

Educational Policies and Labour Market Demands in Nigeria: A Pathway to Sustainable Development

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Abstract

This paper investigates the alignment between educational policies and labour market demands in Nigeria as a pathway to sustainable development. The study uses quantitative analysis of employment data and educational outcomes. The research identifies significant gaps between the skills produced by current educational systems in Nigeria and those required by the labour market, particularly in high-growth industries such as technology and renewable energy. The findings reveal that proactive policy adjustments, driven by real-time labour market data, can significantly reduce skills mismatches. The findings also underscore the importance of flexible curriculum designs, continuous professional development for educators, and strong partnerships between educational institutions and industries. The study concludes that aligning educational policies with labour market demands in Nigeria is crucial for sustainable development, as it not only enhances employability and economic resilience but also supports social equity by ensuring that all students, regardless of background, have access to relevant skills and opportunities. It was recommended that the establishment of national skills councils, regular curriculum reviews, and investment in vocational education and training programs tailored to future labour market trends are essential.

Keywords: Educational policies, Labour market Demand, Sustainable Development

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Introduction

The alignment of educational policies with labour market demands has become increasingly critical for sustainable development, particularly in developing countries like Nigeria. As the nation grapples with high unemployment rates and underemployment among its youth, the mismatch between the skills produced by educational institutions and those required by the labour market has become a significant barrier to economic growth and social stability. Recent studies have highlighted that Nigeria's educational system is often disconnected from the realities of the labour market, producing graduates with qualifications that do not meet the needs of employers, particularly in high-growth sectors such as technology, agriculture, and renewable energy (Okafor & Olaniyan, 2020; Ugochukwu & Adedoyin, 2021). This disconnect contributes to the persistent unemployment crisis, as young graduates struggle to find jobs that match their skills, leading to widespread underemployment and economic inefficiencies (Olanrewaju, 2019).

Efforts to address these challenges have been sporadic and largely ineffective, with many policies failing to translate into meaningful changes in educational outcomes (Nwogu & Udeh, 2018). However, recent policy discussions have increasingly focused on the need to integrate labour market data into educational planning processes to ensure that the skills being taught are relevant to the demands of the economy (Adeniran et al., 2021). This study builds on these discussions by examining the current gaps in Nigeria's educational policies and proposing strategies for better alignment with labour market demands. By focusing on sustainable development, the study emphasizes the importance of creating an education system that not only meets immediate labour market needs but also contributes to long-term economic resilience and social equity.

Objectives of the study

The primary objective of this study is to address the educational policies and labour market demand in Nigeria: a pathway to sustainable development. The specific objectives are to:

- i. assess the extent to which educational institutions in Nigeria are producing graduates with skills that match the needs of the labour market;
- ii. evaluate the effectiveness of existing educational policies in addressing labour market demands;
- iii. examine the potential impact of aligned educational policies on sustainable development in Nigeria.

Research questions

1. How effectively do educational institutions in Nigeria equip graduates with the skills required by employers in key industries?
2. What are the strengths and weaknesses of current educational policies in promoting employability and economic development?
3. How can improved alignment contribute to reducing unemployment, fostering economic growth, and achieving broader social and economic sustainability?

Literature Review

Education is widely recognized as a key driver of economic growth and sustainable development. According to Olanrewaju (2019), education equips individuals with the skills necessary to participate in the labour market, contributing to productivity and innovation. In Nigeria, however, the education system has struggled to produce graduates with the skills required by the economy, leading to high levels of unemployment and underemployment. The author argues that for education to contribute effectively to economic development, it must be closely aligned with labour market demands. Adeniran et al. (2021) emphasize that the alignment of educational policies with labour market needs is essential for achieving the Sustainable Development Goals (SDGs), particularly those related to quality education (SDG 4) and decent work and economic growth (SDG 8). Their study highlights the importance of vocational and technical education in preparing students for specific industries, particularly in sectors like agriculture, technology, and renewable energy, which are critical for Nigeria's sustainable development.

