

## **Managing Higher Education for Innovative Research and Sustainable Manpower Development in a fast changing World**

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### **Abstract**

The importance of higher education to sustainable national development cannot be over-emphasized. In Nigeria, tertiary education is planned and organized among others to; contribute to national development through high level manpower training and to provide accessible and affordable quality learning opportunities in formal and informal education. However, it has been observed that achievement of these goals in Nigeria is becoming increasingly difficult in the face of the current ICT and technologically driven global economy. This paper explored the relationship among higher education, innovative research and sustainable manpower development in Nigeria. The paper equally examined the myriads of problems militating against innovative research and sustainable manpower (in the nation's tertiary institutions) and make suggestions on strategies that could be adopted to ameliorate the problems. The paper concluded that the provision of quality manpower resources is crucial and strategic for all-round development of the nation and that higher education plays a prominent role in this regard. Hence, innovative research which is the fulcrum of today's knowledge economy should be encouraged in the higher institutions of learning. This can be achieved by providing adequate fund, integrating digital technology, skill acquisition and computer literacy into the curriculum among others, and ensuring high standards in the quality of facilities and resources supplied to the higher institutions.

**Keywords:** Innovative research, Manpower development, Global economy, Higher education, Intellectual property.

### **Introduction**

The overall development of a nation can hardly be achieved without effective manpower resources. Skilled and effective manpower resources constitute the backbone of sustainable development in any society. The higher institutions of learning in Nigeria, as in other societies, are charged with the responsibility of contributing to national development through high level manpower, among others. According to the National Policy on Education (FRN, 2013), tertiary educational institutions in the country shall pursue their goals through: quality student intake; quality teaching and learning; research and development; among others.

The quality of manpower produced by the nation's higher institutions of learning could be affected by the quality and quantity of research undertaken by these institutions. Today, this research function appears to be hindered by poor funding and incessant industrial (strike) actions usually embarked upon by the university lecturers and their counterparts in sister

institutions (i.e Polytechnics and Colleges of Education). According to Adeniran (2011), the research function has been rendered moribund by lack of adequate fund and government's poor attitude to results of research effort, published by the universities. As equally noted by Echono (n.d) low uptake and implementation of research results and academic corruption compounded the problem of quality output from the higher institutions of learning.

Therefore, many outcomes of research efforts may not go beyond libraries and book shelves of the various faculties in the nation's higher institutions of learning. Hence, developing and sustaining a clear vision for teaching and research becomes blurred, with increasing lack of appreciation for research missions and academic excellence from government quarters and the society. As observed by Adedeji and Campbell (n.d), reports on higher education confirmed that Nigeria's educational system is experiencing a serious decline in terms of quality of its research due to lack of adequate funding.

Apparently, the society now hails, applaud and fund frivolous programmes like Big Brother Naija (BBN) that promotes obscene and absurd practices rather than upholding the dignity of labour and academic excellence. The looming silence from the government translates into tacit approval of immorality perpetrated during such programmes. At a time other developing countries are trying to catch up with developments in Information and Communication Technology (ICT) and the current technologically driven global economy, Nigerians are busy fighting the evils of corruption, election rigging and thugery, examination malpractices, religious intolerance and bigotry, killings from bandits and Boko harams, insecurity in and out of schools etc. Consequently, many of these problems have crept into the nation's educational system. These have resulted into poor quality of research and academic outcomes from higher institutions of learning.

