## **COVID-19 and Higher Education in Nigeria: The Present and the Future**

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#### Abstract

The surge of COVID-19 pandemic in December, 2019 became an issue of concern to everyone globally including Nigerians. Its sporadic spread into the human environment entrenched awful experiences in all facets of life across the countries of the world. This is a type of virus also traceable to animals but now is ravaging the human environment as a new strain of coronavirus that makes it to be zoonotic in nature. To contain the spread of the virus ushered in some preventive policies and strategies in every people's gathering including higher educational institutions. The alternative option to forestall and contain the spread of the virus in institutions of higher learning was to embrace the use of Information and Communication Technology (ICT) devices in the teaching and learning activities. Against the background, this study examined the effect of COVID-19 pandemic on the present and the future of higher education in Nigeria. It identified the present state of Nigeria's higher educational institutions in the face of COVID-19 pandemic disease, the use of ICT in the teaching-learning activities in the higher education institutions and what the future of higher educational institutions portends. Arising from all these, conclusion was drawn and recommendations were given to include: Government should be ready to provide more infrastructural facilities such as the physical facilities like buildings amongst others: and ICT facilities/equipment in the tertiary institutions of learning should be upgraded to meet the global standard.

## Keywords: COVID-19, education, higher education and ICT

The entire world is currently ravaged by the novel Coronavirus (COVID-19) pandemic to the extent that no particular country and its social institutions are secure from the attack of the virus. The educational institutions that are considered as centres for human capital and national development are also affected with this scourge. In order to prevent and contain the rapid spread of the pandemic, every facet of the nations in the world was locked down

including educational institutions at all levels. It is against this background that this paper aimed at examining the emergence of COVID-19 pandemic, its challenges on social gathering of humans, its effects on higher education and the use of Information and Communication Technologies (ICTs) to forestall further breakdown in the academic calendar of higher educational institutions in Nigeria. Then draw conclusion and advance recommendations that would impact the future of the higher educational institutions in Nigeria.

#### The Emergence of COVID-19 Pandemic in the World at Large

The emergence of COVID-19 in December, 2019 from Wuhan City, China brought a dispensation of uncertainty in the safety of the human race in the world. Helmy et al. (2020) reported that several clusters of pneumonia cases of unknown causes were reported in Wuhan city as at December 2019 and as a result, epidemiological investigations were conducted, while the causative of the pneumonia was confirmed as the severe acute respiratory syndrome Coronavirus-2 (SARS-CoV-2) which is zoonotic, meaning they are normally transmitted between animals and people. Nigeria Centre for Disease Control [NCDC] (2021) reported that as of July 13, 2021 over 164,475 people had died in Nigeria, while infected individuals amounted to 4,038,342 in over 200 Countries of the world (WHO, 2020).

In Nigeria, the NCDC (2020) reports indicated that as at 26<sup>th</sup> of February 2021 the total confirmed cases were 154,476; discharged were 131,722; and deaths were 1,891. In actual fact, the COVID-19 pandemic easily spread through direct contact amongst human beings, spray droplets from sneezing, faecal–oral route, and intermediate fomites from both symptomatic and asymptomatic patients during the incubation period (NCDC, 2020). The disease is characterized by fever, dry cough, dyspnoea, and diarrhoea in 20–25% of patients who do not exhibit upper respiratory signs such as sneezing or sore throat. In the severe cases, the disease is characterized by pneumonia, metabolic acidosis, septic shock, and bleeding (Helmy, et al 2020). Its rapid spread brought about a new world order that altered human lifestyle and patterns of operations in various systems, leading into the immediate and emergency lockdown of the tertiary educational institutions amongst other social institutions in order to contain the rapid spread among the students and their teachers.

# Challenges of the COVID-19 Pandemic Disease on Social/Physical Distancing

The challenges posed by the COVID-19 pandemic disease to the human race throughout the World cannot be over-emphasized, in the sense that its appearance in the world at large can be likened to technical declaration of the Third World War that every leader of the nations of the globe did not prepare for which caught them all unaware. Tracing back the memory line of the First and Second World Wars respectively, it may be interesting to know that there were some nations of the world that did not partake in the world wars, those nations were referred to as the Non-Alliance Nations, but in the case of the novel Coronavirus (COVID-19) every nation of the entire world are partakers of the war declared by the COVID-19 pandemic disease. People that had not yet been affected by the COVID-19 pandemic disease were panicking and looking inwardly to guard against its spread into their countries by closing down inter-countries transit borders.

