

The Nexus Between Government Secondary Education Expenditure and Quality of Education in Nigeria

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ABSTRACT

The decline in the educational system in Nigeria has been a burning subject of research over the years due to its essence in National development. This study examined the Nigerian government education expenditure in comparison with selected countries in Africa, the quality of education in the country and explored the relationship between the government secondary education expenditure and the quality of education at that tier of education system. Data for the study was collated majorly from the World Bank database and official documents of relevant government agencies. The data analysis showed that Nigeria recorded the lowest figure in government education expenditure across all the years under study (2010-2018) except in 2012 when it recorded 8.55% ahead of Seychelles at 6.77%. Nigeria's all-time high was in 2015 (9.26%) and the all-time low was in 2018 (5.94%). Nigeria recorded a high secondary school enrollment rate in 2013 of 56.21% and a corresponding government education expenditure of 8.68%, followed by a decline in enrollment (10.59%) in 2014 despite an increased expenditure of 0.36% over the previous year. The analysis also found a relationship ($r=0.61$) between government education expenditure and secondary school enrollment. The study among other recommendations suggests that the Nigerian government should prioritize education during budget allocation to improve the quality of education at all levels.

KEYWORDS: Educational Financing, Enrollment, Government Education Expenditure, Quality Assurance, Nigeria.

1. INTRODUCTION

Education is the bedrock of human development and can be seen as the passport to the future. Education is the hub of human existence and development. It is through education that values are transmitted across generations. Education enables society to create and domesticate knowledge. In the kind of knowledge-driven society that the global village we call the world has turned into, any society that endangers its educational system, endangers its future. There is increasing evidence that education matters, not only for the personal development of individual learners, but also for the broader economic performance of countries. As the world has entered the age of the knowledge economy, education and human capital development broadly play both critical and reminiscent roles in driving economic development the world over (World Education Forum, 2015; Cuesta et al., 2015; Anyanwu and Erhijakpor, 2007; and Omotor, 2004).

Over the years, countries have invested rapidly in education and have successfully improved their educational system. Just as Hanushek (1996) rightly said, "no improvement is possible with unimproved people" and access to quality education is indispensable for improvement. Some African countries are not left out in this pursuit of educational development and improvement in the quality assurance of their educational system. World Education Forum ranking ranked Seychelles first in Africa and 43rd in the world while Tunisia, Mauritius, South Africa, and Algeria took the 2nd to 5th position in Africa for the best education system (Edeh, 2023). It is unfortunate to note that Nigeria is sitting in 11th position despite ranking first in Gross Domestic Product (GDP) in Africa. The quality of education in Nigeria is at a level where certain groups of people, mostly less privileged, are more affected by the educational system crisis than others. Children in rural areas are in disadvantaged positions in terms of education quality than their counterparts in urban areas.

The Nigerian education system has become a shadow of itself in recent times with a tremendous decline in the quality of the teaching and learning process. Finance as a resource has remained a controversial issue at all levels of education in Nigeria. According to Olabanji and Alaka (2010), resource allocation is one of the most challenging tasks that our educational system especially at the secondary level faces whether they are in the early stage of reform or years into sustaining improvement. Meanwhile, Jaiyeoba and Atanda (2003) explained that the rapid expansion of students' enrolment in secondary education in Nigeria since the attainment of independence followed by the enrolment explosion in recent years have made education a thorny responsibility for the government to shoulder. Hence inadequate funding has resulted in poor teaching and dilapidated buildings (Omoregie, 2005). According to Al'ameen (2022), funding seems to be the major challenge troubling the quality of education in Nigeria which happens to be the usual reason for almost every strike action by teaching staff as well as the reason for the inconsistency of primary and secondary schools' teachers in class and other sensitive academic activities.

