| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

Covid-19 and Administration of Environmental Education Students in Nigerian Tertiary Institution

Olatunde-Aiyedun, T.G¹, Ogunode Niyi Jacob², Ohibime Ernest Ohiosumua³

¹aiyedunt@gmail.com, ²Ogunodejacob@gmail.com, ³ohisernest@mail.com

ABSTRACT: The study discussed the impact of covid-19 on the administration of Environmental Education (EE) students in tertiary institutions in Nigeria. Secondary data collected from online publications and print materials were used. The following challenges affecting EE students during covid-19 and post covid-19 pandemic in tertiary institutions were discussed: funding, shortage of manpower, disruption of teaching programme, disruption of research programme, disruption of academic calendar and affected students learning. Based on the findings, the following are recommended for action: EE students should cultivate the EE principles of being positive change agents to many global crisis and pandemic; government should subsidize the internet services for tertiary institutions, academics, non-academics, and students for affordability; among others. These recommendations if duly implemented will enable the EE students in tertiary institutions conduct e-learning process while adhering to covid-19 preventive measures

Keywords: Administration, Environmental Education students, covid-19, tertiary education

INTRODUCTION

Environmental Education (EE) is an interdisciplinary field rooted both in science and societies, concerned not only with environmental literacy, but also, and perhaps foremost, with the relationship people have with their environment. As such the field cannot be immune to new trends in conservation and environmental protection. When new concepts emerge from science or society that are relevant to the relationship between people and their environment, such concepts have to be scrutinized from an Environmental Education perspective. The main objective of EE which is in line with the SDGs is to involve people, including students, in the challenges of our time. The major global crisis of our time is covid-19. It is therefore expected that EE students create the necessary knowledge, skills and the right attitude towards creating awareness to prevent the spread of this deadly and infectious virus to humans and the physical environment (Olatunde-Aiyedun, 2021; Ekpo & Aiyedun, 2020).

Tertiary Education which is the education given after Post Basic Education in institutions such as Universities and Inter-University Centres such as the Nigeria French Language Village, Nigeria Arabic Language Village, National Institute of Nigerian Languages, institutions such as Innovation Enterprise Institutions (IEIs), and 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) (NPE, 2013) has a major perequisite in the tackling of the spread of covid-19 and other challenges it brings to the education system (Olatunde-Aiyedun, Ogunode & Eyiolorunse-Aiyedun, 2021; Olatunde-Aiyedun, Eyiolorunse-Aiyedun & Ogunode, 2021).

The goals of Tertiary Education is to: contribute to national development through high level manpower training; provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians; 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; reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market; promote and encourage scholarship, entrepreneurship and community service; forge and cement national unity; and promote national and international understanding and interaction (NPE, 2013).

Tertiary Educational institutions shall pursue these goals through: Quality student intake; quality teaching and learning; research and development; high standards in the quality of facilities, services and resources; staff welfare and development programmes; provision of a more practical based curriculum relevant to the needs of the labour market; generation and dissemination of knowledge, skills and competencies that contribute to national and local economic goals which enable students to succeed in a knowledge-based economy; a variety of flexible learning modes including full-time, part time, block release, day-release, and sandwich programmes; access to training funds such as those provided by the Industrial Training Fund (ITF), Tertiary Education Trust Fund (TETFund); Students Industrial Work Experience Scheme (SIWES) that is well structured, coordinated and supervised; maintenance of minimum educational standards through

| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

appropriate regulatory agencies; an all-inclusive credible admissions policy for national unity; supporting affordable, equitable access to tertiary education through scholarships and students' loans; inter-institutional co-operation and linkages; and dedicated services to the community through extra-mural and extension services (NPE, 2013).

The outbreak of covid-19 in 2019 affected the educational institutions which include early child education, primary school education, junior secondary school education, senior secondary education and higher education. Ogunode, Ahaotu & Ayisa (2021), Ogunode, (2020a) and Ogunode & Jegede (2021) stated that the covid-19 have affected the entire educational programme and school calender. To this end, this study was undertaken to explore the effects of covid-19 on administration of tertiary institutions in Nigeria: During and post-covid-19 with the aim making robust recommendations to strengthen the administration of tertiary institutions in a precarious scenario like the Covid19 pandemic.

