THE EFFECT OF COVID 19 PANDEMIC ON HIGHER INSTITUTION IN AKWA IBOM NORTH EAST, NIGERIA: BRIDGE BUILDER OR DIVIDER

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Abstract

The COVID-19 pandemic has changed the face of education in Akwa Ibom State forever. This marked the beginning of how students of private institutions of higher learning started to attend remote lectures from their homes as lockdown was imposed to slow the rate of the spread of Corona virus disease (COVID-19). All the students in Alwa Ibom State were shut out of the school, but not all were shut out of the classroom. With schools shut down across the world, millions of students had to adapt to new types of learning. As a result, the mode of education was changed dramatically with the distinctive rise of remote learning, whereby teaching was undertaken remotely and on digital platforms. It is generally believed that digital learning can increase retention of information and take less time, which means that the changes the coronavirus has caused might be here to stay. The study investigated one of the effects of COVID-19, which was hastily moved to remote learning, on the eight accredited higher institutions in Akwa Ibom, North East. It also determined the presence and non-presence or the inequality of digital devices that facilitate the use of ICT by tertiary education in the state. The outcome of the study was used to predict that there was a divide and that the swift move to remote learning has caused a wider divide, which in turn showed that it is not a bridge builder. The study was significant in determining the presence and adequacy of facilitating conditions for the use of ICT in higher education in Akwa Ibom, North East. Data was collected from the target population of students in all the tertiary institutions in the study area using a multistage sampling technique. Data obtained was analysed using a descriptive statistical tool; results are presented in tables and charts for easy understanding.
Keywords: COVID-19, Higher Institution, Digital Divide, Bridge Builder, Lockdown

Introduction

Coronaviruses (CoV) are a large family of viruses that cause diseases ranging from the common cold to more serious ones. The COVID-19 coronavirus was first detected in China in December 2019 (World Health Organisation, 2020) and has since spread to all regions of the world. The World Health Organisation provided proven and constantly updated information about COVID-19 and its spread and also suggested which health measures should be taken at the individual and collective levels in order to prevent it and avoid its spread. The COVID-19 pandemic has strategically overwhelmed all the global sectors of human endeavours since its first appearance in Wuhan, China, in December 2019. The virus shattered and paralysed all socioeconomic activities for several months. One of the areas that was seriously affected globally was the education sector. Akwa Ibom State was affected just like other states in the country, economically and socioculturally.

Shared Seasoned International Journal of Topical Issues
VOL.10 NO.2, OCTOBER 2024, New York City.   ISSN: 2630-7290

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Some of the effects of COVID-19 on the educational system are listed as follows:

Closing Down of Physical Institutions: Covid19 pandemic forced all schools, colleges, and other educational institutions to remain closed due to the quarantine.

- **Online Learning**: To prevent people from gathering, online classes were introduced in some educational institution.
- **Educational Achievement**: The closings of institutions have a harmful effect on learning. Education is critical for knowledge, and the closings robbed students of their possible growth and development.
- **Completion of course:** Prolonged the educational Years of the students, threatened to limit the student's options and prospects to further their studies.
- **Economic and societal consequences:** The closing down of schools also impact on the economy and society. Those that have their income as a result of students being in schools were also affected. Private institutions workers could not be paid or was delayed as a result of delay in fee payment of the students, which directly impact the revenue generation of the respective schools, which in turn affected the financial condition of the educational institutions and impacting the salary flow of teaching and non-teaching staff.
- **Reaching out to students:** Reaching out to students was also a big challenge as teachers could not reach the students to ensure continuity of education through remote learning.
- **External Examinations postponed:** Various examination boards had to address the crisis by shifting the dates of their examinations.

- **Online experimentation:** Many of the institutions were switching to the online mode, and being a new concept, a lot of back and forth experimentation was experienced.

- **Impact of social isolation:** Since the isolation was not plan, there was no plan also on how to engage the students during the period of isolation and the monotony of the isolation tend to make them more aggressive, depressive or lethargic in the long run.

- **Parents' preparedness:** Parents with limited education find it difficult to facilitate their learning at home. Parents who are not proficient with online learning also find it difficult to help their children.