Many educators and observers of the Nigerian political landscape continue to argue that the transition from British colonial rule to the first generation of Nigerian leaders left a sound, viable, and organized education system. The educational system was functional and operational in the 1950s, 1960s, and 1970s, but quality began to decline in the mid-1980s. By the early 1990s, quality gave way to neglect and mediocrity, giving rise to total decay (Abdullahi, 2014). Nigeria's educational system is in assorted crises of infrastructural decay, neglect, waste of resources, and sordid conditions of service. The country has over 10 million out-of-school children with another 27 million children in school performing very poorly. Millions of Nigerians are half-educated, and over 60 million – or 30% – are illiterate (UNESCO, 2017; Ekundayo, 2019).

The Concept of Quality of Education

Quality education is a practical means of ensuring excellent educational delivery at all levels. Quality Education can be referred to as quality assurance in education, and the goal is to prevent problems with quality and make sure that the system's output meets expected standards. Ebong and Efue (2005) opine that it is a holistic term that is donated towards education as an entity. According to them, it entails the suppliers and consumers and all the various activities put in place to produce quality products and services. Enaohwo (2003) discussed that; the concept of quality assurance in the education system can be looked at from two angles, the internal perspective and the external perspective. This implies that Quality assurance acts as a predictor and measuring tool for standards and quality. It is a method of determining and re-determining the value of any valuable thing. It is important to note that effective and efficient quality assurance is only possible with good management.

Quality assurance refers to control of quality, evaluation and feedback to conformance of quality, reliability, safety requirements, consequences of failure to meet the requirements are quality costs. It also includes monitoring and maintaining standards at "all levels of education (that means, pre-primary, primary, and secondary, technical, and vocational schools) below the tertiary level" (FRN, 2013), and requires (i) Instructional materials, (ii) Teacher quality, (iii) Publications, conferences, workshops, seminars meetings, etc, (iv) Scheduled Tours and visits, (v) Documentation, (vi) Organization of teacher retraining programmes, (vii) Media contacts, (viii) Development of teaching methods, and much more (Major, Favour, & Leigha; 2020).

Educational Financing in Nigeria

Funding for education involves mobilizing and allocating funds to educational institutions. Funding for education in Nigeria has also been a major and ongoing problem. The federal government bears the bulk of financing education in Nigeria through its annual budgetary allocation. Funds allocated by the federal government to the education sector are normally distributed to the various arms and tiers of education. The state government also allocates funds to their institutions and their source is primarily their allocation from the federal account, their share of Value Added Tax (VAT) and state-generated revenue through local taxes, school levies, etc. (Amadi, 2007). Financial allocation to secondary education in Nigeria is very low when compared with other African countries. Available statistics show that the central government allocation to the total annual budgetary allocation in Ghana, Kenya and Uganda, averaged 26%, 20% and 15% respectively, while that of Nigeria was 3% which is far below the UNESCO recommendation of at least 26% of annual budget to education sector (Otu, 2011).

The lack of sufficient funding for public secondary schools in Nigeria is hindering quality assurance initiatives. Funding is essential for quality assurance in secondary schools. Sufficient funding is needed to acquire the human and material resources required to guarantee quality in the secondary school education system. Among the resources necessary for the efficient management of the educational sector, funding has been identified as an essential tool. This is because funding serves as the lifeline for the management and administration of most sectors of the economy, including the education sector (Olowonefa & Ogunode, 2021).

Despite requests from stakeholders for the government to save the system, the educational system in Nigeria is gravely underfunded. Nigeria, the so-called "giant of Africa" and a party to the UNESCO accord, has never been able to spend 26% of the recommended amount. Instead, the financial allocation for education has been steadily declining each year, and this trend has had a significant impact on educational quality.

