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Effective Resource Utilization in Revitalising Educational Productivity in Nigeria: Challenges and Strategies

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Abstract

Nigeria's educational sector faces significant productivity challenges, hindering its potential to drive sustainable development. These challenges are inadequate funding, corruption and mismanagement of resources, inefficient resource allocation, shortage of qualified teachers, poor infrastructure etc. The paper examines the interplay between resource allocation, utilization, and management, and identify key strategies for optimizing resource use which are, planning and management, financial management, human resource development, infrastructure development, technology integration, community engagement etc. The paper concluded that effective resource utilization can enhance teaching and learning outcomes, improve educational quality, and increase productivity. This paper contributes to the ongoing discourse on educational reform in Nigeria by providing actionable insights for policymakers, educators, stakeholders seeking to revitalize the educational section and drive sustainable development. The paper suggests that government should prioritize education by increasing the budget allocation to 15% of the national budget, implementing accountability mechanisms to ensure that educational resources are efficiently utilized, and investing in infrastructure development to provide schools with the resources necessary to deliver high-quality education and foster educational productivity.

Keywords: Educational productivity, Infrastructure development, Resource utilization, Teacher training, and Technology integration.

Introduction

Education is the bedrock of any nation's progress, serving as a catalyst for economic growth, social mobility, and cultural advancement. A well-structured educational system can empower individuals, foster innovation, and enhance national competitiveness. However, Nigeria's educational sector faces numerous challenges, which are inadequate funding, corruption and mismanagement of resources, inefficient resource allocation, shortage of qualified teachers, poor infrastructure etc, hindering its potential to drive national development. Despite government initiatives to improve the quality of education, the country's educational system continues to grapple with inadequate resource utilization, inefficient allocation of resources, and poor educational outcomes. Despite acknowledging the importance of education, the Nigeria government's investments in the sector have failed to yield the desired outcomes.

Despite substantial resource allocation, educational outcomes in Nigeria continue to fall short of global standards, with inadequate infrastructure, shortage of qualified teachers, and outdated curricula contributing to poor student achievement and limited opportunities for socioeconomic mobility (Adebayo, 2018; UNESCO, 2019).

The urgency to revitalize educational productivity in Nigeria cannot be overstated. Education plays a crucial role in human capital development, developing skilled workers, innovators, and entrepreneurs who drive economic growth. It increases productivity that is, improved education leads to higher productivity, as a more skilled workforce can produce more with the same resources. Revitalizing educational productivity helps countries remain competitive in the global economy and also addresses the challenges of effective utilization of resources in Nigeria. Efficient resource utilization is key to improving educational outcomes. To achieve educational objectives, financial, human, and material inputs must be allocated and managed efficiently. However, Nigeria's educational sector is plagued by inefficient resource utilization, resulting in wasted resources and duplicated efforts, hampering the sector's ability to make significant strides in improving educational outcomes (World Bank, 2019).

The primary objective of this study is to explore perspectives on effective resource utilization as a means of revitalizing educational productivity in Nigeria. By examining the challenges facing the Nigerian education sector and identifying potential strategies for optimizing resource use.

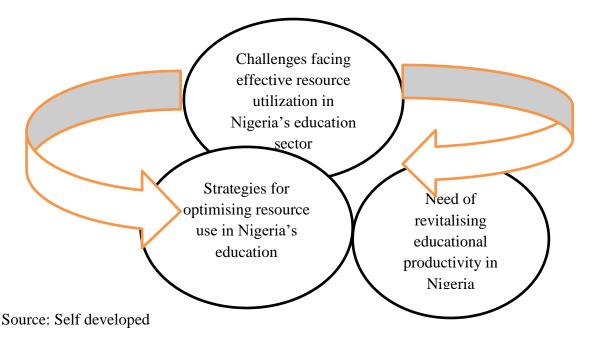
Different studies have carried out on resource utilization and revitalizing the education sector. Agabi (2010) in a study prudential approach to resource management in Nigerian education: a theoretical perspective. She said that resource scarcity is a problem experienced by virtually all human organizations. The Nigerian education sector has endured consistently declining levels of federal government funding over the last two decades. This comes in the face of ever-increasing inflation rates and a growing demand for formal education. This untenable situation is compounded by the compulsory and free Universal Basic Education (UBE) programme which expanded free education from six years of primary education to nine years of basic education. In addition to lengthening the programme's timeframe, its target population was expanded to include out-of-school youths and adults who, for one reason or the other, did not complete a regular formal education. Unfortunately, this zeal for providing education as a social service in Nigeria has not been matched with a zeal for funding it. The under-funding of Nigerian education has been made worse by recent global economic crises. This paper

