



Multiple disruptions and remediating influence on learning of postgraduate business education programmers of rivers state Universities in Post Covid-19 Era

Margaret E Akpomi¹, Numbara Bari E Kayii^{2*}, Charles Befii Nwile³

¹ Professor, Department of Business Education, Rivers State University, Nkpolu- Oroworokwo, Port Harcourt. Nigeria

² Department of Business Education, Rivers State University, Nkpolu- Oroworokwo, Port Harcourt. Nigeria

³ Department of Educational Management Rivers State University, Nkpolu- Oroworokwo, Port Harcourt. Nigeria

* Corresponding Author: Numbara Bari E Kayii

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Abstract

The study aimed at examining the multiple disruptions caused by COVID-19 and the remediating influence on learning of postgraduate Business Education programme of Rivers State universities in the Post Covid-19 Era. Three research questions were posed to guide the study, while three corresponding hypotheses were formulated and tested at 0.05 level of significance. A total of 143 postgraduate students duly registered for 2019/2020 academic session made up the population and sample for the study. The instrument for the study was tagged "Multiple Disruptions and remediating influence on Learning of Post Graduate Business Education Questionnaire (MDRILBEQ), with a four-point rating scale ranging from very high extent to low extent. Three experts in Business Education and Measurement and Evaluation validated the instrument and the instrument test of reliability using Cronbach Alpha method yielded a coefficient of 0.81, 0.83 and 0.87 respectively for the three sections of the instrument. Mean rating was used to answer the research questions, while Z-test was used to test the hypotheses. It was revealed that there is no significant difference in respondents' mean scores on learning disruption caused by COVID-19 and the remediating influence on learning of post graduate Business Education Programmes of Rivers State Universities in the post COVID-19 era. Based on the findings, recommendations made amongst others that Business Education curriculum and teaching resources should be reviewed and upgrade the range of skills provided to students in a way that would better equip and prepare them for the future disruptions.

Keywords: disruptions, learning, social, economic, business education, covid-19

Introduction

The Corona Virus Disease (COVID-19) was first reported in Lagos State, Nigeria on the 27th of February 2020, after the outbreak in China in November 2019. The COVID-19 pandemic has caught almost every country off-guard, requiring painful adjustments to the new reality (Parkash, 2021) [13]. Nigeria is also not an exception. However, Nigeria government has relatively well-managed the acuteness of the pandemic, and its impacts on education, economy, political and society are less severe than many other economies including developed ones in north America and Europe, and other neighboring countries in Africa.

A key factor behind a relatively less severe disruptive impact on education in Nigeria is the closure of all educational institutions in the country on March 19, 2020 by the Federal Government (FG) as a response to the pandemic (Adelakun, 2020). States in the Federation contextualized this to proffer measures and scheduled lessons for students in public schools using stimulus and social protection packages, and pragmatism shown by the government in gradually loosening the lockdown and ensuring the continuation of educational activities in 2021, a year termed post COVID-19 era.

The experiences during the pandemic, however, give an opportunity to reflect on key development strategies and see how these can be remediated to deliver a more inclusive, resilient, and quality education in the post COVID-19 era, as the pandemic highlighted significant inadequacies and inefficiencies in the education sector (Thelma & Adedeji, 2020) ^[15]. As a result of these disruptions; (technological, economic, social, political, and learning) various temporary social support measures were introduced to fill the gaps orchestrated by the prolonged lockdown Agbele & Oyelade, 2020) ^[12]. In a post COVID-19 era, social protection schemes can be mainstreamed, with increased budget allocation (Sahu, 2019) ^[14] wider coverage, better targeting, and strengthened the administration and effective delivery of Business Education courses to the beneficiaries using digital technologies (Owusu-Fordjour, Koomson & Hanson, 2020). Business Education is a course that prepares students for career and self-reliance, it is equally important because it prepares students to handle their business affairs to function intelligently as consumers and citizens in a business economy (Akpomi & Kayii, 2020) ^[1]. This educational process or context has the primary aim of preparing people for roles in enterprises. Such roles could be as employees, entrepreneurs, employers, or simply as self-employed persons (Ubulom, 2012 in Ile, Odimegwa & Azu, 2016). In Rivers State University, Business Education offered at the post graduate levels is to develop high level manpower to pursue a career in industry, public service, self-employment, academics and research by providing advanced training for knowledge and provide same in expand knowledge to solve a real life problem globally (Amesi & Akpomi, 2013) ^[2]. Therefore, for the Business Education programme to sustain its relevance in providing the needs of individuals and that of the society, it must embrace current trends in modern technologies in the academic and economic demands of the society.