The COVID-19 pandemic disease challenge is so big to the extent that the social and physical lifestyle and pattern of everyone had to change forcefully in order to contain the spread of the virus from one person to another. Godfrey (2020) opined that COVID-19 pandemic disease affected all forms of social and economic activity in and around the world. Due to the rapid spread of the novel Coronavirus, governments across the world were forced to implement the global standard measures to curb the infection of the virus. These measures include observing social distancing, i.e., keeping at least two meters of gap between two persons or more in public places, quarantine, partial or total lockdown, adoption and the use of face masks, observing social distancing, regular hands washing and/or the use of alcoholic sanitizers, lockdown of the various social and economic institutions such as educational institutions at all levels, religious worship centres, offices for both government offices and private organizations were not left out, and other restrictive measures (Wasserman et al., 2020). These strategies and techniques to counter the challenge of the COVID-19 pandemic disease spread in the world are just first aid and palliative to the deadly disease, because they are just temporary measures and they are not final antidote to COVID-19 pandemic disease not until there is the availability of the vaccine. Therefore, scientists, leaders of the world and the World Health Organization (WHO) are still on their toes searching for the relative solution to the problem and challenge of COVID-19 disease that is ravaging the human race conglomerates and kingdoms. To fix the challenge of the COVID-19 pandemic disease in the world today, it demands skills and technical know-how that would lead into availability of the COVID-19 vaccine across the globe for the prevention of the virus as it was discovered for other contagious diseases.

The magnitude of challenges posed by the COVID-19 pandemic disease in the area of economic of every affected nation cannot be over-emphasized. If care is not taken, most of the third and developing countries of the world may experience serious economic meltdown and recession very soon. As a result of the lockdown, some private organizations had to lay off their staff, which meant people being thrown into the labour market unexpectedly. Those private organizations that did not lay off their staff were not making payment of the staff salaries, and the last payment of salaries and wages made should had been March 2020 or thereabout. The option of lockdown adopted to curb the spread of COVID-19 pandemic disease would also cause some small and medium scale enterprises to fold up and some upcoming private school organizations were likely to go into extinction since their pupils/students were not in the schools since March 2020, therefore payment of the school fees was not made by the parents.

In other words, schools' academic calendars at all levels of education were interrupted as a result of the COVID-19 pandemic disease to observe the new policy of the partial or total lockdown of the educational institutions and their facilities. As good as the policy of lockdown is, and as one of the measures in containing the spread of COVID-19 pandemic disease in the larger communities, there is also negative implication to the growth and development of any country's human capacity and nation development in which education propagates. It is no doubt that educational institutions and their facilities were locked down by the governments especially the Nigerian government without looking at the future implications of the decision on growth and development on the human capital and nation's development respectively. The negative implication of the lockdown to contain the spread of the COVID-19 pandemic disease seems to be riskier than the problem that lockdown portends to solve as far as education industries are concerned.

Education is a total lifespan tool and equipment that is designed to mould characters and attitudes of an average being in a given society. If the description given to education seems to be true, it is therefore suggested that, there should always be alternative strategies and techniques that would have to replace the conventional and traditional methods of teaching-learning in schooling at all levels. The use of Information and Communication Technology (ICT) apparatus and equipment can be applied to combat any form of pandemic like COVID-19 that may cause the academic calendar to be disrupted.

Looking at the state of education system in Nigeria, it is not an understatement stating that the Nation's educational institutions are yet to be there, when it comes to embracing the full adoption and adaptation of ICT in facilitating the classroom teaching and learning activities.

# COVID-19 Pandemic and Use of Information and Communication Technology in Teaching and Learning at Higher Education

Education plays significant roles in enhancing and moulding the characters and attitudes of the citizenry that would man any nation's economic, political and socio-cultural aspects of life. It means that education is a driving force to reckon with, if any nation would experience rapid growth and development in all ramifications of its facets. Its roles and responsibilities go beyond the skills and knowledge acquisitions attained under the classroom teaching-learning experiences. This is an indication that it embraces both the formal and informal aspects of human life.

