Effects of School closures in COVID-19 era: Evidence from Uganda Martyrs University

Kizito Omona

Keywords
Learning disruption; online and distance learning; school closures; teacher attrition; Uganda.

Abstract
Introduction: As of March 1st, 2020, many governments embarked on nationwide school closures due to the deadly coronavirus pandemic. As the month of March came to an end, about 185 countries across the globe had closed their schools. This affected about 90% of the world’s students and Africa was significantly hit by this closure. The speed of these closures and the rapid move to distance learning gave very little time for planning or any other alternative form of learning. In Uganda, the education of 15 million children and students was disrupted. Learners had to spend the majority of their time at home playing, helping their parents with chores, engaging in agriculture and also spare some hours a day to study. The education of learners was impacted greatly. In urban areas, some learners relied on lessons available online, televisions and radios, while in rural areas, learners had to fall back on their notebooks and printed learning materials provided by the government.

Objective: The objective of this study was to ascertain the effects of school closure on different stakeholders.

Methods: A qualitative phenomenological study was carried out. A sample of eight lecturers, eight students, four administrators and four community members were purposively recruited for the study.

Results: The results show that the impact of the closures on teachers resulted in: (1) leaving the teaching profession, and (2) financial distress. On the part of learners, the effect was a disruption of learning. Schooling provides essential learning and when schools closed, learners were deprived of opportunities for growth and development. The disadvantage of the disruption was disproportionate for under-privileged learners who tend to have fewer educational opportunities, apart from being in schools.

Conclusion: Undoing the effects of learning disruption may require years in Uganda.
Introduction

According to the United Nations Children Educational Fund (UNICEF), research on past school closures indicated that any slight interruption in schooling can result in significant learning loss. Such interruptions include regular scheduled breaks, among others (UNICEF, 2020a). In a study in Malawi, Slade et al. (2017) showed that transitional breaks from grade 1 to 2 and grade 2 to 3 led to an average reduction of 0.4 standard deviations on four different measures of reading skills. School closures due to teachers’ strikes can also lead to reduced learning (UNICEF, 2020b). In Canada, it was pointed out that school closures caused by teachers’ strikes are associated with a loss equivalent of half (0.5) a standard deviation in math test scores (Baker, 2013). Similarly, in South Africa (Wills, 2019), it was found that a student’s performance in subjects taught by a striking teacher was approximately 0.1 standard deviations lower than in subjects taught by a non-striking teacher.

Evidently, school closures have significant effects on learning. Whereas the full impact of the COVID-19 school closures on learning may not be known for many years, forecasting exercises and other statistical simulations have pointed to a bigger problem (UNICEF, 2020b). In the United States, Kuhfeld et al. (2020) projected that students could return to school with 32–37% less progress in reading as compared to what they would have achieved in a typical school year. The predictions are said to be even worse for math, with losses estimated between 50–63% . This result is similar to one found in another study (Kaffenberger, 2020). The COVID-19 pandemic was announced in Uganda in March 2020 and thus, closure of schools followed. Education of the 15 million Ugandan learners was disrupted. Learners had to spend the majority of their time at home. This was spent helping their parents with chores, engaging in agriculture and some hours of daily studies (UNICEF, 2020a). The education of learners was indeed impacted severely. In urban areas, some learners relied on online lessons, television and radio, whereas those in rural areas fell back on their notebooks and printed learning materials provided by the government (UNICEF, 2020b).

As seen in many countries worldwide (Butler-Henderson, et al., 2020, 2021; Crawford et al., 2020; Hawley et al., 2020; König et al., 2020), the pandemic also led to university closures in Uganda (they closed in March, 2020).

Some schools and universities began to partially reopen two months later in May 2020, with far-reaching restrictions remaining in place. Uganda Martyrs University was among the first few universities in Uganda to partially reopen. The university had to immediately adopt online teaching. Consequently, teachers/lecturers faced significant challenges. This was to maintain at least a minimum of communication with students and support students’ learning and development. However, the extent to which teachers successfully mastered these challenges is yet unclear.

The research questions for the study were as follows;

1) What were the home-schooling experiences of students following COVID-19 school closure of Uganda Martyrs University?

2) What was the impact of COVID-19 school closure on teachers/lecturers of Uganda Martyrs University?

3) What was the impact of COVID-19 school closure on administrators of Uganda Martyrs University?

