



Influence of Quality Education and Unemployment Rates on the Poverty Rate in Kano State

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Abstract	Original Research Article
<p>Poverty remains a persistent socio-economic challenge in Kano State, Nigeria, despite various policy interventions. This study explores how quality educational standards and joblessness patterns affect poverty elimination processes, which leads to sustainable economic development. The research examines these relationships through Human Capital Theory by studying how education creates job access and how joblessness causes more poverty, and what policy initiatives can resolve these issues. Details about essential points, including skills mismatch and insufficient vocational education and ineffective labor market conditions, emerge from examining theoretical frameworks, policy papers, and existing literature. The study reveals that excellent educational standards generate economic possibilities, but these advantages remain obscured because an excess of unemployed individuals stems from poor industry-school cooperation, together with scarce business opportunities. The study proposes changes to education strategies that must match learning topics to job market requirements and must develop both technical training programs and business creation initiatives while creating better employment policies. The proper implementation of these approaches will enable Kano State to use education as a way to create lasting economic strength while effectively fighting poverty.</p> <p>Keywords: Quality Education, Unemployment, Poverty Reduction, Human Capital Development, Economic Sustainability.</p>	

INTRODUCTION

Quality education, along with unemployment rates and poverty, continues to be a central matter of global academic study and policy advocacy. Education represents the basic catalyst of socio-economic development, which provides people with essential knowledge together with required skills and abilities for productive employment and economic advancement (Nwachukwu, G. O., 2024). Nigeria and other developing economies deal with persistent high unemployment and economic hardship, even though education has become a primary concern worldwide. The World Bank (2024) identifies low education quality in countries as a primary reason for their slow growth and their absence of industrial development and long-lasting poverty conditions. The relationship between education and economic results has motivated experts as well as policy designers to research how better school systems can lessen employment issues and economic poverty. As the biggest economy in Africa Nigeria experiences a situation where

raising school enrollment numbers has failed to bring substantial shifts to unemployment or poverty statistics (Egunjobi, T. A., 2014).

Various policy-aligned socio-economic elements shape the intricate relationship between education and employment and poverty in the Nigerian system. The Nigerian government has undertaken various educational reforms to enhance quality yet educational issues stem from outdated curricula and funding shortages together with skill deficits between graduates' capabilities and market requirements (Ra, S., et al., 2015). A significant number of university-educated Nigerians (over 40% as per National Bureau of Statistics reports in 2023) face joblessness in searching for appropriate employment. Kano State faces particularly acute socio-economic disparities because it represents a vital northern Nigerian economic center but simultaneously maintains elevated poverty rates as well as restricted employment options. The state experiences high unemployment and poverty rates, according to Jiboku J.O et al. (2021), because it faces economic structural challenges and

cultural barriers along with inadequate technical education. The state needs detailed knowledge about how education quality affects the capabilities to gain employment while fighting poverty.

The existing body of literature about education in economic development has achieved a thorough examination missing pieces still exist. The existing research shows that higher education contributes to job opportunities, yet there is limited focus on the quality aspects of education that would support employment generation and poverty elimination (Aliyu et al., 2024). Studies about the connection between education and the labor market mostly employ national datasets, which ignore geographical variations in educational effects on unemployment rates (Mohammed, 2022). This analysis examines the unique relationship between Kano State's education quality and its unemployment rates and poverty situations to find effective solutions for population economic development. The integration of education policy views with labor economics perspectives and entrepreneurship insights provides a complete framework for handling these socio-economic issues (Mohammed, 2023).

The investigation brings important findings at several different levels. The research supports ongoing academic discussion regarding human capital growth by demonstrating that superior education establishes employment prospects for stable economies. The research data enables policymakers, alongside educators as well as industry stakeholders, to build methods that establish educational success standards that match current workforce requirements. The study incorporates Kano State evidence to provide localized guidance about reducing poverty by using education-based employment strategies. The future economic growth of Nigeria relies on its educational system creating graduates who master academic knowledge and essential skills to establish sustainable careers, according to Mohammed (2024). Educational planning and employment policies must undergo a fundamental change to develop a Kano State workforce that properly handles the needs of the changing economic atmosphere.