In the case of Nigeria, formal education system is segmented into three and namely: Basic Education; Post-Basic Education (Senior Secondary Education); and the Tertiary Education also known as Higher Education. Higher education being the focus of this study is admonished as the educational institutions designed and established to accommodate the graduates of the postbasic education that possess the Higher Education Potentials (HEPs) prerequisites. That is having credit passes in five subjects which include English Language, Mathematics and three other subjects related to the course of choice.

Higher educational institutions comprise: The Polytechnics / Monotechnics; Colleges of Education; and the Universities. Higher educational institutions are expected to train the high-level manpower that would be specialists in their field of endeavours and also to man the nation's economic facilities, political and the socio-cultural aspects of life. It is worthy to know that, the Federal Republic of Nigeria (FRN, 2014) in the National Policy on Education (NPE), the 6<sup>th</sup> edition Section 5; Paragraph 80; described tertiary education as the education given after Post-Basic Education in institutions to include: 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 Agriculture, Schools of Health and Technology and the National Teachers' Institutes (NTI). However, the tertiary level of education system consists of a university sector and a non-university sector. The latter is composed of polytechnics, monotechnics, and colleges of education.

The policy document stipulates the purposes, aims and objectives with a set of goals to be achieved with tertiary education contained herein in the National Policy on Education, Section 5; Paragraph 81 and 82 of the Federal Republic of Nigeria (FRN, 2014). These include:

- *a. Contribution to the national development through high level manpower training;*
- b. Provision of accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians;
- c. Provision of 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. Promoting and encouraging scholarship, entrepreneurship and community service; and forge and cement national unity; and
- f. Promoting national and international understanding and interaction.

Paragraph 82 of the policy document established how tertiary educational institutions should pursue their goals of establishments in the Nigeria society, which include through:

- a. Quality students' intake;
- b. Quality teaching and learning;
- c. Research and development;
- d. High standards in the quality of facilities, services and resources;
- e. Staff welfare and development programmes;

- *f. Provision of a more practical based curriculum relevant to the needs of the labour market;*
- g. 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;
- *h.* A variety of flexible learning modes including full-time, part-time, block release, day-release, and sandwich programme;
- *i.* Access to training funds such as those provided by the Industrial Training Institute (ITF), Tertiary Education Trust Fund (TEFund);
- *j.* Students Industrial Work Experience Scheme (SIWES) that is well structured, coordinated and supervised;
- *k. Maintenance of minimum educational standards through appropriate regularity agencies;*
- *l.* An all-inclusive credible admissions policy for national unity;
- *m.* Supporting affordable, equitable access to tertiary education through scholarships and students' loans;
- n. Inter-institutional cooperation and linkages; and
- *o.* Dedicated services to the community through extra-mural and extension services.

Having identified the goals and ways of fulfilling the tertiary educational institutions vision and mission in Nigeria, it seems that these institutions of higher learning are performing far below the expectations. This is as a result of the following amongst other militating factors challenging the effective service delivery of the higher institutions of learning in Nigeria such as:

- a. Inadequate funding;
- b. Inadequate infrastructural facilities;
- c. Inadequate number of academic staff that is lecturers with the prerequisite qualifications;
- d. Inadequate lecture theatres i.e., lecture auditoriums/space;
- e. Overcrowding of the students' population in lecture theatres manned by one lecturer at a go;
- f. Lecturers versus Students ratio;
- g. Poor and the dilapidated physical equipment and infrastructural facilities;
- h. Inadequate ICT devices to aid teaching-learning activities in the system of tertiary institutions;
- i. Inadequate electricity to power the available ICT apparatus and equipment;
- j. Inadequate sponsoring of research activities through the research grants;
- k. Relative mismatching in the available course of study by the students and needs of the employer of labour; and

1. Unfriendly learning environment for lecturers and their learners such as non-conducive offices for lecturers, and non-conducive lecture rooms for the students amongst others.