Anyebe (2014) seems to capture the situation when he observed that:

*The university system today is contending with very many problematic Issues which takes too much of the little time available at the expense of promoting excellence in the academic programmes of the institutions. These include inadequate teaching and learning facilities; very poor academic preparation of the entrant to the university; dearth of senior academics in the system; ethnicity; the effect of unionism on the stability of the system; examination malpractices; sex abuse; decline in staff training programmes; religious bigotry; politicization of academic leadership in departments and faculties; .....financial squeeze, and cultism and secret societies. (p.90)*

Similarly, the problem of intellectual property (IP) rights which extends beyond the academia to other sectors of the economy has not received serious attention from the government or its concerned agencies. This has given the pirates a free hand to infringe on other people's work. As noted by Aguboshim, Onwuka, Obiakafor and Oboti (2021), inadequate enforcement of IP laws, inadequate awareness about copyright piracy and its ills are major factors challenging

research and innovation in tertiary education in Nigeria. The authors maintained that, researchers at any time should be able to benefit from the fruits of their labour.

Arising from this scenario, is the inevitable need to overcome some of these challenges by re-positioning the educational system to embrace innovative research and quality manpower production. According to Okafor (2019), the main objective of research and innovation is to discover answers to pressing societal challenges by undertaking careful and systematic approach, devising new methods/applications to remedy the situation. It is against this backdrop that, this study sought to examine how higher education could be managed to undertake innovative research and hence promote sustainable manpower development in a fast changing world. In doing this, the following sub-themes/sections shall be examined: Goals of higher education in Nigeria; Conceptual clarification; Theoretical framework; Higher education, Innovative research and sustainable manpower development: The nexus; Factors militating against innovative research and sustainable manpower development; conclusion and recommendations.

### **Goals of Higher Education in Nigeria**

Tertiary or higher education is the education given after Post Basic Education in institutions such as universities and inter-university centres such as Nigeria French Language Village, National Institute of Nigerian Languages, and Colleges of Education, Polytechnics, Monotechnics, and other specialized institutions such as Colleges of Agriculture, Schools of Health and Technology and the National Teachers' Institutes (NTI) (FRN, 2013).

The goals of tertiary education, according to the National Policy on Education (FRN, 2013), shall be to:

- a) Contribute to national development through high level manpower training;
- b) Provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians;
- c) Provide high quality career counseling and lifelong learning programmes that prepare students with the knowledge and skills for self-reliance and the world of work;
- d) Reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market;
- e) Promote and encourage scholarship, entrepreneurship and community service;
- f) Forge and cement national unity; and
- g) Promote national and international understanding and interaction

## **Conceptual Clarifications**

Major concepts used in this study are briefly discussed below.

**Innovative Research:** The need to introduce innovation into research activities in the nation's higher institutions of learning cannot be over-emphasized. Innovation is described as the generation of a new idea and its implementation into a new product, process or service, leading to the dynamic growth of the national economy and the increase of employment as well as to the creation of pure profit for the innovative business enterprise (Urabe, 1988 cited in Kogabayev&Maziiauskas, 2017). Innovation could also be viewed as the practical implementation of ideas that result in the introduction of new goods or services or improvement in offering goods or services (Wikipedia-2022). Innovation is important because, it can bring benefit for all the economic activity, with implementing projects; produce the new products with new quality and help to reduce costs of production circle. Similarly, innovation can catalyze the processes and save the time (Kogabayev&Maziliauskas, 2017).

Research, on the other hand can be described as the systemic investigation, probe, enquiry, scrutiny or analysis into and study of materials and sources in order to establish facts and reach new conclusions. Adequate research leads to the discovery of new techniques, ideas and ways of doing things which will in turn, lead to wealth creation (Okafor, 2019). Osualla (2001) defined research as the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis, and interpretation of data. Research is oriented towards discovering the relationships that exist among the phenomena of interest to a researcher.

Innovative research therefore, is the application of innovation into research activities undertaken in various institutions of learning. According to Okafor (2019), research in institutions of higher learning is categorized into three linear key activities: basic research, applied research, and experimental development research. Basic research seeks to advance knowledge without specific application in mind. He opined that, most research in the university is basic research which are not initiated to solve problems and not of much use in the industries. However, applied research is initiated to address a specific need and seeks knowledge that will facilitate the process for achieving the desired result. Experimental development research on the other hand, is the application of the knowledge from research directed at a specific end product which may be a device or systems (Okafor, 2019). It therefore becomes imperative for

Nigeria's higher institutions of learning to engage in innovative research (which embraces both the applied research and experimental development) to meet the challenges of modern trends in ICT and the demands of the current technologically driven global economy.

