#### Jurnal Mimbar Ilmu

Volume 29, Number 1, 2024, pp. 9-16 P-ISSN: 1829-877X E-ISSN: 2685-9033 Open Access https://doi.org/10.23887/mi.v29i1.70467



## Building a Better Future: Strategical Approaches in Tackling Poor Maintenance in Nigerian Public Secondary Schools

Moses Adeleke Adeoye<sup>1\*</sup>, Yusuf Olayinka Shogbesan<sup>2</sup>, Joshua Durotoye Jolaoye<sup>3</sup>, Hassanat Abdullateef Jimoh<sup>4</sup>

- 1,3,4 Educational Management, Faculty of Education, Al-Hikmah University, Ilorin, Nigeria
- <sup>2</sup> Department of Arts and Social Sciences, Faculty of Education, Al-Hikmah University, Ilorin, Nigeria

#### ARTICLE INFO

#### Article history:

Received November 21, 2023 Accepted March 30, 2024 Available online April 25, 2024

#### Kata Kunci:

Pemeliharaan yang Buruk, Sekolah Menengah Negeri Nigeria, Pendekatan Strategis, Keberlanjutan

#### **Keywords:**

Poor Maintenance, Nigerian Public Secondary Schools, Strategical Approaches, Sustainability



This is an open access article under the CC BY-SA license.

Copyright © 2024 by Author. Published by Universitas Pendidikan Ganesha.

#### ABSTRAK

Sekolah menengah telah lama dilanda masalah pemeliharaan yang buruk, yang mengakibatkan buruknya infrastruktur, terbatasnya sumber daya, dan lingkungan belajar di bawah standar bagi siswa. Untuk mengatasi masalah mendesak ini, penting untuk mengadopsi pendekatan strategis yang berfokus pada peningkatan praktik pemeliharaan dan memastikan keberlanjutan jangka panjang sekolahsekolah tersebut. Studi ini bertujuan untuk menganalisis tantangan utama yang dihadapi oleh sekolah menengah negeri Nigeria dalam hal pemeliharaan dan menyajikan solusi inovatif yang dapat membantu membangun masa depan pendidikan yang lebih baik di negara tersebut. Metode penelitian menggunakan Systematic Literature Review (SLR). Pencarian literatur dilakukan melalui database akademik, seperti PubMed, ERIC, dan Google Scholar. Penting untuk membangun sistem yang komprehensif untuk memantau dan mengevaluasi pemeliharaan sekolah menengah negeri. Pemerintah harus mengalokasikan sebagian besar anggaran pendidikan untuk menangani pemeliharaan infrastruktur dan memastikan bahwa dana tersebut digunakan dengan benar. Investasi ini akan membantu memperbaiki kondisi fisik sekolah dan menciptakan lingkungan belajar yang kondusif bagi siswa. Dengan melibatkan masyarakat dalam proses pemeliharaan, rasa kepemilikan dan tanggung jawab dapat dipupuk sehingga menghasilkan praktik pemeliharaan yang lebih baik.

## ABSTRACT

Secondary schools have long been plagued by issues of poor maintenance, resulting in dilapidated infrastructure, limited resources and a subpar learning environment for students. To address this pressing issue, it is crucial to adopt strategic approaches that focus on improving maintenance practices and ensuring the long-term sustainability of these schools. This study aims to analyze the key challenges faced by Nigerian public secondary schools in terms of maintenance and presents innovative solutions that can help build a better future for education in the country. The research method uses Systematic Literature Review (SLR). A literature search was conducted through academic databases, such as PubMed, ERIC, and Google Scholar. It is essential to establish a comprehensive system for monitoring and evaluating the maintenance of public secondary schools. The government should allocate a significant portion of the education budget to address infrastructure maintenance and ensure that funds are properly utilized. This investment will help to improve the physical condition of schools and create a conducive learning environment for students. By involving the community in the maintenance process, a sense of ownership and responsibility can be fostered, leading to better maintenance practices.