1.1 Statement of the Problem

Educational processes as well as employment status align together with poverty levels to create major global development debates. Multiple research works (Kruss, G., et al., 2015) establish that greater educational achievements lead to better job potentials because education functions as a primary economic growth driver and social advancement catalyst. The educational outlets of numerous developing countries like Nigeria generate graduates who lack the skills demanded by the labor marketplace (World Bank, 2023). The unemployment problem in Kano State continues to grow despite a growing number of graduates (Gambo Umar, M., 2016). Underemployment of youth has surged because educational outputs fail to match market demands which creates increased poverty and slows down economic growth (Rahman, M., et al., 2021). Resolving this gap between education quality and employment possibilities needs full evaluation of quality

influencing variables together with their effect on career opportunities.

Research studies have investigated educational effects on employment but fail to answer crucial novel questions. Research based studies dealing with educational education quantity and enrollment numbers fail to measure education quality together with its effect on employment opportunities (Aliyu et al., 2024). The educational and employment discussions primarily focus on national data which overlooks the diverse realities that exist between different regions of the country (Sundararajan & Mohammed, 2022). The number of studies which analyze the relationship between entrepreneurial education with vocational training and their potential to fight unemployment and decrease poverty in Kano State remains minimal (Mohammed, 2022). Empirical research is absent regarding how well educational policies train graduates for market work (Sundararajan & Mohammed, 2022). The research seeks to develop an advanced comprehension of education quality effects on employment and poverty reduction in a particular regional area by filling knowledge gaps.

Economic development together with social growth become directly affected by this issue. Through practical implementation the study shows policymakers how to develop policies that match workforce requirements by equipping graduates with essential job market and entrepreneurial abilities (Mohammed, 2023). Both vocational and entrepreneurial education play a crucial role in employment creation so curriculum reforms should consider these factors to develop self-employment pathways which support economic sustainability (Sundararajan & Mohammed, 2022). Theoretical work of this research adds value to human capital and labor market theories through its investigation of how educational quality shapes employment changes in developing economies. Through solving these problems scholars can advance their discussions while establishing policies which create economic resilience for Kano State and additional geographic areas.

1.3 Research Objectives

The primary purpose of this research explores how quality education and unemployment rates affect the poverty levels within Kano State. The specific objectives are:

- 1. To examine how excellent education approaches contribute to poverty decreases within Kano State.
- 2. To determine how unemployment statistics affect poverty distribution throughout Kano State.
- 3. To analyze how quality education interacts with unemployment rates when calculating poverty statistics.
- 4. To propose policy recommendations for improving educational access and job placement opportunities in order to reduce poverty throughout Kano State.

1.4 Significance of the Study

The study provides important theoretical and practical contributions that reveal the intricate relationship between quality education along with unemployment levels and poverty

reduction within Kano State. Empirical research findings from this study add to human capital development theories that examine how education quality impacts employment possibilities while reducing poverty levels. This study develops the understanding of educational empowerment through combination of Human Capital Theory (Becker, 1964) and Capability Approach (Sen, 1999) theories. Research findings now support development agencies and educational administrators along with policymakers to produce successful strategies for standard education improvements and unemployment resolution. The high out-of-school child population in Kano State (Ogunode, N. J., et al., 2022) makes it essential to study education and poverty connections for effective intervention creation. Research results will enable the government to create better policies that increase quality education access and establish vocational training programs based on skills for creating jobs.

This study brings value to private sector stakeholders who employ people and conduct business because the research results help them match educational programs with current workforce requirements. When institutions match educational content to employer needs it produces better employable workers who sustain an economy for a longer period (Ahmad, S. R., et al., 2023). Non-governmental organizations, along with development organizations operating poverty reduction programs, should use this research to build efficient programs that combine educational access and work opportunities to fuel economic self-sufficiency (Prabhakar, A. C., 2025). Education levels of the workforce lead to economic diversification and innovation, according to research, which results in lower long-term poverty rates (Bykova, V., et al., 2024).

Areas that have effective educational structures achieve better economic stability and improved social progress, according to studies conducted by Singh P.K. and Chudasama H. (2020). The importance of education grows exponentially during digital transformations because it prepares users for opportunities found in online marketplaces and e-commerce platforms (Sundararajan & Mohammed, 2024). The study addresses serious socioeconomic troubles affecting Kano State by delivering findings that match present-day conditions. The study explains the essential relationships between schooling and work opportunities and poverty because it helps create strategic educational and workforce systems that decrease economic vulnerability and enhance overall lifestyle quality.

