

COVID-19 AND EDUCATIONAL ADMINISTRATION: A REVIEW OF LITERATURE

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Abstract: *The COVID-19 pandemic caused the largest disruption of education system in human history, affecting nearly 1.6 billion learners in more than 200 countries. Closures of schools, institutions and other learning spaces have impacted more than 94% of the world's student population. This has brought far reaching changes in all aspects of our lives. Social distancing and restrictive movement policies have significantly disturbed traditional educational practices. Several schools, colleges and universities have discontinued face-to-face teachings. The need of the hour is to innovate and implement alternative educational system and assessment strategies. The COVID-19 has provided us with an opportunity to pave the way for introducing distance learning. This article makes a review of the impact of the COVID-19 pandemic and the attendant lockdown on teaching and learning and general educational administration viz-a-viz impact of COVID-19 on education system, inequality in access to learning during the COVID-19 pandemic, approaches to distance learning during the pandemic, COVID-19 and education finance, challenges in teaching and learning to draw conclusion and make recommendations.*

Keywords: COVID-19, Pandemic, Lockdown, Distance learning, Educational Administration.

1. Introduction

School closure due to COVID-19 brought significant disruption to education across the world. Emerging evidence from some of the region's highest-income countries indicate that the pandemic is giving rise to learning losses and increases inequality and to reduce and reverse the long-term negative effect, Ukraine and other less affluent lower-middle income countries which are likely to be even harder hit, need to implement learning recovery programmes, protect educational budgets, and prepare for the future chocks (Robbin Donnelly-Patrinis, 2021).

As of April 21st, 2020, approximately 1.723 million learners have been affected with the sudden closures of school in response to the COVID-19 pandemic. UNESCO (2020b) notes that as of the above date, 191 countries have implemented nationwide closures and 5 have implemented local closures, imparting about 98.4 per cent of the world's student population. The COVID-19 pandemic caused the largest disruption of education system in human history, affecting nearly 1.6 billion learners in more than 200 countries. Closures of schools, institutions and other learning spaces have impacted more than 94% of the world's student population (Pokhrel and Chhetri, 2021).

In Nigeria in 2020, the outbreak of COVID-19 disrupted the socio-economic and educational system and caused serious concern for education stakeholders because of the prolong holiday because of the pandemic. Going to school is the best public policy to develop

skills and potentials of the learners and schooling increases the child's ability to become a useful and acceptable member of the society (FRN, 2013). However, efforts to curtail the spread of COVID-19 through non-medical interventions and preventive measures such as social distancing and self-isolation have prompted the wild-spread closure of primary, secondary and tertiary schooling in over 100 countries including Nigeria. This was done to prevent further spread of the deadly virus among learners and school personnel since it can easily be contacted through direct contact with the carrier of the virus.

The outbreak of the pandemic led to the suspension of many unified examinations like the West African Examinations Council (WAEC), the National Examinations Council (NECO), Joint Admission and Matriculation Board (JAMB) in Nigeria and most countries of Africa and the world. Most of Africa's 54 countries are with confirmed cases and death tolls due to COVID-19, some closed their borders and banned international flights, local and international trades are declining at a drastic rate (Adelakun, 2020).

A lot of pandemics have occurred in human history, and affected human life, education system and economic development in the world, the World Health Organisation (WHO, 2020) on March 11, 2020 has officially announced that corona virus (COVID-19) is a pandemic after it covers 114 countries in 3 months and infects more than 118,000 people in the world.

In many developing countries including Nigeria, the economic chock has come first as governments have locked down their economies to reduce the spread of infection. As a result, developing countries are suffering their greatest economic decline and closures of their education and transportation system. Consequently, distance learning solutions such as digital learning management system, massive open online courses and self-directed learning content are containing the platforms (UNESCO, 2020a). However, due to lack of internet connectivity, information technology, educational materials and digital technology skill, distance learning is difficult for teachers, students and families in developing countries (Mustafa, 2020). Some developing countries deliver classes through radio, television, and online platform. However, the poorest families have no radio, television and other devices to access the resources and to learn at their homes. Therefore, some developing countries provided resources such as textbooks, radios, equipment and study guides to the poorest students.