No wonder, there were outcries in the recent times that, the graduates of Nigeria tertiary institutions are unemployable in the field of work by the employers of labour. This is because most of them do not possess the basic skills needed as required by the employers of labour that can fetch them the desired employment opportunities in the workplaces. Alaba et al. (2015) opined that, all forms of employment opportunities and the employers of labour have what they look for in fresh applicants whether in industries, services, business empires, and government jobs amongst others. Thus, an applicant is seen as someone possessing the qualities needed in a field of endeavours, but may not be employed for one reason or the other ranging from inadequate skills and in experiences to fit in for the available job opportunity. Graduate employability seems to be a serious issue of concern in the nation Nigeria, hence the graduates that were turned out on a yearly basis, are full of grades as stated in their certificates but skills and knowledge on which they obtained the certificates cannot be attested to in the field of work by the employers of labour because most of them performed below expectations. According to Mohamedbhai (2020), arising from the feedback obtained from the employers, a major cause of the unemployability of graduates of the higher institutions of learning is the lack of "soft skills" knowledge such as poor communication skills, lack of personal initiative, and inability to work in a team etc.

With the advent of COVID-19 pandemic crisis that is bedevilling the entire world, it is not an understatement saying that the Nigeria tertiary institutions of learning would be under serious attack considering the inadequacies of educational facilities, such as lecture rooms among others. It is saddening that at 21<sup>st</sup> century with the multiple resources at Nigeria's disposal seeing that, on average, lecture theatre rooms in the Nigeria tertiary institutions are mostly overcrowded without functional public address systems to relay relative information of the course contents to the students in the lecture room.

Thus, the level of the use of ICT devices in propagating teachinglearning is yet to gain prominence in the system of higher education in Nigeria. Mostly, the teaching-learning is done in face-to-face contact. The only area that it seems ICT devices are majorly used in the Nigeria tertiary educational institutions system is the area of payment of fees and other related Internal Revenue Generation (IGR), registration of courses, and the students' results record-keeping amongst others. But in the area of teaching-learning activities, ICT compliance seems to be relatively low. In the view of this, the World Economic Forum (2020) posited that the Coronavirus pandemic has exposed the unpreparedness of many higher education institutions in Africa to migrate online teaching-learning activities, instead of the face-to-face use in the traditional and conventional methods of impacting knowledge to their students. When the virus first hit the continent, many African governments – and Nigeria the acclaimed giant of Africa is no exemption – were scrambling to figure out how best to handle the myriad of challenges posing threats on the socioeconomic growth of their countries.

Ogunyemi (2020) reported that in Africa, Nigeria was among the countries with the highest number of COVID-19 pandemic cases compared with the other countries of the continent. It is worrisome that the cases of the pandemic kept on increasing in Nigeria on daily basis gradually and as of June 2020, the mortality rate stood at 3.1%. This was higher than the neighbouring countries such as Ghana, with the mortality rate of 0.5%. Most governments around the world closed down educational institutions temporarily in order to curtail the spread of COVID-19 pandemic cases. It is worthy to know that over a billion learners were affected with the school closures in order to curtail the spread of the pandemic across the globe (UNESCO, 2020).

Arising from the look of things on COVID-19 pandemic and higher education in Nigeria, the Nigerian government endeavoured to ease the imposed lockdown on the other sections of the Nation's facet of life but that of the educational institutions especially the higher educational institutions reopening seemed to be and still remained a mirage to decide upon, in spite of the guidelines given and roll-out by the Federal Government of Nigeria (FGN) through the Federal Ministry of Education (FME) in collaboration with the Federal Ministry of Health (FMoH) and based on the situation report update given by the Presidential Task Force (PTF) on COVID-19 pandemic. The inconsistency of the government at the centre (FGN) could be observed especially in the area of reopening of schools at the basic education and postbasic education. For example, the in-decision of government on the final year students at the secondary school level of education that were meant to write the West African Senior Secondary School Certificate Examinations to be conducted by the West African Examinations Council (WASSCE-WAEC). The guidelines for reopening of schools in Nigeria as contained in the Federal Ministry of Education (2020) titled guidelines for schools and learning facilities reopening after COVID-19 pandemic closures; Section 6 (i-v). These include:

- i. key things to consider is the rate at which the pandemic is spreading in the immediate community where the institution is located;
- ii. the institution should device strategies and techniques to observe the safe social distancing.
- iii. Alternative learning models for safe distancing in form of outdoor learning; staggering attendance; alternate attendance; platooning (that is morning and afternoon of classes shift); flexible schedule; and creative delivery;
- iv. Setting up of the self-isolation centre in the institutions' premises; and
- v. Close, partially close, or reopen consideration. It means that the federal and the state ministries of education must consider the following approaches when taking decision on the reopening of schools and other learning facilities. These include:

- Current understanding of COVID-19 transmission and severity in the students;
- Local situation and epidemiology of COVID-19 where the institutions are located; and
- The setting of schools and learning facilities and their ability to maintain COVID-19 pandemic prevention control measures.