2.0 LITERATURE REVIEW

2.1 Review of Past Studies

Educational research analyzes the relationship between education quality and unemployment and poverty reduction because education transforms economic development. Grant, C. (2017) established that improving workforce productivity and employability through quality education enhances poverty reduction significantly. Throughout their research, Mian L. et al. (2022) prove that elevated education levels create superior employment possibilities, which reduce both unemployment rates and

economic inequalities. Subramani et al. (2024) investigate how digital platforms, particularly the Metaverse, help encourage entrepreneurship as a mechanism to generate new employment options and eliminate poverty.

Researchers have studied the mutual relationship that exists between jobless rates and poverty evolution patterns. Kluve J. and researchers (2019) perform a meta-analysis of active labor market policies to determine that vocational training with education delivers reduced unemployment rates which help minimize poverty levels. The study conducted by Mayer T et al (2019) reveals how structural unemployment in youthful populations exists because of skills mismatches primarily affecting developing economies. The research conducted by Mohammed and Sundararajan (2024) studies the employment effect of agriculture automation to create resilient sustainable livelihoods which combat poverty.

The implementation of gender-sensitive educational policies serves as a crucial factor in diminishing differences in unemployment rates between genders according to gender-based academic research. Sundararajan and Mohammed (2022) investigate entrepreneurial prospects, which, according to them, require gender-specific training programs and financial support to boost women's workforce engagement confirm that quality education for women increases their employment opportunities and lowers their risk of living in poverty. Onarheim K. H. and colleagues (2016) show that female educational investments generate extensive economic advantages since they create poverty reduction across generations.

The relationship between technological disruptions and artificial intelligence (AI) systems plays an important role in creating employment and reducing poverty. The relationship between AI-driven entrepreneurship and economic growth depends on adaptive skill development, according to Sundararajan and Mohammed (2023), because it helps decrease job displacement. Chinoracký, R., & Čorejová, T. (2019) researched the labor market effect of automation, and they reported that technological jobs vanish yet innovative fields produce new employment possibilities. The adoption of AI requires government policy measures, according to George, A. S. (2024), to guarantee fair job transitions.

Multiple Nigerian researchers focus on studying the relationship between education together with joblessness, and poverty within the Nigerian social framework. Nana, R. U. A. (2018) studies the relationship between poor educational facilities that lead to increasing joblessness, particularly throughout Kano State, which lacks effective vocational training services. The research by Okolie, U. C., et al. (2019) identifies problematic aspects in Nigeria’s labor market policies that demand curriculum-relevance to industry needs to be improved. Torracco, R. (2018) explains that insufficient funding for education causes quality problems, which feed into unemployment and poverty patterns. Through policy-driven research, investigators identify different interventions that strive to resolve these matters. The research by Millán T.M. et al. (2019) demonstrates that cash transfer schemes create better results when educational funds are specifically invested for improved long-term work potential. The authors Chhetri, D., &

Zacarias, F. (2021) support education policy decisions with evidence to achieve economic development while maintaining equality. Olaniyi, O. (2010) stresses that effective reduction of unemployment and poverty requires the government to work together with private sector organizations in reforming Nigeria’s educational system.

2.2 Conceptual Framework

The research presents its conceptual framework to understand major concepts in relation to each other which aids analysis of the relationship between educational quality and unemployment levels and poverty reduction. The framework unites human capital theory with labor market studies and technological understanding and entrepreneurial insights to show how education functions as an essential tool for economic uplift and job development.

Education as a Catalyst for Economic Mobility

The academic community consistently supports education as the central force which drives economic development because it forms human capital. The improvement in worker productivity through education investments increases job earnings and gives people better economic opportunities according to Pal L.C. (2023). Quality education teaches students cognitive abilities that enhance their income potential and job prospects especially within developing economic settings according to Nunoo, J., et al., (2024). Okolie, U. C., et al., (2019) studied the educational-employment gap in Africa, which results from outdated curricula unable to develop the right competencies needed by students for contemporary work opportunities.

The policy organization UNESCO (2021) states that educational institutions should modify their systems to align with labor requirements to give students market-ready skills. According to Mohammed (August 18–19, 2023), Industry 5.0 is transforming human resource management along with workforce readiness through digital educational programs and skill retraining.