## 1. INTRODUCTION

Education is the backbone of any nation's progress and development. A country needs to invest in its education sector to ensure a brighter future for its citizens. However, one major challenge Nigerian public secondary schools face is poor maintenance. These schools face challenges in maintaining their infrastructure which negatively affects the quality of education provided to students. The lack of proper maintenance leads to dilapidated buildings, inadequate facilities and a generally poor learning environment (Gavish et al., 2015; Ogaji & Okokon, 2012). This issue hampers the development and growth of students, as they are deprived of essential resources and a conducive educational atmosphere. It is crucial to find

strategic approaches to tackle this problem and build a better future for Nigerian public secondary schools (Mohammed & Pitan, 2018; Nwajiuba et al., 2020). When it comes to building a better future for a nation, one cannot underestimate the importance of education. In Nigeria, the education system plays a crucial role in shaping the minds of the younger generation and equipping them with the necessary skills to succeed in life (Adeoye et al., 2023; Popoola et al., 2020). However, one of the significant challenges that hinder the progress of education in the country is the poor maintenance of public secondary schools.

The state of infrastructure in Nigerian public secondary schools is a matter of concern. Dilapidated classrooms, leaking roofs, broken furniture and inadequate facilities have become the norm rather than the exception. This deteriorating condition has a detrimental impact on the quality of education provided to students. It not only affects their learning experience but also compromises their safety and well-being. To address this pressing issue, strategic approaches must be implemented. Firstly, a comprehensive assessment of the infrastructure in public secondary schools should be conducted. This will help identify the areas that require immediate attention and prioritize the allocation of resources. Additionally, involving local communities, educational stakeholders and government authorities in this process will ensure a collaborative effort towards finding sustainable solutions.

Once the assessment is complete, a robust maintenance plan should be developed. This plan should include regular inspections, repairs and renovations to ensure that the schools remain in good condition. Adequate funding must be allocated to support these maintenance activities and mechanisms should be put in place to ensure transparency and accountability in the utilization of funds (Popoola et al., 2020; Yakubu & Dasuki, 2018). Furthermore, it is crucial to invest in capacity building and training programs for school administrators and staff. Providing them with the necessary knowledge and skills in facilities management and maintenance will enable them to take ownership and responsibility for the upkeep of the schools. Empowering these individuals will not only improve the physical condition of the schools but also foster a sense of pride and ownership within the school community (Hermino & Arifin, 2020; Osaro & Wokekoro, 2018).

The potential positive impact of addressing the issue of poor maintenance in Nigerian public secondary schools is immense. Firstly, it will create a conducive learning environment for students. Clean, well-maintained classrooms and facilities will enhance their overall learning experience and motivate them to strive for academic excellence (Megawati et al., 2020; Yeh et al., 2019). Secondly, addressing this issue will improve the safety and security of students. Leaking roofs, faulty electrical systems and crumbling infrastructure pose significant risks to the well-being of students and staff. By ensuring regular maintenance and repairs, the risk of accidents and injuries can be minimized, providing a safer learning environment (Hussin et al., 2019; Schunk & DiBenedetto, 2020). Moreover, tackling the issue of poor maintenance will enhance the reputation of Nigerian public secondary schools. Improved infrastructure will attract more students, parents and even qualified teachers to these schools, ultimately raising the overall quality of education in the country.

Poor maintenance in Nigerian public secondary schools has had a detrimental impact on various stakeholders within the education system, including students, teachers and the overall quality of education (Adegboyega, 2018; Kehinde et al., 2016). Firstly, students bear the brunt of poor maintenance. Dilapidated infrastructure, such as crumbling classrooms, broken furniture and leaky roofs, creates an uncomfortable and unsafe learning environment. This not only hampers students' ability to focus and concentrate but also jeopardizes their physical safety. Furthermore, inadequate maintenance leads to malfunctioning facilities, such as dysfunctional toilets, lack of clean water and poor ventilation which negatively affect students' health and well-being. Consequently, students are more likely to experience health issues, distractions and a general lack of motivation to attend school regularly.

Neglected schools fail to attract and retain qualified teachers, as professionals are discouraged by the substandard working conditions. This exacerbates the existing shortage of skilled educators, contributing to a decline in the quality of instruction and educational outcomes (Baran-Łucarz, 2019; Reinita et al., 2020). Additionally, the deteriorating infrastructure sends a negative message to students, implying that education is not a priority. This can undermine their confidence in the education system and discourage them from pursuing higher education or other academic opportunities.