REVIEW OF RELATED LITERATURE

Concept of Covid-19

According to the World Health Organization (WHO), coronaviruses are a family of viruses that cause illnesses ranging from the common cold to more severe diseases such as severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cats to humans while MERS moved to humans from a type of camel. Several known coronaviruses are circulating in animals that have not yet infected humans. The name coronavirus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, the looks like it is surrounded by a solar corona. The novel coronavirus, identified by Chinese authorities on January 7 and since named SARS-CoV-2, is a new strain that had not been previously identified in humans. Little is known about it, although human-to-human transmission has been confirmed (Ogunode, Eyiolorunse-Aiyedun, & Olatunde-Aiyedun, 2021, Ogunode, 2020, Aljazeera, 2020). The COVID-19 pandemic affected all educational institutions especially the higher institutions leading to closure of academic programme and other academic functions, Olatunde-Aiyedun, et. al., 2021; Olatunde-Aiyedun, Eyiolorunse-Aiyedun, & Ogunode 2021).

Tartary Institutions Administration of EE Students

Tertiary institutions administration/ higher institution administration or University administration refers to the application of the universities' resources to implement the programme of the universities with the aims of realizing the objectives of the universities. University administration is the mobilization and arrangement of both human and materials resources for the achievement of the university's goals. University administration is the effective use of the resources of the university to implement the teaching programme, research programme and the community service programme of the universities. University administration is the deployment of the universities' resources to accomplish the universities' programme. The objectives of university administration include: to implement the programme of the universities as defined; to allocate resources for the implementation of research programme; to ensure implementation of teaching programme, to ensure implementation of research programme; to ensure delivery of quality community services programme, to ensure effective staff development, to ensure effective student administration, to ensure smooth implementation of academic calendar and to ensure quality education (Ogunode, 2020; Aiyedun, 2020).

The achievement of the higher education goals depends on the quality of educational resources available to the various institutions and the conducive of the working environment. Human resources function well in an atmosphere that is conducive (Ogunode, Jegede, & Musa 2020; Olatunde-Aiyedun & Ogunode, 2021a). Ekpo and Aiyedun (2017) classifies educational resources into human, physical and socio-economic resources. These are potential inputs of the institution that enable the institution to achieve its objectives if they are effectively managed. They are the preconditions for successful implementation of school programmes and whenever this condition is not fulfilled, the ability of the teaching staff to perform his/her task will be greatly hampered. For the purpose of this paper presentation the following factors; financial resources, human resources, teaching, researching, academic programme, and learning will be discussed (Olatunde-Aiyedun & Ogunode, 2021b).

Effects of COVID-19 on Administration of Environmental Education (EE) Students in Nigeria

There are many effects of COVID-19 on the administration of EE students in tertiary education in Nigeria. These are: Reduction in the financial allocation for tertiary education administration, loss of manpower, disruption of teaching programme, disruption of research programme, disruption of academic calendar and affected students learning (Aiyedun &Ogunode, 2020).

| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

Reduction in the Financial Allocation for Tertiary Education

The COVID-19 pandemic in Nigeria have led to the reduction in the funds allocated for the administration of tertiary education in Nigeria. Many tertiary institutions are facing the problem of shortage of funds due to the COVID-19 pandemic. The COVID-19 pandemic affected the entire world economy reducing economic growth and financial development across the World. Nigerian economy is affected by the COVID-19 pandemic. The COVID-19 led to the fell in national revenue in 2020 which affected the budget programme of government. The fell in revenue was responsible for the reduction in the 2020 educational budget. In 2020, education got a budget of 568 billion naira while the 2021 education got a budget of 509 billion naira. The dropped in the educational budget is linked to the fall in the national revenue caused by COVID-19. Tertiary institutions in Nigeria gets their funds from the government and the drop in the 2020 education get will affect the administration of tertiary institutions in the Country. Ogunode (2020) observed that the budgetary allocation released for the administration of the higher education in Nigeria is inadequate. Many tertiary institutions administrators presently are staffed of funds to implement various programme of their institutions. Funds budgeted in 2020 are not released in due to time for the various institutions to carry out their programme. In Nigeria, higher education is financed through concurrent financing from the three tiers of governmentfederal, state, and local government authority, with distinct financing mandates and responsibilities for each tier. The federal government provides 50% and the state and local government as 30% and 20% respectively. Maryjacob & Mukhtar (2021) submitted that state investment in education is heavily reliant on the federal account allocation, making its educational goals susceptible to challenges of national resource mobilization (COVID-19, international oil price fluctuation) and expenditure management. The federal government of Nigeria allocated the sum of 568 billion naira (approx. USD 1.5 billion) to education in 2020. However, as a result of COVID-19, this allocation was reduced to 509 billion naira (approx. USD 1.34 billion). This has pressured public schools into dismissing hundreds of temporary staff members and skyrocketed student school fees in various institutions, thereby increasing the inequality in education (Ogunode & Aiyedun, 2020). Chukwu (2021) observed that "last year we had COVID-19 which affected all revenues, including revenue and it affected economic activities. So last year's drop in IGR can be explained by the COVID-19 induced economic crisis.