Unemployment and Skill Mismatch

The unemployment levels grow because people lack the appropriate skills for available jobs. Nwaikpo P. N. O. (2025) demonstrates that structural unemployment persists when graduates lack skills that meet industrial requirements, thus causing work dissatisfaction alongside reduced task responsibilities. George, A. S. (2023) explains in his research the role of automation and AI in speeding up skill obsolescence and the requirement for perpetual learning for workers. Sustainable business development is influenced by digital transformation in human resource practices, according to Mohammed (2023, May 26–27) in his research.

The Role of Technology and Digital Transformation

Modern technological innovations reform work structures by producing modern job options alongside the

elimination of conventional workplace habits. Bühner, C., & Hagist, C. (2017). demonstrate through research how digitalization produces two significant employment impacts by both increasing high-skilled opportunity and decreasing positions suitable for lower-skilled workers. The research by Morandini S. et al. (2023) shows that Artificial Intelligence decreases workforce needs in particular fields, yet it generates new employment opportunities when workers obtain digital competencies. During his presentation from March 5th to 7th, 2024, Mohammed presented agricultural employment trends that illustrate the necessity of resilient workforce abilities in the face of automation and innovation.

The study by Goulart, V. G., et al. (2022) in Nigeria demonstrates how ICT skills have become essential for qualifying as employable. During their presentation at the conference, Mohammed (2023, May 24–25) examined HR management strategies for global talent, which demonstrated how HR analytics based on technology enhances workforce planning.

Entrepreneurship and Sustainable Economic Growth

Entrepreneurship functions as an essential method to lower unemployment rates while developing economic expansion. Studying the relationship between entrepreneurial activity and economic development, Isaiah, O. S., & Dickson, R. K. (2024) establish the role of new product and service creations from entrepreneurship in driving economic development. The authors of O’Reilly et al. (2018) demonstrate that changing from traditional employment toward entrepreneurial economies produces modern business possibilities mainly in the digital age.

According to Subramani et al. (2024), startup operations within virtual economies become possible because of Metaverse entrepreneurial opportunities. Sundararajan and Mohammed (2023) analyzed digital platforms alongside AI systems as they help promote business scalability.

The paper by Mohammed and Sundararajan (2024) explored automation together with innovation and resilience as factors which secure sustainable livelihoods for agricultural employment. According to Mohammed (2024, May 31) strategic HR management interacts with entrepreneurship and sustainable growth through a mediating mechanism.

Human Capital Investment and Policy Implications

Economic development requires essential investments in people as human capital. Grant C. (2017) proved that workforce training and educational development improve worker performance, which delivers prolonged economic advantages. Education return investments reach their peak levels according to Operti R. and colleagues (2014) when policy emphasizes both quality and inclusivity in educational approaches. According to Mohammed (2024) the relationship between responsible productions alongside responsible consumption influences the sustainable development of

agricultural livelihoods. The policy recommendation from Custer, S., et al. (2018) includes data-based education reforms to provide equal educational opportunities alongside relevant labor market alignment. HR strategies play a crucial role in uniting entrepreneurship with sustainable economic growth, according to Mohammed (2024, May 31).

2.3 Theoretical Framework:
Human Capital Theory

The framework of this study is based on Human Capital Theory which Schultz (1961) first developed before Becker (1993) extended it further. When people make investments in education along with training and acquiring skills their productivity rises thus granting them better employment chances and increasing their earnings and advancing economic growth.

Link to the Study

Human Capital Theory serves as the analytical basis because it explains the relationship between advanced educational standards as they effects labor market participation and anti-poverty solutions. Nigeria becomes one of many developing

nations that face an intricate unemployed workforce problem because job seekers' educational backgrounds do not align with employer needs (Okolie, U. C., et al., 2019). People achieve both higher economic impact and employability by incorporating knowledge with competencies alongside digital skills as per the theory (Van Laar, E., et al., 2017).

Orientation about technological market changes necessitates continuous skill development, which stands as a vital factor (Li, L. 2024). The policy approach of the theory emphasizes that public entities, together with private organizations, need to fund educational and practical instruction programs so workers can become more prepared for their jobs. The economic expansion depends on HR strategy and worker skills enhancement programs along with educational initiatives designed to eliminate skill shortages (Zervas, I., & Stiakakis, E., 2024).

Human Capital Theory creates an excellent groundwork in research because it demonstrates how educational standards and employee skill development together with job preparation practices directly increase worker employability which reduces poverty. The theory functions as evidence that human capital investment stands as a main approach to build resilient economies and create sustainable development.