In addition to these factors, corruption and mismanagement are pervasive issues in the Nigerian education system. Funds allocated for maintenance and infrastructure improvements are often misappropriated or embezzled (Adeoye et al., 2023; Asiyai, 2012). This diversion of funds means that schools are unable to carry out necessary repairs and renovations, leading to a continued deterioration of facilities. Lastly, a lack of community involvement and engagement also contributes to poor maintenance. In many cases, there is a lack of ownership and responsibility among the local community towards school maintenance. This results in a disconnect between the school and its surroundings, making it challenging to garner support and resources for maintenance efforts. By tackling these underlying reasons, Nigeria can

work towards building a better future for its education system, ensuring that students have access to safe and conducive learning environments.

The study aimed to analyze a holistic understanding of the issue and generate practical strategies to tackle poor maintenance in Nigerian public secondary schools to build a better future for students. The novelty of this research is that involving local communities in the school maintenance process can be an innovative approach. This can be done through volunteer programs, skills training for parents and students, or partnerships with local businesses to support school facility maintenance.

## 2. METHOD

The research method uses Systematic Literature Review (SLR) is a research method used to collect review and synthesize relevant literature in a particular research field (Manfra, 2019). This method has systematic steps designed to minimize research bias and ensure that all relevant literature has been examined. This approach is particularly useful for investigating unveiling the power of pedagogically productive conversations among university teachers. The data collection process is carried out by identifying and evaluating scientific articles that are relevant to the topic. This data includes findings, research results, and other related information contained in these articles. A literature search was conducted through academic databases, such as PubMed, ERIC, and Google Scholar, using appropriate keywords such as "Strategical Approaches", and "Maintenance in Nigerian Public Secondary Schools".

After identifying relevant articles, the data analysis process began by thoroughly reading each selected article. Relevant data such as findings of positive or negative impacts of school-university partnerships and professional learning communities were extracted. Next, this data is analyzed to identify patterns, trends, and consistencies in the findings. Compiling a summary and synthesis of the findings helps in understanding the overall impact. The analysis also allows identification for investigating unveiling the power of pedagogically productive conversations among university teachers. The results of this analysis form the basis for drawing up the conclusions in the SLR report, which presents a comprehensive picture of the impact of the partnership based on existing evidence in the literature.

## 3. RESULT AND DISCUSSION

#### Result

# Case Studies Analysis on Approaches Used in Tackling Poor Maintenance in Nigerian Public Secondary Schools

The poor maintenance of schools poses a significant challenge to the quality of education provided. This section will explore evidence and case studies to support the analysis of strategic approaches in tackling poor maintenance in Nigerian public secondary schools. The evidence and case studies presented demonstrated the importance of strategic approaches in tackling poor maintenance in Nigerian public secondary schools. Government intervention, public-private partnerships, and community involvement have all proven to be effective in creating a better future for students.

One notable case study highlighting the successful implementation of strategic approaches to tackle poor maintenance is the rehabilitation program in Lagos State. Under the leadership of the Lagos State Government, several initiatives were undertaken to address the maintenance issues in public secondary schools. The government allocated significant funds to repair and renovate school buildings, improve sanitation facilities and upgrade infrastructure such as laboratories and libraries. Furthermore, the government collaborated with private organizations and community stakeholders to ensure the sustainability of these initiatives. Through public-private partnerships, schools receive support in the form of resources, expertise and maintenance training (Hassan & Fatile, 2022; Oguntolu et al., 2021). This holistic approach resulted in significant improvements in the condition of public secondary schools in Lagos State.

The Nigerian government has launched the Better Education Service Delivery for All (BESDA) program. This initiative aimed to improve access to quality education by targeting out-of-school children and providing support to schools in need. Under the BESDA program, the government allocated funds specifically for the maintenance and renovation of public schools (Adamu et al., 2022; Baba et al., 2022). These funds were used to repair dilapidated buildings, provide essential facilities such as toilets and clean water, and upgrade classrooms and libraries. Through this intervention, the government successfully addressed the issue of poor maintenance in several public secondary schools, thereby creating a better learning environment for the students.

