Perspectives, Impacts and Policy Responses to

COVID-19 PANDEMIC

Contributions from the

Centre for Petroleum, Energy Economics and Law (CPEEL), University of Ibadan

> Adeola Adenikinju Akin Iwayemi Olusanya E. Olubusoye Olugbenga A. Falode

Perspectives, Impacts and Policy Responses to

COVID-19 PANDEMIC

Contributions from the
Centre for Petroleum, Energy Economics and Law (CPEEL),
University of Ibadan

Edited by
Adeola Adenikinju
Akin Iwayemi
Olusanya E. Olubusoye
Olugbenga A. Falode



Published by
Centre for Petroleum, Energy Economics and Law (CPEEL),
University of Ibadan, Ibadan, Nigeria.



With support from CENTRAL BANK OF NIGERIA

Perspectives, Impacts and Policy Responses to COVID-19 Pandemic Contributions from the Centre for Petroleum, Energy Economics and Law (CPEEL), University of Ibadan

Published in Nigeria by



Centre for Petroleum, Energy Economics and Law (CPEEL)
7, Parry Road,
University of Ibadan, Ibadan,
Oyo State, Nigeria
Website: www.cpeel.ui.edu.ng

Supported by



CENTRAL BANK OF NIGERIA

First Published 2020

Copyright © CPEEL

ISBN: 978_978_58234-1-7 (Prints) 978_978_58234-0-0 (Online)

All rights reserved

This book may not be reproduced, stored in a retrieval system or transmitted, in any form or by any means: electronic, photocopying, or otherwise, except for brief quotations in reviews, without the prior written consent of the copyright owners.

Printed by
Artsmostfare Prints
E-mail: artsmostfareprints@yahoo.com

Contents

Preface Acknowledgm	ents	ix x
Notes on Contributors		
Chapter 1:	Introduction and Overview Adeola Adenikinju, Akin Iwayemi, Olusanya Olubusoye and Olugbenga Falode	1
PART 1:	COVID-19 AND NIGERIAN ECONOMY	
Chapter 2:	The Evolution and Spread of COVID-19 in Nigeria Oluwaseun Oyeranti and Babajide Sokeye	17
Chapter 3:	Predictive Model of the Growth of COVID-19 Virus under Different Scenarios Olugbenga A. Falode and Babatunde Onasanya	33
Chapter 4:	Theoretical Linkage and Channels of Transmission between COVID-19 and Nigerian Macroeconomy Outlook Aderoju Oyefusi	57
Chapter 5:	Analysis of Government Policy Responses to COVID-19 in Nigeria Musibau Adetunji Babatunde	73
Chapter 6:	COVID-19 and the Nigerian Economy: Analyses of Impacts and Growth Projections Olusanya Elisa Olubusoye and Ahamuefula Ephraim Ogbonna	95
Chapter 7:	Macroeconomic Impacts of COVID-19 on Nigeria Adeola Adenikinju, Samuel Omenka, Henry Okodua and Abiola Akande	121

Chapter 8:	Macroeconomic Impacts of COVID-19 on Nigeria: A DSGE Approach	163
	Alege Philip.O., Oye Queen Esther and Urhie Ese	
Chapter 9:	COVID-19 and Food Security in Nigeria	191
	Adegbenga E. Adekoya	
Chapter 10:	COVID-19, Peace and Security in Nigeria Isaac Olawale Albert	211
Chapter 11:	COVID-19 and the Nigerian Power Sector Afolabi Ojosu and Alexander Akolo	233
Chapter 12:	COVID-19: The Social and Gender Impact of the Outbreak Patricia I. Ajayi	257
Chapter 13:	COVID-19, Trade and Industrial Sectors in Nigeria Olumuyiwa B. Alaba	271
Chapter 14:	COVID-19 and the Services Sector in Nigeria Ayooluwa Adewole	297
Chapter 15:	COVID-19: Impact Analysis on the Oil and Gas Industry Olugbenga Falode	317
Chapter 16:	Disruptions and Eruptions: Assessing the Impact of COVID-19 on Higher Education in Nigeria Samuel, Kayode M., Ogunjuyigbe, Ayodeji S. O. and Babalola, Jonathan O.	345
Chapter 17:	COVID-19 and Human Capital Sector in Nigeria Akanni O. Lawanson	361