recommends the exploration of non-governmental sources of funding, and the application of prudent measures for managing existing educational resources.

Anochiwa, Uma, Aniagolu and Ogbonna (2016) also wrote on reviving education in Nigeria for sustainable economic growth: issues, problems and prospects. They said Education has been identified as a critical agent in the development of a modern society because it plays a pivotal role in training and building human capacity for the nation. It is argued "as information grows exponentially, and its incorporation in the production process becomes increasing complex, the ability to absorb, and adapt new knowledge is determined by the nature, quality and quantity of the education system". Nigerian government played the "Ostrich" while its educational system headed for a total collapse. Therefore, except the system is revived and revamped, it will be a mirage for the country to catch up with the global competitiveness. As a way forward, Government must increase funding, tackle corruption and improve infrastructure. Excellence must be rewarded and indigenous R&D improved. They must stem the tide of brain drain by creating environment for good education.

Conceptual Clarification

Revitalizing educational productivity in Nigeria: a perspective on effective resource utilization



Resource utilization

Resources are crucial for the survival and functioning of any organization. Without these assets, organizations would have no personnel or means to accomplish their objectives. Resources encompass all the inputs necessary for an organization to achieve its goals, including human,

financial, time, and material resources (John, 2023). The effective allocation and management of resources to achieve organizational goals is referred to as resource utilization (Krajewski, Lee, Manoj, Malhotra, & Larry, 2013). Resource utilization entails the efficient and effective use of various resources, such as financial, human, material, and technological resources, to achieve desired outcomes (Werner & Desimone, 2012). Optimal resource allocation to maximize productivity, efficiency, and effectiveness is central to resource utilization (Cooper, Douglas, Janet, Dobler, Randall, Gibson, & William, 2014).

Types of resource utilization

Resource utilization have been classified into ten groups and include human, financial, material, technological, natural, intellectual, time, information, infrastructure and social resource utilization. We will be discussing four out of the ten resource utilization.

- 1. Human resource utilization involves the efficient management of human resources, encompassing recruitment and selection, training, and development, performance management, employee engagement, and talent management to optimize organizational productivity and efficiency (Noe, Raymond, John, Hollenbeck, Barry, & Patrick, 2017).
- 2. The efficient management of financial resources, including budgeting, investment and funding, financial reporting and analysis, cost control and reduction, is known as financial resource utilization (Brigham & Houston, 2012).
- 3. Material resource utilization focuses on the efficient use of various physical resources, including equipment and machinery, supplies and inventory, facilities and infrastructure, transportation and logistics, and energy and utilities. Efficient management of these resources reduces waste, enhances efficiency, and improves productivity (Heizer & Render, 2014).
- 4. Technological resource utilization encompasses the efficient use of various technological resources, including information technology, communication technology, data analytics and business intelligence, digital marketing and e-commerce, and cybersecurity. Efficient management of these technologies leads to increased innovation, efficiency, and competitiveness (Laudon & Laudon, 2015).

Challenges facing effective resource utilization in Nigeria's education sector

Nigeria's education sector is faced with numerous problems some of which include:

1. Inadequate funding

Nigeria's education sector suffers from inadequate funding, leading to various challenges for schools, teachers, and students. This lack of funding manifests in insufficient classrooms, and infrastructure; learning environments; limited educational materials such as textbooks, and technology; insufficient investment in teacher training and development and low teacher salaries and benefits, which can negatively impact teacher motivation and retention (Oke, 2020).