Educational Policy and Labour Market Alignment

Despite various educational reforms, the alignment between education and labour market demands in Nigeria remains weak. Nwogu and Udeh (2018) examine the effectiveness of existing educational policies in addressing this issue. They find that while some policies have been successful in expanding access to education, they have often failed to ensure that education is relevant to the needs of the labour market. The authors call for more comprehensive reforms that involve close collaboration between policymakers, educational institutions, and industry stakeholders. Adeniran et al. (2021) propose a framework for aligning educational policies with labour market demands in Nigeria. Their framework emphasizes the need for continuous engagement between education providers and employers, the use of labour market data to inform curriculum development, and the integration of vocational training into mainstream education. The authors argue that such an approach is necessary to ensure that education contributes to both economic growth and social equity.

2.1.2 Demands for Sustainable Development in Nigeria

The alignment of educational policies with labour market demands is increasingly recognized as critical for achieving sustainable development in Nigeria. The literature on this topic explores the intersections between education, employment, and economic development, emphasizing the need for reforms that ensure the educational system meets the evolving needs of the labour market. This review synthesizes studies from 2010 to 2024, focusing on the challenges of skills mismatches, the role of vocational education, and the effectiveness of policy interventions.

The Importance of Education in Sustainable Development

Education plays a pivotal role in fostering sustainable development by equipping individuals with the skills needed for productive employment and active participation in society. According to Olanrewaju (2013), education contributes to economic growth by enhancing the human capital required for innovation and competitiveness. However, in Nigeria, the disconnect between the

education system and labour market demands has led to persistent unemployment and underemployment, particularly among youth (Ayonmike, 2014). The United Nations Educational, Scientific and Cultural Organization (UNESCO, 2012) underscores the importance of aligning education with the demands of the labour market to achieve Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education) and SDG 8 (Decent Work and Economic Growth). This alignment is crucial for ensuring that education systems are responsive to the needs of the economy and can support long-term sustainable development (Oketch, 2014).

Policy Interventions and Reforms

Several policy interventions have been proposed and implemented to address the misalignment between education and labour market demands in Nigeria. Nwogu and Udeh (2018) examine the effectiveness of these policies, noting that while some progress has been made, significant challenges remain. The authors identify the need for more comprehensive reforms that include regular curriculum reviews, the incorporation of labour market data into educational planning, and the promotion of lifelong learning opportunities. Adeniran et al. (2021) propose a framework for aligning educational policies with labour market demands that includes continuous stakeholder engagement, the use of technology to track labour market trends, and the integration of entrepreneurial education into the curriculum. The authors argue that such a framework would not only improve the relevance of education but also support broader goals of economic diversification and sustainable development.

Challenges and Opportunities for Nigeria

Aligning educational policies with labour market demands in Nigeria presents both challenges and opportunities. As Adebisi et al. (2015) point out; one of the major challenges is the lack of accurate labour market information, which makes it difficult for policymakers and educators to respond effectively to changes in the economy. Additionally, institutional barriers such as outdated curricula, inadequate infrastructure, and insufficient funding for vocational

education hinder efforts to align education with employment needs. However, there are also significant opportunities. Adeniran et al. (2021) highlight the growing demand for digital skills as a key area where Nigeria can align its education system with global labour market trends. By investing in digital education and ensuring that students acquire relevant skills, Nigeria can position itself as a leader in the knowledge economy and create new pathways to sustainable development.

Theoretical Review:

The alignment of educational policies with labour market demands is a complex issue that involves understanding various theoretical frameworks. These frameworks provide insights into how education can be structured and managed to meet the demands of the labour market, thereby contributing to sustainable development. This theoretical review discusses several key theories relevant to this topic, including Human Capital Theory, Skills Mismatch Theory and Sustainable Development Theory.

Human Capital Theory

Human Capital Theory, developed by economists such as Schultz (1961) and Becker (1964), posits that investments in education and training increase the productivity of individuals, which in turn enhances economic growth and development. The theory suggests that education is a form of capital that yields returns in the form of higher wages, improved employment opportunities, and increased productivity. In the context of Nigeria, Human Capital Theory provides a rationale for aligning educational policies with labour market demands. By ensuring that education and training programs are designed to meet the specific needs of the labour market, policymakers can enhance the employability of graduates and contribute to economic growth. Olanrewaju (2019) argues that the misalignment between educational outcomes and labour market demands in Nigeria has led to a significant underutilization of human capital, which hampers the country's development. This theory underscores the importance of investing in relevant education and training to maximize the economic benefits of human capital.

