

ADEQUATE FUNDING PANACEA FOR ACCREDITATION PROBLEMS IN TERTIARY EDUCATION**Ogunode Niyi Jacob**Department of Educational Management, Faculty of Education, University of Abuja, Nigeria.
Ogunodejacob@gmail.com**Okonkwo, Cecilia Okwudinma**Department of Educational Management Shehu Shagari University of Education, Sokoto State, Nigeria.
ceciliaokonkwo@gmail.com

Received: Jun 22, 2024; Accepted: Jul 29, 2024; Published: Aug 03, 2024;

Abstract: This paper examines the role of adequate funding as a solution to accreditation challenges faced by tertiary institutions in Nigeria. Utilizing secondary data sourced from online and print publications, the study investigates how financial resources impact the accreditation process. The findings reveal that sufficient funding is crucial for the effective implementation of accreditation programs. Specifically, adequate financial support facilitates the preparation for accreditation, aids in the procurement of instructional resources, enables the employment of qualified staff, and ensures the provision of essential infrastructure facilities. The paper underscores that without sufficient funding, tertiary institutions struggle to meet accreditation standards, which in turn affect their educational quality and overall performance. Based on these insights, the paper recommends that the Nigerian government enhance its financial support for tertiary institutions. This increased funding will not only help institutions meet regulatory requirements but also strengthen their capacity to deliver high-quality education, thus contributing to national development and global competitiveness.

Keywords: Accreditation, Adequate Funding, Tertiary Education.



This is an open-access article under the CC-BY 4.0 license

Introduction

Tertiary education is a crucial component of national development, designed to address and solve pressing local, national, and international problems through intensive teaching, research, and the provision of community services. It plays a pivotal role in fostering individual development and growth, while also making a positive impact on society at large (Schrader-King, 2024). By equipping individuals with advanced knowledge and skills, tertiary education contributes to the creation of a knowledgeable and skilled workforce capable of driving innovation and progress (Ogunode & Musa, 2024). Consequently, tertiary education is not only essential for personal advancement but also for addressing broader societal challenges and promoting sustainable development.

Tertiary education, as defined by Ogunode, Edinoh, and Okolie (2023), is a planned and organized system of learning aimed at the holistic development of individuals and the comprehensive transformation of society. This is achieved through teaching, research, and

community service. Tertiary education, also known as higher education, includes educational programs offered by universities, colleges, and other institutions beyond secondary education. It encompasses both undergraduate and postgraduate studies, providing students with advanced knowledge, skills, and qualifications in their chosen fields of study (Proctoredu, 2023; Ogunode, Audu & Olatunde-Aiyedun, 2022). According to the Federal Republic of Nigeria's National Policy on Education (2013), tertiary education is defined as the education provided after post-basic education in institutions such as universities and inter-university centers like the Nigeria French Language Village, Nigeria Arabic Language Village, and the National Institute of Nigerian Languages. It also includes Innovation Enterprise Institutions (IEIs), Colleges of Education, Monotechnics, Polytechnics, and other specialized institutions such as Colleges of Agriculture, Schools of Health and Technology, and the National Teachers' Institutes (NTI).

The realization of tertiary education goals depends on effective supervision and adequate funding. To ensure quality education for sustainable development, the federal government established some key commissions and agencies to supervise and ensure quality programme accreditation in all the tertiary institutions in Nigeria. These commissions includes; National Universities Commission, National Commission for Colleges of Education and National Board for Technical Education. These commissions are saddled with the responsibilities of making policies and ensuring quality of academic programme in the tertiary institutions in Nigeria.

National Universities Commission: The NUC is a parastatal under the FME. The Commission was established in 1962 with the task of developing and managing university education in Nigeria. Its functions include: granting approval for all academic programmes in Nigerian universities; granting approval for the establishment of all higher educational institutions offering degree programmes; and ensuring quality assurance, through regular accreditation, of all academic programmes in universities. The Commission currently regulates the academic programmes of 40 federal, 38 state and 51 private universities in Nigeria. **National Commission for Colleges of Education:** The NCCE is a parastatal of the FME established by Decree 13 of 1989. The establishment of the Commission was a resultant effect of the utmost importance accorded to quality teacher education by the Federal Government of Nigeria. Since its inception, the Commission has continuously pursued the goals of quality assurance in teacher education. It has continuously reviewed and standardized the curriculum of colleges of education in the country through programme accreditation, which is carried out once in five years for all the 20 federal colleges of education, 41 state colleges of education and 5 private colleges of education under the Commission (NEEDS, 2014).