Literature review and background

Effects of school closures on different stakeholders

For many governments and policy makers across the globe, school closure and home confinement were the two measures of lockdown implemented to limit the spread of COVID-19. Even so, there is still an open debate about the actual impact of school closure on education, the reduction of infection risk for children, as well as the infection risk for other age levels – parents, guardians and others care-takers (Petretto et al., 2020). The effects of school closure, thus, varied according to the different categories of stakeholders.

Teachers

Although the long-term implications and effects of the COVID-19 pandemic on education are yet unknown (Flores & Swennen, 2020), they will surely be more challenging for educators and learners in more fragile and unstable contexts, including Uganda Martyrs University. Most universities and educational institutions in Uganda and worldwide experienced an unprecedented total or partial lockdown, culminating in the immediate closure of universities and schools. As such, teachers and students had to learn instantly how to adapt to remote teaching. This is also true for faculty at Uganda Martyrs University.

The need to rapidly adapt to this new context of teaching and learning online revealed how educational institutions and lecturers experienced the challenges and opportunities to carry on their job in such unexpected circumstances (Flores & Gago, 2020). Lecturers had to adapt to the restrictions in interaction and the move to new ways of teaching and learning.

The COVID-19 crisis raised questions about the nature of teaching and ways of supporting the learning of students. It also challenged the educational institutions to rethink ways of re-educating teachers/lecturers for scenarios that are unpredictable and unknown. This raises questions related to equity and social justice. Observationally, teachers experienced the following:
Confusion and stress for teachers: When universities closed unexpectedly and for unknown durations, such as in the COVID-19 era, teachers were often unsure of their obligations and how to maintain connections with students to support learning. Transitions to distance learning platforms tended to be a messy and frustrating process, causing confusion and stress for teachers.

Loss of jobs: When universities closed, teachers or lecturers tended to lose their jobs. The impact of closures on teachers led to: (a) teachers abandoning the profession; and (b) financial distress, as teachers struggled to make ends meet.

Challenges in creating, maintaining and improving distance learning: Demand for distance learning skyrocketed when universities closed and remote education portals were overwhelmed. Learning was moved from classrooms to homes at an accelerated pace. This event presented enormous challenges, both in human and technical terms.

High economic costs: Many lecturers were parents and, thus, working parents were more likely to miss work when schools closed in order to take care of their young children. This resulted in wage loss and tended to negatively impact productivity.

Challenges measuring and validating learning: Calendar assessments, such as high-stakes examinations that determine advancement of students to new educational levels, were thrown into disarray due to school closures. Strategies to postpone, skip or administer examinations at a distance raised serious concerns about fairness, especially when access to learning varied from student to student. Disruptions to assessments resulted in stress for students and their families and triggered disengagement.

Students

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020a), school closures carry high social and economic costs for people across communities. The impact, however, is more severe for the most vulnerable and marginalized learners and their families. The resulting disruptions exacerbated the already existing disparities within the education system as well as in other aspects of their lives. These include, among others:

Interrupted learning: Schooling is known to provide essential learning and therefore, when schools or learning institutions close, students are deprived of opportunities for growth and development. These disadvantages are disproportionate for underprivileged learners who tend to have fewer educational opportunities beyond school or university (Wills, 2019; Baker, 2013; UNICEF, 2020b).

Rise in university dropout rates: It is very challenging to ensure that students return and stay in school or university after universities reopen after closures. Protracted closures and economic shocks place increased pressure on students to work and generate income for financially distressed families.

Increased exposure to violence and exploitation: As universities shut down, chances of unplanned marriages increase, more students are recruited into militias, sexual exploitation of girls and women rises, unplanned pregnancies become more common, and poverty levels rise (UNESCO, 2020a).

Social isolation: Universities are hubs of social activity and human interaction. When universities close, many students miss out on social contact that is essential to learning and development (UNESCO, 2020b).

Administrators

On the part of administrators of the university and different university faculties, the following effects ensued:

Loss of jobs: As there was limited opportunity for physical supervision and a diminished financial base for private universities following universities closure, many administrators lost their jobs. The impact was triggered by: (a) departing administrators; and (b) financial distress.

Challenges in creating, maintaining, and improving distance learning: Demand for distance learning when universities closed overwhelmed administrators. This resulted in messy and stressful administration of remote education. Moving learning from classrooms to homes at an accelerated pace presented enormous challenges, both technically and in terms of administrative competencies.

