authoritative, authoritarian and permissive parenting) were looked at independently, they influence school adjustment of secondary school in Obio/Akpor LGA of Rivers state to a low extent. The finding of the present study is in agreement with the study by Maccoby (as cited in Strage & Brain, 2009) who found out that parenting styles of authoritative, authoritarian and permissive parenting jointly influence secondary students school adjustment. The study further showed that authoritative parents know and understand children's independence, encourage verbal communication, allow children to participate in decision making of the family and desire that their children to undertake more responsive role which helps them to be well adjusted to school. Spera (2007) found out that parenting styles of authoritative, authoritarian and permissive parenting positively influence students school adjustment and developmental outcomes. Hart et al. (2003) also found out that parenting styles of

authoritative, authoritarian and permissive parenting jointly influence students school adjustment.

Conclusion

It was concluded that students from polygamous families show a higher average level of school adjustment than those from monogamous families, indicating that family type may influence students' adjustment in school. Students whose parents have lower educational qualifications tend to show higher school adjustment than those whose parents have higher academic degrees. Students in rural areas adjust better to school than those in urban areas. Parenting styles significantly predict students' school adjustment, jointly explaining about 43% of the variation in how students adjust to school.

Recommendations

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

1. School counsellors and teachers should provide individualized psychosocial support and mentoring programs that recognize the unique dynamics of both polygamous and monogamous family structures, to ensure balanced support and adjustment opportunities for all students regardless of family type.
2. Schools should strengthen parent-teacher relationship by organizing orientation and engagement sessions for highly educated parents to align their academic expectations with the psychological and social needs of their children, promoting better school adjustment.
3. Urban schools should implement programs that reduce academic and social stressors, such as peer pressure and over-competition, by promoting inclusive, supportive environments similar to those often found in rural schools.
4. Educational authorities and school-based psychologists should organize community outreach and parenting workshops that encourage the adoption of positive parenting styles particularly authoritative parenting to enhance students' school adjustment and well-being.

Counseling Implication of the Study

The findings of this study have several important implications for school counselling practices in secondary schools in Obio/Akpor LGA and beyond:

1. **Family Type Awareness:** Since students from polygamous families demonstrated better school adjustment than those from monogamous families, counsellors should avoid stereotyping family structures and instead assess each student's support system individually. This means counsellors must adopt a non-biased, inclusive approach that acknowledges the strengths and challenges of various family settings.
2. **Parental Education Sensitivity:** Given that students whose parents have lower educational qualifications showed better school adjustment, school counsellors should be cautious not to assume that higher parental education automatically translates to greater emotional or academic support for students. Counsellors should actively engage more educated parents in understanding and supporting their children's emotional and social needs, not just academic performance.
3. **Urban vs. Rural Adjustment Differences:** With rural students showing better school adjustment, urban school counsellors should implement targeted intervention programs that reduce urban stress factors such as peer pressure, overcrowded classrooms and lack of community bonding. Efforts should focus on fostering a sense of belonging, emotional safety and interpersonal connection in urban schools.
4. **Parenting Styles as Predictors:** Since parenting styles significantly predict school adjustment, counsellors have an important role in promoting parental awareness and education on effective parenting. Counseling programs should include workshops or seminars for parents on the impact of different parenting styles especially highlighting the benefits of authoritative parenting, which balances warmth and discipline.

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**Influence of Parental Monitoring and Supervision on Early Childhood Learning in
Port Harcourt Metropolis**

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Abstract

Poor parenting is a well-known factor associated with behavioural problems in children. There is a consensus regarding the correlation between parental supervision and emotional and behavioural problems. Most parents have derelicted in their duties of parenting especially in the area of supervision. This paper examines the influence of parental monitoring and supervision on early childhood with a specific focus on learning in Port Harcourt metropolis. It highlights the crucial role parental monitoring and supervision plays in fostering positive outcomes for early childhood learning. The paper focuses specifically on Port Harcourt metropolis children and their parental involvement in regular and early monitoring of the children's activities, providing guidance and support and how it is linked to improved academic performance, social emotional development and reduced risk-taking behaviours.

Keywords: Parents involvement, early childhood, learning, performance, monitoring, supervision, positive outcomes, Port Harcourt metropolis.

Introduction

Early childhood development has many dimensions and unfolds at a breath-taking pace. Measuring early childhood development is a complex undertaking, and it is a new field, marked by rapid evolution, great urgency – and significant gaps in our knowledge.

We have long understood children’s development to their full potential as a fundamental human right. We now know, from recent neuroscience research, just how critical the early years of life are in the development of a child’s brain and in shaping their future. Meanwhile, economics has shown us the great benefits of investing in young children during this unique developmental window – and the wrenching costs, to children and societies, of failing to do so.

In 2016, the world was shocked when the medical journal *The Lancet* estimated that 43 per cent of children under 5 in low- and middle-income countries were at risk of not developing to their full potential. But with the underlying data based on composite, proxy indicators, what that means, and what to do about it, remains open to interpretation.

We don’t yet have a full picture of the well-being and developmental status of the world’s youngest children, owing to the following challenges:

- Many of the available data points are collected by each sector, separately, and often cannot be used in an analysis that cuts across sectors. In this context, analyses of caregiving practices and home environments are limited and need strengthening.
- Establishing a system for tracking child development data at the population level is particularly challenging due to the multidimensional nature of early childhood development.
- A lack of disaggregated early childhood development data prevents us from fully understanding how factors like age, gender, disability, or discrimination based on ethnicity or race affect young children’s chances of reaching their potential – and how we can change that equation.

