

**CLOSURE OF SCHOOLS DURING COVID-19 PANDEMIC: AN  
ASSESSMENT OF LEARNING INTERVENTIONS BY  
GOVERNMENTS ON LIMITING DISRUPTIONS OF EDUCATION  
PROGRAMME. A CASE OF UGANDA**

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**ABSTRACT**

This study is about the Closure of Schools during the Covid-19 Pandemic: An Assessment of Learning Interventions by Governments on Limiting Disruptions of Education Programmes. The study focused on “how effective and efficient are the learning interventions, especially to the disadvantaged children and families in the remote rural district of Uganda” It assessed the recommended interventions by governments on the use of radios, e-learning, printed study materials and how they have limited disruptions in the teaching and learning process. Key interviews were carried out to interface with most education stakeholders to generate their opinions, views, perceptions, and experiences on the prescribed learning interventions. Two sub-counties found at the extreme end of the study district were selected. A total of 103 respondents participated in the study and including 30 pupils, 18 students, 48 parents, 4 local leaders, 2 media officials plus 1 head of the education department at the district level. Results have indicated that most of the learners in the rural setting did not learn at all during the closure of schools. Children lacked knowledge of e-learning and most families could not afford to provide the learning technologies required for their children to learn. The percentage of those that managed to access learning materials was far below the average. E-learning was found very effective in countries that have fully invested in technological infrastructure all over the country and most importantly in rural areas. Uganda as a country needed to have invested first in technological infrastructure to effectively manage the learning interventions during covid-19.

**Keywords:** Learning environment, pandemic, education program, covid-19, Schools

**1.0 INTRODUCTION**

The COVID-19 Pandemic has affected Educational Systems Worldwide, leading to the total closures of Schools, Early Childhood Education, and Care (ECEC) Services, Universities and Colleges. Efforts to slow the spread of COVID-19 through non-pharmaceutical interventions and preventive measures such as social distancing and self-isolation have prompted the

widespread closure of primary, secondary, and tertiary schooling in over 100 countries. Most governments worldwide over decided to temporarily close educational institutions in an attempt to reduce the spread of COVID-19. As of 12 January 2021, approximately 825 million learners were affected due to school closures in response to the pandemic. According to UNICEF Monitoring (2021), 23 countries were implementing nationwide closures and 40 were implementing local closures, impacting about 47 percent of the world's student population.

Since the first cases of COVID-19 in Africa in February 2020, the disease has spread throughout the continent, and different governments have put in place various measures to fight the pandemic. Most governments' responses included a widespread closure of schools at an early stage to reduce the spread of the virus. The impact on education was felt across all countries globally but felt acutely on the African continent. Many students on the continent received no education during the various lockdowns. Since schools were closed, many students did not have the opportunity to receive instruction, feedback, or interact with their teachers. Learning, where possible, moved to online platforms or other media channels.

In Uganda, the President of the Republic of Uganda announced the closure of all Schools Colleges and Universities both public and private 18th March 2020. This was a result of the Coronavirus (Covid-19) pandemic that had hit the world originating from China. As one of the measures to prevent the spread of the disease, the closing of schools, colleges, and universities was evident in most parts of the world. More than 191 countries of the world have closed their schools in the implementation of this measure to curb the spread of the virus. This has impacted about 98.4 % of the world's student population (UNESCO, 2020).

School closure impacts not only the learners, teachers, and families but also has far-reaching social and economic consequences. These include digital learning, food insecurity, internet, homelessness, housing as well as disability services. The impact is more severe with disadvantaged children and their families causing interrupted learning and consequent economic cost to families that do not work.

The closure of schools colleges and universities, however, did not provide a definite time for the reopening of the schools. This was also in response to the fact that the Covid-19 pandemic was still spreading like fire in most countries of the world. In response to school closure, many countries recommended distance learning intervention programs, and many educational platforms were opened. The interventions put in place included e-learning which is learning through radio programs, through television, provision of soft materials by governments through line ministries of education by use of different social media platforms.

Furthermore, most governments went ahead to provide hard copy learning materials to be sent to rural areas to reach every learner through sub-counties and villages to ensure continued learning. These interventions and platforms are the ones the schools, teachers, and parents could use to reach out to the learners and limit the disruptions of education. This, therefore, inspired the researcher to look at the learning interventions put in place by governments, particularly Uganda's government. The question remains "how effective and efficient are these learning interventions for the disadvantaged children and families in the remote rural district of Uganda"? This study, therefore, assessed the interventions

recommended by governments and how they have limited disruptions in the teaching and learning process.