Challenges measuring and validating learning: Supervision of assessments, such as high-stakes examinations that determined advancement of students to new educational levels became challenging for administrators. They, therefore, had to delegate this task to the individual lecturers. Strategies to postpone, skip, or administer examinations at a distance raised serious concerns about fairness, especially when access to learning differed amongst students.

Parents

On the part of parents, school closures following the COVID-19 pandemic had the following effects, among others:
Parents were unprepared for distance and home schooling: when schools closed, parents were asked to facilitate the learning of children at home. This challenge had a greater impact on parents with limited education and resources.

Gaps in student care: in the absence of alternative options, working parents left their children alone when universities closed, and this could have led to risky behaviours, including undesirable influences from peers and substance abuse.

Unintended strain on healthcare cost: Healthcare costs were inevitable during university closures. Some students fell sick because of undue stress and financial losses. Parents had to bear these unforeseen burdens.

Community members and other stakeholders

Similarly, the community felt the effects of school closures following the COVID-19 pandemic:

1) Increased exposure to violence and exploitation: as universities shut down, the chances of unplanned marriages increased, more students were recruited into dangerous groups, sexual exploitation of women rose, unplanned pregnancies became more common, and poverty levels surged. This became a huge burden for the communities where the students live.

2) Unintended strain on healthcare systems: Healthcare workers could not effectively handle healthcare obligations that resulted from closures of educational institutions. This means that many medical professionals were not at the facilities where they were most needed during a health crisis.

3) High economic costs: As many parents had become jobless due to the pandemic, economic productivity was disrupted. This resulted in wage loss and tended to negatively impact productivity.

From the above literature review and background analysis, it is evident that COVID-19 school closures affected almost all higher institutions of learning. Uganda Martyrs University was not spared either. However, to cope, the university embarked early on online learning which had its own challenges.

Methods

Study design and sampling

This qualitative study was executed as a phenomenological research initiative. The choice of the design was based on the fact that a phenomenological approach attempts to understand problems, ideas, and situations from the perspective of common understanding and experience rather than differences. Phenomenology is about understanding how human beings experience their world. It gives researchers a powerful tool with which to understand subjective experiences (Austin, 2014). According to Sadruddin (2018) and Abayomi (2017), phenomenology is a philosophy and a method of inquiry that is not limited to an approach to knowing, but that is rather an intellectual engagement in interpretations and meaning-making that is used to understand the lived world of human beings at a conscious level. Historically, it is a science of understanding human beings at a deeper level by gazing at phenomena. Such a design helped the researcher to ascertain the effects of school closures during the pandemic.

A sample of eight lecturers, eight students, four administrators, and four community members were purposively recruited for the study.

Study area

Uganda Martyrs University (UMU) is a private not-for-profit Catholic university. It is owned by the Episcopal Conference of the Catholic Bishops of Uganda. Archbishop Kiwanuka first conceived the idea of starting the university in the 1940’s but circumstances would not allow its implementation. His proposal was later renewed in the 1980’s and endorsed by the Uganda Episcopal Conference in 1989. The university was officially launched in 1993 by Uganda’s President Yoweri Kaguta Museveni. The university received its civil Charter on April, 2, 2005 (Uganda Martyrs University [UMU], 2020).

UMU is located along the Equator at Nkozi, 80 kilometres west of Kampala, the capital of Uganda. The university was opened in October, 1993, with 84 students and two academic departments. UMU currently has seven faculties, one institute, three schools, and three directorates. The total number of students, postgraduates and undergraduates combined, is about 5,000 (Uganda Martyrs University [UMU], 2020).

Target audience

The participants were Uganda Martyrs University students (postgraduates and undergraduates), administrators, teachers/lecturers and community members (parents and non-parents).

Data collection

Qualitative data were collected using interview protocol guides. Interviews were conducted in English, lasting 30-40
The interviews were coded and thematically analysed, revealing significant changes in the participants’ care work following COVID-19 school closures.

**Data analysis**

The recorded audio files were imported directly into NVivo 12 for thematic coding, while the interviews were eventually transcribed. Coding refers to the identification of topics, issues, similarities, and differences that are revealed through the participants’ narratives and interpreted by the researcher (Sutton & Austin, 2015). This process enabled the researcher to begin to understand the world from each participant’s perspective. Coding was done by hand on a hard copy of the transcript, by making notes in the margin and by highlighting and naming sections of text (Sutton & Austin, 2015). The researcher then proceeded straight to coding sound bites within the audio files. A few notes were attached to each coded sound bite to remind the researcher of their content, and only sound bites deemed relevant for inclusion in this paper were transcribed. Drawing on Attride-Stirling’s method (2001) of thematic network analysis, the researcher organized the sound bites thematically (Primdahl, et al., 2020; Attride-Stirling, 2001).