Another Strategic approach to tackling poor maintenance in Nigerian public secondary schools is through public-private partnerships (PPPs). One notable example is the Bridge International Academies (Riep, 2017; Tessitore, 2019). This organization partners with the government to provide quality education

in underserved communities. Bridge International Academies not only focuses on academic excellence but also emphasizes the importance of proper maintenance. They ensure that school buildings are well-maintained and equipped with the necessary facilities for effective teaching and learning (Hassan & Fatile, 2022; Tessitore, 2019). By adopting a proactive approach to maintenance, they have set a precedent for other schools to follow, ultimately improving the overall state of education in Nigeria.

Engaging the community in the maintenance of public schools is another effective strategy. The example of the Community and Social Development Project (CSDP) in Osun State showcases the positive impact of community involvement (Kilis & Yildirim, 2019; Nwachukwu et al., 2020). Through CSDP, community members contribute their time, resources and expertise to ensure that the schools are well-maintained. This includes repairing infrastructure, providing necessary equipment and organizing regular cleaning and landscaping activities. As a result, the schools are transformed into vibrant and conducive learning environments, benefitting the students and the community as a whole.

## Strategical Approaches to Tackling Poor Maintenance in Nigerian Public Secondary Schools

Prioritizing education in the national budget is crucial to address the challenges faced by Nigerian public secondary schools. By allocating a significant portion of the national budget to education, the government demonstrates its commitment to investing in its human capital. The government should allocate a sufficient budget for the maintenance and improvement of public secondary schools. However, there are successful models from other countries that have effectively increased funding for school maintenance, providing valuable lessons for Nigeria to consider. Finland is known for its high-quality education system, and part of its success lies in its comprehensive funding approach (Jang et al., 2021; Tonga et al., 2022). Finland allocates a significant portion of its national budget to education, ensuring that schools have adequate resources for maintenance and improvement. The Finnish government provides a per-pupil funding model, which allocates a specific amount of money for each student enrolled in public schools. This funding covers not only educational materials and teaching staff but also maintenance and renovations of school buildings. As a result, Finnish schools are well-maintained and offer conducive learning environments for students.

Singapore has successfully employed public-private partnerships (PPP) to increase funding for school maintenance (Kim & Kwa, 2020; Osei-Kyei & Chan, 2015). Under this model, the government collaborates with private entities to develop and maintain school facilities. This approach has allowed Singapore to leverage private sector expertise and resources to ensure that schools are well-maintained. It also ensures that the burden of funding does not solely fall on the government, making it a sustainable solution. Previous study found South Africa has implemented conditional grants as a way to increase funding for school maintenance (Mestry & Berry, 2016). The government provides grants to provinces and municipalities specifically for school infrastructure development and maintenance. However, these grants come with conditions that require proper planning, monitoring and reporting to ensure that funds are effectively utilized.

These successful models from other countries provide valuable lessons for Nigeria in tackling poor maintenance in public secondary schools. Nigeria could consider implementing a combination of approaches, such as infrastructure bonds, comprehensive funding, public-private partnerships and conditional grants. By increasing funding specifically for school maintenance, Nigeria can ensure that its public secondary schools have adequate resources for repairs, renovations and upgrades. This will create a conducive learning environment for students and contribute to a better future for the country. Moreover, proper planning, monitoring and reporting mechanisms should be established to ensure funds are utilised effectively and efficiently. This will help prevent mismanagement and corruption, ensuring that the allocated funds benefit the schools and students.

## Improve Accountability and Transparency

One of the key reasons why monitoring and evaluation mechanisms are vital is accountability. Without a systematic approach to monitoring the utilization of funds, there is a higher likelihood of mismanagement, corruption and diversion of resources. By implementing a comprehensive monitoring system, the authorities can track the flow of funds, identify any discrepancies, and hold responsible individuals accountable. This transparency helps to build trust among stakeholders, including the government, donors and the public which is crucial for the sustainability of any maintenance initiatives. Additionally, proper monitoring and evaluation mechanisms allow for the assessment of the impact of maintenance efforts. It is not enough to allocate funds for repairs and maintenance; it is equally important to evaluate whether these investments are yielding the desired results. Through systematic monitoring, the authorities can assess the quality of maintenance work, identify areas that require further attention and

make informed decisions based on the evidence gathered. This evaluation process enables continuous improvement and helps in refining strategies over time.