- **Potential Technological Barriers:** The challenges of online education and unequal access to internet, reliable internet connectivity and availability of computer at home, poses challenges for those schools who were providing online education during the time of crisis.

The Nigerian Policy on Education has been widely criticised for its failure to make adequate provisions for an unforeseen contingency like pandemic periods (Asuquo, 2009). Higher education campuses are places where students live and study in close proximity to

Shared Seasoned International Journal of Topical Issues
VOL.10 NO.2, OCTOBER 2024, New York City.   ISSN: 2630-7290

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each other. They are also buzzing cultural hubs where students are brought together from nations around the world. Recently, the foundations of this unique ecosystem have been impacted significantly by the rapid spread of the coronavirus (Covid-19) outbreak, creating uncertainty regarding the implications for higher education. Thus, when COVID-19 emerged in Nigeria, the education sector emerged arguably as the most affected. Educational institutions were totally shut down for nearly two semesters in March 2020. With this shutdown, some students received remote education (education that happens outside the physical classroom) until the start of the new school year in September 2020. The remote education or blended learning relied on the use of digital technology. Where the teacher is not present in the same physical location as the students, and which is delivered through digital technologies (Kuhfeld et al., 2020).

This type of education has led to inequalities in access to learning, and this led to the concern if this new type of digital education is a bridge builder we have been waiting for, or a digital divide that has come to widen the digital inequality among students in higher education. Based on the data given by UNESCO (2020), some 826 million students do not have access to a household computer, while 706 million learners have no internet at home. The digital divide can be seen as access to devices and internet, digital skills, parental support, and a learning environment. According to Schleicher (2020), some students in public schools who do not have access to digital learning resources or lack the resilience and engagement to learn on their own are at risk of falling behind. Also, Onyema et al. (2020) opined that the coronavirus pandemic has created multiple problems for the education sector, leading to decreased education opportunities for underprivileged learners and those in rural areas. Digital bridging in education is giving a solution to problems of digital access (material, mental, skill, and usage) in educational institutions. As lockdown was imposed to slow the rate of the spread of coronavirus disease (COVID-19), there came a swift turn to digital education without a period of training for both the lecturers and the students. With schools shut across the world, millions of students had to adapt to new types of learning (Esteban and Cruz, 2020). All the students were shut out of school, but not all were shut out of the classroom. The privilege students took their classroom to their bedrooms, while the less privilege students were locked out of school and out of the classroom. According to Basilaia and Kvavadze (2020), school closure can add stress to students from low-income parents who were already having challenges associated with urban poverty. As a result of COVID-19 locking down, our mode of education was changed dramatically with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. The question still remains: is this new wave of digital education a bridge builder or a divider?

It is generally believed that digital learning has been shown to increase retention of information and take less time (Montes, 2022). With this sudden shift away from the classroom in many parts of the state, the researchers wonder whether the adoption of online learning will continue to persist after the pandemic and how such a shift would impact the educational sector in the study area. Before COVID-19, there was already high growth and adoption in education technology by private universities in Nigeria (Oladunjoye, 2020). Whether it is virtual tutoring, video conferencing tools, or online learning software, there has been a significant surge in usage since COVID-19. The researchers also believe that this unplanned and rapid move to remote learning with no sufficient training, insufficient bandwidth, and little or no preparation might result in either retention of knowledge or poor user experience that is not conducive to sustained growth. How then will this new hybrid

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model of education that has emerged be of significant benefits to our education system? Will it further be accelerated so that remote education will eventually become an integral component of our tertiary institutions, or will it further widen the digital gap in our tertiary institutions?