2. Corona-Virus (COVID-19)

According to the World Health Organisation (WHO, 2020), corona viruses are a family of viruses that cause illnesses ranging from the common cold to more severe acute respiratory syndrome (SARS) and the Middle East respiratory syndrome (MERS). These viruses were originally transmitted from animals to people. SARS, for instance, was transmitted from civet cat to humans while MERS moved to human from a type of camel. Several known corona viruses are circulating in animals that have not yet infected humans. The name corona virus comes from the Latin word corona, meaning crown or halo. Under an electron microscope, it looks like it is surrounded by a solar corona. The novel corona virus, identified by Chinese authorities on January 7, 2020 and since named SARS-CoV-2, is a new strain that had not been previously identified in humans. Little is known about it, although human-to-human transmission has become confirmed.

Chinese health authorities are still trying to determine the origin of the virus, which they say likely, came from a seafood market in Wuhan, China where wildlife was also traded illegally. On February 7, 2020, Chinese researchers said the virus could have spread from an infected animal species to humans through illegally trafficked pangolins, which are prized in Asia for food and medicine. Scientists have pointed to either bats or snakes as possible sources of the virus.

According to the WHO signs of infection include fever, cough, and shortness of breath and breathing difficulties. In more severe cases, it can lead to pneumonia, multiple organ failure and even death. Current estimates of the incubation period-the time between infection and the onset of symptoms-range from one to 14 days. Most infected people show symptoms within

five to six days. However, infected patients can also be asymptomatic, meaning they do not display any symptoms despite have the virus in their systems.

On 27 February, 2020, Nigeria confirmed its first case in Lagos State, an Italian citizen who works in Nigeria had returned on 25 February from Milan, Italy through the Muritala Muhammed International Airport, fell ill on 26 February and was transferred to Lagos State Biosecurity Facilities for isolation and testing (Adelakun, 2020). He noted that to contain the spread of the virus in Nigeria, the Federal Ministry of Education directed all educational institutions in Nigeria to shut down and allow students to go home as cases of reported COVID-19 increased to 13. From February 27 till May 10, the virus had infected over 434 people, spread to 34 out of 36 States of the federation. Over 600 have recovered from the COVID-19 and the fatalities rate was 95.

3. Impact of COVID-19 on education system

Outbreak of COVID-19 pandemic necessitated the closure of child-cares, nursery, primary and secondary schools, college, universities and other tertiary institutions to control the spread of COVID-19 pandemic. COVID-19 not only affects the pupils and students but it also affects teachers and parents across the world. UNESCO reports that over 1.5 billion students in 195 countries are out of school in the world due to the school closures (UNESCO, 2020b). COVID-19 affects education system, examinations, and evaluation, starting from the new semester or term across the school year.

The pandemic is affecting schools, pupils, students, teachers and parents. The COVID-19 crisis increases social inequality in schools. Students from more advantaged parents attend schools with better digital infrastructure and teachers might have higher levels of digital technology skills. Some schools can be well equipped in digital technology and educational resources. Disadvantaged students are attending schools with lower ICT infrastructure and educational resources. With the outbreak of COVID-19 pandemic, more advantaged students are attending schools to adopt online learning since schools in disadvantaged and rural areas lack the appropriate digital infrastructure required to deliver teaching. Students have no equal access to digital technology and educational materials. In the (Woday et al, 2020) survey, the study finds during school closure the level of anxiety, depression, disorders, and stress are high among students.

Distance learning is a solution to continue the education system, but it is difficult in developing countries because many parents have not themselves been to school and there is lack of the necessary Information and Communication Technology (ICT) infrastructure, computers, radio, and television to provide distance learning.

4. Inequality in access to learning during the Covid-19 pandemic

Despite best efforts to set up a supportive remote learning experience, evidence is emerging to show that the school closures have resulted in actual learning losses across the world. Research analyzing these outcomes is ongoing, but early result from Belgium, the Netherlands, Switzerland, United Kingdom, Nigeria and other countries of Africa indicate both learning losses and increases in inequality (Robbin, Donnelly and Pastrinos, 2021 and Adelakun, 2020). Alarmingly, these losses are found to be much higher among students whose parents have less education, a finding reinforced by a study showing that children from socioeconomically advantaged families have received more parental support with their studies during the school closure period.