- Research evidence on child development and the impact of policy and programme interventions in low- and middle-income countries and humanitarian contexts is still limited.

Measuring and monitoring early childhood development is critical to understanding what young children need and identifying those at risk of being left behind and not achieving their full developmental potential. Our knowledge is built upon a range of evidence, including numerical data, qualitative research and analyses, implementation research and evaluations. We depend on this evidence to target and improve interventions, advocate with governments to improve conditions for young children and their families and make the case for investments in early childhood development.

A child's development is embedded within a complex system of relationships. Among the many relationships that influence children's growth and development, perhaps the most influential is the one that exists between parent and child. Recognition of the critical importance of early parent-child relationship quality for children's socio-emotional, cognitive, neurobiological, and health outcomes has contributed to a shift in efforts to identify relational determinants of child outcomes. Recent efforts to extend models of relational health to the field of child development highlight the role that parent, child, and contextual factors play in supporting the development and maintenance of healthy parent-child relationships. This review presents a parent-child relational health perspective on development, with an emphasis on socio-emotional outcomes in early childhood, along with brief attention to obesity and eating behaviour as a relationally informed health outcome. Also emphasized here is the parent-health care provider relationship as a context for supporting healthy outcomes within families as well as screening and intervention efforts to support optimal relational health within families, with the goal of improving mental and physical health within our communities.

Parental monitoring and supervision in early childhood refers to the active participation of parents in their children's learning and development during the critical early childhood years. Numerous studies have shown that parental involvement in education is linked to better learning and developmental outcomes, social skills and self-esteem for

children (Castro et al., 2015; Chun & Devall, 2019; El Nokali et al., 2010; Fan & Chen, 2001; Lara & Saracostti, 2019; Ma et al., 2016).

Fostering learning in children early is the best thing that could happen to any nation in this 21st century as children are considered individuals whose minds are open, can accept information in totality and which can help them. develop the basic skills to function later in life.

A child undergoes various physical, emotional, and social stages from birth to adulthood. Emotional and behavioural problems in a child develop from any interference in their mental development. Most issues commence during childhood and have significance for later life, such as scholastic abilities, learning new skills, using a substance, engaging in violent activities, and developing warm relations, and tend to continue into adulthood

The early stage of human development is a critical part of early childhood development which is sensitive, and significant in the development processes of children.

Literally, child supervision commonly encompasses keeping children safe and healthy, supporting children in their schooling, wellbeing and teaching children life and social skills, such as being respectful to others (Amadi & Azunwena, 2020; Ruiz-Casares et al., 2024). Particularly for young children, child supervision requires **parents** or caregivers to be attentive to the child's behaviour and near their child (Huynh et al., 2017)

It has become increasingly apparent from recent studies in education and psychology that parents have a considerable role and impact on their children's learning and development cum evolution.

Parents play the most vital role in influencing their children's total development because they primarily are the first contact they relate and interact with within the first 2 years of birth and as such their effect on the children's developmental outcomes cannot be overemphasized.

Theoretical Review

The present study is based on the following theories. According to Bandura's self-efficacy theory (Weinberg et al., 1979), perceived self-efficacy is a major driver of

activity choice, task effort expenditure, and task perseverance in the face of impediments. Self-efficacy, while not the primary predictor of behaviour, plays a significant part in people's decisions about how much effort to put in and how long to keep it up when confronted with stressful conditions (Clarke-Midura et al., 2019; Ran et al., 2022).

According to Vygotsky's social interaction theory, social interaction between the child's mind and caregiver is a vital key to the child's cognitive development (Forman and Cazden, 1986). Every parent wishes best for their children, especially when it comes to their intellectual abilities, moral values, and character development. Many parents, on the other hand, are unaware that educating and caring for their children in an overly restricted or overly permissive manner might cause them to lose confidence and ambition to succeed. According to several researchers, the family environment, particularly parenting behaviour, influences interpersonal competence and changes in development, including social academic achievement, in teenagers (Whittaker and Cowley, 2012; Shian et al., 2022). According to Grolnick and Ryan (1989), one factor that influences adolescent school competency is the familial environment. The family environment reveals several relationships between parents and children that have an impact on one another, particularly in terms of parental style. In this scenario, the family environment, in the form of parenting style, also provides a learning pattern and facility. Theresya et al. (2018) proposed that a good parenting style creates a positive emotional environment and boosts a child's self-confidence while learning, which helps the child do better in school.