Chapter 18:	COVID-19 Pandemic and the Nigerian Financial Sector Adebiyi, M. Adebayo	381
Chapter 19:	COVID-19 and the Informal Economy in Nigeria Abiodun O. Folawewo	407
Chapter 20:	National Response to COVID-19 and the Question of Institutional Governance in Nigeria Peter Kayode Oniemola	423
Chapter 21:	COVID-19 and the Nigerian Power Sector: Legal and Institutional Implications Ayodele Oni	451
PART 2:	COVID-19, AFRICA AND REGIONAL PERSPECTIVES	
Chapter 22:	Evaluation of African Countries Response to COVID-19: Evidence from African Countries Iredele Ogunbayo, Nkechinyelu Oranye, Ebunoluwa Oyesina and Ayomide Olusola	467
Chapter 23:	Impact of COVID-19 on Economies of North African Countries Bilal Khamri, Olusanya E. Olubusoye and Adeola Adenikinju	503
Chapter 24:	Governments Policy Responses to Coronavirus: Case Study of the Southern Africa Countries Bbosa Robert	533
PART 3:	COVID-19 AND GLOBAL RESPONSES	
Chapter 25:	Commonalities in Policy Responses to Global Financial Crisis and the COVID-19 Pandemic Temitope Laniran and Adeola Adenikinju	573

Chapter 26:	COVID-19 and the Nigerian Economy: Looking Ahead Akin Iwayemi	597
Index		613



Disruptions and Eruptions: Assessing the Impact of COVID-19 on Higher Education in Nigeria

Samuel, Kayode M., Ogunjuyigbe, Ayodeji S. O. and Babalola, Jonathan O.

16.1 Introduction

Higher educational institutions are globally recognised to be synonymous with knowledge essentially because their primary mandate is anchored to a tripod – knowledge generation (as evidenced in research), knowledge transmission (in form of teaching), and knowledge sharing through towngown engagements (community service). Ivory towers are, therefore, intrinsically designed to be engines of growth, centres of innovation and excellence, as well as agents of development and wealth creation on many fronts. A few of the hallmarks of world class institutions of higher learning are outstanding outputs, cutting edge research, solution-driven projects and technology transfer among others. The level of knowledge explosion in the Twenty-first Century is unarguably unparalleled as evidenced in the rate and scale of transformation in science, technology, communications, culture, politics, human mobility and migrations (Aina, 2019: 141).

Unfortunately, according to the UNESCO (2020), more than 90% of higher institutions across the world have been temporarily shut down as part of a strategic effort to mitigate the spread of SARS-CoV-2, or coronavirus-2019 (COVID-19), a respiratory disease caused by a novel coronavirus. The disease was first reported in Wuhan City, Hubei Province, China in December 2019, and was declared a global health pandemic by the World Health Organization on 11 March, 2020. The global community was caught unaware by the COVID-19 and the element of surprise revealed the inadequacies in the various human institutions (health, educational and so forth). Above all, it has impeded human migration and mobility across the glove. Although, the pandemic infected persons may be asymptomatic, several people develop and display respiratory symptoms, including coughing, sneezing, fever and body weakness, and in severe cases deaths have occurred.

As at 5 June, 2020, the virus had infected close to seven million people globally and almost 400,000 fatalities reported. The disease, though not entirely airborne, is transmitted via contaminated surfaces, but particularly through contacts with droplets of an infected patient's spits, sneezes and so forth. It spreads easily in a high-density gathering of persons. One of the greatest fears is the serious risk of community transmission, forcing a lockdown in most countries. This closure has triggered disruptions of unprecedented degree in human living, education, energy, agriculture and other areas of the world economy. Higher Educational Institutions (HEIs), including universities, colleges and other institutions in tertiary education, are no exception. Several nations in the global south appear to be disproportionately affected particularly due to challenges with migrating to a possible platform, including the online education. In response to the pandemic, the UNESCO (2020) noted that approximately 1.725 billion learners are affected due to school closures (only 10 countries kept their schools opened). In addition, it was also reported that the pandemic had impacted about 98.6% of the world's student population with more than 150 countries implementing nationwide closures and only a few others opting for local closures.

As common to many other African countries, one of the primary challenges posed by COVID-19 to the higher education sector in Nigeria is the difficulty in ensuring the continuity of learning and student engagement outside the university environment. While learning methods in technologically advanced countries have undergone swift Information

and Communication Technology-based adaptations, Nigerian institutions still grapple with sectoral and broader limitations of infrastructural deficits and development gaps. This is further compounded by the absence of robust national policy and concrete intervention measures to support remote learning and the sustainability of higher education operations, including emergencies (Aina, 2019; Ahupa, 2019).