Considering all the aforementioned, the FME therefore suggested a gradual and phased reopening of schools and prioritizing of learners who are vulnerable, have reduced access to distance learning modalities, and/or are in examination classes. This would help assess the readiness of schools and learning facilities to reopen fully to all learners. In addition, this would serve to minimize the risk of resurgence of coronavirus infections in the school environment.

It is obvious and without doubt, the pandemic exposes the government at the various levels of governance in Nigeria on the neglect and the marginalization of education industry amongst other sectors of the country, otherwise the emergence of COVID-19 pandemic should not have caught the government unaware since its outbreak did not emanate in the country. The continuous locking down of educational institutions and their facilities with the view to curtailing the spread of COVID-19 pandemic in the school environments seems to be a good step but the government should be mindful of the fact that, solving a particular problem at times should not be a liberty to create other big problems if not now but for the nearest future. The government at the various levels of governance should sit back with the stakeholders in the education industry to identify the risk factors in the continuous closure of educational institutions especially the higher educational institutions and its facilities to students, and the entire nation of Nigeria. The decision made some years back on education either good or bad led the nation's education industry to where it is today. What does the future hold with the continuous lockdown of the higher institutions of learning? Without mincing words, the Nigerian government often handled education matters with the levity hands starting from the budgetary allocation allotted to the industry and the release of funds to pursue the educational goals and its facilities.

# COVID-19 pandemic and the Future of Higher Education in Nigeria

Incontrovertibly, the entire world did not foresee the outbreak of the COVID-19 pandemic, and the danger it portends. However, how would the higher educational institutions that are established to enhance the high-level human capacity development in the country manoeuvre this unprecedented quagmire. There is no way the future can be discussed without looking at the present situation which is an end result of the past decisions. The COVID-19 pandemic ought not to be a threat to the effective operations and the service delivery of the higher education in Nigeria, if only there had been adequate

planning of the institutions of higher learning in the time past and ahead of a time like this.

The higher educational institutions in Nigeria are supposed to be at the fore front proffering relative solutions to the pandemic menace in the country through research and innovation but the closure of the institutions seems to be antithetical to the mandate of the ivory towers. This foretells great risk to the nation's economy. The students of the higher institutions are at their various homes since March 2020, roaming about the streets, not even knowing when their institutions would be reopened for the academic activities and at the end, they would graduate half-baked. It is a known fact that the COVID-19 pandemic has seriously affected education across the globe through the closure of schools in which the higher educational institutions were no exemption but the havoc caused by the pandemic can still be reversed. The revival of educational institutions especially the higher educational institutions from the negative experiences encountered during this pandemic COVID-19 can still be countered by taking proactive steps by the government and the stakeholders in education. World Bank (2020) said that the pandemic has already profound impacts on education by closing schools almost everywhere on the planet, in the largest simultaneous shock to all education systems in the lifetimes. The damage will become even more severe as the health emergency translates into a deep global recession. But it is possible to counter those shocks, and to turn a crisis into an opportunity.

It is obvious that with the continuation of closure of the higher educational institutions of learning and its facilities with the view of curtailing the spread of the COVID-19 pandemic, there is every possibility for the nation Nigeria to experience more students' dropping out from the higher institutions of learning as a result of one reason or the other such as economic constraint amongst others. The issue of dropout portends more danger to the country especially in the area of security and it can cause Nigeria economy to nosedive into another experience of economic recession.

Furthermore, there is a chain effect of the COVID-19 pandemic on the higher educational institutions as a result of continuous closure of educational institutions of learning and its facilities which also affected the secondary schools that serve as a constant source of admission of the new students into the higher education. It is an indication that the admission into the higher educational institutions would be affected in one way or the other in the forthcoming academic session of 2020/2021. Mohamedbhai (2020) admonished that COVID-19 pandemic would leave no sector in any country in the world unaffected, and its consequences would be felt for years to come. At a time when efforts were being deployed to improve higher education in Nigeria, there are speculations that COVID-19 pandemic would destabilize the sector, with serious consequences.