This emerging data, which provides insight into the region's highest-income countries, can also be used to predict outcome in middle-income countries. Despite their substantial technological capability, even Europe high-income countries have experienced learning losses and increased inequality as a result of the abrupt transition to visual learning (Robbin, Donnelly and Pastrinos (2021). These outcomes are likely to be even more acute in middle-and lower-

income countries, where there is much less technological capabilities and a larger share of family living (Adelakun, 2020).

The school closure due to COVID-19 may not affect students equally. Students from less advantaged backgrounds highly suffered during COVID-19 than advantaged students (Mekonnen and Muluye, 2020). To control the corona-virus spread, most countries have been working to encourage parents and schools to help students continue to learn at home through distance learning (UNESCO, 2020a). The governments advised students to learn from radio and television lessons that can be accessed at home. However, the radio and television lessons may work for some children and students in urban areas, but most parents in rural areas have no access to radio and television lessons. For example in Ethiopia, more than 80 per cent of the population lives in rural areas with limited or no access to electric power, so that it is challenging for students in rural areas to learn from radio and television lessons (Tiruneh, 2020). This situation is similar in Nigeria and other developing countries of Africa and even where there is electric power, the supply is epileptic and people live below the poverty line.

Robbin Donnelly & Pastrinos note that outside the classroom, learning losses may translate into even greater long-time challenges. It has long been known that decreases in test score are associated with future declines in employment. Conversely, increases in student achievement leads to significant increases in future income as do additional years of schooling which are associated with an 8-9 per cent gain in life time earnings. In the absence of any intervention, the learning losses arising from the COVID-19 pandemic are likely to have a long time compounding negative effect on many children's future well-being. These learning losses could translate into less access to higher education, lower labour market participation and lower future earnings.

5. Approaches to distance learning during the pandemic

There was a general appreciation in all countries that education was essential and had to continue even though the schools were closed. There was broad agreement that effective distance learning was necessary but how that would be achieved was more problematic. There were wide national and sectoral differences in what distance education might look like. Government advice varied between countries and between education sectors. In some cases, government responses were quick, appropriate and comprehensive. In another case, very little was done and decisions were left to teachers, schools and lower administrative levels.

WHO Regional Office for Africa (2020) notes that distance learning systems, a broad concept, requires a suite of materials design, a system for paper materials distribution, a system for returning tasks, and a system for monitoring learning management and mentoring skills, which are different from the skills required of a teacher with a class full of students. Distance learning, of any kind, also makes very different demands on students than attending a class does and, particularly for younger students, parents need to understand these different demands that distance learning places both on them and on their children.

At the University or college level, institutions could broadly decide for themselves how to approach continuity of education and many higher education institutions already had Virtual Learning Environment which, in principle, enabled them to continue teaching with little interruption. In practical terms, it was often not so straightforward. In other cases, institutions proposed mainly synchronous video conferencing lessons for their students, using zoom or something similar. Not all students were able to access these lessons.

At the school level, there were differences between the primary and secondary levels, but also a lot of commonality. At both levels, there was concern about the 'examination classes' (both taking the primary and secondary living examination) and many countries made particular provision for them. If provision for examination classes was not prompted at the national level, then at local and institutional levels, these classes were prioritized for action. However, particularly at the primary school level, and almost as much at the secondary school level, neither students nor teachers had any experience of teaching and learning outside the

classroom environment. The learning curve for both was, therefore, very steep and, in some cases, insurmountable. Government responses varied, with some very efficient, and others comparatively ineffectual.

Although, as one might expect, the response of wealthier, more advanced countries has generally been more noticeably effective in mitigating the effects on education, other, poorer countries have also often responded well too. Similarly, although one might expect poorer countries to have shown a slower, less adequate response, some wealthier countries also appear, on occasion, to have been less than adequate in their responses.

There were two broad types of responses from teachers. The first was those who wanted the government to provide them with training, as well as materials and technology etc. These may have been reasonable enough requests, but they were practical in the emergency situation that they found themselves in. The second group was those who recognised that external help was unlikely to be forthcoming in the short-term and decided they would have to find their own solutions to the problem they were facing. This divide did not really split along country lines-there were examples of both in many countries.