Beyond the apparent impact of COVID-19 on higher learning activities in the country, the higher education sector has become significantly vulnerable to the impact of the pandemic on international economies particularly those of its benefactors. More so, the global reconfiguration of education systems, as well as the emerging psychosocial effects and behavioural change are informing stringent measures around border-crossing and travel, and threatening academic mobility. These have real consequences on the nascent visibility of indigenously produced knowledge and the career support of emerging indigenous scholars. Also, the elongation of the academic calendar without corresponding income-generation tends towards increasing pressure on the over-stretched government funds to support the administration of public universities, while private institutions may run out of operating funds. In spite of these disruptions, emerging realities orchestrate value-adding opportunities and eruptions within the sector.

This paper addresses the impact of the COVID-19 pandemic on the quality, methods and sustainability of learning, research and administrative activities in HEIs in Nigeria. It attempts to unveil new areas of emphasis for pedagogy and administration. Due to the paucity of context-specific empirical evidence and research documents on this nascent subject-matter, literature reviewed were predominantly sourced from new online portals, particularly those that provide verifiable content on education-related issues as well as relevant materials from the domains of credible institutions, agencies and organisations.

16.2 Theoretical Linkage/Literature Review

16.2.1 Contextualising the Triple Burden of Nigeria's Higher Education System: Inequality, Weak Institutions and the COVID-19 Pandemic

Inequality/Inequity is a recurring theme in research on higher education. One of the primary challenges of education in modern times has been widening inequalities/inequities with the sector's inability to ensure

inclusive access to quality education irrespective of social, economic and cultural backgrounds (Gegel, Lebedeva, & Frolova, 2015; Chamorro-Premuzic & Frankiewicz, 2019, Okundare, Solaja, & Soyewo, 2013). Rather than aiding social mobility, higher education sector continues to morph into an institute that strengthens and reproduces social inequality. For instance, Gegel *et al.* (2015:1) assert that education capital cannot promote social elevation without a reconfiguration of the character of national education systems and improvement of quality of education in various social, economic and cultural contexts.

Intersectionality, as a concept and theory, offers a credible prism through which the connection between the COVID-19 pandemic and higher education in Nigeria can be explained. Though "Intersectionality", as coined by Kimberlé Crenshaw (1989), is domiciled in feminist and gender discourses, when engaged from other disciplinary perspectives, it provides a broader utility value in understanding the overlapping and interdependent inequalities emerging from multiple forms of identities. The focus in this discourse is on inequalities in education and how various forms of social identity and intra-sectoral positioning impact institutional/individual experience.

Crisis and emergencies are known to exacerbate inequality. Prior to the disruptions caused by the COVID-19 pandemic, there are extant gaping levels of social, economic and cultural inequalities in the Nigerian higher education system. The normative challenges bedevilling the country's educational system, particularly at the tertiary level, have been well articulated by scholars (Isa, 2015; Olayinka, 2019). Generally speaking, attention is often drawn to the issues of inequality (lack of or poor access to qualitative education) and the fragile institutions (infrastructures) driving its operations. The weakness clearly manifests itself in the lack of preparedness or capacity on the part of different stakeholders to gain traction and respond accordingly to the dynamics of the complex and novel type of knowledge which characterise the new and emerging world order (Okebukola, 2006; Oduwaiye, 2008). In addition, the pace at which production, markets, states, polities, cultures and societies is being altered globally is not only alarming, but also demands a more complex nuanced and integrative approach to understand. This poor state of affairs is further complicated by the emergency situation occasioned by the outbreak of the COVID-19 global pandemic.

For Nigerian university-bound students, socio-economic privilege wields multi-level influence from choice of institution (whether private or public) to employability after school. More so, intra-sectoral inequality exists between the quality of the educational capital offered by government-owned institutions and those accessible in private-owned institutions (Akpotu and Akpochafo, 2009). Nevertheless, there appears to be a gradual decline in employment opportunities for Nigerians who obtain their education capital from higher institutions in the country due to deficits in knowledge and skills relevant for the contemporary world of work. The COVID-19 pandemic further complicates intersections of inequalities/inequities of access to quality and affordable education, as well as threatens the post COVID-19 survival of several institutions. The issue of inequality and social justice is reactivated beyond a lack of access to education by students living in the remote area when the question of how persons/students living with disabilities can be assisted is raised.