National Board for Technical Education: Established by Act No. 9 of 1977, the NBTE is a parastatal of the FME specifically created to handle all aspects of technical and vocational education falling outside university education. The Board supervises and regulates, through an accreditation process, the programmes offered by technical institutions at secondary and post-secondary school levels. It is also involved in funding of polytechnics owned by the Government of Nigeria. Tertiary institutions in Nigeria presents their various academic programme for accreditation and re-accreditation to theses commission namely; National Universities Commission, National Commission for Colleges of Education and National Board for Technical Education every five years especially for the universities. The academic programme accreditation in Nigerian tertiary institutions appear facing a lot problems which has resulted to failed academic programme or interim or denial accreditation. Many tertiary institutions have been a victim of either having interim or denial accreditation (NEEDS, 2014).

Many factors have been identified as responsible for tertiary institutions in Nigeria interim or denial accreditation and one of these factor according to Ogunode, Edinoh, and Rauf, (2023) is shortage of infrastructure facilities. Akomolafe and Ibijola (2014) carried out a study and discovered a moderately adequate teaching staff in universities in south-west Nigeria, but the teacher/student ratio was poor. The researcher attributed this to the inability of universities to meet the standard laid down by the NUC-BMAS. In some universities, management does not release

money on time to affected departments to prepare for the exercise. It seems our Ivory towers are plagued by inadequate infrastructural facilities and teaching personnel for quality instructional delivery. In some institutions, facilities and equipment are borrowed and used for accreditation and the selection of members of the accreditation team is handled only by NUC. Similarly some academic programme contents are inadequate and not relevant to the needs of the students and the labour market. Also, Akomolafe and Ibijola (2014) pointed out that that infrastructure; curriculum, learning environment and quality of academic personnel in Nigerian universities were not adequate to bring out the best in students to meet the yearning of Nigeria as a nation. Ogunode and Samuel (2022) concluded that inadequate funding is one of the major problems facing program accreditation in Nigerian public universities. Programme accreditation of universities is capital intensive. There are many financial commitments required to carry out programme accreditation. This fund is what the school administrators do not have to spend. It is based on this that this paper examines the import of adequate funding as panacea to accreditation problems in tertiary institutions in Nigeria.

Theoretical Framework

This paper is anchored on role theory, which was developed by sociologists such as George Herbert Mead and Ralph Linton. Role theory posits that individuals' behavior is essentially the performance of roles that society has organized into specific categories. These roles come with certain expectations, responsibilities, and behaviors that individuals aim to fulfill. In the context of gender, social roles prescribe distinct behaviors to men and women. These gender roles dictate how individuals should act based on their gender, shaping their daily behaviors and interactions. Women's gender roles (Olatunde-Aiyedun, Chakraborty & Mishra, 2024), or social roles for women, often include responsibilities such as being a mother, caretaker, and helper. In contrast, men's gender roles, or social roles for men, typically involve being a breadwinner, protector, and leader. Role theory suggests that individuals strive to meet these societal expectations, performing their gender roles accordingly. This performance is not static but dynamic, as people continuously enact these roles to align with societal norms and expectations. By understanding role theory, we can better comprehend how societal expectations influence individual behaviors and how these behaviors reinforce existing social structures (S.M 2022). The implication of this theory on this paper is that the government has a specific role to play in ensure provision of adequate funds for the development and sustainable manpower production in the country. Adequate budgetary allocation to the various tertiary institutions will enable them meet up with the provision of human and materials resources needed for programme accreditation that will guarantee quality of the system.