## 2.0 LITERATURE REVIEW

The 2019-2020 coronavirus pandemic has affected the education system worldwide leading to the total closure of schools, colleges, and universities. As of April 2020, approximately 1.723 billion learners have been affected due to the closure of schools in response to the pandemic (UNESCO, 2020). Corona Viruses are a large family of viruses that can cause illnesses ranging widely in severity. The first known severe illness caused by coronavirus emerged with the 2003 Severe Acute Respiratory Syndrome (SARS) epidemic in China. The second outbreak of severe illness began in 2012 in Saudi Arabia with Middle Respiratory Syndrome (MERS). In December 2019, China authorities alerted the World Health Organization (WHO) of an outbreak of a Novel Strain of Corona Virus causing severe illness which was sub-sequentially named SARS-COV-2.

Shortly after the epidemic began, Chinese scientists sequenced the genomic of SARS-CV-2 and made the data available to researchers worldwide. The resulting genome sequence data has shown that Chinese authorities rapidly detected the epidemic and that the numbers of covid-19 cases have been increasing because of human-to-human transmission after a single introduction into the human population. Andersen and collaborators at several other research institutions used this sequencing data to explore the origin and evolution of SARS-COV-19 by focusing on several tell-tale features of the virus (Andersen, 2020).

Reports on the 1918-1919 influenza pandemic in the United States, the closing of schools, and public gathering bans were associated with lower total mortality rates in cities that implemented such interventions. Closing of schools also was seen to have reduced mobility from the Asian flu of 1957-58 by 90% and controlling influenza in the US, 2004-2005 by 50%. Several countries are believed to have successfully lowered the spread of infection through the closing of schools during the 2009 HINI flu pandemic. Mandatory closure of schools and social distancing measures were associated with a 29-375 reduction in influenza transmission rates. Therefore, the general assumption is that the same approach would really help in controlling the spread of covid-19.

There have been multiple nonpharmaceutical interventions and preventive measures to stem the spread of covid-19 pandemic the world over. Some of the interventions included social distancing and self-isolation which prompted the worldwide closure of primary and secondary schools, colleges, and universities (Wikipedia, the free encyclopedia). There is evidence of previous outbreaks of infectious diseases that prompted world spread closure of schools around the world. Mathematical modeling has proved that transmission of an outbreak may be delayed by closing the schools. However, the effectiveness of this model depends on the contacts the students maintain outside the school. School closure may be effective when enacted promptly.

The lockdowns in response to COVID-19 have interrupted conventional schooling with nationwide school closures in most OECD and partner countries, the majority lasting at least 10 weeks. While the educational community has made concerted efforts to maintain learning

continuity during this period, children and students have had to rely more on their own resources to continue learning remotely through the Internet, television, or radio. Teachers also had to adapt to new pedagogical concepts and modes of delivery of teaching, for which they may not have been trained. In particular, learners in the most marginalized groups, who don't have access to digital learning resources or lack the resilience and engagement to learn on their own, are at risk of falling behind.

### 3.0 METHODOLOGY

This study mainly used a qualitative approach to investigate the problem. The researcher mainly used qualitative methods to generate data and describe and analyze the data. The methods used included mainly the interview where the researcher used an interview guide to interface with most education stakeholders to generate their opinions, views, perceptions, and experiences. The researcher carried out face-to-face interviews with the respondents using a structured interview guide. The interview was one to none specifically to those stakeholders that were directly responsible for teaching and learning of children. Interviews enable researchers to get into the depth of the problem through probe questions. The focus was on the interventions put in place by governments for continued learning during school closure due to Covid-19. Purposive sampling was used to select the stakeholders who included students because they are the direct beneficiaries of the learning interventions, parents who actually the host of these learning interventions since learning was taking place at home, local council leaders, sub-county chiefs and district education department who were all involved in ensuring that learning programs take place. Others were the teachers and the media who were the custodians of the learning interventions in ensuring that they reach out to all the learners.

The study was carried out in two sub-counties that are found in the extreme end and rural-based sub-counties within the study district of Ibanda (Kijongo and Nyamarebe) in Western Uganda. The reason for this selection was to understand whether children in such remote areas have opportunities to continue learning during the covid-19 era. Students were picked from each parish within these sub-counties to have a representative picture of the whole sub-county. A total of 103 respondents participated in the study that included 30 pupils, 18 students, 48 parents, 4 local leaders, 2 media officials, and 1 head of the education department at the district level. The observation method was used especially during the learning times on radio and TV. The researcher further visited the radios and TV stations to observe teachers teach and also visiting of some families in the study sub-counties to observe learners' learning. Interaction with local leaders, sub-county chiefs, and the education department was done during the interview process.