16.3 Impacts of COVID-19 on Higher Education Sector in Nigeria: Relevance and Adequacy of Policy Responses

Clearly, existing policies on higher education in Nigeria are yet to deliver on the laudable goals of social and economic mobility, social transformation, and higher level workforce development (Okundare, Solaja and Soyewo, 2013). The pre COVID-19 assessments of the Nigerian higher education sector reveal extant challenges, some of which are now being exacerbated by the pandemic. These challenges include inadequate budgetary allocation for research, learning and administrative engagements; inconsistent policies and discontinuity of programmes; infrastructural decay including outdated curricula and teaching materials. Underequipped research facilities; incessant disruptions of academic calendars due to industrial actions (strikes) by lecturers and students' riots; poor remuneration and inadequate welfare provisions for faculty and administrative staff are also implicated in several ways (Isa, 2015; Iruonagbe, Imhonopi, and Egharevba, 2015). While these challenges are more pronounced in the governmentowned universities, the inclusion of private sector in the management and ownership of university has not delivered significantly on better outcomes. Okundare et al. (2013) note that private sector inclusion has encouraged high costs of learning, a widening gap between the upper class and indigent students, and a decline in the quality of education.

Evidence suggests that policy and implementation gaps within the sector require urgent interventions to discourage brain drain and intellectual exodus, particularly at the postgraduate level. Nigeria was identified as the number one country of origin for Africa's international students with 164 percent increase in Nigerians studying abroad between 2005 and 2015 (Onyukwu, Clark, and Ausukuya, 2017). An overwhelming and unmet expectation on the part of college-age Nigerians resulted in outbound mobility and intellectual-drain. Onyukwu *et al.* (2017) opine further that:

Nigeria's higher education sector has been overburdened by strong population growth and a significant 'youth bulge' (More than 60 percent of the country's population is under the age of 24.) And rapid expansion of the nation's higher education sector in recent decades has failed to deliver the resources or seats to accommodate demand. A substantial number of would-be college and university students are turned away from the system. About two thirds of applicants who sat for the country's national entrance exam in 2015 could not find a spot at a Nigerian university." (Onyukwu et al., 2017:1).

A critical impact of the pandemic on the higher education sector is the discontinuity of learning activities intensified by the varying difficulties in institutional efforts to migrate to online education. As in many African countries, the attempt to use Information and Communication Technologies (ICTs) to deliver programmes online in Nigeria at a distance to enrolled students has made evident the existing digital divide and technological gaps in the country. The temporary suspension of face-to-face learning has also exacerbated intra-sectoral inequities in the higher learning sector as many institutions, particularly government-owned, do not have adequate ICT infrastructure to deliver full online programmes. Mohamedbhai (2020) also notes the evident digital inequities among students in the same institutions. Instances where institutions are more experienced and equipped to deliver online learning, students living in the rural areas with less access to ICT infrastructure or means are greatly disadvantaged. However, there are pragmatic solutions to curtail the challenge of inequity and as far as a lack of access to qualitative higher education in Nigeria is concerned. One non-negotiable requirement for students with special needs (disabilities) is assisted technology to mediate exclusion to qualitative education, particularly in the post COVID-19 period. In the same vein, special schemes and financial aids in form of soft loans, bursary awards and so forth could be made available to indigent students to procure relevant tools such as personal computers/laptops and provision of data to facilitate their access to online training through the Internet.

There is no gainsaying that Nigerian institutions are not adequately prepared to deliver their programmes online. This lack of preparedness and technical competence of instructors and students would adversely impact the quality of online education. Mohamedbhai (2020:1) asserts that quality online learning requires that the teaching material is prepared by a professional instructional designer; that the lecturer is pedagogically trained for delivering the programme; and the students are equally exposed to the pedagogy of online learning. He further notes that the implications are more severe for those in the natural sciences and technology. To this end, universities need to adopt remote lab tools to enable engineering students continue to work remotely through the use of hands-on practice with live data and instrumentation, even as they switch from in-person to remote classes in such a time as this.