Educational Management and National Development

Countries globally are now zeroing in on education as a means of propelling them into the realm of science and technology, with the expectation of human advancement in terms of living standards and environmental development. This is because education is the lifeblood of any nation, the backbone of its industries; it is the basis of moral renewal and rejuvenation of its people. Education is the driving force and shield of any nation's defense. Thus, no country can afford to pay lip service to the education of its citizens. A nation that underestimates the importance of education is doing so at its peril. Therefore, proper and efficient management should be put in place to ensure the effective utilization of resources in the education sector of a state. According to Okeke (2001) generally higher education, is perceived as an ivory tower, the function is diverse and more so than the trinity of teaching, research, and service. In the main, groups of functions are associated with production, consumption, and citizenship. The objectives of higher education in Nigeria are to inculcate the value system of the new social order both intellectual and social, develop human skills, provide for gifted individuals, provide an enabling and conducive environment for meaningful teaching, learning, research, training, and upgrading of total human resources of the nation. These goals are to be pursued through effective management techniques (NPE 1981).

A properly managed education provides support for sector-wide programmes and development. According to Okeke (2001), education has latent potentials which are not yet properly tapped at present to contribute significantly to the economic and social sector development of a nation. He further contended that this holdup is caused by a lack of suitable management. The part of higher education in society falls under the domain of social, cultural, and economic development of the society. This highlights access and excellence: quality of education to be delivered or the benchmark to be targeted in different areas; labor market link; public benefit and contribution to private sector growth.

Manpower training for economic development is not the overriding aim of education. In other words, the limited aim of education is economic development. Economic development should not be used as the yardstick of progress or failure in all fields of human behaviour. If the contrary was the case, the sole objective of the education system would have been just to train enough men who have the right skills for the job at hand (Ukeje, 1986). Institutions of higher learning were designed to produce skilled human resources necessary to manage independent countries; ensure that quality goals are attained, generate developmentally relevant research; target education standards and incentives to uphold them; staff development and retention, education inputs, and regular facilities maintenance (Yesufu, 1973). Unfortunately, incessant and inconsistent changes in the government policy on education within the past three to four decades have precipitated instability and undermined rational management and planning approaches in the system (Okeke 2001). Today, many of our educational institutions are left with inexperienced and insufficiently trained staff that lack the necessary mentors and role models to guide them as a result of proper and rational management techniques (William 1993).

Teachers are the fulcrum on which the lever of the educational system rests (Ige 2013). Apart from students, they are the largest and most crucial inputs of the educational system whose influence to a great extent affects the quality of educational output (Ige, 2013). Atiga and Ogunode (2021) noted that teachers are the executors of the school curriculum. Their duties include teaching, preparing lesson notes and lesson plans, assessing students, creating exam questions, and grading answer sheets. They also provide guidance in classes, carry out academic services, communicate with parents regarding feedback on students' progress, and at times take students on excursions with school authorization. Teachers are invaluable elements in the management of educational institutions, particularly secondary schools. The teachers' roles are irreplaceable in delivering teaching programs. It is unfortunate that as important as the teachers to achieving the objective of secondary school management many public secondary schools do not have adequate professional teachers. The scarcity of professional teachers is more pronounced in the sciences programme (Aiyedu & Ogunode 2021). Ike (2017) pointed out that the problem is no longer that of unavailability, but that of instability. This does not help the development of the education system.

Sadly, the majority of public educational institutions in Nigeria are faced with the problems of inadequate infrastructural facilities and this is affecting the development of education. Ogunode (2020) confirmed the shortage of facilities at the public primary schools in Nigeria while Ike (2017); Mercy & Anselm (2018); Atiga & Ogunode (2021) concluded that many public secondary schools in Nigeria lack adequate infrastructural facilities

to support teaching and learning. At the higher institutions, Ogunode (2020) agreed that many higher institutions especially the universities do not have adequate facilities. The researchers concluded that inadequate funding of schools, poor infrastructural facilities planning, poor qualities of infrastructural facilities, institutional corruption, ineffective monitoring and evaluation of infrastructural facilities, increased student population, damages of facilities by students are causes of inadequate infrastructural facilities in Nigerian schools (Ogunode, Johnson, & Olatunde-Aiyedun, 2022).