The researcher further looked at both the hard copy and soft copy materials provided by the Ministry of Education in regard to continued learning programs for various classes. All data was then collected, presented, interpreted, discussed, and analyzed using a thematic approach to reach the conclusion. The closing of schools in this regard of covid-19 is associated with early methodologies in preventing related pandemics that occurred years back. In this 21st century, researchers looked closely at the innovations by governments in ensuring the continued learning of all learners irrespective of the pandemic.

### 4.0 PRESENTATION AND DISCUSSION OF RESULTS

School closures in response to covid-19 have shed light on various social and economic issues including digital learning, food insecurity, and homelessness among others. In response to school closure, UNESCO recommended the use of distance learning programs and open education applications and platforms that schools and teachers can use to limit disruptions in education. Uganda as a country also adopted some of these learning interventions to reach out to its learners across the board depending on access to technology. Table 1 below presents learning interventions adopted by the Uganda government and how they have helped the majority of learners in rural areas of Uganda.

**Table1: Learning Interventions Helpful to the Majority of Learners**

Variable(s)	Frequency (N=64)	Percentage (%)
Learning through radios	13	20.3
Learning through televisions (TV)	08	12.5
Learning through other media using Internet	06	9.4
Learning through use of home based computer	05	7.8
Learning through materials from Ministry of Education	11	17.2
Learning through Parents	10	15.6
Learning through Colleagues	11	17.2
<b>Total</b>	<b>64</b>	<b>100</b>

The most observable spike in the intervention was the use of radio, providing materials by the Ministry of Education, and learning through colleagues. These seem to have fairly worked due to their response rate of 20.3% and 17.3% respectively over their effectiveness. The implication is that much as they are reported as having worked, the response rate is far below the average. This implies that the majority of the learners did not learn at all. The table further reveals learning through the use of home-based computers and learning through other platforms say the internet being the least intervention that could work during this closure of schools with 7.8% and 9.45 respectively. This explains why Schleicher and Reiners(2020) argued that covid-19 is changing the education system in the world. This, therefore, explains how Uganda children are really exposed to e-learning technologies that require computer skills and access to the internet. The implication is that learning technologies for learners are only accessible in educational institutions rather than homes or rural communities. The rate at which these learning interventions are reported signifies very limited learning that took place during the closure of schools and in some cases, learning did not take place at all. Table 2 below presents data on how the learners were in a position to access the learning materials during the closure of schools. It is observed that learning.

**Table: Accessibility of Learning Materials to Learners during Covid-19 Lockdown**

Variable(s)	Frequency (N=25)	Percentage (%)
Radios	05	20
Televisions (TV)	03	12
Internet	02	8
computers	02	8
Materials From Ministry Of Education	05	20

Parents Home Base Activities	03	12
Colleagues Sharing Notes	05	20
<b>Total</b>	<b>25</b>	<b>100</b>

It is observed that learning through radio, materials provided by Ministry of education and sharing of notes from colleagues were more effective at a rate of 20% across all. The implication is that more families had radios and learners were able to use them during the learning time during the closure of schools. However, still the response rate of 20% which is far below the average indicates that not all the learners accessed the learning. More still, computers and access to internet was least reported with a rate of 8% respectively. This is a clear indication that most families in Uganda do not have computers at home and the few that do have cannot access internet connectivity. This makes it more badly when it comes to rural areas. Table 3 below looked at challenges associated with learning interventions put in place by the Ugandan government during the closure of schools due to Covid-19.

**Table 3: Challenges Associated with Covid-19 Lockdown Learning Interventions**

Variable(s)	Frequency (N=91)	Percentage (%)
Limited access to Radios	03	4.1
Limited access and availability of TVs	09	12.3
Limited access to computers	09	12.3
Limited internet	11	15.1
Few subjects taught on radios	05	6.8
Limited access to soft copy of Materials from MoES	07	9.6
Limited access to hard copy of Materials from MoES	07	9.6
High cost of materials from MoES during printing	08	11
Limited teacher pupil interaction for correction	11	15.1
No access to any of the learning materials	03	4.1
<b>Total</b>	<b>73</b>	<b>100</b>

The key critical issues highlighted in table 3 above are, limited access to the internet, limited teacher-learner interaction, limited access to TVs and Radio, and most importantly the computer. Serious to note is where it was observed that some learners did not access any of the learning materials mentioned with a rate of 4.1%. The implication is that during the closure of schools as a result of covid-19, some learners did not learn anything at all until the end of the first closure. It is also reported that few subjects were taught on radios leaving many other subjects not catered for. Materials supplied by the Ministry of Education and Sports were reported expensive whereby, only one copy would be supplied to more than one student and parents were left with the responsibility of duplicating copies for their children. This added the cost to parents irrespective of being in lockdown and not earning. This agrees with Al-Samarrai et al (2020) that there will be a lot of impact covid-19 on the education financing world both for governments and parents.