However, there are successful initiatives from other sectors that have improved accountability and can serve as models for addressing this issue. One example of a successful initiative that improved accountability is the implementation of transparency and technology in public procurement. In many countries, corruption and mismanagement have been rampant in the procurement process, leading to poorquality infrastructure and services. However, by leveraging technology and enforcing transparency measures, several countries have been able to reduce corruption and enhance accountability. This initiative empowers citizens to actively participate in the monitoring and evaluation of public services, including maintenance projects. By involving citizens in decision-making processes and holding authorities accountable, the quality of service delivery can be significantly improved. Public-private partnerships (PPPs) have been successful in many countries, particularly in improving the quality and maintenance of public infrastructure (Hassanain et al., 2019; Kim & Kwa, 2020).

Collaboration between the government, NGOs and other stakeholders brings several significant benefits to addressing the issue of poor maintenance in Nigerian public secondary schools. Firstly, it allows for the pooling of resources, both financial and human which can significantly enhance the scale and impact of maintenance initiatives. By combining efforts, stakeholders can leverage their respective strengths and compensate for their weaknesses, leading to more sustainable and long-term solutions. Secondly, collaboration fosters knowledge sharing and learning between different stakeholders. NGOs and other organizations can bring innovative approaches and best practices from their experiences in similar contexts while the government can share its understanding of policy frameworks and implementation strategies. This exchange of knowledge and expertise can lead to more effective and efficient maintenance programs. Lastly, collaboration encourages accountability and transparency. When multiple stakeholders are involved, there is a shared responsibility to ensure that resources are utilized efficiently and effectively. Regular monitoring and evaluation mechanisms can be put in place to track progress, identify challenges, and make necessary adjustments. This ensures that the maintenance efforts remain on track and that the desired

#### Discussion

In the quest to build a better future for Nigeria, it is crucial to address the issue of poor maintenance in public secondary schools. Firstly, inadequate infrastructure is a major problem. Many schools lack proper classrooms, libraries, laboratories and other essential facilities. This not only affects the learning environment but also hampers the delivery of quality education. Students are deprived of the necessary resources to enhance their learning experience (Bashar & Yasin, 2020; Izobo-Martins et al., 2018; Maduka, 2018). Secondly, the lack of basic amenities further exacerbates the problem. Access to clean water, functional toilets and electricity is often limited or nonexistent in many public schools. This not only poses health risks but also creates an uncomfortable and unproductive environment for both students and teachers.

Additionally, deteriorating facilities contribute to the poor maintenance issue. Many schools suffer from neglect and lack regular repairs. Buildings, furniture and equipment are often in a state of disrepair, making them unsafe or unusable. This not only affects the physical safety of students but also hinders the effectiveness of teaching and learning. In a survey conducted across several Nigerian states, it was found that over 70% of public secondary schools suffer from poor maintenance (Asiyai, 2012; Maduka et al., 2020). This includes dilapidated classrooms, broken furniture, dysfunctional toilets, and inadequate water supply. These conditions significantly impact the educational experience and hinder students' ability to learn effectively. This not only hampers maintenance efforts but also erodes public trust in the education system (Ogaji & Okokon, 2012; Osaro & Wokekoro, 2018).

Nigerian public secondary schools have been grappling with the issue of poor maintenance for years. This problem has had a detrimental impact on the quality of education and the overall learning environment for students. To build a better future for the education system in Nigeria, it is crucial to analyze the underlying reasons for this issue. One of the primary reasons for poor maintenance in Nigerian public secondary schools is a lack of funding. The education sector in Nigeria has long suffered from inadequate budget allocations with a significant portion of funds being diverted to other areas (Adeoye et al., 2023; Owan et al., 2022). This has left schools with limited resources to carry out necessary repairs and renovations. Insufficient funds mean that schools are unable to address maintenance issues promptly, leading to further deterioration of infrastructure.