**Manpower Development:** For any organisation to function effectively and continue as a going and relevant concern, human, financial and material resources must be readily available and judiciously utilized to achieve the organisation's set objectives. Of all the resources needed for organisation's and societal development, human resources appears to be the most vital because it controls and harness all other resources for optimum productivity. As rightly observed by Okafor (2019), the level of development of any organisation is hinged on the strength of her resources (people). Similarly, Eseyin, Uchendu and Bright (2014) believed that human resource is an indispensable resource that is needed to achieve productivity in any organisation. For this reason, human beings who constitute the manpower resources in an organisation, institution or nation must be well trained, informed and groomed. The act of training, educating and grooming of human resources connotes manpower development (Gbesoevi, 2019). Manpower development could also be viewed as involving the task of inculcating into the human resources the skills, aptitude, attitude, knowledge, morals, values, creative ability etc (Echono, n.d). Manpower development deals with developing and improving the potentialities, abilities and capabilities of human beings for maximum benefits of the organisations, institutions and societies where these individuals are to operate (Gbesoevi, 2019).

Manpower development equally aimed at developing competencies such as technical expertise to lead others; the need to perform one's job efficiently and the desire to meet organizational objectives of higher productivity and profitability (Olabisi, 2007). Similarly, Adedeji and Campbell (n.d) viewed manpower or human capital development as a means of enhancing skills, knowledge, productivity and inventiveness of people through a process of human capital formation. It is basically the active participation of people in the development process and the consequent need to construct institutions that permit and indeed encourage that participation.

Since the society is not static but dynamic, it is imperative that the educational system, the work environment and productive system be made adaptive to constant changes happening every now and then to make them relevant to the current global best practices. This perhaps, makes Eseyin et.al. (2014) to submit that workers in the organisation needed to be exposed to constant training and empowerment to make them relevant to the work environment.

**Intellectual property:** Refers to creations of the mind: inventions; literary and artistic works; and symbols, names and images used in commerce ([www.tezu.ernet.in](http://www.tezu.ernet.in)>notice>intelle.....). Similarly, Blakeney (2005) in Aguboshim, et.al (2021) viewed intellectual property as those creations emanating from the human mind in relation to which the state or country confers upon the creators, statutory monopoly for a prescribed term to prevent their unauthorized exploitation. According to Tade and Akinleye (2012), intellectual property represents the creative ideas or innovations that result from intellectual activity and creation. Intellectual property is divided into two categories: Industrial property (which includes patents for inventions, trademarks, industrial designs and geographical indications) and Copyright (which covers literary works and architectural design). Intellectual property rights on the other hand, allow creators, or owners, of patents, trademarks or copyrighted works to benefit from their own work or investment in a creation ([www.tezu.ernet.in](http://www.tezu.ernet.in)>notice>intelle.....). In Nigeria, these rights have not been properly guarded, hence the pirates have a field day. Aguboshim, et.al. (2021) observed that inadequate enforcement of intellectual property laws, inadequate awareness about copyright piracy and its ills are major factors challenging research and innovation in tertiary education in Nigeria.

Creating a conducive environment for the enforcement of intellectual property rights is important not only for qualitative research but for the overall development of the nation. According to Echono (n.d), research in universities has been identified to contribute to economic development, clinical, commercial and business opportunities. Universities can attract businesses into their countries and communities and can launch and incubate startup companies or license to sell their technologies to other companies. This can hardly be done without proper enforcement of intellectual property rights.