Against the background, to counter the import and the challenges posed by the COVID-19 pandemic in the education sector especially the higher educational institutions, the leaders in the education sector, other stakeholders and government should endeavour to embark on the SWOT analysis of higher education and come up with the SWOT profile of the institutions. The SWOT profile would inform the policy that would safeguard the institutions from the militating factors challenging the service delivery of the institutions: before, during and the post COVID-19 pandemic. The SWOT profile should sustain the growth and development of the institutions in the Nigeria education system in the future.

### **Conclusion and Recommendations**

Every aspect and facet of life seems to be at a standstill as a result of the COVID-19 pandemic that is fighting and batting hard on the entire world from the inception of the year 2020. The pandemic successfully secured changes in the lifestyle of everyone in the larger society through embracing social distancing, use of nose mask, washing of hands frequently with water and soap and/or alcoholic sanitizer etc. Aside the aforementioned strategies and techniques to curtail the spread of the COVID-19 pandemic in the human environment, social organizations like educational institutions at all levels were closed down. Therefore, higher education institutions in Nigeria were not exempted in the closure, the reason is not far- fetched, but it is a fact that the present state of the nation's higher educational institutions seems to be a growing fast incubator for the spread of the COVID-19 pandemic amongst the students, their lecturers and the institutions' immediate environments. These are the institutions that are supposed to build and develop the capacity of the younger generations that would replace the older ones in managing the economic, political and the socio-cultural aspects of life as applicable to a business minded nation. But in the case of Nigeria, higher educational institutions seem not to be adding value to the lifestyles of the younger generations, it rather turns them out as half-baked graduates that do not fit in for a workplace design and therefore, most of them become unemployable to the employers of labour.

At present, the total closure of the higher educational institutions of learning to contain the spread of the COVID-19 pandemic is like adding more problems to the existing ones at hand in Nigeria. Instead of the total closure of the institutions because of the pandemic, the government at the various levels of governance should do the needful in identifying challengers to the fulfilment of higher educational institutions goals, aims and objectives and come up with the blue-print of tackling the challenges. At this time, the students and their lecturers ought to be seeing the level of seriousness of the government in addressing and countering the COVID-19 pandemic in the institutions. In the view of this, the following recommendations and not limited to them were suggested in order to secure the future of the Nigeria higher educational institutions:

- 1. Government at the centre should commission the various control and supervisory bodies of higher education in Nigeria (e.g., National Universities Commission, National Board of Technical Education, and National Commission for Colleges of Education) to call a stakeholders' summit and discuss the way forward in securing the future of the Nation's tertiary institutions for better service delivery.
- 2. Government should endeavour to implement the United Nations Educational, Scientific and Cultural Organizations (UNESCO) recommendation of 26 per cent on funding education in the country rather than given insignificant percentage of funding as presented in the yearly fiscal budget of the Nation to education.
- 3. There should be immediate review of the higher education curriculum to accommodate security/safety and health education related issues, just as the entrepreneurial education is embedded therein as a compulsory course in the system.
- 4. The teaching and learning activities in the higher education system should embrace both the face-to-face contact and distance learning through the use of information and communication technology (ICT) devices. This would enable the continuity of the teaching and learning activities, and the question of pandemic like this COVID-19 should not affect the teaching-learning process. Enhance ICT devices in linking the lecturers and their students to continue with the programme through social media such as Edumodo, Telegram, Webinar, Mixir and teleconferencing etc.
- 5. Government should be ready to provide more infrastructural facilities such as physical facilities like buildings amongst others.
- 6. The ICT facilities/equipment in the tertiary institutions of learning should be upgraded to meet the global standard.
- 7. Health facilities available in form of health clinic in the tertiary institutions should be upgraded to address pandemics like COVID-19 amongst others.
- 8. More focus and attention should be given to action research as conducted by the students and their lecturers through funding such research activities by the relevant authority as the case may be.
- 9. Government should always avert academic and non-academic staff of tertiary institutions from embarking on strike action by looking inward on their pressing demands and needs. If armed forces, police and the paramilitary cannot go on strike also academic and non-academic staff should not go, treat them better they are drivers of any nation's economy.
- 10. There should be from time-to-time review of the policy and enable laws or instrument establishing the tertiary institutions, doing such would enable the control and supervisory bodies of the various institutions to identify gaps in the system and proffer solutions as and due.