Concept Adequate Funding

Funding of educational institutions refers to the official financial resources by the schools for effective implementation of their programme. It is the official money given to universities to implement its programme. For the purpose of administration, funds to universities are classified as recurrent or capital. In turn, the recurrent category is partitioned into personnel and overhead costs. Personnel costs take care of staff salaries and allowances. Overhead costs take care of the routine expenses for running the university including such items as equipment, building and road maintenance, payment of utility bills, fuelling of cars, refreshments for meetings, payment of council allowance, as well as hostel and ground maintenance (Okebukola 2003; Nwafor, Uchendu, & Akani, 2015).

Adequate fund refers to sufficient funds available for execution of a project or programmes (Ariza & Olatunde-Aiyedun, 2023). Adequate fund is the provision of an excess money for the implementation of programmes. Adequate fund is the financial allocation above a minimum bench mark for implementation of a programme (Ogunode, and Mohammed, 2024a). Adequate funding according to Musa (2020) involves the provision of sufficient financial resources for the execution

of programme or programme in a particular institutions. Ayeni and Babalola (2009) argued that funding was central and germane to the success at all levels of education. Ogbonnaya (2000) opined that funds are necessary for staff payment, staff development and procurement of educational materials, which in themselves are indices of effective management.

Ogunode, Lawan, & Ajape (2021) submitted that the objectives of funding educational institutions include: to enable the institutions implement its programmes, enable the educational institutions conduct teaching programmes, to enable the educational institutions carry out research programmes; to enable the educational institutions execute services, to enable the educational institutions provide adequate infrastructural facilities, to enable the educational institutions employ adequate academic and non-academic staff, to enable the educational institutions implement the staff development programme, to enable the educational institutions provide conducive teaching and learning environment and to enable the educational institutions pay salaries, pay for services, maintenance and for unforeseen circumstances. Olamoyegun, Olatunde-Aiyedun, and Ogunode (2022) noted that the availability of adequate funds aids the administration and management of university education. It helps to realize its objectives and goals.

Ogunode, Zhenseh and Olatunde-Aiyedun, 2022) asserted that adequate funding of tertiary institutions in Nigeria is essential for the realization of their objectives. Proper funding ensures that the myriad sub-programs within these institutions are effectively managed and executed. These sub-programs include curriculum implementation, extracurricular activities, teaching initiatives, research endeavors, community service projects, and accreditation processes, all of which are capital-intensive undertakings (Ogunode, Olowonefa, & Suleiman, 2023). Without sufficient financial resources, these programs cannot operate at optimal levels, leading to substandard educational outcomes and the inability of institutions to fulfill their broader educational and societal mandates. Consequently, securing adequate funding is paramount to enabling tertiary institutions to deliver quality education, foster innovative research, engage meaningfully with their communities, and maintain the rigorous standards required for accreditation. This funding not only supports the infrastructural and operational needs of the institutions but also empowers them to contribute significantly to national development and address both local and global challenges through education and research.

Concept of Accreditation

Accreditation can be defined as a mechanism designed in the tertiary institutions to ensure that academic programme offers are of standard and meet various policies and quality of national and international standard (Ogunode, Edinoh, & Rauf, 2023). Accreditation of academic programs is all-embracing and involves assessing the appropriateness of programme philosophy and objectives, the adequacy and relevance of the curricula to the students in their specific areas of study and the world of work (Akpan & Etor 2018). Accreditation according to Akpan, et al, (2016) is a process of self-study and external quality review used in higher education to scrutinize an institution and/or its programmes for quality standards and need for quality improvement. The process is designed to determine whether or not an institution has met or exceeded the published standards (set by an external body such as a government, national quality assurance agency, or a professional association) for accreditation, and whether it is achieving its mission and stated purpose.

Accreditation according Obadara and Alaka (2013) is a process that aids institutions in developing and sustaining effective educational programmes and assuring the educational community, the general public and other organizations that the accredited institution has met high standard of quality and effectiveness. It is a measure of the quality of academic programmes on acceptable minimum standard provided by the accrediting agency. Okebukola (2006) described accreditation as a process of examining the availability and adequacy of resources, and merit rating of resources and programs to enhance the quality of output. This means that accreditation involves

the process of ensuring that curricula, physical facilities, personnel, funds and so on meet the needs of the university to achieve its stated philosophy and objectives. Hence, it is a measure of the quality of academic programs and it is aimed at strengthening academic programs for quality assurance and quality improvement.