Problem Statement/Justification

One of the adages from my place of birth says "marry in haste, repent at leisure." Here in Nigeria, there has been a significant gap between those from privileged backgrounds and those of disadvantaged backgrounds. So with the hasty Swift to Remote Learning, what were the plans for the disadvantage students? Before the pandemic, some students without reliable internet access and technology struggled to participate in digital learning; some of the disadvantage students had to go to places with free Wi-Fi to enable them to use their phones to do their assignments. With the lockdown of the economy, these disadvantage students could not go out to where there was free Wi-Fi any longer, and even the free WiFi joint was not even open; their parents could not buy data for them. On the other hand, private schools were using digital devices with their students online during the same lockdown periods; most of their students even defended their projects online (Covenant University Project Defence, 2020; Babcock University Project Defence, 2020), and some had an online graduation (Babcock graduation, 2020). This is also feasible in the first National Youth Service Corps (NYSC) batch of February 2021, after the pandemic, which recorded more than 80% of the corps members from private institutions. So is this hasty turn to remote learning a bridebuilder or a further divide? This gap is seen across the state and between income brackets. The lack of access has caused a significant amount of problems in many struggling institutions of higher learning; this lack of access puts the institutions in a competitive and economic disadvantage state. This is due to the skills and confidence that Internet access impacts on students who have access to the internet. For schools not to have internet access, it means those schools were unable to teach IT skills, and the students are not able to take advantage of the vast amount of information available on the web. With the lack of IT skills, students from these schools are unable to compete with their counterparts from private schools.

Objectives of the Study

The central thrust of the study was to investigate, the effect of Covid 19 in tertiary institutions in Uyo Senatorial District of Akwa Ibom State. In particular, the researchers sought to answer the following questions:

1. To determine if there was inequality in access of ICT devices among students during lockdown.
2. To determine the level of preparedness in case of another lockdown.
3. To ascertain if all the students that were locked out of school were actually locked out of class.
4. To ascertain if the hasty swift to remote learning is the bridge that was being expected or is to further widen the digital divide that existed.

Research Questions

1) To what extent was ICT devices/ internet available to students of higher institution in uyo senatorial district?

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2) To what extent does the institutions of higher learning in uyo senatorial district prepared in case of another lockdown?
3) To what extent was the student of higher institutions in uyo senatorial district locked out of school and out of class?
4) To what extent has the hasty swift to remote learning bridged the already existed digital divide.

Literature Review

It is clear that the COVID-19 pandemic has utterly disrupted the education system that many assert was already losing its relevance. There has been a hasty move to online learning to create a new and effective method of educating the students. What has been made clear through this pandemic is the importance of disseminating knowledge to the students. If online learning technology can play a role here, it is therefore necessary for all of us to explore its full potential. Making sure that it gets to all the learners equally.

In checking the digital divide, the Digital Bridge Institute (DBI) in Abuja was established in 2004 by the Nigerian National Communication Commission (NCC) to assist in the promotion of ICTs in Nigeria. In spite of these efforts, ICTs have not impacted greatly on the Nigerian school system. In fact, the impact of ICT is much more noticeable in the economic and communication sectors of the country. According to Olatokun (2012), his paper highlighted the crucial role of information technology (IT) in global development and the need for countervailing policies to regulate IT. The study concluded by submitting that it is the responsibility of the National Information Technology Agency (NITDA) with the full backing of the Nigerian government to transform the digital divide into a digital opportunity for Nigerians and that the future and destiny of IT in Nigeria are bright provided the government and NITDA work together and apply the recommendations suggested.

In another development, out of the 66,000 corps members of 2020 batch B mobilised by the National Youth Service Corps (NYSC), 37450 came from private institutions, while 28550 came from public institutions (National Secretariat NYSC, Abuja). A further probe shows that even the 28550 corps members were those from public universities that could not make it in previous batches and were waiting to join the next batch.

In Akwa Ibom State 2004, there was an introduction of a science park project whose objectives were to:

• Provide the needed infrastructure for IT, R and D (Research and Development) and software development and production;
• Foster excellence in education and training of Akwa Ibom State indigenes in all aspects of IT;
• Provide a collaborative environment for IT and R and D for academia, government, industries and business;
• Promote and encourage IT business investments from local, out of state and foreign investors; and Serving as IT resource center for industries and businesses located in the State. (Asuquo, 2009).

All of this was to take place at the completion of the science park, which unfortunately seems to have come to its demise. This would have been useful in the time of the pandemic in some ways.

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Students from private institutions of higher learning who are from a privileged background have computers and other digital gadgets to use in learning at home, while those from disadvantaged backgrounds do not. It is the concern of the researchers that the pandemic might bring about a digital divide. For those who do have access to the right technology, there is evidence that learning online can be more effective in a number of ways. Some research shows that on average, students retain 25–60% more material when learning online compared to only 8–10% in a classroom. This is mostly due to the students being able to learn faster online. E-learning requires 40-60% less time to learn than in a traditional classroom setting because students can learn at their own pace, going back and re-reading, skipping, or accelerating through concepts as they choose (Gutierrez, 2013).