Skills Mismatch Theory

Skills Mismatch Theory explores the discrepancies between the skills acquired through education and training and those demanded by employers in the labour market. According to this theory, a mismatch between education and labour market needs can lead to unemployment, underemployment, and economic inefficiencies (Okafor & Olaniyan, 2020). In Nigeria, the persistence of high youth unemployment despite increasing educational attainment suggests a significant skills mismatch. Oketch (2020) emphasizes that the Nigerian education system has not kept pace with the rapidly changing demands of the labour market, particularly in sectors such as technology and manufacturing. The theory highlights the need for ongoing curriculum reform, the integration of vocational and technical training, and close collaboration between educational institutions and industry to address the skills gap.

Sustainable Development Theory

Sustainable Development Theory provides a framework for understanding the long-term implications of aligning educational policies with labour market demands. This theory, rooted in the concept of meeting the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987), emphasizes the importance of integrating economic, social, and environmental considerations into policy decisions. Adeniran et al. (2021) apply Sustainable Development Theory to argue that aligning education with labour market demands is not only an economic necessity but also a critical component of achieving sustainable development. The authors suggest that by ensuring that education systems are responsive to labour market needs, Nigeria can foster inclusive economic growth, reduce poverty, and promote social equity. Moreover, the alignment of education with emerging sectors such as renewable energy and sustainable agriculture is essential for supporting environmental sustainability.

Empirical issues

The literature also provides examples of countries that have successfully aligned their educational policies with labour market

demands, offering lessons for Nigeria. For instance, Olanrewaju (2019) discusses the case of Germany, where a strong vocational education and training (VET) system has been instrumental in reducing youth unemployment and supporting economic growth. The author suggests that Nigeria could benefit from adopting similar approaches, tailored to its specific economic and social context.

Similarly, Ugochukwu and Adedoyin (2021) highlight the experiences of South Korea, where close collaboration between educational institutions and industry has ensured that education remains relevant to the needs of the economy. The authors argue that such collaboration is essential for Nigeria if it is to achieve sustainable development.

As Okafor and Olaniyan (2020) point out, one of the major obstacles is the lack of accurate and up-to-date labour market data, which makes it difficult for policymakers and educators to respond effectively to changes in the economy. Additionally, there are institutional barriers, such as outdated curricula and insufficient resources for vocational training, that hinder efforts to align education with employment needs.

However, Adeniran et al. (2021) suggest that the growing interest in digital skills and technology presents a unique opportunity for Nigeria to align its education system with the demands of the global economy. By investing in digital education and ensuring that students acquire relevant skills, Nigeria can position itself as a leader in the knowledge economy.

Methodology

Model Speculation

This study adopts Ordinary Least Square (OLS) regression method to analyze the causal relationship between growth as a proxy for sustainable development and educational policies in Nigeria between 1991 and 2023. In the process of analyzing the data to answer the research questions and draw valid conclusion, the model regresses the dependent variable (GDP at current US\$) on the independent variables (Unemployment rate, Expenditure on Education, Total Labour Force, adjusted saving on education).

The following model was considered for general estimation for this study

$$\log(GDP_t) = \beta_0 + \beta_1 UEMPR_t + \beta_2 \log(EXPED_t) + \beta_3 \log(TLBF_t) + \beta_4 \log(ADJTS_t) + \mu_t \quad (1)$$

$\log(GDP_t)$ is the log of Gross Domestic Product at current \$US

$UEMPR_t$ is the unemployment rate

$\log(EXPED_t)$ is the log of expenditure on Education

$\log(TLBF_t)$ is the total labour force at the log base

$ADJTS_t$ is the adjusted savings on education expenditure

β_0 : is the intercept obtainable when the respective explanatory variables assumed zero, while β_1 , β_2 , β_3 and β_4 are slopes coefficients of the respective impact of the explanatory variables on the response variable. μ : is stochastic or random or error term to accommodate the influence of other determinants of Insecurity that are not included in the model.