The objectives of accreditation of higher institutions/programmes as outlined by the NUC (2012) include.

1. To ensure that at least the minimum academic standards documents are attained, maintained and enhanced.
2. To assure employers and other members of the community that Nigerian graduates of all academic programmes have attained an acceptable level of competency in their areas of specialization.
3. To certify to the international community that the programmes offered in Nigerian universities are of high standard and their graduates are adequate for employment and further studies.

The NUC (2012) outlines the criteria for accreditation of academic programmes to include: philosophy and objectives of the programme, the curriculum, teaching staff (quality and quantity), students' admission and graduation requirements, standard of degree examination, financial support, status of physical facilities, administration of department and employers rating of graduates. It can be deduced from these criteria that accreditation of academic programmes is all embracing and involves assessing the appropriateness of programme philosophy and objectives, the adequacy and relevance of the curricula to the students in their specific areas of study and the world of work.

Adequate Funding Panacea for Accreditation Problem in Tertiary Education

Adequate funding is critical to the success of accreditation programs in tertiary institutions in Nigeria, as it ensures these institutions meet the necessary standards of quality and performance. This financial support is essential for effective preparation for accreditation, enabling institutions to procure essential resources, employ sufficient and qualified staff, and provide necessary infrastructure facilities. Ogunode, Jegede, Olamoyegun, Akinjobi and Olatunde-Aiyedun (2022) emphasised that adequate funding supports the development of quality teaching materials, recruitment of qualified staff, and maintenance of modern infrastructure, all crucial for creating an environment conducive to learning and research. Moreover, it facilitates continuous improvement initiatives such as professional development, curriculum updates, and research activities, which are vital for maintaining accreditation standards and fostering innovation. Therefore, adequate funding ensures institutions can meet and exceed accreditation standards, enhancing the reputation, credibility, and overall effectiveness of tertiary education in Nigeria, and contributing to the nation's socio-economic development and global competitiveness.

Preparation of Accreditation

Poor preparation for accreditation of the academic program by intending universities is another problem hindering effective programme accreditation in the public universities in Nigeria. Poor preparation from the school administrators, deans, head of departments and senate committee on accreditation is some tin responsible for why many public universities fail academic program accreditation in their universities. The inability of the Bursar to release the money to the department to acquire the human and materials resources on time, poor participation of the senate committee on accreditation and the inability of the department to procure all the items and resources needed for the accreditation due to poor management (Ogunode, et al 2022a). This problem can be solved through adequate provision of funds to the various tertiary institutions. Adequate funding of tertiary institutions in Nigeria will enhance effective preparation for

implementation of accreditation programme in the various institutions. Accreditation programme needs preparation. Many human and materials resources are required to be procure and put down in the various institutions. There is need for school cleansing and sanitation. There is need to put down necessary resources that will facilitate ease accreditation. Committee on accreditation needs a lot of financial resources to plan and organize all resources needed for the accreditation. Adequate funding will enable tertiary institutions put down structure and infrastructure that will aid success of the accreditation programme (Ogunode, Olaoye, & Yakubu, 2023).

Procurement of Instructional Resources

Educational instructional resources are critical for effective implementation of accreditation programme in the tertiary institutions. Educational resources include resources used in the various laboratories and classroom to support implementation of teaching and research. The NUC Benchmark Minimum Academic Standards (BMAS) of 2012 stipulated that libraries and information resources required for accreditation of academic programme in departments includes; current basic texts, reference books, journals and other relevant textual and non-textual materials should be readily available in the library. Adequate funding will assists tertiary institutions in Nigeria to purchase and make available the various resources needed in each of the departments. Akpan, et al, (2016) noted that accreditation exercise stimulates university authorities to provide adequate quantity and quality resources to meet the requirements for accreditation because no universities want to be denied accreditation. The provision of these resources enhanced quality teaching that gave rise to quality graduates. Ogunode et al (2021) submitted that the government should increase the funding of public universities. This would make the school administrators access to adequate funds to carry out a program like the academic program accreditation. Funding is vital for the procurement of adequate instructional resources and facilities in the higher institutions (Echono, 2022; Ogunode, & Ukozo, 2023; Ohaeri, Olayinka & Ogunode 2023)