2. Corruption and mismanagement

Corruption and mismanagement of resources pose significant obstacles to effective resource utilization in the education sector. This phenomenon manifests in various ways, such as: embezzlement of funds designated for educational purposes, reducing the resources available for schools and students. Misallocation of resources, with priority given to personal interests over educational needs. Nepotism and favoritism in resource allocation, leading to inequitable resource distribution. Lack of transparency and accountability, which can create a culture of impunity and discourage effective resource utilization (UNESCO, 2019).

3. Inefficient resource allocation

Inefficient allocation of resources can result in waste and duplication of efforts in the education sector. This may include: Inadequate needs assessment, leading to resources being allocated to low-priority areas while critical needs remain unmet. Poor distribution of resources, with some schools receiving an overabundance of resources while others remain underserved. Lack of prioritization, with resources allocated to areas with low returns on investment rather than to areas with the greatest potential impact. Inefficient use of technology, such as failing to harness the potential of digital tools and platforms to streamline resource allocation and management (World Bank, 2019).

4. Shortage of qualified teachers

The shortage of qualified teachers is a pressing issue in the education sector, adversely affecting educational quality. This includes the following challenges: Insufficient teacher training and professional development, leading to subpar teaching methods and limited instructional expertise. Limited subject matter expertise, hindering teachers' ability to provide effective instruction. High teacher turnover rates, leading to a lack of stability and continuity in the teaching profession. Inadequate teacher motivation, which can result from low salaries, lack of resources, and limited professional development opportunities (NUT, 2020).

5. Poor infrastructure

Inadequate infrastructure in classrooms and libraries negatively impacts learning outcomes. This includes: Insufficient classroom space, leading to overcrowding and limited individualized instruction. Poor ventilation and lighting, creating an uncomfortable and distracting learning environment. Limited access to technology, such as computers and interactive whiteboards, hindering the use of modern instructional methods. Inadequate library resources, including limited access to books, journals, and other learning materials (FGN, 2020).

6. Inadequate teacher training

Poor teacher training programs negatively impact the effectiveness of teachers, resulting in the following challenges: Limited professional development opportunities, limiting teachers' ability to keep up with new educational trends and methodologies. Inadequate subject matter training, hindering teachers' ability to teach specific subjects effectively. Lack of training in technology integration, hampering the utilization of modern technologies to enhance instruction. Inadequate classroom management training, making it difficult for teachers to manage student behavior effectively (Adebayo, 2018).

7. Lack of educational materials

Insufficient educational materials, such as textbooks and technology, negatively affect learning outcomes. This includes the following challenges: Outdated textbooks that fail to reflect the latest academic research and advancements in various disciplines. Limited access to digital resources, such as e-books, online educational platforms, and educational software, hampering students' ability to engage with modern learning methods. Inadequate science and laboratory equipment, impeding hands-on learning and experimentation. Limited access to libraries, limiting students' exposure to diverse reading materials (WAEC, 2020).

8. Inefficient use of technology

Inefficient use of technology in education hinders productivity and learning outcomes. This includes the following challenges: Limited access to technology, such as computers, tablets, and internet-enabled devices, limiting students' and teachers' ability to harness the power of technology in education. Inadequate technology training, preventing teachers from effectively integrating technology into their teaching and students from utilizing digital tools for learning. Poor internet connectivity, impeding access to online educational resources and collaborative learning opportunities. Inefficient use of educational software, such as learning management

systems and digital textbooks, leading to suboptimal utilization of available technology (Laudon & Laudon, 2015).

9. Poor maintenance culture

A poor maintenance culture can cause rapid deterioration of educational infrastructure, including the following challenges: Lack of regular maintenance, leading to breakdown of equipment and facilities, and the need for costly repairs or replacements. Inadequate repair and replacement of worn-out or damaged infrastructure, further exacerbating deterioration. Poor waste management, resulting in an unhygienic learning environment and potential health hazards. Inadequate cleaning and sanitation, leading to a dirty and unsanitary learning environment (Heizer & Render, 2014).