6. COVID-19 and education finance

The interruption of the education system in Nigeria as in other countries of the world due to the outbreak of COVID-19 pandemic has led all education stakeholders at various levels to have a shift in the plans to finance the education of the children and the education system at large. There is no doubt the pandemic will elongate academic calendar and this elongation will warrant extra payments at the various levels of education demanding adjustment in education financial strategy. Adelakun (2020) notes that during the lockdown some parents were forced to procure laptops, android phones, television cables and other means of ICT, to ensure their wards move with the new innovation of the online classes at the various levels designed for the teachers to reach out to their students.

Most of the middle-class private schools in Nigeria could not pay their staff's salaries in the era of COVID-19 pandemic and lockdown because students were not in school and some have not paid their school fees before the outbreak of the COVID-19 crisis. The expenses run during the period of lockdown by government who paid public school staff and few private school owners who managed to pay their staff are mere gifts and not payment for work done. This will have effect on the future educational finance because the working time does not tally with the staff payment. The development is nobody's fault however because no one could have predicted that the world will be faced with this challenge. Government tried to ensure the welfare of workers during the lockdown with the belief that they are the oil keeping the engine of the national economy running. But if the ugly development of lockdown persists, it may have serious impact on the commitment of governments towards the education system in the face of competing demands from the healthcare and other sectors serving vulnerable segments of the society.

The outbreak of the COVID-19 pandemic has not only revealed the poor state of infrastructure and facilities in the health sector of Nigeria but also revealed the reality of the dilapidation and poor funding of the education sector. Aside from the health sector, no other area has suffered the impact of COVID-19 like education. While many countries have easily adapted and switched to virtual classes, in Nigeria, it is not only difficult but also impossible to open our schools virtually due to lack of facilities necessary to operate virtual classes, poor provision of the internet network, unstable power supply, high cost of mobile data and other challenges.

Okwuosa & Modibbo (2021) assert that many children were out of school even before the pandemic, and even more have dropped out due to the pandemic. The home teaching method introduced by the Nigerian Ministry of Education to teach through radio and television is not yielding the desired result as the electricity supply in the nation is below average and majority of Nigerians are living below the poverty line and cannot afford television or radio.

The need to protect education budgets has never been more urgent. Records show that for the past ten years, the Nigeria education sector allocation has not reached the UNESCO recommended 10 to 15% of the budget in developing countries. This has led to teachers' strikes at all levels of education in Nigeria, with other calamities that have reduced the once proud education sector into a complete laughing stock in international education rating standards.

In Nigeria, basic education is financed through concurrent financing from the three tiers of government-federal, state and local government authorities with distinct financing mandates and responsibilities for each tier. The federal government provides 50% and the state and local governments provide 30% and 20% respectively (Babalola, 2000). As a result, state investment in education is heavily reliant on the federal account allocation, making its educational goals susceptible to challenges of natural resource mobilization, COVID-19, international oil price fluctuation, and expenditure management.

The federal government of Nigeria allocated the sum of #568 billion (approx. USD 1.5 billion) to education in 2020. However, as a result of COVID, this allocation was reduced to 509 billion naira (approx. USD 1.34 billion). This has pressured public schools into dismissing hundreds of temporary staff members and skyrocketed students' school fees in various institutions thereby increasing inequality in education. In addition, the attacks on education facilities in North-East, Nigeria have destroyed infrastructure worth billions of naira and resulted in the deaths of countless students and teachers. This destruction requires funding to rebuild and employ more teachers, as well as strengthen the security to assure the safety of teachers and learners.

7. Challenges in online teaching and learning

With the availability of a sea of platforms and online educational tools, the users-both educators and learners-face frequent hiccups while using it or referring to these tools. Some of the challenges identified and highlighted by many researchers are summarized as follows:

Broadly identified challenges with e-learning are accessibility, affordability, flexibility, learning pedagogy, life-long learning and educational policy (Murgatroid, 2020). Many countries have substantial issues with a reliable internet connection and access to digital devices. While, in many developing countries, the economically backward children are unable to afford online learning devices, the online education poses a risk of exposure to increased screen time for the learner. Therefore, it has become essential for students to engage in offline activities and self-exploratory learning. Lack of parental guidance, especially for young learners, is another challenge, as both parents are working. There are practical issues around physical workspaces conducive to different ways of learning (Pokhrel and Chhetri, 2021).