Employment of Adequate Staff

Tertiary education is a crucial component of national development, designed to address and solve pressing local, national, and international problems through intensive teaching, research, and the provision of community services. It plays a pivotal role in fostering individual development and growth, while also making a positive impact on society at large (Schrader-King, 2024). By equipping individuals with advanced knowledge and skills, tertiary education contributes to the creation of a knowledgeable and skilled workforce capable of driving innovation and progress (Ogunode & Musa, 2024). Consequently, tertiary education is not only essential for personal advancement but also for addressing broader societal challenges and promoting sustainable development.

Adequate funding of tertiary institutions will help various tertiary institutions in Nigeria to employ the right and adequate staff required for program accreditation in the various tertiary institutions (Olatunde-Aiyedun & Ogunode, 2021). For instance, the NUC Benchmark Minimum Academic Standards (BMAS) of 2012 for Nigerian universities stipulates specific requirements for non-academic staff in each department during program accreditation. These include having at least one computer-literate secretary, one clerical officer, two office attendants/cleaners, two typists, one laboratory attendant, and one technician. Moreover, academic staff appointments should meet specific rank mixes and ratios, including 20% in the professorial grade, 35% in the senior lecturer grade, and 45% in the lecturer I grade and below. Additionally, the BMAS of 2007 prescribes teacher/student ratios for different disciplines, such as 1:20 in science, 1:15 in engineering and technology, and 1:10 in medicine, veterinary medicine, and pharmacy. The employment of academic and non-academic staff requires substantial funding, and many tertiary institutions fail accreditation due to staff shortages linked to poor funding (Tunde & Issa, 2013). Adequate budgetary provisions enable institutions to meet regulatory staff requirements, thereby

enhancing instructional delivery and student learning outcomes (Akpan, 2011; Akpan et al., 2016). Furthermore, adequate funding is essential for public institutions to achieve their goals and mandates, demonstrating that no meaningful impact can be attained without sufficient financial support (Ogunode, Ukozor, & Ayoko, 2023e; Hassan & Fatile, 2022; Ayuba, 2015).

Provision of Infrastructure facilities

Adequate funding is vital for the provision of necessary infrastructure facilities in tertiary institutions. The NUC Benchmark Minimum Academic Standards (BMAS) of 2007 and 2012 stipulate that each department must have sufficient infrastructure to meet accreditation standards. This includes classrooms, lecture theatres, laboratories, studios, staff offices, and workshops for technical and vocational education. Additionally, every Faculty of Education should be equipped with a computer laboratory, internet access, and a resource room. These facilities are essential for the effective execution and implementation of academic programs and require significant financial investment (Adams, Zubair, & Olatunde-Aiyedun, 2022). Providing these facilities in the appropriate quantities and qualities is crucial for meeting accreditation requirements (Okebukola, 2018; Ogunode & Mohammed, 2024). Therefore, adequate funding enables tertiary institutions to procure and install all necessary infrastructure, ensuring that each department and faculty meets the standards set by accreditation bodies

Conclusion

This paper explored the critical role of adequate funding in addressing accreditation problems within Nigerian tertiary institutions. Utilizing secondary data, it was established that adequate financial support is essential for the effective implementation of accreditation programs. The study concluded that sufficient funding is vital for several key areas: the preparation for accreditation, procurement of instructional resources, employment of qualified staff, and provision of necessary infrastructure facilities.

In light of these findings, the paper recommends that the government should significantly enhance financial support for tertiary institutions across Nigeria. By ensuring that institutions receive adequate funding, they will be better positioned to meet accreditation standards, improve educational quality, and effectively implement their academic programs. This financial support is crucial not only for fulfilling regulatory requirements but also for fostering a robust educational environment that contributes to national development and global competitiveness.