Ngogi and Mahaye (2020) ^[9] discourse that long periods of learning were lost for as long as the closures lasted. This is evident as different cases were recorded daily. Kekić and Miladinović (2016) ^[7] reported that schools losing long periods of learning because of the disease outbreak upshot to both chronological and stable smash up on the educational system (Wondwosen & Damtew, 2020) ^[21].

According to Agbele and Oyelade, (2020) ^[12] the pandemic negatively create a gap in the distance learning implementation at the local and national levels, variation of students' academic attainment based on the ability of educational institutions (Ngumb, 2020), and to provide distance learning, students, teachers and parents' quality of life during lockdown.

The disruptive tendencies of the pandemic affected many items in the 2020 Education Sector appropriation bill, because most items were not implemented due to the drastic financial shortfall (Kathmandu, 2020) ^[6]. However, more funding is required to keep learning going or scaled-up education support programmes as part of the government's palliative measures. For the government, reducing costs will require re-prioritizing its plans in light of this new reality (Mba, 2020) ^[8]. The most urgent needs at the moment will be improving teachers' motivation, learners' preparedness and galvanizing domestic digital, and media enterprises (Ngogi, 2020) ^[9]. The shortfall in financing possibly caused inequality related to educational services provided to students; decreasing academic attainment in state institutions that lack technological means to provide distance learning;

difficulties in measuring learning outcomes due to undeveloped student performance assessment systems in the school environment (Zhong, Luo, Li, Zhang, Liu, and Li, 2020) ^[22].

The school environment is a commercial environment that generate income for so many people living near-by. School closure carries a high social and economic cost impacts across the community. Moreover, universities, polytechnics, colleges of education or other higher institutions operate as mini-cities and majority of people living around them generate their income by engaging themselves in different business activities that include operating personal hostels, restaurant, cafes, shops, transport services, selling of food items, etc. (Oluwatuyi, 2020) ^[12]. Towns that depend on university students to support their living are greatly affected and suffered a lot of economic damage due to school closure and absence of students on campus (Viner, Russell, Croker, Packer, Ward, Stansfield, Mytton, Bonell, Booy, 2020) ^[20].

In addition, so many adjunct workers in the school system such as cleaners, gardeners, and other external people that render some services to school are suddenly relinquished without prior notice. Such people may likely face uneasy part of life if they do not have other things fetching them money. An overview of the related studies shows that most of the studies on COVID-19 disruptions on education are foreign-based. It became necessary to bridge the missing link by studying multiple disruptions and its remediating influence on education.

COVID-19 has caused education disruptions and prolonged school closures all around the world, and particularly in Rivers State, affected all students' population and led most tertiary institutions to think about alternative ways of providing education to ensure that learning never stops (The Guardians, 2021: 14). Keeping education continuity in mind, most institutions rushed to remote learning; a kind of distance education using online platforms, e-learning, and ICTs, which set off an unplanned and rapid shift in teaching and learning approved programmes of study in the institutions (Taibat, 2020) ^[16]. This unplanned scenario opened the door to many opportunities, highlighted existing and new disparities and gave rise to several challenges characterized the rush to embrace online and distance education.

To highlight the way forward and to harness available technologies and the internet in education and that online education will become an integral component of school education in 2021. Yet, due to such an abrupt shift from school closures due to COVID-19 (UNESCO, 2020), lecturers were forced to deliver online learning without proper training, and support or time for preparation but being plied with diverse new tools; they had to digitize their course contents and/or develop new contents (Di Pietro., Biagi, Costa, Karpiński, Mazza, 2020; Cheng, 2019) ^[4, 3]. These developments ushered in multiple disruptions to both lecturers and students. Preventive measures to contain the spread of infection through confinement and physical distancing have disrupted technological, economic, social, political, and teaching and learning activities of digital divide lecturers and students were grounded and marginalized. Therefore, for the Business Education programme to sustain its relevance in providing the needs of individuals, lessons learned from Covid-19 disruptions would leverage inclusive and alternative learning to shape the futures of post graduate Business education in Rivers State Universities.