The desire for a visible governmental impact on the educational system in Nigeria has become an outcry. Poor infrastructure, lack of teachers' motivation, inconsistent funding and lack of equity have surrounded the Nigerian educational system. It is evident in the budget allocations and educational spending of the federation. These issues became worse in this present administration (2015-2022) which has resulted in questions on the priority of the government and her allies. It is on this background that this study aims to compare the government's secondary education expenditure in Nigeria with other African countries.

Theory of Resource Distribution and Theory of Continuous Improvement

The theory of resource distribution was first proposed by economist John Stuart Mill in his book, "Principles of Political Economy," published in 1848. Mill's theory suggested that resources should be distributed in such a way that would maximize the utility of society as a whole. He argued that resources should be distributed according to each person's ability and willingness to work, and that those with the greatest ability and willingness to work should receive the largest share of resources. Mill's theory of resource distribution has been widely accepted and has been the basis for many economic theories in the modern era (Fix, 2019).

This theory as applied to this research on government education expenditure and quality of education suggests that resources should be allocated equitably, with those in greatest need being given priority. It suggests that when governments increase expenditure on education, it should be done in a way that ensures that resources are spread across the population in a way that leads to benefits for the entire population. This could include providing additional resources to underprivileged areas, providing access to quality educational materials, and ensuring that all students have equal access to quality teachers and resources. (Shields, Newman & Satz, 2017; UNESCO, 2017). Additionally, this theory suggests that when governments increase expenditure, it should be done in a way that is cost-effective and leads to the most effective use of resources.

The Theory of Continuous Improvement was developed by statistician Edwards Deming in the 1940s. Deming's Theory of Continuous Improvement focused on the need to constantly improve operations and processes to achieve better results. He argued that consistent and iterative changes, as opposed to sporadic and major overhauls, are required to create sustainable results. Deming also believed that kaizen, or continuous improvement, was necessary for its successful implementation in the West. He encouraged organizations to engage in the four-step process of the Deming cycle, which includes planning, doing, checking, and acting (Edwards, 1982; Businessballs, 2020).

This theory suggests that educational systems should focus on continuous improvement, to ensure that they are providing a quality education to their students. It proposes that educational systems should use data to measure performance and identify areas for improvement, and should invest in the development of their educators (Zmuda, Kuklis, & Kline, 2004). Hence, this theory suggests that educational systems should invest in research and development, and use innovative techniques to ensure that they are providing a quality education to their students.

Therefore, this study aimed at:

1. Evaluating Nigerian government education expenditure as compared to other African countries.
2. Determining the relationship between government education expenditure and secondary school enrollment in Nigeria

2. METHODOLOGY

This study adopted a descriptive survey research design to evaluate the Educational spending per cent over Gross Domestic Product and budget allocation in Nigeria from 2010 to 2018. The data was sourced from National Bureau of Statistics, Central Bank of Nigeria (CBN) Statistical Bulletin and World Bank (various issues). Data was also collected for other African countries to create a comparison with the Nigerian records.

The data for Government Education Expenditure and Secondary School Enrollment was extracted from the online database. The data extraction for countries of interest on Government Education Expenditure was included based on any of these two criteria;

1. African Biggest Economy
2. African Best Quality Assurance Education

The countries selected based on these criteria are; Nigeria (case study), South Africa, Egypt, Seychelles, Kenya, Mauritius, Algeria. Tunisia and Morocco was excluded because of limited data in the World Bank Database. The data was analyzed using mean and percentage, and presented in tables and charts. Correlation analysis was conducted to evaluate the relationship between the variables.

3. RESULTS

The data on Government Education Expenditure across the selected African countries is presented below.