Beyond the conventional face-to-face mode of delivery, diversified platforms such as e-learning and e-classrooms which are 21st-Century compliant exist for facilitator-learner interactions and opportunity for knowledge transmission at emergency situations such as necessitated universities being shut down to forestall community transmission of the COVID-19. Any institution that would take advantage of digitally-mediated pedagogies must, among other things, embrace blended teaching/learning modes, be well-equipped and its operators and users well-trained to utilise them.

Another significant impact of COVID-19 is the disruption of research activities and academic mobility of postgraduate students and emerging scholars in the country. The closure of institutions has interrupted the research progression of postgraduate scholars particularly those in the experimental, data-gathering or analysis phase of their research. While those in the humanities may adapt their methodologies to utilise online platforms for data collection where applicable, those in the natural sciences do not have that luxury. Epileptic power supply in public institutions and the volatility of aging laboratory equipment have combined to negatively impact on researchers' productivity in many respects. As a result, there is loss of resources invested in their research including research samples and

so forth. Also, researchers, especially those in the humanities, grapple with emerging social factors and variables that did not exist during their literature review and hypothesis which may impact the overall quality and quantity of their data and research outputs. While emerging trends open up new areas of socially-valid research, it disrupts the existing course of action that researchers in the final phase of their theses have invested in. The foregoing have dire consequences on the academic timelines and graduation dates for many, with implications on limited personal funds used to predominantly sponsor graduate studies in the country.

Due to indefinite postponement and outright cancellation of many international conferences, the few accessible travel grants and conference bursaries, mostly issued by foreign universities, have been lost. In the same vein, Nigerian universities have been mandated by the public health realities to cancel or postpone international conferences hosted by them. This impacts the budding visibility of indigenously produced knowledge, revenue generated from hosting conferences and academic networking opportunities for scholars in the country. There are also growing concerns and uncertainty about the continuity of existing research projects and scholarships including those funded by the Nigerian Government and foreign agencies, institutions and governments. The COVID-19 pandemic has altered research and economic priorities for many nations and the growing economic strains may affect the already limited budgetary allocation for research and higher education activities in the country. This fiscal reality threatens the quality and sustainability of learning activities and administrative support in Nigerian higher institutions. It has been shown that government's roles in terms of relevant policies and proper funding is crucial to any improvement in public universities and other higher education institutions (Asiyai, 2015: 65; Akpotu & Akpochafo, 2009: 25). In addition, the imminent decline in funding will be aggravated by incomegeneration gaps in the sector, while extension of the academic calendar without corresponding revenue from enrolment and school housingrelated fees will also be devastating.

Positive responses of the country higher institutions to the COVID-19 pandemic can be seen on many fronts. First, it has encouraged and served as a fertile ground for scientific enquiries into drug therapy for the disease, particularly efforts in the area of promoting home-grown solutions and enhancing Africa's indigenous knowledge system. Secondly, numerous

scholars are collaborating to drive research in the area of data analytics, tracking and information dissemination about the virus. Academic staff members in Nigerian universities have been involved in service provision in form of production of disinfectants, customised testing kits and face masks.

In addition, ventilators and other necessary equipment dispensers are being manufactured, which invariably would prove beneficial to government in terms of planning and policy implementation. The positive impact of the COVID-19 pandemic on the Nigeria's educational sector is perhaps the eruptions of new research priorities accompanying the revelation of policy, research, innovation and intervention gaps in the country. It presents the sector an opportunity to position itself as the driver of social transformation by delivering on development priorities. The sector should be motivated to test new methods and activate its skills and knowledge bank in response to the pandemic with a view to achieving significant results. Results delivered by higher institutions during the pandemic would impact sector-state/industry relationship and the quality of favourable investment and negotiation in the post COVID-19 era.

16.4 Post COVID-19 Outlook of the Nigeria's Higher Education Sector

There is no doubt that the coronavirus pandemic has triggered a fresh normative in all sectors and industries in the country, including the higher education. The challenge for the higher education system in Nigeria includes keeping up with new global methods and balancing the context-valid approaches in this new reality. There will be an increase in the need to integrate ICT in learning and student engagement modalities whilst adapting to new global educational standards. It is important to state that although concerted efforts are being made globally to flatten the curve of the pandemic, there is an extant potential for recurring outbreaks. This means that reaching a post-COVID state may take longer than assumed in current discourses.