Parenting Style and Learning Outcome

Early childhood and early school years have long been recognized as crucial to adult well-being and success (Diniz et al., 2021). Education that is developmentally appropriate from an early age leads to better educational outcomes later in life (Ma et al., 2016). Despite the large quantity of studies done in this area, there are major discrepancies in how parents are conceptualized and measured (Tazouti and Jarlégan, 2019). Some academics define parental involvement as involvement in school activities; others define it as parental ambitions for their children; and yet others define it as

involvement in their children's home learning activities. Researchers have recently acknowledged that the concept of parental participation is multidimensional (Dewi and Indrasa, 2017), encompassing a wide range of parental behaviours related to their children's education. Epstein (1992) defined parental involvement as (1) parent practices that create a positive learning environment at home; (2) parent-school communications about school programs and student progress; (3) parent participation and volunteering at school; (4) parent and school communications about learning activities at home; (5) parent involvement in school decision making and governance; and (6) parent access to a school's resources (Catsambis, 2001). Parents' involvement in their children's education, according to Epstein, is not static. Rather, differences in any of three overlapping domains of influence family, community, or school can alter the forms of parental participation (Epstein, 1992). Based on the previous literature, these variables were studied separately with either father or mother influence on children success. But the objective of present study was to explore the influence of both parents on children's and how parental self-efficacy leads to better learning outcome (Zeb et al., 2021). Children's relationships with their families are critical to their growth (Popa, 2022). Parental childcare attitudes are defined by the parents' warm and caring approach to the child; expectations of the child; communication with the child; and disciplinary attitudes toward them. In family attitudes theory, Diana Baumrind identified three categories of parental attitudes: families that are permissive, authoritative, and authoritarian (Baumrind, 1968). Permissive parents take the strategy of tolerating and endorsing behaviour based on the wishes of their children without looking into the causes or grounds of the behaviour (Liu and Guo, 2010). Although the child's behaviour is harmful to the environment, it is tolerated, and the parents are powerless to encourage the child to follow the rules. While such parents have greater talents in terms of childcare, they have less ability to control their children's conduct. They give their children too much freedom, lack discipline, and have low expectations of their children (Verrocchio et al., 2015). Furthermore, authoritarian parents use strict rules and constraints formed by an excessive level of authority to control their children's behaviour. For those parents, what matters is that their children follow the rules without

questioning them, and that their parents interfere and regulate their children's behaviour without hesitation for the sake of the child. Despite their failures in childcare, these parents have the mindset of having the most parental control. They use both verbal and non-verbal (physical) sanctions to penalize the child's unwanted behaviour while failing to appreciate positive behaviour (Song et al., 2022).

Moreover, in this parenting style parents place unrealistic expectations on their children (Ren and Zhu, 2022). These are the parents who are the most resistant to change and also make swift decisions. Lastly, with verbal and physical emotions authoritative parents assist their children. They have compassionated and close ties with their children. Those parents approach their children in a more cooperative manner. Their expectations are based on the abilities of their children. Those parents are attempting to mould their children's cooperative and sensitive behavior. They are aware of their children's thoughts, feelings, and attitudes, and they treat them with respect (Liu et al., 2022). The norms of authoritative parenting, which are widely regarded as the most ideal kind of parental care and attitudes, are open, obvious, and debatable. Because of its adaptable structure, it can be reconfigured.

The role of these parental attitudes and actions can have an impact on their children's personality traits and adaption to their surroundings. Growing up in a family with permissive parents might make children selfish. These children are uninterested in other people's feelings and thoughts. They may be lacking in self-control and have low self-esteem. They could be lacking in social skills. Anxiety, sadness, and uneasiness may be experienced by children of authoritarian parents. When they are furious, they may resort to more physical aggression. Furthermore, they are unable to communicate effectively. They may exhibit a lack of self-assurance. In social situations, they are introverted people who can be confrontational. Children raised by authoritative parents are more capable socially and accept responsibility; they are self-assured, cooperative, pleasant, cheerful, autonomous, socially skilful, and independent (Önder and Gülay, 2009).

With the growing emphasis on early childhood education and school success, it's more important than ever to understand the development of skills, abilities, knowledge, and behaviours that are particularly important to children. When it comes to defining

learning outcomes, there are two ways that are commonly used. One method is to identify and describe desirable learning outcomes for children at various developmental stages using crucial domains of child development. The five domains of learning and development for children in early childhood education and early primary education have been highlighted by the National Education Goals Panel as vital to enhancing human development. Physical well-being and motor development, social and emotional development, and learning approaches (learning styles) that include cultural components of learning, language development, and cognition and general knowledge are among these categories (Ma et al., 2016). The way parents raise their children has a big impact on their development and learning.

In western societies, research has consistently proven that parenting style has a direct relationship with children's academic achievement (Luo et al., 2021). In general, research shows that children raised by authoritative parents have the best outcomes, whereas children raised by authoritarian or permissive parents have the worst outcomes. A study found that parenting style had a significant impact on children's self-concept development. The reported level of warmth demonstrated by both their fathers and mothers had a direct relationship with the children's self-concepts but not with parental permissiveness. Moreover, another previous study discovered that the family style affects the process of acquiring self-efficacy as outlined by Bandura (1986). According to previous studies focused on western cultures, authoritarian and permissive parenting styles have a negative impact on children's academic achievement (Huang and Prochner, 2003). Therefore, Hypothesis 1 is constructed as shown below:

- H1: Parenting style is positively associated with early childhood learning outcome.

Parental Self-Efficacy and Learning Outcome

Parenthood, while frequently rewarding, is also fraught with stress-inducing obstacles. New parents must deal with the physical and financial demands of caring for a child, as well as the various lifestyle changes that might arise as a result of this additional duty and lead to negative consequences such as strained spousal relationships and social isolation (Song et al., 2022). The emotional cost of parents' lack of confidence in their

capacity to care for their children was noted as a concern for new parents as early as 1986. Once it was found, the idea of being confident in oneself and one's skills as a parent was called parental self-efficacy, and it was immediately understood within a Bandura (1986) framework.