Table 1: Government Education Expenditure of selected African countries

S/N	Year	Nigeria	Egypt	South Africa	Algeria	Kenya	Seychelles	Mauritius
1	2010	6.17	11.30	18.04	-	20.56	10.86	14.57
2	2011	7.88	10.95	18.70	-	19.25	10.39	13.85
3	2012	8.55	10.92	19.68	15.98	19.92	6.77	14.96
4	2013	8.68	11.91	18.70	17.65	19.14	9.55	14.79
5	2014	9.04	11.92	18.99	16.47	17.08	12.08	20.91
6	2015	9.26	11.92	18.70	15.20	16.66	12.59	19.46
7	2016	6.65	11.45	18.05	16.11	17.35	11.72	19.96
8	2017	6.12	-	18.72	17.56	17.71	10.26	20.36
9	2018	5.94	-	18.90	13.77	19.04	11.83	19.27

Source: World Bank Database

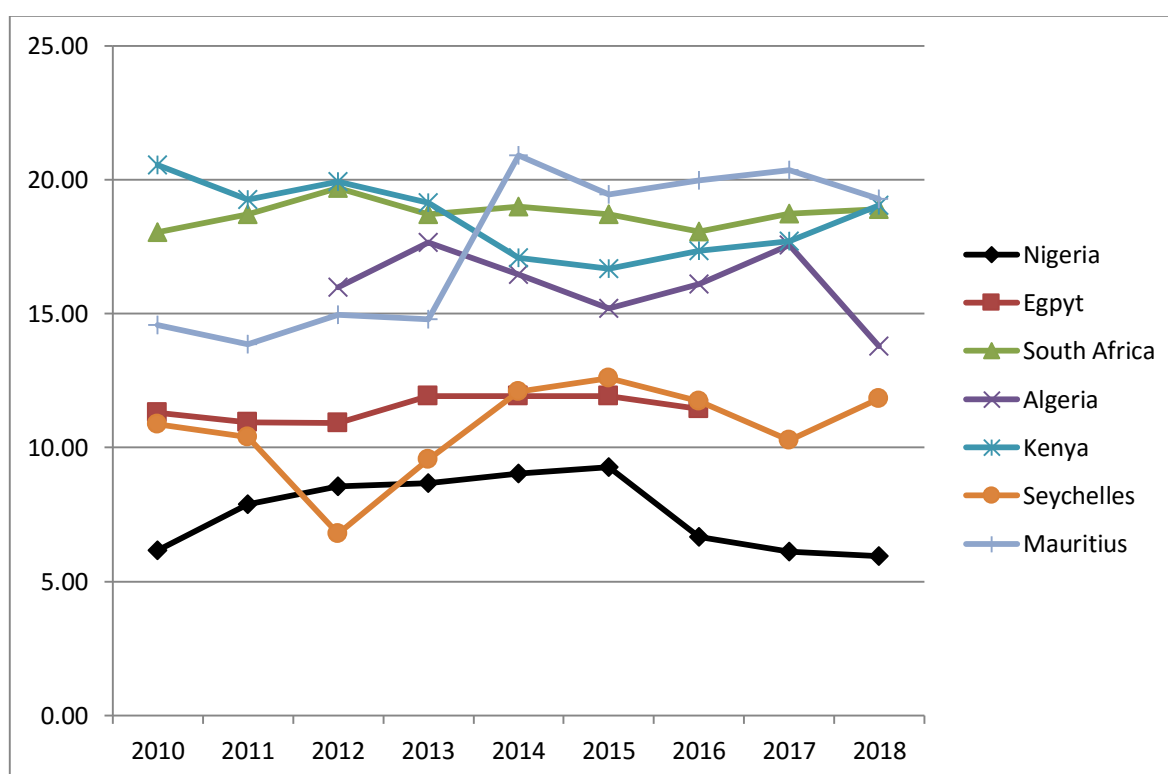


Figure 1: Line Graph of Education Spending for seven African countries (2010-2018)

From the graph above, it is shown that Nigeria recorded the lowest in government education expenditure across all the years under study except in 2012 when it recorded 8.55% ahead of Seychelles at 6.77%. Nigeria all-time high was in 2015 (9.26%) and all-time low in 2018 (5.94%). Mauritius topped the chart ahead of all the countries under study in 2014 with 20.36% and continued till 2018.