### **Theoretical Framework**

**Human Capital Theory:** This theory was developed by Garry Becker (1967) and Theodore Schultz (1988). The proponents of this theory viewed human capital as the stock of economically productive human capabilities which can be formed by combining innate abilities with investments in human beings. The theory focuses on reasons why the decision to invest in education is made. Investment in education could be in form of expenditures on education, on-the-job-training, health and nutrition. The provision of education is viewed as a productive venture or investment in human capital, which the proponents of the theory considered to be generally important than investment in physical capital. Therefore, the concept of education as

a capital good is firmly established in the theory of human capital, which attaches great importance to human skills as a factor of production in the process of development.

Proponents of the theory equally believed that individuals are rational beings that make choices to invest in human capital (i.e. education and training) in order to increase their productivity in their jobs, thereby boosting their future earnings. Consequently, individuals with higher productivity are rewarded with higher pay (UK Essays, 2015). As a result, attempts at boosting productivity of the population are considered as investment in capital. It is further believed that the most efficient path to national development lies in the improvement of human capital through education. Hence, educational activities, including research, were seen as investments to contribute to the efficiency of the population. From this perspective, education is seen to develop an individual's productive skills and yields benefit to the individual overtime and to the society (UKEssays, 2018, in Echono,n.d).

### **Higher Education, Innovative Research and Sustainable Manpower Development: The Nexus**

Innovative research and sustainable manpower development cannot and should not be separated from higher education. The need to reposition Nigeria's higher education system to become more innovative in its research and hence meet up with the expectation of sustainable manpower development, becomes heightened in the face of the seeming inability of the nation's educational system to rise to the challenge of today's competitive and technologically driven global economy.

Tertiary education has the statutory role of imparting worthwhile knowledge in the learner so as to equip him to contribute meaningfully to the nation's growth and development. It equally has the role of instilling in the learner, the spirit of commitment, good morals and values. This way, individual learners would be intellectually, morally, physically, mentally, and psychologically sound, suitable for organizational, institutional and societal use (Gbesoevi, 2019). Today, it is very doubtful if the nation's higher institution of learning has been able to fully live up to these expectations or even produce graduates that are relevant to the needs and demands of the fast changing labour market. According to Adedeji and Campbell (n.d), the problem of inability to gain access into university, inadequate funding and the mismatch between university programmes and the labour market demand have become serious and alarming issues to parents, policy makers and the society at large. In a similar write-up, Anyebe (2014) believed that the problem of mismatch between the out-turn of the university systems

and the needs for labour market as well as the faulty economic development plan may account for the current wave of the unemployment of employable working force in Nigeria.

Given the problem of underfunding and other challenges facing tertiary institutions in the country, engaging in innovative research (applied research and experimental development research) might be difficult. When that happens, the supply of relevant manpower for sustainable becomes hampered. As rightly noted by Emunemu (2009) in the Okafor (2019), countries of the world with poor or inadequate research and innovation capacities will become poorer since knowledge creation is the key to sustainable socio-economic development. The decline in research across higher institutions in Nigeria began in the 1980's (Echono, n.d).

It was reported that Nigeria's total number of publications in scientific journals stood at 1,062 in the same year and by 1995 this number has dropped to 711. However, publication in scientific journals by South Africa was 3,413, 14,883 for India, and 5,440 for Brazil (Echono, n.d). At a time when the nations of the world are breaking new and fallowed grounds through their research activities, the quality of research being carried out by Nigerian academics has been adjudged to be of low standard (Emunemu, 2009, cited in Okafor, 2019).

However, in a comparative analysis of research output of eight African countries reported by Echono, (n.d), it was discovered that there was a significant improvement in Nigeria's universities research output in 2021 due to TETFund's (Tertiary Education Trust Fund) intervention. The research output was summarized in the table below.