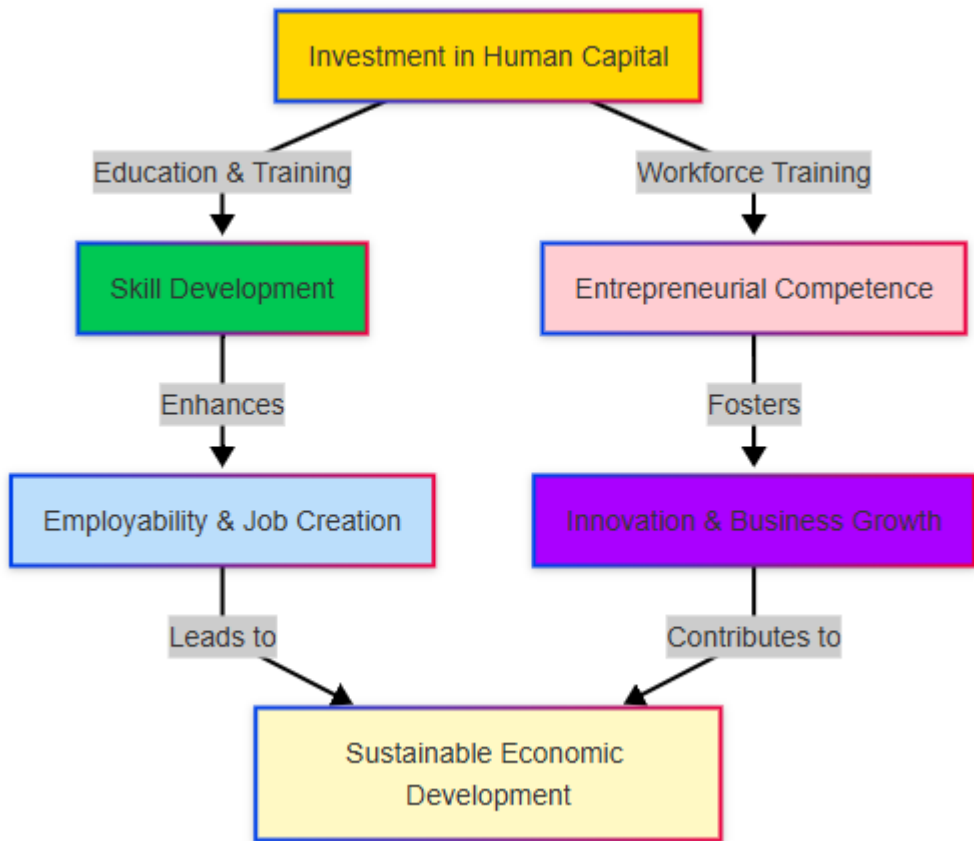


Figure 1: Human Capital Theory and Sustainable Economic Development

Human Capital Theory demonstrates its structured connection between resource investment in human capital and economic sustainability through Figure 1. Through the model, all three

elements of education and workforce preparation, and entrepreneurial qualifications work together to create skilled individuals who are employable and innovative. These, in turn,

foster job creation, business growth, and economic sustainability. The presented figure enhances the argument that human capital development through education and workforce training boosts both economic productivity and poverty reduction as specified in the research goals.

2.4 Research Gap

Research about education and skills development, and economic growth expansion continues to expand but vital gaps persist regarding how country-specific educational reforms and trainings affect employability and poverty elimination in Nigeria. Research about entrepreneurship education, vocational training, and digital transformation for handling unemployment exists (Dinika, A. A. T. 2024; Aranda Jiménez, J. R., et al., 2022) yet the empirical optimization approaches to match labor market needs remain underdeveloped. Academic studies about human capital investment have become well-established (Bhosale, A., 2025; Schultz, T. W., 1961) yet authors primarily use generalized approaches without examining how Nigerian graduates encounter unique industry-academia disconnect challenges. The analysis of government-led approaches to unemployment reduction lacks direction toward private sector collaboration as well as digital skills implementation and entrepreneurial innovation according to Ntleki (2022) and Tilly (2022).

Research analyzing HR strategies and labor market policies and workforce planning approaches theory first and fail to provide applicable policy solutions (Hughes, E., & Dundon, T. (2023); Mohammed & Kumar, 2022). This study seeks to address these gaps by providing a conceptual framework that integrates education, entrepreneurship, and HR-driven skill development strategies to enhance employability and economic resilience.