In the following decades, parental self-efficacy (PSE), which has lately been defined as "parents' belief in their ability to influence their child in a health and success-promoting manner," has emerged as a key treatment target for parent and child well-being. Parental self-efficacy has remained relevant in published literature since its inception as such an important clinical emphasis (Albanese et al., 2019). Parental self-efficacy research is based on Bandura's (1986) self-efficacy theory, which states that one of the major processes influencing behaviour is an individual's conviction in their capacity to effectively complete a task or sequence of activities. As a result, PSE measures a parent's ability to mobilize the cognitive resources and actions required to exert control over life events. While self-efficacy is defined as a dynamic dimension that varies depending on the task's needs, external variables, and a person's previous experiences (Tazouti and Jarlégan, 2019).

A parent's job is a complex and hard opportunity to support and contribute to a child's growth and development. In this regard, parental competence is made up of behavioral, affective, and cognitive elements, with parental self-efficacy being a key component. Coleman and Karraker (2000), for example, reported the following findings: parents with high self-efficacy believe they can effectively and positively influence their children's development and behaviour, and they engage in positive parenting behaviours, are more responsive to their children's needs, engage in direct interactions with their children, use active coping strategies, and perceive their children to have fewer behavioral problems. On the other hand, for parents who have poor self-efficacy, the opposite is true. Previous literature supported that parent with low self-efficacy, for example, have higher rates of depression, exhibit more defensive and controlling behaviour (Zeb et al., 2021), have higher perceptions of child difficulties, report higher stress levels, have a passive parental coping style, place a greater emphasis on

relationship problems, show more negative affect, feel helpless in the role of parent, and use punitive disciplinary strategies (Pelletier and Brent, 2002).

Consequently, parents' involvement in their children's learning and academic progress is generally beneficial, according to researchers. Greenwood and Hickman (1991) identified a number of studies concentrating on primary school students that found links between parental participation and academic achievement, well-being, attendance, student attitude, homework readiness, grades, and educational goals. The findings revealed that academic achievement, time spent on homework, positive attitudes toward school, and lower rates of high school dropouts are all favourably associated with parental participation (Gonzalez-DeHass et al., 2005). Several studies have found that parents from higher socioeconomic backgrounds are more involved in their children's education than parents from lower socioeconomic backgrounds, and that this involvement fosters more positive attitudes toward school, improves homework habits, reduces absenteeism and dropout, and improves academic achievement (Sui-Chu and Willms, 1996). Aside from the high emphasis put on education by Chinese parents, the fierce rivalry for a limited number of spots in higher education has an impact on parents' parenting behaviour. According to prior research performed in China, over 83 percent of parents said they helped their children study in various ways, such as hiring tutors or supervising their children's homework (Zhang, 2021). In Hong Kong and Taiwan, studies on the relationship between Chinese parenting style and children's results were also conducted (Luo et al., 2021). In another study, high self-esteem is linked to positive parent-child relationships among Chinese teenagers (Tan et al., 2022). Children who have a poor relationship with their parents, on the other hand, exhibit higher maladjustment and deviant behaviour. According to a Taiwanese study (Huang and Prochner, 2003), low achievement motivation and bad learning attitudes were linked to rejecting and inconsistent parents. As a result, the following hypothesis has been developed:

- H2: Parental self-efficacy is positively associated with early childhood learning outcome.

Mediating Role of Parental Self-Efficacy Between Parenting Style and Learning Outcome

In the current study parental self- efficacy mediates between the relationship between parenting styles and learning outcome. Parental self-efficacy is another key theoretical construct for understanding influences on parental participation. It is a powerful predictor of parent behaviour, with parents who feel more efficacious in their parenting position more likely to engage in parenting actions that are crucial in improving children's social, emotional, and behavioral development (Zeb et al., 2021). High PSE is linked to parents' use of a variety of optimal parenting strategies throughout childhood, including maternal sensitivity and responsiveness to children's needs, warm and affectionate parenting behaviour, and monitoring, according to comprehensive descriptive reviews. Low PSE, on the other hand, has been linked to coercive or harsh parenting as well as a proclivity to give up when faced with parental obstacles. While PSE has been associated to increased participation in home learning activities such as reading and helping with homework with older children. Previous research on the relationship between PSE and engagement in play, learning, and home activities with younger children is limited (Giallo et al., 2013).

Parental self-efficacy can have a direct impact on a child's adaptive ability, but it can also have an indirect impact on a child's adaptive capacity due to their parents' engagement behaviour. Parents with a high PSE score have fewer negative emotions and are more confident in dealing with challenging parenting situations, which benefits their children's learning (Zeb et al., 2021). It is critical for children's development that parents establish a cognitively stimulating home learning environment. According to previous research, PSE moderated the association between parents' positive perceptions (e.g., individual teacher invitations and general school invitations) and children's achievement. Parents' self-efficacy also plays a mediating function in parents' negative emotions (e.g., parental stress) and parenting practice behaviours, according to previous

research, which can help to mitigate the detrimental impact of parents' emotions on parenting practice behaviours (Liu et al., 2022).

Conceptual Review

Parental supervision as a tool for shaping and monitoring early childhood learning.

Ecological Systems Theory

Propounded by: Urie Bronfenbrenner (1979)

Overview:

Ecological Systems Theory explains how a child's development is influenced by different layers of environmental systems. Bronfenbrenner identified five systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. The microsystem—which includes the immediate environment such as family, school, and peers—is most relevant to early childhood learning.