The study aimed at examining the multiple disruptions

caused by COVID-19 and its remediating influence on learning of postgraduate Business Education Programmes of Rivers State Universities in the post Covid-19 era. Specifically, the study sought to:

1. Examine how learning disruption caused by COVID-19 influences learning of post graduate Business Education Programmes of Rivers State Universities the post Covid-19 era.
2. Examine how Economic disruption caused by COVID-19 influences learning of post graduate Business Education Programmes of Rivers State Universities in the post Covid-19 era.
3. Examine how social disruption caused by COVID-19 influences learning of post graduate Business Education Programmes of Rivers State Universities in the post Covid-19 era.

The following research questions and corresponding hypotheses are posed and formulated to guide the study

1. To what extent does learning disruption caused by COVID-19 influences learning of postgraduate Business Education Programmes of Rivers State Universities the post Covid-19 era?
2. To what extent does Economic disruption caused by COVID-19 influences learning of postgraduate Business Education Programmes of Rivers State Universities the post Covid-19 era?
3. To what extent does social disruption caused by COVID-19 influences learning of postgraduate Business Education Programmes of Rivers State Universities in the post Covid-19 era?

H₀₁: There is no significant difference in respondents' mean scores on learning disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education Programmes of Rivers State Universities in the post COVID-19 era.

H₀₂: There is no significant difference in respondents' mean scores on economic disruption caused by COVID-19 and

remediating influence on learning of post graduate Business Education Programmes of Rivers State Universities in the post COVID-19 era.

H₀₃: There is no significant difference in respondents' mean scores on social disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.

Methodology

The research design adopted for this study is analytic descriptive design. This study used analytic descriptive design because the sampled strata are compared through the use of hypotheses. The population for this study is 143 Business Education students for 2019/2020 academic session, which comprised (104 post graduates students in Rivers State University and 39 from Ignatius Ajuru University of Education, Port Harcourt). There was no sample as the researcher used the entire population for the study. The instrument used for data collection was "Multiple Disruptions and remediating influence on Learning Post Graduate Business Education Questionnaire (MDILBEQ). MDILBEQ is made of 20 items developed on a four (4) point rating scale of Very High Extent (VHE-4), High Extent (HE-2), Moderate Extent (ME-3), and Low Extent (LE-4). The instrument was subjected to content and face validity and reliability test which gave a coefficient of stability of 0.81, 0.83, and 0.87 respectively. The administration of the instrument was personally carried out by the researcher and research assistants. Data gathered for research questions to three were analyzed using mean and standard deviation and formulated null hypotheses tested with Z-test at 0.05 level of significance

Results

Research Questions 1: To what extent does learning disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era?.

Table 1: Summary of mean scores on the extent learning disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era

S/N	ITEM	RSU = 104		IAUE = 39		Remark
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂	
1.	Used ICT platforms to redefine the nature and scope of Business Education programme.	2.98	1.09	3.59	1.05	HE
2.	Build up the ecosystem for effective learning of Business Education courses	2.67	0.98	2.71	0.72	HE
3.	Developed technological equipment for learning support services	3.04	1.15	3.59	0.99	HE
4.	Established specific priorities and emphasize some courses more than others in Business Education curriculum	2.95	0.98	2.29	0.73	HE
5.	Highlighted the need to develop students and lecturers' digital literacy.	2.93	1.03	3.06	0.72	HE
6	Highlighted the need to enhance both initial and continuous training of lecturers and student in the use of technology for teaching and learning	2.75	1.12	3.02	0.92	HE
7	Prioritizing opportunities for authentic education through enriched curriculum to give future direction for teaching and learning after students return to school.	2.83	1.11	2.86	0.97	HE
	Grand Mean	2.88	1.07	3.02	0.87	HE

The result from research question 1as presented in Table 1 shows that the respondents all rated the items 1, 2, 3, 4, 5, 6, and 7 high. Hence, since the grand mean of 2.88 and 3.02 which is above the criterion mean of 2.50, both respondents in Rivers State Universities agreed to a high extent that learning disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers

State Universities in the post COVID-19 era.