Shortage of Academic and Non-Academic Staff

The effectiveness of administration of tertiary institutions depend on adequate and qualified academic and nonacademic staff. The school administrators needs the human resources within the institutions to realize the objective of the institutions. It is unfortunate that Nigerian tertiary institutions that have been described by Ogunode (2021) and Olatunde-Aiyedun and Ogunode (2021) stated that the shortage of staff is affected by COVID-19 pandemic which led to the death of many professors. The COVID-19 pandemic that occurred in 2019 across the world including Nigeria have led to the death of many professionals. It was reported that over ten million people died as a result of COVID-19 across the World. In Nigeria, many tertiary institutions resume to confirm the death of many academic staff and nonacademic staff that COVID-19 have killed. In Kano state for instance, many professors were reported death as a result of COVID-19. In Lagos, a professor was confirmed death due to COVID-19 while in Benue state, another professors was reported death as a result of COVID-19. Ogunode (2020) observed that covid-19 reduced the number of academic staff in the Nigerian educational institution while Ahaotu & Ogunode (2021) also discovered that many academic staff have been lost due to COVID-19. Ogunode, Iregbe, & Abashi, (2020) observed that the higher institutions in Nigeria and across the World has lost many teachers, lecturers and great researchers to COVID-19 pandemic. This loses will affect the growth and development of the educational sectors especially the higher institutions.

Impact of covid-19 on Teaching Programme

Disruption of teaching programme is another great impact of COVID-19 pandemic on the administration of tertiary institutions across the country. One of the major function of school administration is to ensure effective implementation of teaching programme. Teaching programme is one of the cardinal programme of higher education (Ogunode, 2020). Teaching programme deals with delivering on planned lecture to the students with the aims of transferring knowledge, skills and hidden information within a particular programme to them. In Nigerian tertiary institutions, teaching and learning are mostly done with conversional model. Teaching is physically and learning is physically done in the lecture halls. The outbreak of COVID-19 pandemic which resulted to school closure affected the teaching programme of many tertiary institutions especially the public higher institutions. Majorities of the tertiary institutions do not have the adequate ICT infrastructural facilities to migrate to online or virtual learning (Ogunode and Aiyedun, 2020). Ogunode, Iregbe, and Abashi, (2020) stated that teaching and learning in all Nigerian higher institutions and across the world have been put to hold because of the COVID-19 virus. Teaching and learning have been put to hold in all the Universities, Poly-techniques and colleges of education in the country as a result of COVID-19 pandemic. The implication of this is that many Nigerian students will not be in the schools for a period of one month or even more implying that they will be idle. Ogunode, Iregbe, & Abashi, (2020) noted that COVID-19 pandemic have led to the

| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

suspension of academic calendar of higher institutions, suspension of research programme of higher institutions, and led to the suspension of community service of higher institutions in FCT, Abuja.

Impact of covid-19 on Research Programme

Higher institution administration is saddled with the responsibilities of ensuring effective implementation of research programme. Research programme have been observed by Ogunode as the second cardinal programme of the higher institutions. Research programme is vital to the development of the tertiary institutions because it is one of the indicator used to measure the performance of tertiary institutions across the country. The research programme in Nigerian higher institutions is not effective due to inadequate funding and lack of conducive environment. The covid-19 pandemic outbreak in 2019 which resulted to the school closure have also disrupted the research programme of many higher institutions in the country. During the school closure it was observed that many higher institutions shut down implying that laboratories and research resources were not in used in most of the tertiary institutions except for few private higher institutions. It was also observed that students research work, conferences and research programme of many research centers within the higher institutions were closed down. Ogunode (2020) conducted a study which to examined the impact of covid-19 pandemic school close down on the research programme of higher institutions in Abuja, Nigeria. Result collected revealed that respondents agreed that covid-19 pandemic school closure have impact on research program of higher institutions, covid-19 pandemic affected the flow of international research grants into higher institutions, covid-19 pandemic affected government funding of research higher institutions and 100% agreed that higher institutions as part of their community services by creating awareness to the general public on prevention of covid-19 (Ekpo & Aiyedun, 2019).