Parental monitoring and supervision fall within this microsystem and have a direct and significant impact on a child's learning outcomes. Regular parental involvement ensures children receive guidance, emotional support, and structured routines that are critical for cognitive, behavioral, and academic development.

In Port Harcourt Metropolis, where children are exposed to diverse socioeconomic and cultural influences, active parental monitoring can help mediate negative external factors and enhance learning consistency.

Why this theory is still relevant:

- It is widely cited in contemporary educational, psychological, and social research.
 - It supports holistic and contextualized analysis of child development.
 - Modern versions and applications of the theory are used in policymaking and program design in education, health, and family welfare.
1. Microsystem: Immediate environments such as family and school.
 2. Mesosystem: Interactions between microsystems, like parent-teacher relationships.

3. Exosystem: External settings that indirectly affect the child, such as parental workplaces.
4. Macrosystem: Broader cultural and societal norms.
5. Chronosystem: Temporal changes and transitions over the life course.

Port Harcourt, as a metropolitan area, presents unique challenges and opportunities for early childhood education. Urbanization, economic pressures, and diverse cultural backgrounds can influence parental involvement. Applying Bronfenbrenner's theory, the exosystem factors such as parental work schedules and community resources play a role in shaping the extent of parental supervision. Understanding these dynamics is essential for developing strategies that encourage active parental participation in early childhood learning within the metropolis.

Conceptual review

Similarly, Obiwezuozor (2015) highlighted challenges in early childhood education policy implementation in Nigeria, noting that parental engagement is often overlooked. The study advocated for policies that actively involve parents in the educational process to enhance learning outcomes.

Port Harcourt, as a metropolitan area, presents unique challenges and opportunities for early childhood education. Urbanization, economic pressures, and diverse cultural backgrounds can influence parental involvement. Applying Bronfenbrenner's theory, the exosystem factors such as parental work schedules and community resources play a role in shaping the extent of parental supervision. Understanding these dynamics is essential for developing strategies that encourage active parental participation in early childhood learning within the metropolis.

In Port Harcourt, Dickson (2021) examined the experiences of parents with infants aged 0–3 years and found that economic pressures and urban migration often lead to dual-income households, resulting in reduced parental supervision. This lack of consistent parental presence can negatively impact early learning and development.

Ejekwu and Jumbo (2021) highlighted the role of early childhood education in achieving quality education in Port Harcourt Local Government Area. Their findings suggest that

adequate caregiver qualifications and appropriate child-to-caregiver ratios, facilitated by active parental involvement, are essential for quality early childhood education.

Amadi, G. A., & Azunwena, R. N. (2022)

In their study titled “Effective parental supervision and child proofing as accident prevention strategies for physical wellbeing of preschool children in Port Harcourt metropolis, Rivers State,” the authors emphasize the critical role of parental supervision in ensuring the safety and well-being of pre-schoolers. The research highlights that active parental involvement, including childproofing measures, significantly reduces the risk of accidents among young children in Port Harcourt.

Elenwo, P. M., & Ebom-Jebose, A. (2025).

Early Childhood Edupreneurship in Rivers State: Nurturing Innovation in Education. The authors discuss the role of innovative educational practices and parental involvement in enhancing early childhood education in Rivers State. They emphasize that active parental engagement complements institutional efforts, fostering quality early childhood education in Port Harcourt.

Edebor, F., & Umaru, Y. (2021).

Parents’ Perception about Private Primary Schools’ Owners’ Roles in Achieving Sustainable Development in COVID-19 Era in Port-Harcourt, Metropolis. This study explores parents’ perceptions of private school proprietors’ roles during the COVID-19 pandemic. It highlights the importance of parental involvement and collaboration with school management to sustain early childhood education amidst challenges.

Early childhood: The period from conception through entry to school. Early childhood development (ECD)’ refers to the physical, psychological, cognitive and social development that a child experiences between birth and school-going age. Based on various scientific studies, we know that early childhood development plays a key role in determining whether a child will reach his or her full potential. The events that occur during the early years of childhood have a lasting impact and will affect a child’s growth and development throughout his or her life.

It is for this reason that it is so important for parents and childcare workers to focus on building a strong foundation in early childhood. By providing appropriate care and affection, and by creating sufficient opportunities for learning, parents and childcare workers can help children to develop to their full potential. This, in turn, will help to break the cycle of poverty, reduce social inequality, and increase economic activity

Child development: The process by which children's capacities emerge, including cognitive, language, social and emotional development, approaches to learning, and, fine and gross motor development. This process of development is strongly influenced by nutrition, health, and the child's environment.

Parent - A parent is a caregiver of the offspring in their own species. In humans, a parent is the caretaker of a child (where "child" refers to offspring, not necessarily age). A biological parent is a person whose gamete resulted in a child. Some parents may be adoptive parents, who nurture and raise an offspring but are not biologically related to the child. Suffice it to say that parents are those who are supposed to take proper care of children under them whether biological or adoptive. Supervision: The New International Webster's Comprehensive Dictionary of the English. Parents have the responsibility of shaping up their children in the best possible manner, enhancing their talents, and protecting them from any kind of harm. At every stage of life, parents play a major role. In the present world, every child is brought up amidst numerous challenges. Within a family, the basic unit and channel for socialization are found.