The significance of collaboration between the government, non-governmental organizations (NGOs) and other stakeholders in addressing the issue of poor maintenance in Nigerian public secondary schools. The government plays a crucial role in providing the necessary policy frameworks and resources

to address the maintenance challenges in public secondary schools. By collaborating with NGOs and other stakeholders, the government can leverage their expertise, resources and networks to implement effective strategies. The government can allocate adequate funding for maintenance programs, establish standards and guidelines for school maintenance, and enforce compliance to ensure sustainable improvements.

## 4. CONCLUSION

In conclusion, addressing the issue of poor maintenance in Nigerian public secondary schools is crucial for building a better future for education in the country. By implementing strategical approaches such as comprehensive assessments, robust maintenance plans, capacity building and stakeholder involvement, the potential positive impact on the future of education in Nigeria is significant. It will create a conducive learning environment, enhance safety and security and improve the overall quality of education. Investing in the maintenance of public secondary schools is not just an investment in infrastructure; it is an investment in the future of the nation. By implementing strategical approaches such as government intervention, community involvement, proper funding and accountability, training and capacity building and technology-driven solutions, it is possible to tackle poor maintenance in Nigerian public secondary schools. These approaches will help create a conducive learning environment, ensure the sustainability of the education system and build a better future for Nigerian students. All stakeholders must work together and prioritize the maintenance of school infrastructure to provide quality education and improve the overall educational landscape of the country.

#### 5. REFERENCES

- Adamu, M. M., Okereke, V. E., & Hamidu, L. A. J. (2022). Effective Maintenance of Physical Facilities in Secondary Schools Bauchi State, Nigeria. *Path of Science*, 8(2–3), 4001–4005. https://www.ceeol.com/search/article-detail?id=1045493.
- Adegboyega, L. O. (2018). Influence of Achievement Motivation on Nigerian Undergraduates' Attitude towards Examination. *International Journal of Instruction*, 11(1), 77-88. <a href="https://eric.ed.gov/?id=EJ1165188">https://eric.ed.gov/?id=EJ1165188</a>.
- Adeoye, M. A., Oladimeji, R. M., & Akinnubi, O. P. (2023). How Leadership Failures Fuel Covetousness and Corruption in Nigeria's Educational System? *Journal of Education Action Research*, 7(3), 388–395. https://doi.org/10.23887/jear.v7i3.67444.
- Asiyai, R. I. (2012). Assessing school facilities in public secondary schools in Delta State, Nigeria. *African Research Review*, 6(2), 192–205. https://doi.org/10.4314/afrrev.v6i2.17.
- Baba, N. M., Ibrahim, A. Z., & Nura, B. A. W. A. (2022). Creating A Space Within the Basic Education Framework for Alternate Learning Systems for Universalizing Access to Education. *Turkish International Journal of Special Education and Guidance & Counselling ISSN*, 11(1), 28–35. https://tijseg.org/index.php/tijseg/article/view/155.
- Baran-Łucarz, M. (2019). Formative assessment in the English as a foreign language classroom in secondary schools in Poland. Report on a mixed-method study. *Journal of Education Culture and Society*, 10(2), 309–327. https://doi.org/10.15503/jecs20192.309.327.
- Bashar, S., & Yasin, M. (2020). A review of public secondary schools' effectiveness in Nigeria: challenges and managing strategies. *International Journal Psychosoc Rehabil*, 24, 5220 –5229. https://www.researchgate.net/profile/Saadu-Isa-Bashar/publication/341067273.
- Gavish, N., Gutiérrez, T., Webel, S., Rodríguez, J., Peveri, M., Bockholt, U., & Tecchia, F. (2015). Evaluating virtual reality and augmented reality training for industrial maintenance and assembly tasks. *Interactive Learning Environments*, 23(6), 778–798. https://doi.org/10.1080/10494820.2013.815221.
- Hassan, K. I., & Fatile, J. O. (2022). Public Private Partnership and Educational Infrastructure in Nigeria. *Journal of Public Administration, Finance & Law, 26,* 138–151. https://doi.org/10.47743/jopafl-2022-26-13.
- Hassanain, M. A., Al-Zahrani, M., Abdallah, A., & Sayed, A. M. (2019). Assessment of factors affecting maintenance cost of public-school facilities. *International Journal of Building Pathology and Adaptation*, *37*(5), 528–546. https://doi.org/10.1108/IJBPA-02-2019-0019.
- Hermino, A., & Arifin, I. (2020). Contextual Character Education for Students in the Senior High School. *European Journal of Educational Research*, 9(3), 1009–1023. https://doi.org/10.12973/EU-JER.9.3.1009.
- Hussin, H., Jiea, P. Y., Rosly, R. N. R., & Omar, S. R. (2019). Integrated 21st century science, technology, engineering, mathematics (STEM) education through robotics project-based learning. *Humanities*