A post COVID-19 reality with substantial impact on the sector is the predicted decline in budgetary allocations and continuous underinvestment in education accompanying the decline in crude oil prices and public health demands on government's limited funds. An inference can be drawn from the 2016 oil price-induced economic recession which

affected all sectors including education. Onyukwu, Clark, and Ausukuya (2017) note that austerity measures adopted by the Nigerian government in 2016 resulted in slashed budgets to education and precipitated tuition increment in public universities. While Government-owned institutions may receive palliative measures from government through innovative means, there is the question of survival for private-owned institutions which are already expensive. Many private institutions are susceptible to downsizing or even closure (Tamrat and Teferra, 2020). More so, if the cost of higher education increases without citizens recovering from the economic destabilisation of the pandemic, it may impede education progression and account for more university dropouts.

Furthermore, with the international benefactors of higher education research in Nigeria severely hit by the pandemic and the consequent economic constraints, there are indications of limited access to funds for education research. Research in Africa is largely funded by Europe, the United States and China with numerous research collaborations with foreign-based institutions. The severity of the pandemic in these regions would affect their economic strength and dictate education priorities that address their local problems (Mohamedbhai, 2020). The potential decrease in research funds and withdrawal of scholarships as well as collaborations with foreign institutions will impact the quality and quantity of research outputs in the country, including postgraduate training. There is also a possible surge in higher education illiteracy with a sharp decline in financial capital and the shortage of scholarships. Unavailability of a vaccine or approved therapeutic interventions for the virus may impact enrolment and return rate of students and faculty to the already overcrowded lecture halls and residences especially in government-owned institutions. A decline in enrolment would mean lesser income for many institutions.

Another post COVID-19 reality for the sector is the imminent demand on essential services, which raises a need for new pedagogical and research priorities. Educational engagements should from now focus more on strengthening professional deployment into industries termed as essential. The relevance for other disciplines would rely on robust interdisciplinary and multidisciplinary training. Also, changes in the world of work with emphasis on ICT skills would require the integration of ICT training and modes of engagement in the educational systems. The sector would also be

saddled with creating learning environments that offer mastery of soft skills needed for the new world of work.

It is glaring that in view of the pandemic, many people are growing themselves into ICT natives particularly from the dimension of distance relationships and meetings. It is anticipated that some of these expositions will also affect research supervisor-supervisees' relationship. One practical result of, and response to the pandemic is in the area of statutory academic and administrative meetings in higher institutions, many of which are now being held virtually. There is a high probability that such meetings would continue in the post COVID era. In addition, certain operations within the postgraduate programmes in higher institutions, especially the conduct of final oral examinations of theses and dissertations can now be held on virtual platforms with an added advantage of utilising more experienced and hard-to-find specialists in different fields of study. Hitherto, such examinations require the physical presence of all examiners with its attendant high cost of inviting external examiners, especially institutions from a far long distance. Embracing ICT-based platforms would minimise such inhibitions and therefore improve the quality of repertory of possible examiners. Also, there is a strong probability that new programmes and curricula relating to emergency situations would spring up and develop as part of the post COVID-19 experience.

16.5 Summary, Conclusion and Recommendations

The response triggered by COVID-19 validates the Nigerian higher education system's unpreparedness for disruptions in emergencies. There is an urgent need for a sectoral overhaul and upgrade in terms of educational ideology and learning priorities, methods and deliverables. New policies must be put in place to position the sector for the realisation of its vision to advance the country's "economic growth and global competitiveness through the provision of accessible and relevant high-quality education" (Federal Ministry of Education, 2019).

We wish to rehash the nuanced declaration that Africans must have a change in orientation whereby we look towards the West or go cap-in-hands to seek assistance. The time for introspection has come to seek Africasensitive solutions to those peculiar challenges confronting Africa (Albert, 2013: 71). An important question to ask is: can we possibly return to the old

way of doing things, or can we come back to a new sense of normality? The answer is not as straight forward since the experience of COVID-19 seems to have established new ways of doing things, as far as higher education matters are concerned, particularly the need to embrace blended teaching and learning. In so doing, there is the learn how to achieve a delicate balance between contents for the face-to-face mode and those which would require online modes of delivery.

Going forward, there is the need to institutionalise laudable and workable interventions which have emerged as 'quick fixes' following diverse experiences caused by the pandemic in order to ensure more sustainable approaches beyond the COVID-19 pandemic in the country's educational sector, especially HEIs' operations. Such efforts would include scaling up programmers for the implementation of digitally-mediated pedagogies to ensure blended teaching/learning modes are properly entrenched. Also, electronic platforms to share teaching materials and improve collaborative research engagements across institutions and borders, among others must be developed. Below are some recommendations.