Table 2: Data on Government Education and Expenditure Secondary School Enrollment

S/N	Year	Government Education Expenditure (%)	Secondary School Enrollment (%)
1	2010	6.18	44.22
2	2011	7.88	45.56
3	2012	8.55	47.18
4	2013	8.68	56.21
5	2014	9.04	45.62
6	2015	9.26	46.78
7	2016	6.65	42.00
8	2017	6.12	42.76
9	2018	5.94	43.51

Source: World Bank Database

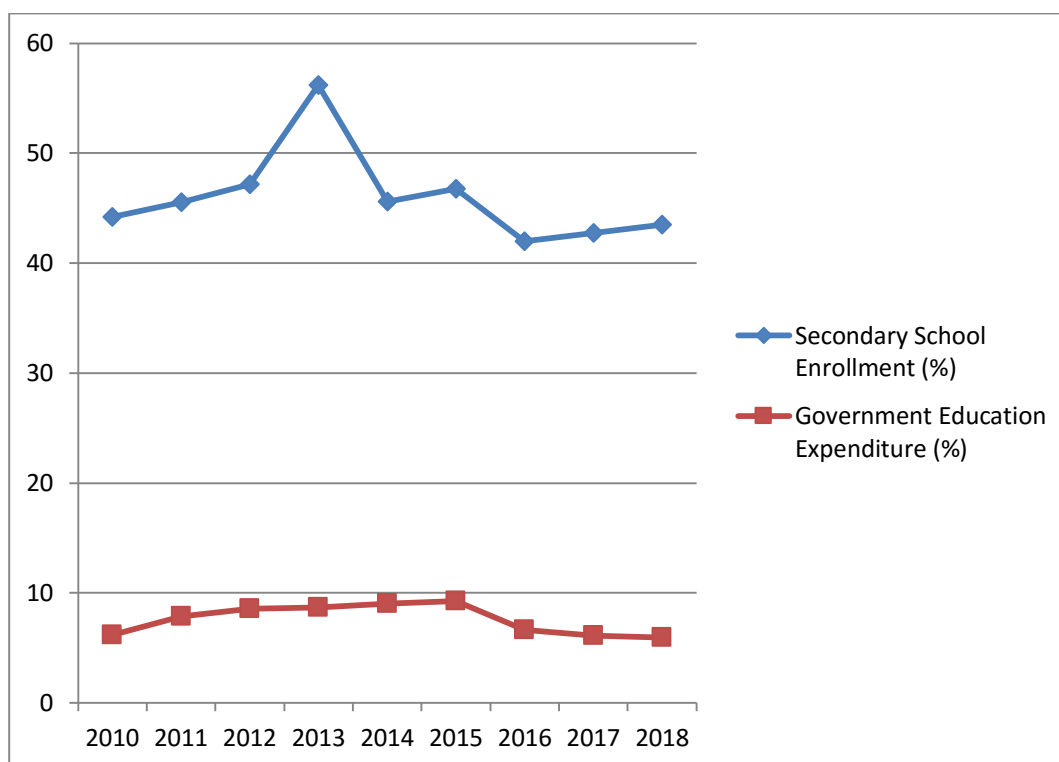


Figure 2: Line Graph of Education Spending and Secondary School Enrollment (2010-2018)

From the line graph, it shows that Nigeria recorded high secondary school enrollment in 2013 with 56.21% with a corresponding government education expenditure of 8.68%, followed by a decline in enrollment (10.59%) in 2014 in spite of an increased expenditure of 0.36% over the previous year. The record shows a government education expenditure of 5.94% in 2018 with a corresponding secondary school enrollment of 43.51%