**Table 1**

<b>Country</b>	<b>Total Publication</b>
South Africa	372,646
Egypt	302,626
Nigeria	135,504
Tunisia	113,626
Morocco	93,468
Kenya	49,757
Ghana	34,018
Uganda	25,278

Source: Echono (n.d) citing International Science Rankings (Scopus, 2022)

Despite this observed improvement, a lot still needs to be done to improve research undertakings in the nation's higher institution of learning. Such improvement in innovative research will go a long way to boost sustainable manpower development in the country. According to Okafor (2019), adequate research leads to the discovery of new techniques, ideas and ways of doing things which will in turn, lead to wealth creation.

### **Factors Militating Against Innovative Research and Sustainable Manpower Development in Nigeria**

Some of the challenges facing innovative research and sustainable manpower development are briefly discussed below.

**Low uptake of research result and government poor attitude to research efforts:** Research outcomes from the nation's higher institutions of learning are hardly utilized by the government resulting in a blurred vision for meaningful innovative research. As observed by Echono (n.d), low uptake and implementation of research results and academic corruption compounded the problem of quality output from the higher institutions of learning. Results from the work of Aguboshim, Onwuka, Obiokafor and Oboti (2021) revealed that research and innovation are crippled by out-dated, non-sustainable or virtually non-existent policies, and poor educational system.

**Inadequate funding:** Lack of adequate fund for research activities and education in general has always been a clog in the wheel of any meaningful progress and development that might accrue to the nation from such research endeavour. According to Adeniran (2011), the research function has been rendered moribund due to lack of adequate fund and government poor attitude to research outcomes from the universities. In the same vein, Adedeji, and Campbell (n.d), observed that Nigeria's educational system is experiencing a serious decline in terms of quality of its research due to lack of adequate funding. The authors believed that the Nigerian education sector suffered unprecedented setbacks in the level of resource available to it since the period of economic downturn in the eighties. Poor funding results in poor infrastructure, under-staffing, poor personnel administration and so on, this unfavourably affects the institution's drive for manpower development (Gbesoevi, 2019). It should however, be pointed out that TETFund has risen up to some of these challenges through the provision of some research fund and infrastructural facilities, but given the number of public universities in the country, there is still a lot to be done to remedy the situation. According to Echono (n.d), a

significant improvement in research output was recorded in 2021 due to TETFund interventions as against the output in the 1980s and 1990s.

**Intellectual property (IP) factor:** one major factor challenging research and innovation in tertiary education in Nigeria is inadequate enforcement of IP laws, inadequate awareness about copyright piracy and its ills. Researchers, at any time should be able to benefit from the fruits of their labour. In this information age, it has become difficult, if not impossible, for researchers and innovators, especially in education to attain their ultimate goals or create added value through their work, knowledge and ideas. This is because, there are no adequate rules and regulations created to enforce or protect intellectual activities of research and innovations in tertiary education in Nigeria (Aguboshim, et.al. 2021).

**Frequent strike (industrial) actions:** Frequent strike actions arising from disagreement between Federal (or sometimes state) government and labour unions in higher institutions particularly ASUU (Academic Staff Union of Universities) has often resulted in prolonged closures of those institutions. This development has great consequence on the quality of research and graduates produced from these schools. Half bakes or low quality graduates who are rushed through the semesters to catch up with the time lost after resumption (from strikes) will definitely have a telling effect on the manpower quality produced. As observed by Echono (n.d), frequent disruption of the academic calendar as a result of strikes or other unnecessary closures has taken a toll on the orientation, focus, timing and process of quality research in the nation's ivory towers.