Impact of covid-19 on Academic Calendar

Academic calendar are planned and designed by school administration to guides the activities and programme of the higher institutions. Academic calendar dictates the academic programme of the school. When to resume, when to start exams, when to observe excursion and when to close. The academic calendar contains all the school academic activities for a semester and a session. Academic calendar aid effective school administration by giving directions. The outbreak of the COVID-19 which ended to shutting down of all educational institution in Nigeria disrupted the academic calendar of the tertiary institutions. The COVID-19 prevented many students from writing their final exams and from completing their academic work. Presently, many higher institutions are still running 2019-2020 academic session instead of 2020-2021 academic session. Ogunode, Ahaotu and Ayisa (2021); Aiyedun and Ogunode (2020); Ogunode, (2020b); and Ogunode, (2020c) observed that the covid-19 pandemic affected the academic programme of higher institutions in Nigeria.

Impact of Covid-19 on EE Students' Academic Performance

Administration of EE students in tertiary institution is saddle with the responsible of ensuring that that teaching and learning takes place effectively and efficiently in the institutions. The outbreak of covid-19 pandemic which led to closure of all tertiary institutions in Nigeria have disrupted the learning programme of Nigerian students resulting to learning loses. The administration of students learning in Nigerian tertiary institutions was affected by the covid-19. The Nigerian higher institutions students like other students across the world have lost a lot in term of learning. The COVID-19 lock down which lasted for about nine months in Nigeria put many public higher institution off of learning because during the period of lock down teaching and learning was not done due to absent of ICT infrastructural facilities in the majorities of higher institutions in the country (Ogunode, 2020, Aiyedun, & Ogunode, 2020; Ojelade, Aregbesola, Ekele & Aiyedun, 2020). Simon & Hans (2020) submitted that the global lockdown of education institutions has caused major (and likely unequal) interruption in students' learning; disruptions in internal assessments; and the cancellation of public assessments for qualifications or their replacement by an inferior alternative. learning loss in Group of Seven (G7) industrialised countries such as France, Canada, Italy, Germany, Japan, United Kingdom and the United States ranged from 9.84% (in France), to 31.16% (in Italy), according to the survey (Shuriah, 2021). In India, the COVID-19 lockdown to contain the spread of the virus in the country affected over 1,000 universities and more than 45,000 colleges that remained shut for months. It compelled these institutions to function in unfamiliar ways, suspend activities such as research, and operate online. A whopping 85% of students in higher education in India felt the measures led to learning loss, according to the survey. While students believe that the loss is between 40% and 60% of what they would normally learn, university leaders estimated the loss at 30% to 40%. The survey estimates it could take around three years to overcome this gap (Shuriah, 2021).

Conclusion, Implication of the Study

This presentation discussed the effects of COVID on administration of tertiary institutions in Nigeria: During and post-COVID. The presentation used secondary data and primary data which were collected from the online publication and

eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

print materials. The paper identified drop in tertiary education funding, shortage of manpower, disruption of teaching programme, disruption of research programme, disruption of academic calendar and affected students learning.

Recommendations

To ensure that teaching and learning of EE students in tertiary institution continues in Nigeria, the following recommendations are suggested:

- EE students should cultivate the EE principles of being positive change agents to many global crisis and pandemic. i.
- The government should subsidize the internet services for tertiary institutions, academics, non-academics, and ii. students for affordability.
- iii. The government should increase the funding of tertiary institutions to enable the institutions to meet up with the challenges caused by COVID-19.
- iv. The government should provide all the ICT facilities in all tertiary institution to allow academic staff and students to have access to online education even in rural areas. This will enable the tertiary institutions conduct eadministration in the various institutions.
- The government should continuously train and retrain all school administrators and academic staff and nonv. academic staff on information communication technologies.