Analysis

Unit Root Test

Table 1: Unit Root Test (Stationary Test)

Variables	Level t-Statistics	1 st different t-Statistic	Test critical values @5% level	Order of integration
GDP	-4.074188 (0.0197)	Nil	-3.612199	I(0)
D(GREXEDU)	Nil	-4.672925 (0.0009)**	-	I(1)
D(TOTAL_LABOUR_FORCE)	Nil	-4.390778 (0.0016)**	-	I(1)
D(UNEMPLOYMENT__TOTAL)	Nil	-3.464117 (0.0169)**	-	I(1)

Source: Author's Compilation

The result in the table above indicated that the Null hypothesis of the unit root test of the variables cannot be rejected when the variables are stationary in their first difference levels except the GDP at current price that is significant in level.

Long run relationship among the variables

In spite of the stationarity of the variable, the long-run relationship of the variables was as well conducted.

Table 2: Johansen Co-integration Test

Included observations: 29 after adjustments

Trend assumption: Linear deterministic trend

Series: UNEMPLOYMENT__TOTAL___O TOTAL_LABOUR_FORCE
GREXEDU GDP__CURREF

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.752519	61.02146	47.85613	0.0018
At most 1	0.327961	20.52521	29.79707	0.3879
At most 2	0.169815	8.999471	15.49471	0.3654
At most 3	0.116815	3.602393	3.841466	0.0577

Trace test indicates 1 cointegrating equation(s) at the 0.05 level

* Denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.752519	40.49625	27.58434	0.0007
At most 1	0.327961	11.52574	21.13162	0.5948
At most 2	0.169815	5.397078	14.26460	0.6911
At most 3	0.116815	3.602393	3.841466	0.0577

Max-eigenvalue test indicates 1 cointegrating equation(s) at the 0.05 level

* Denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Table 2 present the Johansen co-integration test at 0.05 level of significance. The result shows the model has corroborated by maximum Eigen values of probability 0.0007. It is concluded that a long-run relationship exists among the variables. Also, the long-run relationship among the variables can be confirmed between trace statistic and critical values.

Serial Correlation Test

Table 3: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	20.04004	Prob. F(2,24)	0.0000
Obs*R-squared	19.38953	Prob. Chi-Square(2)	0.0001

Source: EViews Computation, 2024

The result revealed that the model is free from the problem of the serial correlation since F-statistics value of 20.04004 with the probability value of 0.0000 which is less than 5% level of significance.

Heteroscedasticity Test

To validate the constant variance of the model (Homoscedasticity), so as not to lead to bias estimation of the model parameters, this study checked the Heteroscedasticity Test of the model.

Table 4: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.782862	Prob. F(4,26)	0.0476
Obs*R-squared	9.293333	Prob. Chi-Square(4)	0.0542
Scaled explained SS	5.089497	Prob. Chi-Square(4)	0.2782

Source: EViews Computation, 2024

As seen from table 4 above, the F-Statistics and the probability is significant with the model with a less than 5% value of 0.0476 which is in order.

Test Equation:

Dependent Variable: LOG(GDP__CURREF)

Table 5: Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(ADJUSTED_SAVINGS__E DUCAT)	-0.057002	0.088746	-0.642306	0.5263
LOG(GREXEDU)	0.107315	0.050918	2.107625	0.0449
LOG(TOTAL_LABOUR_FORCE)	0.789927	0.081106	9.739388	0.0000
UNEMPLOYMENT__TOTAL__ _O	0.008632	0.076905	0.112246	0.9115
C	6.064889	2.536357	2.391181	0.0243
R-squared	0.946525	Mean dependent var	25.97873	
Adjusted R-squared	0.938298	S.D. dependent var	0.790545	
S.E. of regression	0.196371	Akaike info criterion	-0.270931	
Sum squared resid	1.002602	Schwarz criterion	-0.039643	
Log likelihood	9.199430	Hannan-Quinn criter.	-0.195537	
F-statistic	115.0512	Durbin-Watson stat	0.493085	
Prob(F-statistic)	0.000000			

Table 5 indicates the Ordinary Least Square Analysis of the variables. The constant variable is significant with log (GREXEDU) which is

the expenditure on education with probability value of 0.0449. This is as well the same as for the total labour force, log (TOTAL_LABOUR_FORCE) with probability of 0.0000. As expected, the unemployment rate, UNEMPLOYMENT __TOTAL___O, is not significant with the regressor with the value of 0.9115 as well as the adjusted saving in education with the value of 0.5263. The Equation is very well significant with R-Squared value of 95% approximately.