Research Questions 2: To what extent does Economic disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era?.

Table 2: Summary of mean scores on the extent economic disruption caused by COVID-19 influences the learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 Era

S/N	ITEM	RSU = 104		IAUE = 39		Remark
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂	
8.	Provide collective engagement and mutual accountability as critical cornerstones for sustained success in keeping schools safely open to future challenges	3.58	1.09	3.63	1.05	HE
9.	Educational processes have had to be transferred from schools to home-based remote learning	2.67	0.98	2.71	0.72	HE
10.	Deployment of on-line remote learning has further reinforced inequality in educational opportunity for business education students	2.19	1.15	2.32	0.99	HE
11	The disruption is an opportunity to imagine more inclusive, flexible and equitable provision of education, based on a mix of technologies and a combination of school-based and remote learning.	2.5	0.98	2.61	0.73	HE
12	Develop economic intelligence and skills	2.73	1.03	2.98	0.72	HE
13	Modification of students' behaviour economically.	2.5	1.12	2.98	0.92	HE
	Grand Mean	2.69		2.88		HE

The result from research question 2 as presented in Table 2 shows that the respondents all rated the items 8, 9, 11, 12, and 13 high and rated item 10 to low extent. Hence, since the grand mean of 2.69 and 2.88 is above the criterion mean of 2.50, both respondents in Rivers State Universities agreed to a high extent that economic disruption caused by COVID-19 influences learning of post graduate Business Education

programmes of Rivers State Universities in the post COVID-19 era.

Research Questions 3: To what extent does social disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era?.

Table 3: Summary of mean scores on the extent social disruption caused by COVID-19 influences the learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 Era

S/N	ITEM	RSU = 104		IAUE = 39		Remark
		\bar{X}_1	SD ₁	\bar{X}_2	SD ₂	
14	Enable infrastructure, make it available for everyone and ensure that it can accommodate all updates occurring in educational platforms and resources; and ensure mutual collaboration and support among organizations, institutions and states to empower underprivileged areas;	2.88	0.82	2.98	0.83	HE
15	Covid-19 experience has prompted the department to reimagine the purpose of Business Education programme for the organization of learning	2.67	0.98	2.76	0.98	HE
16.	The disruption helped the learning Business Education to be more differentiated and personalized so that students can develop greater autonomy, as well as time management and self-organization skills.	3.01	1.02	2.69	1.01	HE
17	The disruption provide unique opportunity to redefine the learning community by better networking learning spaces that connect classroom and school-based learning with the home, family and community at large.	2.67	1.03	2.61	1.01	HE
18	Creating social support message and activities to promote positive spirit, health knowledge and action for the department and community	2.77	0.98	2.6	1.29	HE
	Grand Mean	2.8		2.73		HE

The result from research question 3 as presented in Table 3 shows that the respondents all rated the items 14, 15, 16, 17, and 18 high. Hence, since the grand mean of 2.80 and 2.73 which is above the criterion mean of 2.50, both respondents in Rivers State Universities agreed to a high extent that social disruption caused by COVID-19 influences learning of post graduate Business Education programmes of Rivers State Universities in the post the COVID-19 era.

Hypotheses

H₀₁: There is no significant difference in respondents' mean scores on learning disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.

Table 4: Z-test Scores on learning disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes.

Respondents	\bar{X}	SD	N	Df	Z-cal	Z-crit	Decision
RSU	2.88	1.07	104				
				141	0.37	1.96	Accepted
IAUE	3.02	0.87	39				

The results in table 4 shows that respondents in Rivers State University had mean and standard deviation scores of 2.88 and 1.07 respectively, while respondents in Ignatius Ajuru University of Education had mean scores and standard deviation of 3.02 and 0.87 respectively. On the basis of z-comparison, the calculated Z-ratio (0.37) is smaller than the critical value (1.96). Therefore, the null hypothesis of 'no significant difference in respondents' mean scores on learning disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era does not differ significantly' is retained for insufficient empirical evidence.