Table 3: Pearson Correlation Coefficient of Government Education Expenditure and Secondary School Enrollment

		Government Education Expenditure	Secondary School Enrollment
Government Education Expenditure	Pearson Correlation	1	.610
	Sig. (2-tailed)		.081
	N	9	9

The table above shows the relationship between Government Education Expenditure and Secondary School Enrollment. We have that $r = .61$, $pvalue = 0.081$. The data did not show a significant relationship at $pvalue < 0.05$ but showed significance at $pvalue < 0.1$. This indicates a strong positive relationship between the variables.

4. DISCUSSION

The findings from Table 1 showed a fluctuating Nigerian government expenditure in education with a constant decrease after 2015. Nigeria recorded an all-time high in 2015 with 9.26% and had a steady decline down to 5.94% in 2018. It is important to note that Nigeria is estimated to account for the highest Gross Domestic Product (GDP) in Africa (Source) but has been ranked 11th in Quality Assurance in education by the World Education Forum (Edeh, 2023). The educational system has been on a constant decline which can be accounted for by the lack of improvement in the government education expenditure over the years. Just as Major, Favour and Leigha (2020) found out in their research, pointing out that the character and behavior of the government regarding educational funding can hardly support the realization of policy goals like quality assurance in educational institutions, as desired, and may further deteriorate existing mechanisms in the years ahead unless and until certain drastic measures are taken to reverse this trend.

Comparing the Nigerian government's expenditure on education to other African countries, we can properly decode the reason behind the lack of quality assurance in Nigerian education especially in Secondary Schools. Among the seven African countries selected for the study, Nigeria is sitting below in government education expenditure. All these countries; Seychelles, Egypt, Mauritius, Algeria, Kenya and South Africa with a higher per cent of government education expenditure are also sitting ahead of Nigeria in the best education system ranking by the World Education Forum.

The Pearson Correlation Coefficient analysis presented in Table 3 shows a relationship of $r = 0.61$ which means a percentage of 61%. The test showed a significant relationship at $pvalue < 0.1$ indicating a strong positive relationship between government education expenditure and secondary school enrollment. The relationship between these two variables is essential to note due to the impact government education expenditure can create on educational development which will encourage students to return to the classroom. When the government invests in education, it will subsidize the cost of education and empower human capacity for a better teaching and learning environment. It will improve infrastructure to accommodate a high rate of enrollment in the schools, and thereby increase the quality of education in Nigeria.

5. CONCLUSION

Education is an essential industry that is crucial for Nigeria to keep up with other industrialized nations. It is not possible to progress without establishing this crucial sector. Hence, it is possible to redress the face of education in Nigeria to create a better atmosphere for teaching and learning. Efforts and determination should be devoted to finding lasting solutions to the problems. An increase in educational funding, more infrastructural facilities, the hiring of more qualified teachers, improved school supervision, the elimination of all forms of corruption in educational administration, and effective planning of education should all be pursued. It is left on the shoulders of the various arms of government to properly adopt the UNESCO recommendations for better education inclusion and equity. When proper planning is put in place, educational stakeholders will also be charged to remain accountable for quality assurance delivery at all levels of the educational system in Nigeria.

Recommendation

Based on the findings of the research, the researcher's recommendations are elucidated below;

1. The Nigerian government should prioritize education during budget allocation to improve the quality of education at all levels.
2. The educational bodies in Nigeria should sit up and research issues of major importance for the government to make proper provisions on the areas in the educational system that need urgent attention and funding.

3. The policymakers and the Ministry of Education should liaise with the levels of government to implement laws that can protect the interest of education in Nigeria and further encourage the return to the classroom for the pupils and students.
4. There should be proper investigation and probing for all the financial allocation to the educational system to ascertain the level of input and usage of the finances.
5. There should be constant funding for research on educational development in Nigeria.

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