It is clear that the COVID-19 pandemic has utterly disrupted the education system that many assert was already losing its relevance. There has been a hasty move to online learning to create a new and effective method of educating the students. What has been made clear through this pandemic is the importance of disseminating knowledge to the students. If online learning technology can play a role here, it is therefore necessary for all of us to explore its full potential.

Methodology

Description of study Area/Site: Akwa Ibom North East District comprises nine local government areas, the biggest of the three federal constituencies of Akwa Ibom State. The district lies along the south-eastern part of Nigeria, now politically grouped as the south-south zone in the Niger Delta Region along the eastern coastal lines of Nigeria.

Figure 1. Study Area. (In yellow colour)

Data collection: A questionnaire was administered directly on the respondents by the researchers, assisted by trained assistants for the study. Questionnaires filled were retrieved and analysed. Out of 4000 questionnaires distributed 3974 were retrieved giving the percentage retrieval at 99.35.

Design of the study: This study employed descriptive Survey design. The study used questionnaires for data collection with the view of generalizing from a sample to a

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population. The choice of design was that there will not be control or interference with the variables.

Population of the study: The population of the study was made up of 4000 students in the 8 accredited tertiary institutions in Akwa Ibom north east district of the State. 500 questionnaire was sent to each of the institutions.

Sample/Sampling Technique: A purposive sample of 4000 respondents were given the questionnaire in all 8 institutions in the study area. The sample participants from the districts had equal opportunity of being selected or a representative of the population of study.

Validity of the Study: Validity refers to the degree to which an instrument accurately measures what it intent to measure. Face validity was used to check that the items adequately measure or represent what the researcher wishes to measure.

Reliability: Reliability refers to the degree to which an instrument yield consistent results. The reliability of the instrument was determined through a pilot test using Cronbach Alpha. This was done by Sampling 50 students that did not take part in the main survey. Data retrieved from them was used to determine the reliability coefficient of the instrument, which was 0.78, showing that the instrument was reliability. **Instruments:** Data collection was done using a structured questionnaire using a 4- points likert scale with responses as follows: Strongly Agree(SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree (SD) = 1 point, to ensure that comprehensive list of scales are included. Statements was constructed by the researcher based on their admissibility to the present study and on the cultural relevance to suit area of study. This instrument were collected and the data that fitted into various experiences were established response categories. The results were easy to generalise, summarise and even be compared to other results.

Data Analysis: Descriptive statistics was employed to summarise and describe all properties of data collected from the respondents using mean scores and Standard deviation. Decision rule states that when the Mean is 2.49 and below, the extent is Low but from 2.50 and above the extent is High.

Data analysis employed descriptive statistics to summarise and describe all properties of data collected from the respondents as follows

Table1: Demographic information of Respondents

Questionire	Questionare received	Questionaire wasted	Total Questionare	
Number	3974	26	4000	
Percentage	99.35%	0.65%	100%	
Public schools students that responded			2886	72.62%

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Private schools students that responded		1088	27.3
Gender	Number	Percentage	
Female	2346	59%	
Male	1628	41%	
Field of Study	Number	Percentage	
Arts	1425		
Science	648		
Social Science	1901		
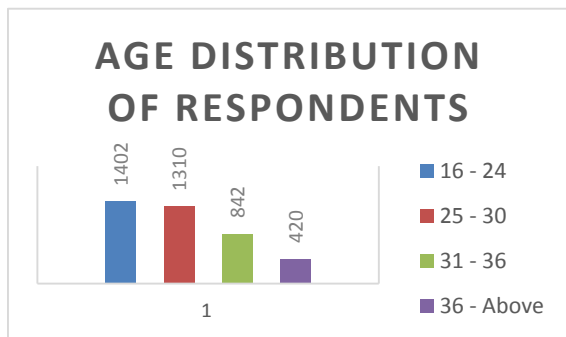
Figure 2. *Age of Respondents*
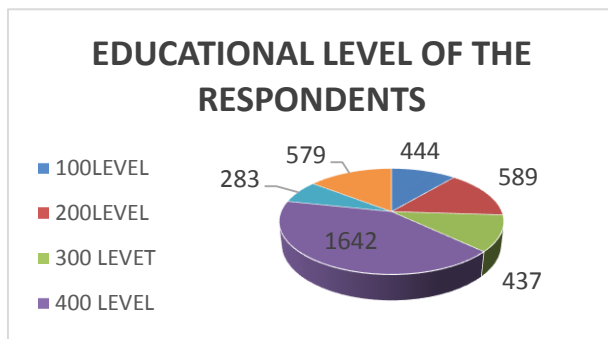
Figure 3. *Educational level of respondents*