H₀₂: There is no significant difference in respondents' mean scores on economic disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.

Table 5: Z-test Scores on economic disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes

Respondents	\bar{X}	SD	N	Df	z-cal	z-crit	Decision
RSU	2.69	1.05	104				
				141	0.39	1.96	Accepted
IAUE	2.88	0.86	39				

The results in table 5 shows that respondents in Rivers State University had mean and standard deviation scores of 2.69 and 1.05 respectively, while respondents in Ignatius Ajuru University of Education had mean scores and standard deviation of 2.88 and 0.86 respectively. On the basis of z-comparison, the calculated Z-ratio (0.39) is less than the critical value (1.96). Therefore, the null hypothesis of 'no significant difference in respondents' mean scores on economic disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era does not differ significantly' is retained for insufficient empirical evidence.

H₀₃: There is no significant difference in respondents' mean scores on social disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.

Table 6: Z-test Scores on social disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes

Respondents	\bar{X}	SD	N	Df	z-cal	z-crit	Decision
RSU	2.88	0.97	104				
				141	0.18	1.96	Accepted
IAUE	2.73	1.02	39				

The results in table 6 shows that respondents in Rivers State University had mean and standard deviation scores of 2.88 and 0.97 respectively, while respondents in Ignatius Ajuru University of Education had mean scores and standard deviation of 2.73 and 1.02 respectively. On the basis of z-comparison, the calculated Z-ratio (0.18) is less than the critical value (1.96). Therefore, the null hypothesis of 'no significant difference in respondents' mean scores on social disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education Programmes of Rivers State Universities in the post COVID-19 era does not differ significantly' is retained for insufficient empirical evidence.

In summary, this study revealed the following findings:

1. That there is no significant difference in respondents' mean scores on learning disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.
2. That there is no significant difference in respondents' mean scores on economic disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.
3. That there is no significant difference in respondents' mean scores on social disruption caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State

Universities in the post COVID-19 era.

Discussion of Findings

The findings show that multiple disruptions by COVID-19 created various challenges to the learning of Business Education in Rivers State universities and implications were drawn for designing the future of Business Education in the post COVID-19 era. However, this study revealed that no significant difference exist in respondents' responses on learning, economic and social disruptions caused by COVID-19 and remediating influence on learning of post graduate Business Education programmes of Rivers State Universities in the post COVID-19 era.

The first finding is in agreement with Ngogi and Mahaye (2020)^[9], Kekić and Miladinović (2016)^[7] and Wondwosen and Damtew (2020)^[21] who depict that long periods of learning were lost for as long as the closures lasted, which prompted the used of IT and AI to re-define teaching and learning, knowledge management and utilization, creating unlimited opportunities for learning and development.

In tandem with the second finding, Kathmandu (2020)^[6] and Mba (2020)^[8] reported that disruptive tendencies of the pandemic affected many items in the 2020 Education Sector appropriation bill, because most items were not implemented due to the drastic financial shortfall, which required more funding is required to keep learning going or scaled-up education support programmes as part of the government's palliative measures.

Thirdly, the study revealed and agreed with Di Pietro., Biagi, Costa, Karpiński, Mazza (2020)^[4] that social disruption created negative impact on students, lecturers and parents' quality of life during lockdown caused by the implementation of social distancing policy. This condition provided opportunities (Cheng, 2019)^[3] for creating, adapting and harmonizing curricula for distance learning.

Recommendations

The study concludes that closure of educational institutions and home confinement have fundamentally transformed the way in which students, lecturers and parents engage with education and learning during COVID-19. This novel experience has prompted institutions especially Business Education programmes in River State Universities to reimagining the purpose of education and the organization of learning through technological platforms to forestall future occurrence.

This novel experience has prompted institutions especially Business Education programmes in River State Universities to reimagining the purpose of education and the organization of learning through technological platforms to forestall future occurrence. Based on the findings of the study and conclusion made, the following recommendations are put forward by the researchers.

1. Business Education curriculum and teaching resources should be reviewed and upgrade the range of skills provided to students in a way that would better equip and prepare them for the future disruptions.
2. Universities offering Business Education programmes should explore new methods to train and prepare lecturers and students, so they may attain the required skills and competencies to keep up with future economic and social changes.