**Lack of synergy between labour market demands and university programmes:** There is an obvious lack of the contemporary global economy, labour market demands and the university programmes. This development often lead to high rate of unemployment as currently being witnessed in Nigeria. According to Anyebe (2014), the demands of the world of work are rapidly changing as current developments indicate that what the future need most is the "knowledge worker , with flexible and adaptable skills". In contrast, too much emphasis is placed on paper (certificate) qualification in Nigeria at the expense of functional competence, skills, acquisition, entrepreneurship, ICT compliance etc which are very important in today's technologically-driven knowledge economy. As rightly submitted by Adedeji and Campbell (n.d) and Anyebe (2014), the inability to gain access to the university, inadequate funding and the mismatch between university programmes and the labour market demand have become serious and that faulty economic development plan may account for the current wave of

unemployment of employable working force in Nigeria. This perhaps made Ayodele (2006), to describe the content of Nigerian education as irrelevant, bookish, theoretical, and *white-collar* job oriented. To worsen the situation, qualitative research outcome that could partly address the problems are not encouraged. According to Adedeji and Campbell (n.d), there has been drastic decline in the World Bank's support for higher education sector, which has adversely affected the progress of academic activities taking place in many higher institutions, especially in African countries.

Echono (n.d) seems to capture the situation, when he observed that:

*The missing link between education, research and human capital development in Nigeria can be attributed to lack of effective interactions between the academia, industry and government to foster economic and social development (p18).*

**Poor infrastructural facilities and mismanagement of available resources:** Deteriorating facilities and mismanagement of available resources are twin factors affecting effective administration, learning, research and quality manpower output from the nation's higher institutions of learning. According to Nwakanma (2010) cited by Okafor (2019), Nigerian tertiary institutions of learning are far too ill-equipped to train and develop new graduates suitable for the 21<sup>st</sup> century. Analysis of the situation point to the extreme level of infrastructural as well as pedagogical deficiency in Nigeria tertiary institution, this being the result of underfunding of public tertiary institutions in the country. Similarly, the mismanagement of available resources could be counter-productive to the educational system. As opined by Okoroma (2006), the improper use of available funds appear to be a more challenging problem. He observed further that if the low allocation to the university system were properly used the quality of education generally in Nigeria would have appreciated.

Other identified problems are that of erratic power supply; academic staff's adaptability struggle on ICT utilization and online classroom environment; lack of reliable, credible and timely data; academic fraud; lack of access to grants and research fund; low level of computer literacy; hostile socio-economic situations, lack of incentives for relevant publications etc (Adeniran, 2021; Echono, n.d).

## **Conclusion**

Sustaining the production of quality manpower resources is crucial and strategic for all-round development of every sector of the national economy. It is very obvious that education plays a prominent role in this regard. However, innovative research which symbolizes the pillar of

today's knowledge economy and which could push the frontier of appropriate manpower suitable for labour market's demand is being relegated to the background. For Nigeria's higher institutions to remain relevant in the scheme of things and brace-up to the challenge of the globalised knowledge economy, a conducive environment that supports innovative research is urgently needed. To this end, the nation's higher institution's (especially the university system) should be re-positioned in a systematic and planned manner to provide equal access to resources for all staff and students by creating an equitable, secured and inclusive teaching, learning and research environment.

### **Recommendations**

The following recommendations are made in line with the above discussion.

- Meaningful research outcomes from various higher institutions should no longer be allowed to rot on the institutional libraries or bookshelves but should translate into instruments for making new discoveries and for breaking new grounds to facilitate sustainable development. Hence, research should focus on solving societal problems and government should wake up to the responsibility of utilizing such research outcome.
- Adequate funding is paramount for the effective functioning and smooth administration of all tertiary institution. To meet the financial requirement of adequate manpower training, quality research and provision of infrastructural facilities, sufficient budgetary allocation should be made to the education sub-sector.
- There should be adequate legislation to enforce intellectual property laws and adequate awareness should be created among the populace and academia on the ills and consequences of copyright piracy, plagiarism and intellectual fraud. Similarly, there should be effective legislation against all forms of financial fraud and mismanagement of available resources in higher institutions of learning.
- Frequent and prolonged strike/industrial actions has taken its toll on the quality of research and graduates produced in the country. Causes of strikes should therefore be strictly addressed and government should be sincere in its efforts of honouring agreement between it and the academic staff unions of these institutions.
- Efforts should be made to strike a balance between the industrial and labour market demands and the university programmes. Hence, curriculum reforms that emphasize skills acquisition, creativity, entrepreneurship, ICT-compliance, etc that are critical in globalised knowledge economy should be promoted.