Figures 2 and 3 showed charts on how questionaires was resonded to by the respondents by age and by their educational level

Table2: Questionnaire Responses of Respondents

Questions	SD	D	A	SA
Q1 We have laptop and MIFI (hotspot) in my home.	1402	2055	432	85

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Q2 Our school computer laboratory is well equip for remote learning	2068	951	502	453
Q3 The lecturers in my school have personal laptops and internet devices	1569	1254	544	607
Q4. Our lecturers teaches us some topic remotely	2265	954	425	330
Q5 During the lockdown we were still receiving lectures	1476	1894	402	202
Q6 Using computer device to teach is compulsory in my school since after lockdown	2534	1189	134	117
Q7 After lockdown many of my lecturers attended training on ICT	1920	1324	436	294
Q8. After lockdown computing devices were installed in our school laboratory	1087	2086	548	253
Q9. Graduation in my school was delayed by one year because of covid19 lockdown	252	167	1880	1675
Q10. In my school project defence held remotely during covid19	2481	1207	213	73
Q11. Graduation was done in my school virtually during the covid19 lockdown	1742	1222	215	73
Q12. There was no communication with our lecturers throughout the lockdown	383	31	2064	1396

Research Questions 1: To what extent was ICT devices/ internet available to students of higher institution in uyo senatorial district?

Table 2 ICT/ Internet Availability

Questions	SD	D	A	SA	X	STD
Q1 We have laptop and MIFI (hotspot) in my home.	1402	2055	432	85	1.79	1.39
Q2 Our school computer laboratory is well equip for remote learning	2068	951	502	453	1.82	1.61
Q3 The lecturers in my school have personal laptops and internet devices	1569	1254	544	607	2.03	1.81

The results from Table 2 showed that the avilability of ICT devices/ Internet was available to students in a very low extent. Perhap it was available to only students from private institutions.

Research Questions 2: To what extent does the institutions of higher learning in uyo senatorial district prepared in case of another lockdown?

Table3: Level of preparedness

Questions	SD	D	A	SA	X	STD
Q6 Using computer device to teach is compulsory in my school since after lockdown	2534	1189	134	117	1.45	1.07

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Q7 After lockdown many of my lecturers attended training on ICT	1920	1324	436	294	1.76	1.48
Q8. After lockdown computing devices were installed in our school laboratory	1087	2086	548	253	1.98	1.62

Results from Table 3 showed that the level of preparedness in case of another Lockdown is very Low as shown in the responses and on the table represented by the mean and standard deviation, From the responses, after lockdown, there was no training for the instructors and the was also no improvement on availability of new devices in the school laboratory.

Research Questions 3: To what extent was the student of higher institutions in uyo senatorial district locked out of school and out of class?

Table 4: Extent of Locked down and Locked out

Questions	SD	D	A	SA	X	STD
Q4. Our lecturers teaches us some topic remotely	2265	954	425	330	1.69	1.45
Q5 During the lockdown we were still receiving lectures	1476	1894	402	202	1.82	1.47
Q9. Graduation in my school was delayed by one year because of covid19 lockdown	252	167	1880	1675	3.24	2.81
Q10. In my school project defence held remotely during covid19	2481	1207	213	73	1.46	1.07
Q11. Graduation was done in my school virtually during the covid19 lockdown	1742	1222	215	73	1.43	1.00
Q12. There was no communication with our lecturers throughout the lockdown	383	31	2064	1396	3.06	2.70

Results from Table 4 showed the extent the students were locked down from school and locked out of the classroom. Item 9 showed that in most of the institutions their graduation was delayed by one year while very few schools had their graduation within the period. Also item 10 and11 showed that in very few institutions Project defence and graduation was done virtually. Also item 12 showed that there was no communicationWhich means that most of the respondents were locked out

Research Questions 4: To what extent has the hasty swift to remote learning bridged the already existed digital divide.