References

1. Akpomi ME, Kayii NE. Evaluation of Business Education programme in Rivers State University, Port Harcourt, Nigeria, *International Journal of Education and Evaluation*. 2020; 6(2):53-66.
2. Amesi J, Akpomi ME. Application of new technologies and mentoring strategies in Business Education in Rivers State. *International Journal of Accounting Research (Arabian Group of Journals)*. 2013; 1(5):11-20.
3. Cheng YC. *Paradigm shift in education: Towards the third wave of effectiveness*. Routledge, 2019.
4. Di Pietro G, Biagi F, Costa P, Karpiński Z, Mazza J. The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international datasets, JRC Technical Reports, 2020. Available at <https://publications.jrc.ec.europa.eu/repository/handle/JRC121071>
5. Ile CM, Odimegwa CG, Azu ON. Application of asynchronous instructional strategies in teaching and learning of Business Education programmes in colleges of education in south east Nigeria. *Nigerian journal of business education (nigjbed)*. 2016; 3(1):126-141.
6. Kathmandu K. COVID-19 educational disruption and response: Continuation of radio education for secondary level students in Nepal. UNESCO, 2020. <https://en.unesco.org/news/covid-19-educational-disruption-and-response-continuation-radio-education-secondary-level>
7. Kekić D, Miladinović S. Functioning of educational system during an outbreak of acute infectious diseases. Retrieved from, 2016. <https://www.researchgate.net/publication/309728224>
8. Mba JC. Challenges and Prospects for Africa's Higher Education. Association of African Universities, 2020. <https://www.globalpartnership.org/blog/challenges-and-prospects-africas-highereducation>
9. Ngogi EM. *The Impact of Covid-19 Pandemic on Education: Navigating Forward*, 2020.
10. *Pedagogy of Blended Learning*. University of Pretoria, South Africa, 5, 4-9.
11. Owusu-Fordjour C, Koomson C, Hanson D. The impact of Covid-19 on learning-the perspective of the Ghanaian student. *European Journal of Education Studies*. 7(3).
12. Oluwatuyi VS, Okunade RA, Oluwatuyi MF, Agbele AT, Sam-Ijadele OI. Covid-19 In Ekiti State Nigeria: Why should we worry? *International Journal of Research and Scientific Innovation*. 2020; 7(6):146-149.
13. Parkash, M. Priorities in the post Covid-19 era. Retrieved, 2021, from <https://www.thedailystar.net/opinion/news/priorities-the-post-covid-19-era-2013665>
14. Sahu P. Closure of universities due to Coronavirus Disease 2019 (COVID-19): impact on education and mental health of students and academic staff. *Cureus*. 2020, 12(4).
15. Thelma O, Adedeji A. Covid-19: Impending situation threatens to deepen Nigeria's education crisis. An article published at the Centre for the studies of the Economies of Africa, 2020.
16. Taibat H. *Education and Covid-19 in Nigeria: Tackling the Digital Divide*, 2020.
17. Available online: <https://www.soas.ac.uk/blogs/study/covid-19-nigeria-digitaldivide/> (accessed on 8 May, 2021)
18. The Guardian. Don't Reopen Schools Now; ASUU President urges Government, 2020. Available online: [m.guardian.ng/news/don't-reopen-school-now-asuu-presidenturges-government/](https://www.guardian.ng/news/don't-reopen-school-now-asuu-presidenturges-government/) (accessed on 8 May, 2021).
19. Unesco. COVID-19 education response: Virtual knowledge-sharing workshop on distance education programmes using radio and television, 2020. summary report <https://unesdoc.unesco.org/ark>
20. Viner RM, Russell SJ, Croker H, Packer J, Ward J, Stansfield C, Mytton O, *et al*. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *Lancet Child Adolescent Health*. 2020; 4:397-404
21. Wondwosen T, Damtew T. COVID-19 poses a serious threat to higher education; the impact of the COVID-19 Crisis. *International Network for higher education in Africa, series*, 2020, 4.
22. Zhong BL, Luo W, Li HM, Zhang QQ, Liu XG, Li WT. Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey. *International Journal of Biological Science*. 2020; 16(10):1745-1752.