10. Lack of community participation

The lack of community participation in education can hinder resource utilization, including the following challenges: Limited parental involvement, leading to reduced support and guidance for students' educational development. Inadequate community engagement, reducing the pool of potential resources and support for educational programs. Lack of local support, hindering the implementation of educational initiatives and the mobilization of community resources. Limited partnerships with local organizations, such as businesses, NGOs, and community groups, impeding collaboration and resource sharing (Hitt Miliordos, Park, Park, & Ramchandani, 2011).

11. Inadequate data management

Inadequate data management can hinder informed decision-making in the education sector, including the following challenges: Limited data collection, resulting in insufficient information for decision-making and poor understanding of educational needs and outcomes. Inadequate data analysis, resulting in poorly informed decisions based on incomplete or incorrect data. Poor data storage and retrieval, hindering the ability to access and use data effectively. Inadequate data-driven decision-making, leading to suboptimal allocation of resources and ineffective educational policies and programs (Krajewski et al., 2013).

12. Political interference

Political interference in the education sector can adversely affect resource utilization, including: Political appointment of educators based on political affiliation rather than educational qualifications, hindering the effectiveness of educators and the quality of instruction. Political influence on curriculum, leading to politicized and biased educational content. Political interference in education policy, resulting in policies that prioritize political interests over educational needs. Limited autonomy for educators, reducing their ability to make decisions based on educational needs and priorities (Werner & Desimone, 2012).

Need of revitalizing educational productivity in Nigeria

To revitalize educational productivity in Nigeria, a holistic approach must be adopted that addresses key areas such as infrastructure, teacher training, curriculum, technology, governance, and funding. Through coordinated and strategic implementation of these strategies, the country can improve educational outcomes, foster innovation and creativity among students, and position itself to compete in the global economy. This in turn will contribute to Nigeria's overall economic growth, social development, and global competitiveness (Akinkugbe, 2013). Challenges of revitalizing educational productivity in Nigeria.

- 1) Low enrollment rates: The United Nations Children's Fund (UNICEF, 2020) reports that Nigeria has one of the lowest enrollment rates in the world, with only 61% of children aged 6-11 years enrolled in primary education, and only 42% of adolescents aged 12-14 years enrolled in secondary education. This low enrollment rate poses a significant challenge to the country's educational productivity, as fewer students are accessing the educational resources and opportunities necessary for personal and societal development.
- 2) Poor infrastructure: According to the World Bank (2018), poor infrastructure in Nigerian schools, including inadequate classroom space, limited access to technology, and insufficient power and water supply, hampers the ability of teachers to deliver quality education, leading to lower student performance and reduced educational productivity.
- 3) **Inadequate teacher training:** The National Educational Research and Development Council (NERDC, 2017) highlights the inadequacy of teacher training in Nigeria as a major factor contributing to low educational productivity, with many teachers lacking the skills and knowledge required to effectively deliver the curriculum and promote student learning.
- 4) **Outdated curriculum:** According to the Federal Government of Nigeria (FGN, 2019), the outdated curriculum in many Nigerian schools, which fails to reflect the changing needs of the 21st century economy and society, hinders the development of critical thinking, creativity, and other 21st century skills essential for educational productivity.

- 5) **Corruption and mismanagement:** Transparency International (2020) points to corruption and mismanagement in Nigeria's educational system as a major factor undermining educational productivity, with resources intended for educational development being diverted for personal gain, resulting in inadequate funding for school facilities and teacher training, and reduced effectiveness of educational programs.
- 6) **Inadequate funding:** UNESCO (2019) highlights that inadequate funding for education in Nigeria, particularly for teacher training, infrastructure development, and educational resources, is a key factor impeding educational productivity, as limited financial resources prevent schools from investing in innovative programs, updating technology, and supporting teachers in their professional development.
- 7) **Inefficient resource allocation:** The World Bank (2018) indicates that inefficient resource allocation in Nigeria's educational system, characterized by inadequate budgeting, corruption, and unequal distribution of funds among schools, undermines educational productivity by limiting the ability of schools to purchase adequate materials, attract and retain qualified teachers, and implement effective instructional programs.