References

- [1]. Adams, S.O., Zubair, M.A. & Olatunde-Aiyedun, T.G. (2022). Effects of project (infrastructure facilities) abandonment in public tertiary education in Nigeria and the way forward (EGNES), 1(2), 41-46. <https://doi.org/10.26480/egnes.02.2022.41.48>
- [2]. Akomolafe, C. O. & Ibijola, E. Y. (2014). Accreditation of academic programmes and quality assurance in universities in South-West Nigeria. Available from: www.global-conference.eu/proceeding/vol.1. pdf [Accessed 10 August, 2015].
- [3]. Akpan, C. P. (2011). Quality assurance management in higher education. In: Bassey, S. U. and Bassey, U. U. (Eds.) Management of Higher Education in Nigeria. Uyo: Abaam Publishers, pp: 216-229. ISBN: 978-485-684-5.
- [4]. Akpan, C. P. & Etor, C. R. (2016) Accreditation of academic programmes and quality university education in South-South Nigeria. *International Journal of Educational Studies*, 13(2), 37-54 3.
- [5]. Alechenu, J. (2012), November 13. Nigerian universities lack enough lecturers. The Punch Newspaper. p: 43.
- [6]. Ariza, A.J. & Olatunde-Aiyedun, T.G. (2023). Bringing Project-Based Learning into Renewable and Sustainable Energy Education: A case study on the development of the

Electric Vehicle EOLO. *Sustainability*, 15(13), 1-32. <https://doi.org/10.3390/su151310275>

[7]. Ayeni A.O and Babalola J.B (2009). Funding options for educational inventions in the educational sector Ibadan-his lineage publishing house.

[8]. Echono, S.T. (2022). Funding public tertiary education: roles of tertiary education trust fund (tetfund) and its future for sustainable development. A paper presented by the Executive Secretary of the Tertiary Education Trust Fund (TETFund)-at the Ahmadu Bello University Zaria Alumni Lecture October 2022.

[9]. Federal Republic of Nigeria (2013). National policy on education. 4th ed. Lagos: Nigerian Educational Research and Development Council.

[10]. Hassan, K., I. & Fatile, J., N. (2022). Public Private Partnership and Educational Infrastructure in Nigeria. *Journal of Public Administration, Finance and Law*. (26), 138-51. <https://doi.org/10.47743/jopaf-2022-26-13>.

[11]. National Universities Commission (2012). Manual of accreditation procedures for academic programmes in Nigerian universities. Available from: www.dspace.funai.edu.ng. [Accessed 20 August, 2015].

[12]. Nwafor, N. E. Uchendu, E. E & Akani, C. O (2015) Need for adequate funding in the administration of secondary education in Nigeria. *Global Journal of Educational Research*, (14), 119-124.

[13]. Obadara, O. E. & Alaka, A. A. (2013). Accreditation and quality assurance in Nigerian universities. *Journal of Education and Practice*. 4, 13-41.

[14]. Ogunode, N.J, & Abubakar Musa. (2021). Challenges facing the academic planning unit in Nigerian universities and the way forward. *European Journal of Humanities and Educational Advancements*, 2(4), 68-73. Retrieved from <https://scholarzest.com/index.php/ejhea/article/view/536>

[15]. Ogunode N. J, Abubakar, L & Ajape, T.S (2021) Evaluation of causes of inadequate funds in Nigerian public universities. *Middle European Scientific Bulletin*, (9), 93-103

[16]. Ogunode, N.J., Audu, E.I. & Olatunde-Aiyedun, T.G. (2022). Community service programme of Nigerian public tertiary institutions: problems and way forward. *Spanish Journal of Innovation and Integrity*, 5, 1-9. <http://sjii.indexedresearch.org/index.php/sjii/article/view/64>

[17]. Ogunode N.J., Edinoh, K., & Okolie, R.C. (2023). Public Private Partnership Model and Implementation of Tertiary Education Program in Nigeria. *AMERICAN Journal of Science on Integration and Human Development*, 01(06), 1-12.

[18]. Ogunode, N. J, Edinoh, K., & Rauf, O. S. (2023). Programme Accreditation in Tertiary Education. *European Journal of Higher Education and Academic Advancement*, 1 (5),1-13.