Findings and Discussion

Based on the findings from above, it was shown that government revenue and expenditure on education has a significant relationship. Without sufficient expenditure on educational resources such as good curriculum development, no corresponding development can be sustained in the sector. It is of utmost importance to improve the quality of education through funding to be able to improve the future sustainability of labour force that can serve in different capacities in the various sector of the economy.

It is evident from the findings that allocation to educational sector since the period of study of this research, 1991, has been very low. The adjusted savings to education never has a corresponding effect on GDP. This could only be improved upon by increasing expenditure on education to meet up with the 26% total annual budget standard of the United Nations Educational Scientific and Cultural Organization (UNESCO). Educational policy in the country has not been favourable with the standard of the Sustainable Development Goals, SDGs as revealed in the relationship of unemployment rate, adjusted saving on education and the government revenue, GDP.

Conclusion

Aligning educational policies with labour market demands is crucial for Nigeria's sustainable development. The current disconnect between education and employment has contributed to persistent high unemployment rates, particularly among youth, and has hindered economic growth. By addressing this gap, Nigeria can unlock its potential to foster a highly skilled workforce that meets the needs of the evolving labour market. From the regression result, it

was found that government revenue and expenditure on education has significant relationship. Therefore, the need for government funding of the educational sector is crucial. Labour supply is also significant with government revenue, showing that with increase in government expenditure, there will be improvement in labour supply by increasing school enrolment to foster future sustainability of the work force in different sectors of the economy.

Recommendations

Based on the findings this study, it is recommended that;

1. **Regular Curriculum Review and Reform:** The Nigerian government and educational institutions should establish a regular process for reviewing and updating curricula to align with current labour market demands. This reform must incorporate input from industry stakeholders, ensuring that academic programs are tailored to the needs of growing sectors like technology, agriculture, and renewable energy. Vocational and technical education should be prioritized to equip students with practical skills.
2. **Strengthen Partnerships between education and industry:** Stronger collaboration between educational institutions and industries is essential to bridging the gap between education and employment. This could involve formal partnerships, internships, apprenticeships, and mentorship programs that provide students with real-world experience. Employers should be directly involved in developing curricula, setting competency standards, and offering practical training opportunities.
3. **Promote Vocational and Technical Education (VTE):** Vocational and technical education should be promoted as a viable alternative to traditional academic paths. The government must increase investment in VTE by building more training centres, equipping existing facilities with modern tools, and ensuring qualified instructors are available. This will help reduce unemployment and create a workforce capable of supporting key industries in Nigeria.

4. **Incorporate Labour Market Data into Policy Decisions:** Educational policymakers should utilize real-time labour market data to inform decisions about academic programs, enrolment quotas, and resource allocation. Labour market forecasting can help identify trends and skill demands, enabling the education sector to respond proactively to emerging economic opportunities.
5. **Enhance Digital and Entrepreneurial Education:** Given the global shift towards a knowledge-based economy, Nigeria's education system should focus on digital literacy and entrepreneurship. Digital skills, particularly in areas such as coding, data analysis, and digital marketing, are increasingly in demand. Entrepreneurial education will also prepare students to create their own businesses, thus reducing reliance on formal employment and promoting economic diversification.
6. **Increase Government Funding for Education:** Adequate funding is critical to the successful implementation of these recommendations. The Nigerian government must prioritize investment in education by increasing the national budget allocation for both general and vocational education. Funding should be directed toward improving infrastructure, providing modern teaching materials, and ensuring that educators are well-compensated and trained.

By implementing these recommendations, Nigeria can create an education system that not only meets labour market needs but also fosters sustainable economic development, reduces unemployment, and promotes social equity.

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