Table 5: Swift to remote learning a bridge builder of a divider

Questions	SD	D	A	SA	X	STD
Q9. Graduation in my school was delayed by one year because of covid19 lockdown	252	167	1880	1675	3.24	2.81
Q10. In my school project defence held remotely during covid19	2481	1207	213	73	1.46	1.07
Q11. Graduation was done in my school virtually during the covid19 lockdown	1742	1222	215	73	1.43	1.00

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Q12. There was no communication with our lecturers throughout the lockdown	383	31	206 4	1396	3.0 6	2.70

From Table 5, it can be seen that in few institutions, there was project defence and virtual graduation ceremony. While majority of the institutions did not have any communication with their lecturers. Their graduation was delayed by one year.

The Findings from this study contributed significantly to existing knowledge in e-learning and Digital divide among tertiary institutions in Akwa Ibom North East District Within the context of this study, constraints to the successful use of e-learning facilities were be identified.

Discussion

The study showed the damaging effects of the COVID-19 pandemic on education and the various barriers that it caused the students and lecturers to engage in online education for continued learning during the COVID-19 lockdown. The study showed that public higher institutions were badly affected during the COVID-19 lockdowns. Some of the identified effects from the study include learning disruption, lack of access to learning resources such as laboratories, research constraints, lack of technological devices, and loss of learning interests among learners. This finding is in line with an earlier assertion by Onyema et al. (2020) that the coronavirus pandemic created multiple problems for the education sector, leading to decreased education opportunities for underprivileged learners and those in rural areas. The analysis also revealed that poor digital skills, school policies, digital divide, poor electricity, unavailability and accessibility of digital devices, network issues, lack of training, lack of funding, etc. are the major barriers for online education during the COVID-19 pandemic school closures. Among these factors, lack of facilities appeared to be the highest hinderance to online learning during the pandemic. More than 80% of the respondents agreed that lack of digital devices, such as a computer or internet facility, were the major factors that limited their engagement in online education. Similarly, poor electricity service, unavailability and accessibility issues, network issues, etc. also created lots of problems for education during the COVID-19 lockdown.

The result of the study shows that coronavirus disrupts educational activities and tends to reduce educational opportunities for disadvantaged students. It displaced students and teachers and created multiple barriers in teaching and learning. The study indicated that the COVID-19 lockdown has the tendency to widen the already existing digital divide and to also widen the class difference between the students from higher socioeconomic classes and those from lower social classes. This is in line with the assertion by Ben, Mathew, and Kristen (2010) that school closure can add stressors to students who are already contending with challenges associated with urban poverty. The finding recognises the need for technology in education, particularly in times of emergencies. This is in line with an earlier assertion by Onyema (2019) that integration of emerging technologies in education is no longer a choice but a need for all educators considering the changing learning environment, demands for flexibility in methodology, and the need to enhance creativity and innovations in learning.

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Conclusion

The study established that the rush into remote learning during COVID-19 lockdown is not a bridge builder but has further widen the already existing digital divide. These effects were felt by all educational stakeholders. The study emphasises the need for adoption of technology in education as a way to prepare in case of future pandemics in education. The school closure during COVID-19 remains a lesson and a warning to the entire educational sector, particularly those who are yet to embrace or adopt emerging learning technologies that support online or remote education.

Recommendations

1. Higher institutions should prioritize the development and implementation of blended learning models that combine both in-person and online education. This will enhance learning flexibility and continuity during future disruptions.

2. The government, in collaboration with educational institutions, should increase funding and support for technological advancements in education, including the provision of affordable internet access, digital devices, and training for both students and staff.

3. Mental health services should be strengthened within institutions to support students and staff in coping with the psychological impacts of the pandemic. Counseling services, peer support programs, and stress management workshops can help build resilience in the academic community.

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Shared Seasoned International Journal of Topical Issues
VOL.10 NO.2, OCTOBER 2024, New York City.   ISSN: 2630–7290

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