The innately motivated learners are relatively unaffected in their learning as they need minimum supervision and guidance, while the vulnerable group consisting of students who are weak in learning face difficulties. Some academically competent learners from economically disadvantaged background are unable to access and afford online learning. The level of academic performance of the students is likely to drop for the classes held for both year-end examination and internal examination due to reduced contact hour for learners and lack of consultation with teachers when facing difficulties in learning/understanding (Sintema, 2020).

Student assessments are carried out online, with a lot of trial and error, uncertainty and confusion among the teachers, students and parents. The approach adopted to conduct online examination varies as per the convenience and expertise among the educator and the compatibility of the learners. Appropriate measures to check plagiarism is yet to be put in place in many schools and institutions mainly due to the large number of student population. The lockdown of schools and colleges has not only affected internal assessments and examinations for the main public qualifications like General Certificate of Secondary Education (GCSE), but A levels have also been cancelled for the entire cohort in the UK. Depending on the duration of the lockdown, postponement or cancellation of the entire examination assessment might be a grim possibility (United Nations, 2020).

Various state-level board exams, recruitment exams, university-level exams and entrance exams have been postponed across India due to the COVID-19 outbreak and national lockdown. Various entrance examinations such as (BITSAT 2020, NATA 2020, CLAT 2020, MAT 2020, ATMA 2020) have also been postponed/rescheduled. The education system in schools, colleges and universities across the country has been severely impacted due to the ongoing situation. It is also possible that some students' careers might benefit from the interruptions. For example, in Norway, it has been decided that all 10th grade students will be awarded a high-school degree. A study carried out in France shows that the 1968 abandoning of the normal examination procedures in France, following the student riots led to positive long term labour market consequences for the affected cohort (Maurin and McNally, 2008)

School time also raises social skills and awareness besides being fun for the children. There are economic, social and psychological repercussions on the life of students while they are away from the normal schedule of schools. Many of these students have taken online classes, spending additional time on virtual platforms, which have left children vulnerable to online exploitation. Increased and unstructured time spent on online learning has exposed children to potentially harmful and violent content as well as greater risk of cyber-bullying. School closures and strict containment measures mean more families have been relying on technology and digital solutions to keep children engaged in learning, entertainment and connected to the outside world, but not all children have the necessary knowledge, skills and resources to keep themselves safe online.

8. Conclusion

The outbreak of COVID-19 weighed down the socioeconomic and educational system and the attendant lockdown, the measure adopted to contain it, caused serious concern for education stakeholders because of the prolong holiday as a result of the pandemic. Going to school is the best public policy to develop skills and potentials of the learner as schooling increases the child's ability to become a useful and acceptable member of the society. However, school closure due to COVID-19 brought significant disruption to education in developing and developed countries of the world. The school closure brings difficulties for students, families and teachers. So, distance learning is a solution to continue the education system. However, distance learning is challenging in developing countries because many parents have not themselves been to school, lack of ICT infrastructure, computers, radio, and television. The poor and digitally illiterate families with low educational levels, children with poor learning motivation are more suffering in this situation and this increases inequality. The COVID-19 pandemic has made all schools across the world to adopt teaching and learning online so, government should scale network infrastructure and internet connectivity across urban and rural areas.

9. Recommendations

The followings are recommended to mitigate the challenges of pandemic and build a more resilient system that can withstand future crises and safe our education system:

E-learning requires not only electricity, but also access both to data connectivity and to the devices through which the e-learning materials can be accessed. All these are in short supply in our schools and in most cases the facilities required for easy transition to distance learning are not there. Government should therefore focus on developing new infrastructure to aid such adaptability in the future.

Government should prioritise by directing much of the funding and resources to support schools delivering remote instruction, particularly if those schools are serving high-poverty and high minority population.

Schools should be better prepared to switch easily between face-to-face and remote learning as needed to protect the education of students not only during future pandemics, but also during other shocks that might cause school closures.

Teachers need to be better equipped to manage a wide range of IT devices in the event of future school closures. Short training courses should be offered to teachers to improve their digital skills. Also, it is imperative to build a future education system that can make a better use of blended learning models to reach all learners at their levels and to provide more individualized approach to teaching.

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