References

- Aljazeera. (2020). Corona virus: All you need to know about symptoms and risks. Retrieved on July, 17 2020 from 1. https://www.aljazeera.com/news/2020/01/coronavirus-symptoms-vaccines-risks-200122194509687.html
- Aiyedun, T.G. & Ogunode, N.J. (2020). Effect of COVID-19 on academic program in universities in Nigeria. 2. Electronic Research Journal of Engineering, Computer and Applied Sciences, 2, 193-201. https://www.researchgate.net/publication/346966789 Effect of Covid-19_pandemic_on_academic_programme_of_universities_in_Nigeria
- Aiyedun, T.G. (2020). Effect of animation teaching strategy on secondary school students' achievement, retention 3. and interest in climate change in Lokoja, Kogi State. International Journal of Trend in Scientific Research and Development (IJTSRD), 4 (3) 944-949. https://www.ijtsrd.com/papers/ijtsrd30740.pdf
- Ekpo, C.G. & Aiyedun, T.G. (2020). Effect of Integration of Photographic Album Teaching Strategy on Students' 4. Performance in Environmental Education. The Environmental Studies Journal (TESJ): A Multidisciplinary Journal, 3 (1) 15-33. https://www.researchgate.net/publication/342049747_Effect_of_Integration_of_Photographic_Album_Teaching_S trategy_on_Students'_Performance_in_Environmental_Education?_sg=WXqpyO7WFiLRU9HJYoxtykI77dpVprKEaYzc2GZgf7OL9CyMY564JEs_KfFHD8uaKJh12bWA449Ylqq5l9d-9wu74_p0v5uEAhcqRlC.5LZX7_yYMloloXosECNpqeFvTl1U8PNFaakPyBBxf2XJPPT2ngLDxnRhsrld0pHgWRRs673PfJ8fo2N0FOBw
- Ekpo, C.G. & Aiyedun, T.G. (2019). Environmental Education: A tool for creation of awareness on adaptation to 5. climate change in Nigeria. IOSR Journal of Research & Method in Education (IOSR-JRME), 9 (6) 12-21. http://iosrjournals.org/iosr-jrme/papers/Vol-9%20Issue-6/Series-5/C0906051221.pdf
- Ekpo C.G. & Aiyedun T.G. (2017). Environmental Education: Essential tool for the attainment of Sustainable 6 Development Goals in the 21st Century Nigeria. The Researcher: A Journal of Contemporary Educational Research, 1(1), 124-142.
 - http://www.researchersjournal.org/j2/papers/v1n1g.pdf
- Jegede, D. (2020) Perception of Undergraduate Students on the Impact of COVID-19 Pandemic 7. on Higher Institutions Development in Federal Capital Territory Abuja, Nigeria. International Journal on Integrated Education e-Electronic Research Journal of Social Sciences and Humanities 2706 8242 2 (2),www.eresearchjournal.com
- Maryjacob, O. & Mukhtar, H.M. (2021) Education financing in Nigeria and the impact of the COVID-19 8. pandemic Bottom of Form https://www.globalpartnership.org/blog/educationfinancing-nigeria-andimpact-covid-19-pandemic
- Nasir, M. S., Khan, M. R. (2020). The Coronavirus Pandemic: Symptoms, Precautions and 9. Preventions in the Light of Teaching of Islam. Electronic Research Journal of Social Sciences and Humanities, 2(II):45-66.

| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

- Ojelade, I.A., Aiyedun, T.G. & Aregebesola, B.G. (2019). Environmental Education as an Instrument for awareness creation on the health effects of water contamination in Saburi Community of Federal Capital Territory (FCT), Abuja, Nigeria. *The Researcher: A Journal of Contemporary Educational Research*, 2 (1), 1-16. http://www.researchersjournal.org/j2/papers/v2n1a.pdf
- 11. Ogunode, N.J. & Aiyedun, T.G. (2020). Administration of science programme in Nigerian higher institutions: issues, challenges and way forward. *Middle European Scientific Bulletin*, 6, 94-99.
- 12. Ogunode N.J, Eyiolorunse-Aiyedun, C.T. & Olatunde-Aiyedun, T.G. (2021). Educational planning in Nigeria during covid-19: problems and way forward. *Academicia Globe: Inderscience Research*, 2(07), 137–147. https://doi.org/10.17605/OSF.IO/RM4SY
- 13. Ogunode N, J, Iregbe, A & Abashi, A. E. (2020). Impact of COVID-19 on the Higher Institutions Development in Nigeria. *Electronic Research Journal of Social Sciences and Humanitie*. Vol 2 (2) P:126-135
- 14. Ogunode N, J, Jegede, D, & Musa, A, (2020) Problems Facing Academic Staff of Nigerian Universities and the Way Forward *International Journal on Integrated Education*. Volume 4, Issue I, p:230-240
- Ogunode N, J. (2020e). Impact of COVID-19 Pandemic School Close Down on the Research Programme of Higher Institutions. International Journal of Advances in Data and Information Systems Vol. 1, No. 1, April 2020, pp. 40~49 ISSN: 2721-3056, DOI: 10.25008/ijadis.v1i1.189 40
- 16. Ogunode, N. J. (2020a). Impact of COVID-19 on Private Secondary School Teachers in F.C.T, Abuja, Nigeria. *Electronic Research Journal of Behavioural Sciences*, 3(2020):72-83.
- 17. Ogunode, N. J. (2020b). An Investigation into the Impact of COVID-19 Pandemic on Higher Institutions in FCT, Abuja, Nigeria. *Journal of Social Science, Education and Humanities*, 1: 8-16.
- Ogunode, N. J. (2020c). Effects of COVID-19 Schools Close Down on Academic Program of Senior Secondary Schools in Abaji Area Council of Federal Capital Territory Abuja, Nigeria. *Electronic Research Journal of Social Sciences and Humanities*, 2(II):84-94.
- 19. Ogunode, N. J. (2021). Impact of Covid-19 on Administration of Primary School in Nigeria. *International Journal on Integrated Education*, 4(1); 221-229, doi:10.31149/ijie.v4i1.1175.
- Ogunode, N. J., Abigeal, I, Lydia, A. E. (2020). Impact of COVID-19 on the Higher Institutions Development in Nigeria. *Electronic Research Journal of Social Sciences and Humanities*, 2(II): 126-135.
- 21. Ogunode N.J., Ahaotu, G, N, & Ayisa C, T. (2021) Impact of the Covid-19 Pandemic on Nigerian educational institutions. *Electronic Research Journal of Engineering, Computer and Applied Sciences*. Volume 3 (2021)
- 22. Ogunode N, J, Jegede De, Audu, E, I., & Adah S. (2021) Impact of COVID-19 on Educational Planning in Federal Capital Territory, Abuja, Nigeria. *Riwayat: Educational Journal of History and Humanities*, Volume 4, Nomor (1),p: 55-61
- 23. Ogunode, J., Eyiolorunse-Aiyedun, C. T & Olatunde-Aiyedun, T.G (2021) Educational Planning In Nigeria During Covid-19: Problems And Way Forward. *Academicia Globe: Inderscience Research*, 2(7), 137-146
- 24. Ojelade, I. A., Aregbesola, B. G., Ekele, A., & Aiyedun, T. G. (2020). Effects of Audio-Visual Instructional Materials on Teaching Science Concepts in Secondary Schools in Bwari Area Council Abuja, Nigeria. *The Environmental Studies Journal (TESJ)*, 3, (2) 52 – 61. https://researchersjournal.org/effects-of-audio-visual-instructional-materials-on-teaching-science-concepts-insecondary-schools-in-bwari-area-council-abuja-nigeria/
- Olatunde-Aiyedun, T.G. (2021). Fundamentals of Environmental Education.LAP LAMBERT Academic Publishing, Mauritius. https://www.researchgate.net/publication/349573767_Fundamentals_of_Environmental_Education
- Olatunde-Aiyedun, T.G., Eyiolorunse-Aiyedun, C.T. & Ogunode, N.J. (2021). Post covid-19 and digitalization of University lecturers in Nigeria. *Middle European Scientific Bulletin*, 11(1). http://cejsr.academicjournal.io/index.php/journal/article/view/488
- 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_Edu cation_Teachers_in_Nigeria

| eISSN: 27924025 | http://openaccessjournals.eu | Volume: 1 Issue: 4

- Olatunde-Aiyedun, T.G. & Ogunode, N.J. (2021). School Administration and effective teaching methods in Science Education in Nigeria. *International Journal on Integrated Education*, 4 (2), 145-161. 10.13140/RG.2.2.11502.54080
- Olatunde-Aiyedun, T.G., Ogunode, N.J. & Eyiolorunse-Aiyedun, C.T. (2021). Assessment of virtual learning during covid-19 lockdown in Nigerian public universities. *Academicia Globe: Inderscience Research*, 2 (5) 159-175. https://agir.academiascience.org/index.php/agir/article/view/132 or https://doi.org/10.17605/OSF.IO/S6N2Q
- 30. Osiesi, M. P. (2021). Addressing Teaching And Learning Challenges Amidst The Covid-19 Pandemic: Implications For The Nigeria Primary Schools. *International Journal on Integrated Education*, 4(I); 1-8.
- 31. Simon, B. & Hans, H.S. (2020). Schools, skills, and learning: Impact of COVID-19 on https://voxeu.org/article/impact-covid-19-education. https://www.universityworldnews.com/post.php?story=202003240656397
- 32. Shuriah, N. (2021). Pandemic is behind large learning loss for students

https://www.universityworldnews.com/post.php?story=20210716085202949