[19]. Ogunode, N.J., Jegede, D., Olamoyegun, S.O., Akinjobi, F.N. & Olatunde-Aiyedun, T.G. (2022). Effects of project (infrastructure facilities) abandonment in public tertiary education in Nigeria and the way forward. <http://erjbehaviouralsciences.com/wp-content/uploads/2022/09/3.-effects-of-project.pdf>

[20]. Ogunode, N.J & Mohammed, D Y. (2024). Adequate Funding Panacea for Development of Educational Administration and Planning Programme in Tertiary Institutions in Nigeria. *Pubmedia Social Sciences and Humanities*. 1(3), 1-13

[21]. Ogunode, N. J. Olaoye, A. E & Yakubu, I. (2023) Adequate Funding of Public Universities and Effective Implementation of Core Curriculum and Minimum Academic Standards (CCMAS) in North-East, Nigeria Universities. *Analytical Journal of Education and Development*, 3(3), 215-222.

[22]. Ogunode, N. J. Olowonefa, J. A & Suleiman, S (2023) Benefits of funding tertiary education in Nigeria. *European Journal of Artificial Intelligence and Digital Economy*, 1(3), 5-16

[23]. Ogunode, N. J, & Samuel, A (2022). Accreditation of Academic Programs in Public Universities in Nigeria: Challenges and Way Forward. *Electronic Research Journal of Social Sciences and Humanities* 4(2),15-27.

[24]. Ogunode, N. J. & Ukozo, C. U (2023). Exploring alternative funding options for universities education in a depressed economy. *Fan, Ta'lim, Madaniyat Va Innovatsiya*, 2(10), 64-76. <https://mudarrisziyo.uz/index.php/innovatsiya/article/view/451>

[25]. Ogunode, N.J., Zhenseh, A.J. & Olatunde-Aiyedun, T.G. (2022). Critical review of problems facing higher education in North-East Geo-Political Zone of Nigeria. *Central Asian Journal of Social Sciences and History*, 3(7), 54-63. <https://cajssh.centralasianstudies.org/index.php/CAJSSH/article/view/398>

[26]. Ohaeri, N.C., Olayinka, O. T. & Ogunode N.J. (2023). Enhancing research institutes' development through adequate funding in Nigeria. *World of science: Journal on Modern Research Methodologies*, 2(2), 7-16

[27]. Okebukola, P.A (June 21, 2018) Can the dry bones rise again? Revitalisation story of the Nigerian university System. 23rd Convocation Lecture of Ekiti State University, Ado Ekiti.

[28]. Olamoyegun, S.O., Olatunde-Aiyedun, T.G. & Ogunode, N.J. (2022). Funding of science programme in public secondary school in Federal Capital Territory, Abuja, Nigeria. *European Journal of Innovation in Nonformal Education (EJINE)*, 2(2), 1-7. <http://innovatus.es/index.php/ejine/article/view/246>

[29]. Olatunde-Aiyedun, T.G., Chakraborty, T. & Mishra, N. (2024). Women in science education in the 21st century with special reference to Nigeria. In T. Chakraborty, N. Mishra, D. Kumari, A. Natarajan, & S. Ray (Eds.), *Gender equality: An international perspective* (pp. 57-73). Nova Science Publishers, Inc.

[30]. Olatunde-Aiyedun, T.G. & Ogunode, N.J. (2021). Shortage of professional science and environmental education teachers in Nigeria. *Asian Journal of Science Education*, 3 (1), 1-11. https://www.researchgate.net/publication/350819014_Shortage_of_Professional_Science_and_Environmental_Education_Teachers_in_Nigeria

[31]. Proctoredu (2023) Tertiary Education - Definition & Meaning. <https://proctoredu.com/glossary/tertiary-education>.

[32]. S.M. (2022). *Role theory*. <https://study.com/academy/lesson/eaglys-social-role-theory-of-gender-differences-definition-lesson-quiz.html>

[33]. Tunde, O. K. & Issa, A. (2013). The quality of Nigerian higher education and the funding of library resources. *Ozean Journal of Social Sciences*. 6, 43-53