Parental Patterns or Styles

Parental attitudes and behaviours that are performed while raising children have a significant impact on children's future behaviour as well as shaping behaviour at early ages. Children must have healthy relationships with their parents in order to display consistent behaviours in society, to be self-sufficient, to gain necessary social skills, and achieve his/her independence. This is closely related with parental attitudes and behaviours; i.e. the parenting styles that the parents adopt. The most common parental

attitudes are classified as authoritative, authoritarian, permissive, uninvolved and overprotective (Baumrind 2021).

Authoritarian parents display little warmth and a high degree of control. They are strict disciplinarians and use a punitive and restrictive style. Authoritarian parents expect their children to obey rules and instructions set by them without questioning. Authoritarian parents may use expressions such as “You will do that, because I say so”. These behaviours may cause the adolescent to be dependent and rebellious. Rebellious adolescents display aggressive behaviours, whereas obedient/submissive adolescents can be dependent on their families (Baumrind, 2021).

Permissive parents display a high degree of warmth, but they are undemanding and do not have high expectations. According to this permissive and passive parenting style, the only way to show love to adolescents is to indulge all their wishes. Expressions such as, “Of course you can stay out late if you want” may be used by these parents. Permissive parents do not want to cause disappointment by saying no. Therefore, adolescents may make many decisions independently from their parents. This situation may cause difficulties for the adolescents in controlling themselves and may result in tendencies to display egocentric behaviours (Baumrind, 2021). The permissive and loose attitudes of the parents cause children to be spoiled and expect that they will be given priority over the other individuals in the society. When they are not given priority, the individuals feel restless and uncomfortable and cannot adapt to social relationships outside the family.

Baumrind (2022) in his study identifies that pre-school children raised by parents with differing parenting styles varied in their degree of social competence.

According to the National Policy on Education (NPE) (FRN, 2013), ECE is an educational setting for progenies age 3 through 5 years in preparing their entry into primary

school. The ECE years is a interval of outstanding intellect improvement. These years lay the

basis for scholarship in subsequent educational levels. In pursuant to this, the federal government

of Nigeria, in her NPE (2013), stipulates the following objectives for ECE:

1. Effecting a smooth transition from home to the school;
2. Preparing the child for the primary level of education;
3. Providing appropriate care and supervision for progenies while their parents are at work (on farms, in the market, in their offices);
4. Inculcating social norms;
5. Inculcating in the child the spirit of inquiry and creativity through the exploration of nature and local environment through playing with toys, through artistic and musical activities
6. Teaching cooperation and team spirit;
7. Teaching the rudiments of numbers, letter, colours, shapes, forms among others through play, and
8. Teaching good habits especially good health habit.

Early childhood

Early childhood learning which is also known as early childhood education refers to the period from birth to age eight, emphasizing the importance of this time for children's development and future success. It encompasses formal and informal educational programs which is designed to nurture cognitive, social-emotional, and physical growth.

Key Aspects of Early Childhood Learning:

- **Foundation for Future Learning:**

Early childhood learning lays the groundwork for lifelong learning, shaping a child's cognitive, social, and emotional development.

- **Brain Development:**

This period is crucial for brain development, and quality early childhood care and learning can have a significant impact on a child's future.

- **Holistic Development:**

ECCE focuses on nurturing a child's physical, social, emotional, and cognitive abilities, creating a strong foundation for their overall well-being.

- **Play-Based Learning:**

Play is recognized as a valuable tool for learning, as it allows children to explore, create, and develop essential skills in a natural and engaging way.

- **Inclusive Education:**

ECCE aims to provide inclusive and supportive environments that cater to the diverse needs of all children, promoting equitable access to learning opportunities.

- **Importance of Family:**

The family and home environment play a crucial role in a child's development, and supportive families can enhance the impact of ECCE programs.

- **Importance of Family:**

The family and home environment play a crucial role in a child's development, and supportive families can enhance the impact of early childhood care learning programs.

- **Global Impact:**

Early childhood education is considered a key investment in a nation's future, contributing to economic growth, social inclusion, and improved quality of life for children, according to UNESCO and OECD.

One key success factor that transcends nearly all others, such as socioeconomic status, children's background or the kind of school a student attends is parents involvement in monitoring and supervision.

Why Early Childhood Learning Matters:

- **Improved Academic Outcomes:**

Children who receive high-quality early childhood care and learning are more likely to succeed in school and achieve higher academic outcomes.

- **Enhanced Social-Emotional Development:**

ECCE programs foster social and emotional skills, such as empathy, cooperation, and problem-solving, which are essential for building strong relationships and navigating social situations.

- **Reduced Poverty and Inequality:**

Investing in early childhood care and education can help break the cycle of poverty and inequality, providing children from disadvantaged backgrounds with opportunities to thrive.

- **Increased Economic Productivity:**

- A well-educated and skilled workforce is essential for economic growth, and early childhood care and learning helps lay the foundation for future success in the workforce.

The extent to which schools nurture positive relationships with families — and vice versa — makes all the difference, research shows. Students whose parents stay involved in school have better attendance and behavior, get better grades, demonstrate better social skills and adapt better to school.

Parental involvement also more securely sets these students up to develop a lifelong love of learning, which researchers say is key to long-term success.