- and Social Sciences Reviews, 7(2), 204–211. https://doi.org/10.18510/hssr.2019.7222.
- Izobo-Martins, O. O., Ekhaese, E. N., Ayo-Vaghan, E. O., & Olotuah, A. O. (2018). Assessing Users' Perceptions of the Current Maintenance Disorder of Public Secondary School in Ogun, Nigeria. *Journal of Building Construction and Planning Research*, 6(2), 90–101. https://doi.org/10.4236/jbcpr.2018.62006.
- Jang, M., Aavakare, M., Nikou, S., & Kim, S. (2021). The Impact of Literacy on Intention to Use Digital Technology for Learning: A Comparative Study of Korea and Finland. *Telecommunications Policy*, 45(7). https://doi.org/10.1016/j.telpol.2021.102154.
- Kehinde, O. J., Abiodun, A. J., Adegbuyi, O., & Oladimeji, H. (2016). Small and Medium Scale Enterprises: Pivotal to Sustainable Economic Development: The Nigerian Experience. *International Journal of Current Research*, 8(1). https://www.ajol.info/index.php/afrrey/article/view/60249/48494.
- Kilis, S., & Yildirim, Z. (2019). Posting Patterns of Students' Social Presence, Cognitive Presence, and Teaching Presence in Online Learning ONLINE LEARNING. *Online Learning*, 23(2), 179–195. https://avesis.metu.edu.tr/yayin/c602500e-43ee-41cb-8d82-1240bba9f249/posting-patterns-of-students-social-presence-cognitive-presence-and-teaching-presence-in-online-learning.
- Kim, S., & Kwa, K. X. (2020). A closer look at risk factors for public-private partnerships in Singapore: Six case studies. *Asian Journal of Political Science*, 28(2), 142–163. https://doi.org/10.1080/02185377.2020.1780142.
- Maduka, N. (2018). Establishing factors influencing building maintenance practices in public secondary schools in Onitsha, Anambra State, Nigeria. *COOU African Journal of Environmental Research*, 1(2), 90–103. http://ajer.coou.edu.ng/index.php/journal/article/view/95.
- Maduka, N., Olotuah, A., & Ezeji, K. (2020). Appraisal of Building Conditions in Public Secondary Schools in Onitsha, Nigeria. *COOU African Journal of Environmental Research*, *2*(1), 66 –75. https://www.researchgate.net/profile/Kelechi-Ezeji/publication/343675915.
- Manfra, M. M. (2019). Action research and systematic, intentional change in teaching practice. *Review of Research in Education*, 43(1), 163–196. https://doi.org/10.3102/0091732X18821132.
- Megawati, I., Basikin, & Wibawa, S. (2020). Teacher's strategies of managing classroom and students' response: A case study. *Elementary Education Online*, 19(2), 20–33. https://doi.org/10.17051/ilkonline.2020.02.103.
- Mestry, R., & Berry, B. (2016). The perceptions of stakeholders of the implementation of a state funding model in South African public schools. *Africa Education Review*, 13(2), 82–95. https://doi.org/10.1080/18146627.2016.1224096.
- Mohammed, A. O., & Pitan, O. S. (2018). Innovation and Renewal of Economics Curriculum in Nigerian Secondary Schools: Approaches, Problems, and Strategies. *Journal of Economics and Environmental Education*, 3(1), 10–20. https://www.researchgate.net/profile/Abidat-Mohammed/publication/364957777.
- Nwachukwu, J. U., Aluko, E. Y., & Oloyede, G. O. (2020). Tackling Development Through Community and Social Development Project, 2008–2019: The Case of Ejigbo Local Government Area, Osun State, Nigeria. *International Journal of Multidisciplinary Research and Publications (IJMRAP, 2*(2), 1–5. https://www.academia.edu/download/64871940/IJMRAP\_V2N11P67Y20.pdf.
- Nwajiuba, C. A., Igwe, P. A., Akinsola-Obatolu, A. D., Ituma, A., & Binuomote, M. O. (2020). What can be done to improve higher education quality and graduate employability in Nigeria? A stakeholder approach. *Industry and Higher Education*, 34(5), 358–367. https://doi.org/10.1177/0950422219901102.
- Ogaji, D. S., & Okokon, E. O. (2012). Appraising the physical environment of secondary schools in Calabar, Nigeria. *Journal of Environmental Science, Toxicology and Food Technology*, 1(1), 42–48. https://www.academia.edu/download/88747952/7965f27f9e8ffc20ccc7b263f5be897a593b.pdf
- Oguntolu, O., Oladigbolu, E. A., & Adegbile, M. (2021). Assessment of Quality of Secondary School Infrastructure in Lagos State: A Case Study of Selected Schools in Lagos Mainland. *International Journal of Innovative Science and Research Technology*, 6(12), 832–838. https://ijisrt.com/assets/upload/files/IJISRT21DEC204\_(2).pdf.
- Osaro, N. G., & Wokekoro, E. (2018). Condition of public secondary schools in Rivers State, Nigeria. *A Paper Presented at the 18th AFRES Annual Conference*, 349–370. https://afres.architexturez.net/system/files/afres2018\_147.pdf.
- Osei-Kyei, R., & Chan, A. P. (2015). Review of studies on the Critical Success Factors for Public Private Partnership (PPP) projects from 1990 to 2013. *International Journal of Project Management*, 33(6), 1335–1346. https://doi.org/10.1016/j.ijproman.2015.02.008.
- Owan, V. J., Odigwe, F. N., Okon, A. E., Duruamaku-Dim, J. U., Ubi, I. O., Emanghe, E. E., Owan, M. V., & Bassey,