#### References

- Alaba, A. O., Oresajo, N. O., & Akinkuowo, F. V. (2015). Needs assessment in graduate employability: implication for educational planning and administration. *International Journal of Educational Administration Planning and Research (IJEAPR)*. 7 (2), 288-304.
- Federal Ministry of Education (2020) guidelines for schools and learning facilities reopening after COVID-19 pandemic closures. Taking responsibilities for safe schools and quality learning. Retrieved on 12-07-2020 from: www.education.gov.ng
- Federal Republic of Nigeria (FRN, 2014). National Policy on Education (NPE), 6<sup>th</sup> edition. Yaba, Lagos: NERDC.
- Godfrey, M. (2020). COVID-19: social distancing and lockdown in Black Township in South Africa. <u>https://kujenga-amani.ssrc.org/2020/05/07/covid-19-social-distancingand-lockdown-in-black-townships-in-south-africa/</u> Retrieved on 28-07-2020
- Jegede, D. (2020). Perception of undergraduate students on the impact of COVID-19 pandemic on higher institutions development in Federal Capital Territory (FCT) Abuja, Nigeria. Electronic Research Journal of Social Sciences and Humanities. 2(2), 211-222. www.eresearchjournal.com. Retrieval date: 22/07/2020.
- Helmy, Y. A., Fawzy, M., Elaswad, A., Sobieh, A. Kenney, S. P., & Shebata, A.
  A. (2020). The COVID-19 pandemic: A comprehensive review of taxonomy, genetics, epidemiology, diagnosis, treatment and control. *Journal of Clinical Medicine*. https://www.researchgate.net/publication.340897895. Retrieval date: 29/07/2020.
- Mohamedbhai, G. (2020). COVID-19: What consequences for higher education in Africa? International Higher Education. Vol 102, special issue 2020. 30-32.
- Mustafa, N. (2020). Impact of the 2019-2020 coronavirus pandemic on education. *International Journal of Health Preferences Research*.
- National Centre for Disease Control (NCDC, 2020). What is coronavirus? <u>https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20update%20</u> <u>of%20COVID-19%20outbreak%20in%20Nigeria</u>
- National Centre for Disease Control (NCDC, 2021). An update of COVID-19 outbreak in Nigeria <u>https://ncdc.gov.ng/diseases/sitreps/?cat=14&name=An%20updat e%20of%20COVID-19%20outbreak%20in%20Nigeria</u>
- Ogunode, N. J., Abigeal, I., and 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. www.eresearchjournal.com
- Ogunyemi, D. (2020). Coronavirus: what Nigeria can do post lockdown. The conversation academic rigour, journalist flair.

https://theconversation.com/coronavirus-what-nigeria-can-dopostlockdown-138995. Retrieval date: 8/7/2020.

- UNESCO (2020): COVID-19 educational disruption and response. Retrieved on 14-05-2020 from: <u>https://en.unesco.org/themes/education-</u> <u>emergencies/coronavirus-school-closures</u>
- Wasserman, D., Gaag, R., and Wise, J. (2020). The term physical distancing is recommended rather than social distancing during the COVID-19 pandemic for reducing feelings of rejection among people with mental health. Cambridge University Press Public Health Emergency Collection. <u>https://creativecommons.org/licenses/by/4.0/</u> Retrieval Date: 9/07/2020
- Wikipedia (2020). Impact of the COVID-19 pandemic on education. <u>https://en.wikipedia.org/wiki/Impact\_of\_the\_COVID-</u> 19 pandemic on education. Retrieval date: 9/7/2020
- World Economic Forum (2020). What will higher education in Africa look like after COVID-19? <u>https://europeansting.com/2020/06/08/what-will-higher-education-in-africa-look-like-after-covid-19/</u>. Retrieval date: 8/7/2020.
- World Bank (2020). The COVID-19 pandemic: shocks to education and policy responses
- World Health Organisation (2020). Coronavirus disease 2019 (COVID 19) situation report-94.