A generation ago, the National PTA found that three key parent behaviors are the most accurate predictors of student achievement, transcending both family income and social status:

1. creating a home environment that encourages learning;
2. communicating high, yet reasonable, expectations for achievement; and
3. staying involved in a child's education at school.

When all these happens, the motivation, behavior and academic performance of all children at a particular school improve. Simply put, the better the partnership between school and home, the better the school and the higher the child's achievement across the board.

Parental involvement is the active, ongoing participation of a parent or primary caregiver in the education of a child. Parents can demonstrate involvement at home by:

- reading with children
- helping with homework
- discussing school events
- attending school functions, including parent-teacher meetings
- volunteering in classrooms

While both **parental involvement** and **parental engagement** in school support child success, they have important differences.

Involvement is the first step towards engagement. It includes participation in school events or activities, with teachers providing learning resources and information about their student's grades. With involvement, teachers hold the primary responsibility to set educational goals.

But while teachers can offer advice, families and caregivers have important information about their children that teachers may not know. So a student's learning experience is enriched when both bring their perspectives to the table.

With **engagement**, home and school come together as a team. Schools empower parents and caregivers by providing them with ways to actively participate, promoting them as important voices in the school and removing barriers to engagement. Examples include encouraging families to join the family-teacher association or arranging virtual family-teacher meetings for families with transportation issues.

Research has found that the earlier educators establish family engagement, the more effective they are in raising student performance.

The importance of parents monitoring and supervision in childhood learning.

Children whose families are engaged in their education are more likely to:

- earn higher grades and score higher on tests;
- graduate from high school and college;
- develop self-confidence and motivation in the classroom; and
- have better social skills and classroom behaviour.

In one study, researchers looked at longitudinal data on math achievement and found that effectively encouraging families to support students' math learning at home was associated with higher percentages of students who scored at or above proficiency on standardized math achievement tests.

Children whose parents are involved in their learning are also less likely to suffer from low self-esteem or develop behavioral issues.

Parents can get involved in their children's learning in the following ways:

1. Make learning a priority in your home, establishing routines and schedules that enable children to complete homework, read independently, get enough sleep and have opportunities to get help from you. Talk about what's going on in school.
2. Read to and with your children: Even 10–20 minutes daily makes a difference. And parents can go further by ensuring that they read more each day as well, either as a family or private reading time that sets a good example.
3. Ask teachers how they would like to communicate. Many are comfortable with text messages or phone calls, and all teachers want parents to stay up to date, especially if problems arise.
4. Attend school events, including parent-teacher conferences, back-to-school nights and others — even if your child is not involved in extracurricular activities.
5. Use your commute to connect with your kids; ask them to read to you while you drive and encourage conversations about school.
6. Eat meals together: It's the perfect opportunity to find out more about what's going on in school.
7. Prioritize communication with teachers, especially if demanding work schedules, cultural or language barriers are an issue. Find out what resources are available to help get parents involved.

Experts urge parents to be present at school as much as possible and to show interest in children's schoolwork.

Six key standards for good parent/family involvement programs include:

1. Schools engage in regular, two-way, meaningful communication with parents.
2. Parenting skills are promoted and supported.
3. Parents play an integral role in assisting student learning.
4. Parents are welcome in the school as volunteers, and their support and assistance are sought.
5. Parents are full partners in the decisions that affect children and families.
6. Community resources are used to strengthen schools, families and student learning.

Supervision

This is based on a mix of theoretical viewpoints ranging from experiential learning, constructivism/role play, team learning and lifelong learning. Supervision is gotten from two words “super” meaning above and “video” meaning to see.

In the realm of early-childhood-education, the foundational principle of effective supervision cannot be overstated. As young children embark on their journey of exploration and learning, the role of educators extend far beyond mere oversight; it encompasses a commitment to fostering a safe and nurturing environment that promotes holistic development. Effective supervision is essential not only for safeguarding children from potential hazards but also for enhancing their learning experiences and emotional well-being. This article delves into the significance of effective supervision in early-childhood settings, outlining key strategies and principles that educators can adopt to ensure that every child feels secure, valued, and empowered. By prioritizing effective supervision, educators can create a vibrant atmosphere where children are free to learn, grow, and thrive.

Ngbobili and Nnodim (2018) maintained that the purpose of supervision is to see that laid down standards are maintained and that the school is run in accordance with laid down regulations.

Active Supervision would mean, consistently monitoring for a specific behaviour pattern. As hard is sounds. If clearly thought and planned out active supervision will be most beneficial for the kid and it is definitely not needed to explain the reasons if you follow the post till the end. Now it would matter the most what kind of a behaviour you are looking for in your child. Following are the most important fundamental behaviours to be instilled in your child:

1. **Curiosity:** as soon as children begin to converse they start questioning everything around them. If they don't a slight push is required, try Playing ***What is this?*** game with them. Just pick anything and ask in a jovial way what is this and follow up with the answer. It will help them forever, even way ahead in the future.
2. **Fearlessness:** I have used a seemingly different word here if you noticed. Instead of Bravery as any author would prefer, I have used Fearlessness. As I have seen across countries and different Culture. Children are pushed forward to do any kind of action and later pushed back by showing fear when the parents don't want kids doing or asking some stuff. Best ways to handle this is to always explain the child as to why it should not be done or said.
3. **Empathy:** Blind love towards all incapable life forms should be the perfect explanation for empathy. Love to elders, animals, plants and trees. Loving rich and poor equally would all combine in the empathetic behaviour.
4. and finally **little Discipline:** This being the most asserted behaviour of parents as to the importance being given to appearance in all Cultures has been voted highest reason for stress and frustration amongst young students according to a survey. A little Discipline goes a long way, all which needs to be asserted should be regular hygiene and arrangements of all personal stuff by themselves.
5. **Honor:** Some children grow as proud in nature, they respond to appreciation well and some don't give a damn even if u appreciate

them to death. If we look for an optimal behaviour, the children should always be proud of achievements but not so much that they get greedy for the rewards. This is in the parents control as to appreciate children only for these 5 behaviour rather than materialistic stuff like medals and marks.