- There should be equal access to grants and research fund and computer literacy should be encouraged among all tertiary institutions' staff. Similarly, the problem of erratic power supply and ICT utilization should be addressed.

## References

- Adedeji, O.S. & Campbell, O.A (n.d).The role of higher education in human capital development in Nigeria. <https://ssm.com/abstracts2380878>
- Adeniran, O.S. (2011). Funding and management of university education in Nigeria: Problems and strategies for improvement. *African Journal of Historical Sciences in Education*, 7(1), 282-292.
- Adeniran, O.S. (2021). Emerging issues in higher education administration in the context of COVID-19 pandemic in Nigeria. *Ife Journal of Educational Studies*, 18(1), 59-73.
- Aguboshim, F.C., Onwuka, I.N., Obiokafor, I.N.&Oboti, N.P. (2021). Factors challenging research and innovation in tertiary education in Nigeria. *World Journal of Advanced Research and Reviews*, 10(1), 224-229.
- Anyebe, A.A. (2014). Nigerian university and manpower development in a changing world. *Higher Education Studies*, 4(1), 82-93.
- Becker, G. (1967). *Human capital and the Personal Distribution of Income: An Analytical Approach*. University of Michigan. Woytinsky Lecture. Republished in Becker, G. Human Capital, 2<sup>nd</sup> Edition. New York.
- Echono, S.S.T. (n.d). *Education, Research and Human Development in Nigeria: The Challenges and Missing Link*. Paper presented at the 18<sup>th</sup> convocation ceremony of Enugu State University of Science and Technology, Enugu, Enugu State.
- Eseyin, E.O., Uchendu, E.E. & Bright, I.B. (2014). Higher education as a tool for human capital development in Nigeria. *International Journal of Education and Research*, 2(6), 591-600.
- Federal Republic of Nigeria (2013). *National Policy on Education* (6<sup>th</sup> Edition). Lagos: NERDC Press.
- Gbesoevi, E.S. (2019). The role of tertiary education in manpower development in Nigeria. *Global Academic Journal of Linguistics and Literature*, 1(1), 17-19.
- Kogabayev, T. &Maziliauskas, A. (2017). The definition and classification of innovation. *Holistica*, 8(1), 59-72.

- Okafor, O.A. (2019). Repositioning research and innovation for sustainability in human development: A sine qua non for tertiary education in Nigeria. *International Journal of Academic Accounting, Finance, & Management Research (IJAAMR)*, 3(9), 13-16.
- Okoroma, N.S. (2006). A model for funding and ensuring quality assurance in Nigerian universities. *Nigerian Journal of Education Administration and Planning*, 6(1), 1-15.
- Olabisi, C. (2007). *Personnel Management*. Ibadan: Jackbod Enterprises.
- Osualla, E.C. (2001). *Introduction to Research Methodology*. Onitsha: African-Fep Pub. Ltd.
- Schultz, T. (1988). Education Investment and Returns. In H. Chenery & T. Srinivasan (Eds). *Handbook of Development Economics*. North Holland.
- Tade, O. & Akinleye, B. (2012). “We are promoters not pirates”. A Qualitative Analysis of Artistes and Pirates on Music Piracy in Nigeria. *International Journal of Cyber Criminology*, 6(2), 26-388.
- Uk Essays (2015). Use of human capital theory. [www.ukessays.com/essay/sociology.....](http://www.ukessays.com/essay/sociology.....)
- What is Intellectual Property? [www.tezu.ernet.in>notice>intelle.....](http://www.tezu.ernet.in>notice>intelle.....)
- Wikipedia (2022). *Definition of Innovation*. <https://en.wikipedia.org/wiki/Innovation#Creativity-and-innovation>