The other issue was learning through colleagues and sharing notes from classmates or colleagues. This contradicts the Department of Education UK (2020) on implementing protective measures in education and childcare settings. This implies that students in their communities would congregate again in their communities to discuss learning. This therefore

compromised the SOPs and created more risk for learners contracting covid-19 even during the closure of schools.

## 4.1 Appropriate learning interventions proposed to the government

Following a face-to-face interview that was done, participants proposed that the government needed to develop as many e-learning platforms as possible that are affordable and accessible to every student. Students come from different communities and most importantly are those from the worst remote areas where access to the internet, power source, and other communication network is a big problem. This increase would enable every child to use the most convenient means of e-learning hence being able to learn.

Most of the e-learning platforms require the internet and power. In order for learning to effectively take place, then these key and critical area services needed to be provided by the government to facilitate learning. The government needed to ensure internet and power services are a key priority for easy learning. Reports indicate that 57% of rural communities cannot access electric power or internet access.

Various learning institutions have opted for any mode of e-learning that is proved convenient to their institution. These learning modes are in one or another other neither friendly nor causing effective learning for the students. Fact that Covid-19 has come to stay, and the fact that the closure of schools is on and off, there is a need to develop policy/policies for standardisation of the teaching and learning using different technologies. This would mean that students at which level of learning, are moving at the same pace as each other irrespective of different modes and are of learning.

E-learning is very effective in countries that have fully invested in technological infrastructure all over the country and most importantly in rural areas. Most countries in sub-Saharan Africa have their highest population in rural areas and worst still; it's in the rural area with high birth rates. So a good number of school-going children are in rural areas. It is therefore prudent that governments need to invest more in technological infrastructure particularly in rural areas if e-learning is to be effective as a new learning mode for our education system.

In sub-Saharan Africa, access to and use of computers is limited to urban schools and most importantly in higher institutions of learning. For example, considering the Ugandan curriculum for primary education, information technology is silently mentioned as one of the subjects for study in lower and primary education. This means that for effective e-learning modes to take shape there is a need for increased access and usage of both computers and the internet in all learning environments irrespective of location and level of education. Uganda as a country should therefore adopt the plan of ensuring that every education institution is availed with computers and information technologies becomes one of the compulsory and examinable subjects at every level of study.

Most African schools have been stuck on the traditional methods of knowledge search, particularly through the reading of hard-copy content and information from textbooks. Physical libraries have been established at all learning institutions and it has been gazetted as

the center for knowledge search. It is hardly visible to find families in African families for students to use in case of reading. This, therefore, requires that learning institutions need to change from physical libraries to digital libraries for students to access online. Equally, it's important that families should begin the Installation of home libraries if their children are to keep learning from their homes.

The fact that Covid-19 has been a pandemic and most countries Uganda inclusive had not planned for it, all its effects will definitely bear a cost on the economy of each country. The provisions for e-learning are extremely costly and even these proposed innervations for e-learning may not be achieved in short term yet students must continue learning. For the case of Uganda, it's advisable that the country begins with the development of enough learning materials for all learners through NCDC and ensures they are distributed in all learning institutions. These learning materials will facilitate some learning as governments plan to put all the necessary structures that can facilitate effective e-learning.

## 5.0 CONCLUSION

Looking at the trend of events in the 21st century, the globalization of almost every activity, the increased innovations and use of technologies, it's high time for African countries to begin immediately changing their methods of work, particularly in the education sector, and focus on information Technologies. Covid -19 has worked as a wakeup for most African countries to begin seriously thinking about going digital. E-learning should be seen as the new way of teaching and learning our students irrespective of the levels of learning. What is important is for government to carry out effective planning to ensure that the critical areas of focus are carefully dealt with most especially, through ensuring affordability by all learners, standardization, investment in IT and most importantly focusing on the rural sectors where learners are more vulnerable to both economic and social environments as well as location challenges.

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