First, there should be an adoption of a social transformation and development ideology for the higher education sector. This should streamline the activities and deliverables of higher institutions to knowledge production and training so as to drives meaningful and measurable social transformation and development. Emphasis must be placed on interdisciplinary and multidisciplinary training that encourages research collaboration and equips students with critical thinking and problem solving abilities for social impact. New emphasis should also be placed on translational research. particularly research outputs that can be patented and commercialised. This will create needed avenues for the production of homegrown solutions first to Africa and also to global problems. It will establish a new line of revenue for institutions and initiate sustainable partnerships between the academia and the industry. With industry partnerships, institutions can augment shrinking government funds with private sector investments for lucrative research. Setting development-oriented performance indicators would boost the sector's output and socioeconomic relevance.

Second, relevant curricula and training methods must be developed or adapted to address the "growing need for training and education to match a changing labour market" (Douglass, 2020). Gaps in quality and relevance of programmes and knowledge taught in higher institutions to real-world

demands must be bridged. More so, the quality of training must not be neglected by research and ranking-focused faculty, since training shapes the quality of workforce deployed into the economy and impacts employability. Chamorro-Premuzic and Frankiewicz (2019:1) assert that "while research is the engine of growth and innovation, which explains the strong emphasis top academic universities place on it, it should not be an excuse to neglect the actual education offered to students, including the critical issue of preparing them for the real world." Emphasis on quality learning and teaching methods will ensure that market demands for skilled employees and students' investment for job opportunities after school are met. The orientation of educational training must become problem-solving, industry-valid and innovative.

Third, emphasis must be placed on building infrastructure and capacity to support digitisation of education and remote learning. The higher education sector must become a technological industry providing educational services. This evolution should be evident in all institutional processes. The foregoing underscores the importance of digital competencies and unequivocally places new demands on the work of university lecturers, which would involve the training and retraining of staff with digital and technological skills relevant to their office. While investing in ICT infrastructure is critical, strategies must be developed to maximise underused equipment and facilities. Digitising learning will decongest classrooms; open up learning to other members of society, increase revenue channels for institutions; and familiarise students with new skills required for work in the shifting economy. Giving the complexity of the Nigerian context, there is a need to reduce data-reliance through the use of audio visuals and other accessible formats for course work.

In addition, the Federal Ministry of Education and affiliated-agencies must prioritise investment in safety, resilience and social cohesion in education systems (Parater, 2015) for the long-term. While there are various challenges to contend with, stakeholders of higher education need to invest concerted efforts in positioning and revalidating the sector's relevance.

More so, stakeholders must acknowledge that "success [for students, institutions, industries and government] in the future would not be defined by a degree, but by potential and the ability to learn, apply, and adapt" (Chamorro-Premuzic & Frankiewicz, 2019). We haste to declare that the future is here and adaptation must begin.

In the bid to transform the system, it is vital to seek pragmatic ways to support faculties to head towards this new direction, including capacity strengthening mechanisms for effective delivery. In addition, a greater level of collaboration is required to learn and share experiences, as well as, open channels of continuous engagements. Most importantly, there is the need to foster new partnerships among African universities across nations, sub-regions and extending to other regions. Progressive institutional collaborations will require synergies among universities, which may take the form of faculty exchange, content sharing, even though individual universities would still be responsible for awarding their degrees.

It is evident from the foregoing that responsive approach to knowledge must be transformative, penetrative and holistic. Indeed, it must extend beyond the current static, siloed practice which has proved less-/non-productive. Unusual creative and possibly disruptive knowledge that can break barriers and extend boundaries of nations, gender, creeds and colour is what the higher education system in Nigeria requires at this critical period and beyond the pandemic.