- B. A. (2022). Contributions of placement, retraining and motivation to teachers' job commitment: structural equation modelling of the linkages. *Heliyon*, 8(4), e09334.1-13. https://doi.org/10.1016/j.heliyon.2022.e09334.
- Popoola, G. A., Amoo, O. K., Umar, O. G., Popoola, A. A., & Olatunji, O. M. (2020). Influence of reading habit on student academic performance in a senior second school in Ibadan. *Multifaceted Strategies for Social-Emotional Learning and Whole Learner Education*, 141–162. https://doi.org/10.4018/978-1-7998-4906-3.ch007.
- Reinita, Zuardi, Budianti, I., & Efendi, R. (2020). *Development of Civics Literacy Teaching Materials in Primary Schools*. 464(Psshers 2019), 121–125. https://doi.org/10.2991/assehr.k.200824.030.
- Riep, C. B. (2017). Making markets for low-cost schooling: The devices and investments behind Bridge International Academies. *Globalisation, Societies and Education, 15*(3), 352–366. https://doi.org/10.1080/14767724.2017.1330139.
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology*, *60*, 101832. https://doi.org/10.4103/0019-5154.182410.
- Tessitore, M. (2019). Bridge International Academies: A critical analysis of the privatization of public education in Africa. *Review of Education, Pedagogy, and Cultural Studies, 41*(3), 193–209. https://doi.org/10.1080/10714413.2019.1694359.
- Tonga, F. E., Eryiğit, S., Yalçın, F. A., & Erden, F. T. (2022). Professional development of teachers in PISA achiever countries. *Professional Development in Education*, 48(1), 88–104. https://doi.org/10.1080/19415257.2019.1689521.
- Yakubu, N., & Dasuki, S. (2018). Assessing eLearning systems success in Nigeria: An application of the DeLone and McLean information systems success model. *Journal of Information Technology Education: Research*, 17, 183–203. https://doi.org/http://shura.shu.ac.uk/21526/.
- Yeh, C. Y. C., Cheng, H. N. H., Chen, Z. H., Liao, C. C. Y., & Chan, T. W. (2019). Enhancing achievement and interest in mathematics learning through Math-Island. *Research and Practice in Technology Enhanced Learning*, 14(1). https://doi.org/10.1186/s41039-019-0100-9.