Parental supervision is a veritable tool that needs to be used by every parent for proper upbringing of the children. History has it that no child starts out as a cruel, violent person. It is only when the children is abused in horrific ways or have to witness the ongoing abuse of others that the child learns to act on the contrary. Thus, the purpose of the supervision process is to provide a safe, supportive opportunity for individuals to engage in critical reflection in order to raise issues, explore problems and discover new ways of handling both situation and oneself.

It is apparent that lack of parental supervision can bring about a lot of severe consequences on the child (children). It can lead to the child participating in criminal activities, violence, prostitution, examination malpractices, cultism to mention but a few. When this is the case, the said child becomes emotionally unbalanced as his or her behaviour negates the societal norms. This in turn will affect the child or children negatively, the family and the society at large.

Challenges of supervision in early childhood learning by parents in Port harcourt Metropolis:

Economic pressures and time constraints:

Many parents in Port harcourt are engaged in jobs that take their whole time like in the oil sectors, civil service and informal sector and this leaves them little or no time to supervise their children's learning at home.

1. Parental Resources:

Many parents, especially those from low-income backgrounds, struggle to provide the necessary resources for early childhood development, such as educational materials and a safe, stimulating environment.

2. Knowledge Gap:

Some parents may lack a clear understanding of developmentally appropriate practices for early childhood education and may not know how to effectively support their children's learning at home.

3. Societal Influence

Traditional beliefs and cultural practices can sometimes hinder parents from engaging in modern, research-based early childhood practices.

4. Infrastructure and Access:

The lack of adequate early childhood education infrastructure in some communities can limit parents' access to quality resources and support.

5. Inadequate Support from Educational Institutions:

Some parents may not receive adequate guidance or resources from schools or other educational institutions on how to effectively supervise their children's learning at home.

6. Language Barriers

In some families, there may be language barriers between parents and children, which can make it difficult to effectively support their learning.

7. Lack of Awareness:

Some parents may be unaware of the importance of early childhood supervision and the positive impact it can have on their children's development.

Supervision is not merely about keeping an eye on children; it involves a structured supervision plan that incorporates principles of active monitoring and the responsibilities of educators to protect children from harm. This approach not only safeguards children but also promotes their overall development and creates a nurturing learning environment. Wikipedia, (2018).

Monitoring - Monitoring involves regularly checking and recording the progress or quality of something over time, whereas supervision is the direct oversight and guidance of activities or people. In essence, Monitoring tracks and reviews supervision outcomes for conformance to estimated output and corrective activities loop for improvements in the next performance cycles.

Therefore, monitoring early childhood development involves tracking a child's progress over time, observing their milestones, and identifying potential developmental delays. This process is crucial for ensuring children receive timely support and interventions if needed. Developmental monitoring is a continuous process, often starting at birth and continuing through the early years, to assess a child's progress in areas like play, learning, speaking, and behaving.

Some tools used for early childhood developmental and behavioural screening are **formal questionnaires or checklists** based on research that ask questions about a child's development, including language, movement, thinking, behaviour, and emotions.

Conclusion

- ✓ Chinenye Onunkwo's paper examines the influence of parental monitoring and supervision on early childhood learning in Port Harcourt metropolis, emphasizing its role in fostering positive outcomes.
- ✓ The study highlights the importance of parental involvement in monitoring children's activities, which is linked to improved academic performance, social-emotional development, and reduced risk-taking behaviours.
- ✓ The introduction discusses the critical nature of the parent-child relationship in influencing children's socio-emotional, cognitive, and health outcomes, advocating for relational health models in child development.
- ✓ The paper asserts that active parental participation during early childhood is associated with better learning outcomes, social skills, and self-esteem in children, supported by various studies

Suggestions for further studies.

1. Designing and implementing intervention programs and measure their impact on children's learning outcomes.
2. The role of fathers or male guardians in early childhood learning supervision within Port harcourt metropolis.
3. Find out how various socio-economic levels of parents in Port harcourt metropolis affect their ability to monitor and supervise their children's learning especially among low-income or working-class families.
4. Analyse how cultural beliefs and practices shape parental supervision styles and their effect on early childhood learning because of the diverse ethnic population in Port harcourt.
5. Explore how digital tools are being used by parents to monitor learning and how effective these tools are in enhancing early childhood education.

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(Weinberg et al., 1979), perceived self-efficacy is a major driver of activity choice, task effort expenditure, and task perseverance in the face of impediments.

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The Lancet,(2016), estimated that 43 per cent of children under 5 in low- and middle-income countries were at risk of not developing to their full potential.

Wikipedia, (2018) promotes their overall development and creates a nurturing learning environment.

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