References

- Ahupa, V. I. (2019). Scaling-Up Educational Intervention on Teacher Education in the State of Emergency. *KIU Journal of Social Humanities*. 4(2): 33-36.
- Aina, T. A. (2019). The Social Sciences and Public Policy in Nigeria in the Era of the Fourth Industrial Revolution: Relevance and Potential for Social Transformation. In Babalola, J. O et al., (eds). Re-thinking Higher Education and National Development 2. Ibadan: The Postgraduate College, University of Ibadan. pp. 140-175.
- Akpotu, N. E. and W. P. Akpochafo (2009). An Analysis of Factors Influencing the Upsurge of Private Universities in Nigeria. *Journal of Social Sciences* (18)1. pp 21-27. Retrieved from https://files.eric.ed.gov/fulltext/EJ1060560.pdf on June 1, 2020.
- Albert, I. O. (2013). Track 5 Diplomacy: Rethinking African Studies beyond the Culture and Civilization Thesis. In Olorunnisola, O. et al., (eds). African Cultural Identity Vol. 1. Ibadan: The Postgraduate School, University of Ibadan. pp. 71-103.
- Asiyai, R. I. (2015). Improving Quality Higher Education in Nigeria: The Roles of Stakeholders. *International Journal of Higher Education*. (4)1. pp. 61-70. doi:10.5430/ijhe.v4n1p61.
- Chamorro-Premuzic, T & Frankiewicz, B. (2019). 6 Reasons Why Higher Education Needs to be Disrupted. *Harvard Business Review*. Retrieved from https://hbr.org/2019

- /11/6-reasons-why-higher-education-needs-to-be-disrupted on May 1, 2020.
- Crenshaw, K. W. (1989). Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics. Chicago: University of Chicago Legal Forum. pp.139–67.
- Douglass, J. A. (2020). Higher Education is Key for the post-COVID Recovery. Retrieved from https://www.universityworldnews.com/post.php?story = 2020 0424084530242 on 25 April 2020.
- Federal Ministry of Education, (2019). Brief on Tertiary Education Department 2017. Retrieved from http://education.gov.ng/tertiary-education on May 1, 2020.
- Gegel, L., Lebedeva, I and Frolova, Y. (2015). Social Inequality in Modern Higher Education. *Procedia Social and Behavioral Sciences* vol. 214, pp. 368 374.
- Isa, N. (2015). ASUU Struggles and the Revitalization of Public University Education in Nigeria. In Aderinto, A. A. et al. (eds). Higher Education and National Development. Ibadan: The Postgraduate School, University of Ibadan. pp. 69-110.
- Iruonagbe, C.T., Imhonopi, D. & Egharevba, M.E. (2015). Higher Education in Nigeria and the Emergence of Private Universities. *International Journal of Education and Research*. 3(2) pp 49-64.
- Mohamedbhai, G. (2020). COVID-19: What Consequences for Higher Education? *University World News*. Retrieved from https://www.universityworldnews.com/post.php? story = 20200407064850279. on 09 April 2020.
- Oduwaiye, R.O. (2008). Access and Equity in Nigerian Universities. Challenges and way forward. *International Journal of Educational Management* Vols. 5&6 pp. 66-74.
- Okebukola, P.A.O. (2006). State of University Education in Nigeria. Ibadan: Heinemann.
- Okundare, A., Solaja, O. M., & Soyewo, G. T. (2013). Rethinking Nigerian Tertiary Education Policies: Toward Equity and Accessibility. *International Journal of Multi-Disciplinary Studies and Sports Research (IJMSRE)* No 3 pp. 303-316.
- Olayinka, I. (2019) Challenges in building a World-Class University. In Aderinto, A.A et al. (eds). Re-thinking Higher Education and National Development 1. Ibadan: The Postgraduate School, University of Ibadan. pp. 77-95.
- Onyukwu, J., Clark, N. & and Ausukuya, C. (2017). Education in Nigeria. *World Education News and Reviews*. Retrieved from: https://wenr.wes.org/2017/03/education-in-nigeria on 27 April, 2020.
- Parater, L. (2015). 10 Ways to Innovate in Higher Education in Emergencies. *United Nations Refugee Agency UNHCR*. Retrieved from: https://www.unhcr.org/innovation/10-ways-to-innovate-in-higher-education-in-emergencies/on May 2, 2020.
- Tamrat, W. and Teferra, D. (2020). COVID-19 Poses a Serious Threat to Higher Education. *University World News*. Retrieved from:

 $https://www.universityworldnews.com/post.php?story = 20200409103755715 \\ on 29 April 2020.$

UNESCO (2020). COVID-19 Educational Disruption and Response. Retrieved from: https://en.unesco.org/covid19/educationresponse on 25 April 2020.

JANUER SITY OF IBADAN LIBRARY