2.5 Model of the Study

The study examines entrepreneurial innovation's relationship with sustainable economic development by constructing a complex independent variable (IV) that includes multiple dimensions and a dependent variable (DV) that exists across dimensions. The independent variable, composed of Entrepreneurial Innovations, encompasses four dimensions: Technological Advancements and Business Model Innovation and Market Expansion Strategies as well and Financial Resource Mobilization. The two factors combine to impact Sustainable Economic Development, which serves as a single dimension that includes economic sustainability, environmental preservation, and business survival. This model demonstrates that the innovation-based elements support economic sustainability through their interconnected processes, which accelerate sustainable development.

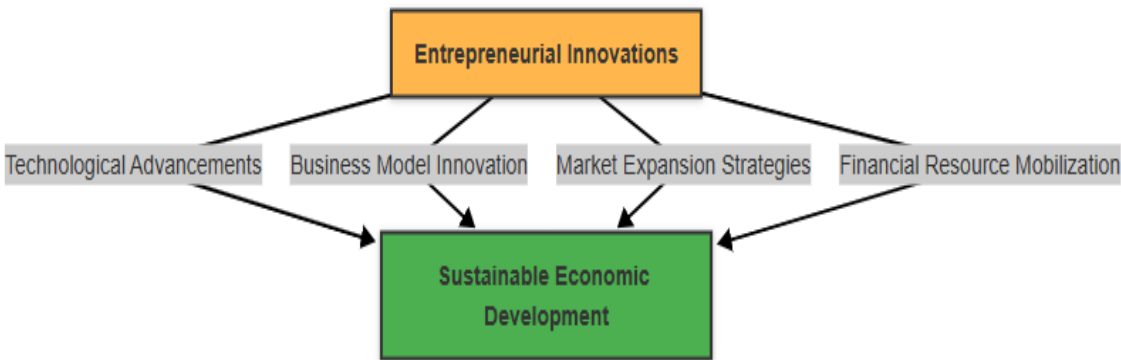


Figure 2: Conceptual Framework of Entrepreneurial Innovations and Sustainable Economic

The figure demonstrates how each entrepreneurial innovation measure contributes to sustainable economic development (see Figure 2 Model of Entrepreneurial Innovations and Sustainable Economic Development). The variable of Entrepreneurial Innovations divides into four main components which include Technological Advancements as well as Business Model Innovation and Market Expansion Strategies and Financial Resource Mobilization to provide the foundation for economic sustainability. The three elements mutually affect sustainable economic development by developing long-term economic strength and social inclusivity with environmental stability. The model demonstrates entrepreneurship plays an essential strategic function for reaching sustainable development goals (SDGs) through its advancement of innovative solutions which

boost economic productivity and sustainability mechanisms.

4.0 FINDINGS

The research findings demonstrate that high standard education acts as a fundamental element for decreasing poverty levels in Kano State. The research demonstrates that higher education leads people to secure better employment positions and earn increased earnings that decrease poverty risks. The combination of proper educational organization and hands-on practical training produces work-ready graduates who can find employment in formal and informal sectors according to statistical research.

The region experiences extended poverty because

unemployment rates continue to increase. The research shows that elevated graduate unemployment together with increased unemployment across the board intensifies economic challenges because these job seekers hold mainly low-paying temporary positions. The combination of insufficient industry-relevant training and scarce opportunities for entrepreneurship serves to worsen the levels of poverty affecting the region. Education and unemployment together produce the outcomes regarding poverty statistics. The combination of quality education helps decrease the odds of unemployment, but employment scarcity reduces its impact on poverty reduction.

The gap between education and employment results in graduate unemployment because of poor labor market compatibility, which demonstrates the necessity for unified education-to-work frameworks.

The research demonstrates the critical requirement for government-established initiatives that should focus on uniting education with employment. Sustainable poverty reduction and job creation benefit from educational reforms as well as vocational instruction, with additional support from private sector involvement and entrepreneurial programs.