Strategies for optimizing resource use in Nigeria's education

1. Planning and management

There are several key steps that can be taken to improve resource utilization in the education sector, including conducting a needs assessment and resource mapping, prioritizing resource allocation based on educational objectives, developing and implementing resource utilization policies, establishing resource management committees, and developing and implementing a national education strategic plan. These steps can help to ensure that resources are allocated efficiently and effectively, maximizing their impact on educational outcomes and enhancing the quality of education in the country (Adebayo, 2018).

2. Financial management

Effective financial management in the education sector requires a multi-pronged approach, including increasing budgetary allocation to education, improving financial management and transparency, exploring alternative funding sources, and implementing cost-saving measures. These steps can help to ensure that educational institutions have the financial resources they need to deliver high-quality education and achieve their objectives (Oke, 2020).

3. Human resource development

Human resource development in the education sector is crucial for enhancing the quality of education. Several key steps can be taken to support human resource development, including implementing teacher recruitment and retention programs, providing ongoing professional development and training opportunities for teachers, and investing in staff capacity building and development. These measures can help to ensure that educational institutions have a highly skilled and motivated workforce that is able to deliver high-quality education (NUT, 2020).

4. Infrastructure development

Effective infrastructure development and maintenance in the education sector is crucial for ensuring safe and functional learning environments. Several key steps can be taken to support infrastructure development, including investing in school infrastructure development and maintenance, implementing infrastructure maintenance and upgrade plans, promoting community-based resource mobilization, and leveraging technology for educational delivery. These measures can help to enhance educational infrastructure and ensure that educational institutions have the resources they need to support effective teaching and (WAEC, 2020).

5. Technology integration

Effective technology integration in the education sector can help to enhance teaching and learning outcomes. Several key steps can be taken to support technology integration, including implementing e-learning platforms and digital resources, utilizing educational software and applications, and developing and implementing virtual and augmented reality learning experiences. These measures can help to provide students with access to innovative and engaging learning environments that support personalized learning and enhance educational outcomes learning (UNESCO, 2019).

6. Community engagement

Community engagement is essential for enhancing educational outcomes and fostering a strong and supportive educational environment. Several key steps can be taken to promote community engagement, including promoting community participation and ownership in educational initiatives, engaging parent-teacher associations (PTAs) in educational activities, and implementing school-based management and decision-making. These measures can help to create a collaborative and supportive educational environment that involves community members in shaping educational policies and programs (Oke, 2020).

7. Institutional development

Effective institutional development in the education sector is crucial for supporting high-quality educational outcomes. Several key steps can be taken to enhance institutional development, including establishing centralized resource management systems, empowering teachers, developing and implementing teacher career progression plans, and promoting public-private partnerships (PPPs). These measures can help to create a strong and sustainable educational system that supports educational excellence and enhances student learning and development (World Bank, 2019).

Conclusion

Revitalizing educational productivity in Nigeria requires a multifaceted approach that addresses inadequate funding, corruption, inefficient resource allocation, and poor infrastructure. Effective resource utilization is critical to improving education outcomes, driving economic growth, and enhancing social development.

Suggestions

The following suggestions are preferred based on extant literature reviewed on strategies for revitalizing educational productivity.

- Government should prioritize education by increasing the budget allocation to 15% of
 the national budget, implementing accountability mechanisms to ensure that educational
 resources are efficiently utilized, and investing in infrastructure development to provide
 schools with the resources necessary to deliver high-quality education and foster
 educational productivity.
- 2. Private sector organizations should collaborate with the government in infrastructure development projects to improve the educational environment and facilitate educational productivity, and support teacher training initiatives to ensure that teachers have the knowledge and skills necessary to implement innovative teaching methods and enhance student learning.
- 3. Civil society organizations should champion education reform by advocating for government policies and initiatives that prioritize educational productivity, and monitor resource utilization to ensure that educational funds are allocated equitably and efficiently, holding government and private sector actors accountable for the effective delivery of educational services.

4. International organizations should leverage their expertise and resources to provide technical assistance and support capacity-building initiatives in Nigeria's educational sector, helping to strengthen infrastructure, develop teacher training programs, and improve educational delivery, ultimately contributing to improved educational productivity.

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