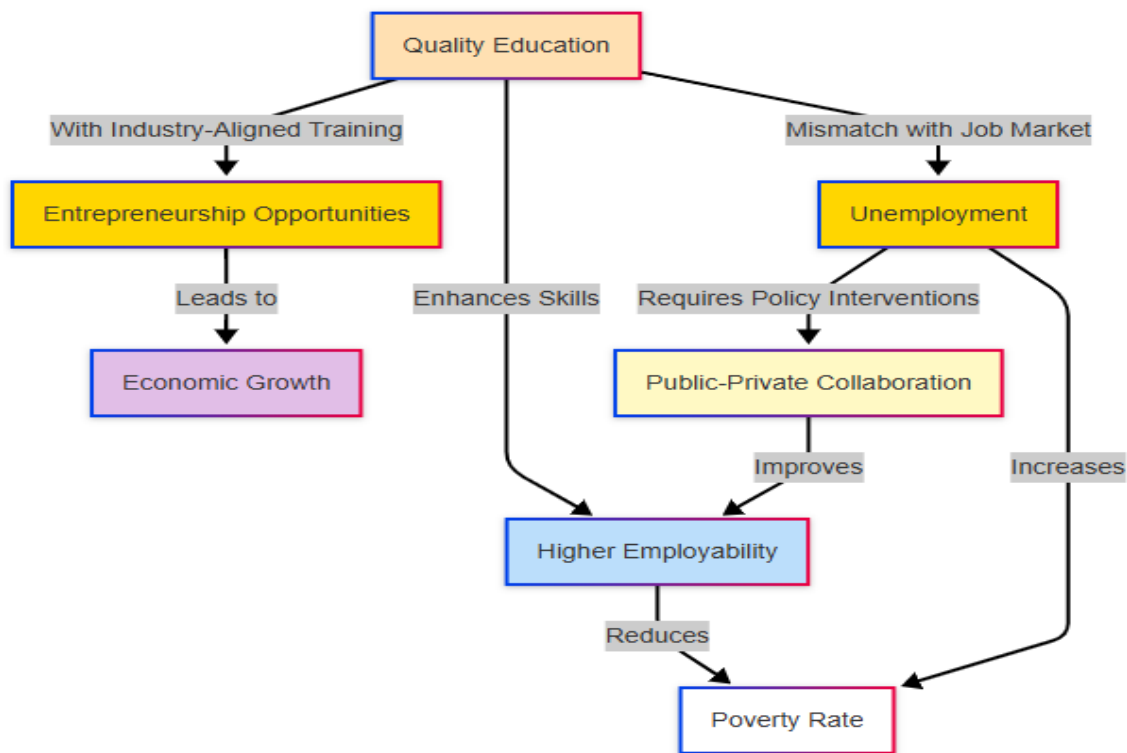


Figure 3: Key Findings on the Relationship Between Education, Unemployment, and Poverty

The illustrative Figure 2 demonstrates that better educational quality strengthens employment opportunities to decrease poverty levels. Becoming unemployed because job market requirements differ from educational content will raise poverty levels. The combination of support from both the authorities and private sector with entrepreneurship initiatives creates successful pathways connecting education and work which drives national development.

4.1 Recommendations

1. A set of the following recommendations should be employed to tackle the recognized problems while seizing potential advantages in Kano State:
2. A modification of educational curriculums should include practical education components alongside technical

instruction and entrepreneurial education to match graduates with industries needs.

3. The establishment and strengthening of vocational training institutes through expansion will teach employable skills that benefit people in the manufacturing and agricultural sectors, along with digital services fields.
4. The government and private sector need to develop partnerships which allow educational institutions to link students with internships and apprenticeship programs as well as permanent employment positions.
5. Government institutions together with financial bodies should develop startup funding opportunities as well as business mentorship initiatives and incubation facilities to promote entrepreneurship-based employment creation.
6. Educational investments in digital competencies alongside innovation will create better career opportunities for

graduates due to the modern technological transformation of work systems.

7. Plans need to strengthen labor market policies by developing measures to generate jobs along with fair compensation schemes combined with social protection systems which benefit informal workers.
8. The delivery of education outcomes needs a planned assessment method through which education performs regarding jobs and poverty elimination. This assessment system should exist to improve operations continuously.

5.0 CONCLUSION

This study analyzes how good education and joblessness affect poverty numbers in Kano State. The research results prove that better education makes people more employable, yet shows that high unemployment rates hurt these efforts at fighting poverty. Quality education decreases joblessness but brings more poverty because graduates lack the required expertise for available openings. Economic development needs to combine education updates with job training programs through job opportunities and government actions. Kano State will help create an employable workforce that strengthens both the economy and society when it connects working and learning systems.

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