All audio recordings were transcribed verbatim, regardless of the intelligibility of the transcript. Lines of text were numbered. Once the transcription was complete, the researcher read it while listening to the recording and did the following: corrected any spelling or other errors; anonymized the transcript; inserted notations for pauses, laughers, looks of discomfort; inserted any punctuation, such as commas and full stops. This was done in line with Sutton & Austin’s (2015) principle of data management.

**Ethical considerations**

The researcher adhered to ethical considerations involving research on human participants. The researcher sought and received informed consent from all participants. Names and other personal identifiers were anonymized to protect the identity of participants.

**Results**

All participants in this study unanimously expressed concern about the COVID-19-related school closures. Several lecturers mentioned students whom they were particularly worried about and for whom they went to singificant lengths to stay in touch with. However, the lecturers faced numerous challenges in translating their concerns into practical improvements.

**Home-schooling experiences of students**

On 18 March 2020, the Ugandan government announced an abrupt school closure effective immediately. All students were asked to go home and learn remotely. The university soon afterwards started an online learning approach, which was both synchronous and asynchronous. Uganda Martyrs University adopted Moodle as an online Learning Management System for all students. Students were required to register for continuity of learning and lecturers were urgently trained to commence this way of learning as a ‘new normal’. The students were subsequently oriented on this new learning platform.

The experiences of the students are described through the themes that emerged as:

**Theme 1: Interrupted learning**

Schooling is known to provide essential learning and therefore, when schools or learning institutions close, students are deprived of opportunities for growth and development. These disadvantages are disproportionate for underprivileged learners who tend to have fewer educational opportunities beyond school or university.

“The closure has spoiled my plan. I wanted to finish my university education this year (2020) and do something else. But now, I have nothing else to do […] I may not realize my dream as planned” – Student A (3rd year, undergraduate)

“This COVID-19 has really affected my plans” – Student C (2nd year, postgraduate)

“Our lecturer could not reach us as it used to be. Giving us examination alone was a huge struggle. We had to follow up for nearly three months before we could be examined as a class. So terrible” – Student B (2nd year, undergraduate)

“For me, I failed to graduate this year (2020). It’s a loss” – Student F (3rd year, undergraduate)

“They wanted us to use computer for learning and have reliable internet. This was not easy on my side […]. I come from a rural area and having access to stable electricity is a big challenge which affected my learning significantly” – Student D (2nd year, undergraduate)

From the narratives above, it is clear that the school or learning disruption was heavily felt by many students, both undergraduates and postgraduates.

**Theme 2: Rise in university dropout rates**

It is very challenging to ensure that students return to, and stay in, university when universities partially reopen after closures. This is even more so for protracted closures and when economic shocks place pressure on students to work and generate income for financially distressed families. In an interview with one student who never reported back to university, the student had this to say:
“After the closure, I got so many issues at home. I fell sick and my guardian spent a lot of money to offset my sickness. We also lost our jobs. With all these, I couldn’t be able to report back or progress with my studies [...]. I’m still planning raise more money and then make up my mind to finish schooling”– Student H (2nd year, postgraduate)

“I will struggle to rejoin” – Student G (3rd year, undergraduate)

It is evident that university dropout rates are likely to rise due to the COVID-19-related school closures.

**Theme 3: Exposure to violence and exploitation**

As universities shut down, unplanned marriages increased, more students were recruited into problematic groups, sexual exploitation of women escalated, unplanned pregnancies became more common, and poverty levels surged.

**Sub-theme 3a: Exposure to violence**

“My house was broken into […]. But I can’t tell whether it was done by a university dropout student”- Student G (3rd year, undergraduate)

“There is too much theft these days” – Student C (2nd year, postgraduate)

**Sub-theme 3b: Exploitation**

“I know of a friend, my course mate who got married because of frustration from this school closure. It’s terrible” – Student G (3rd year, undergraduate)

**Theme 4: Social isolation**

Universities are known as hubs of social activity and human interaction. When universities closed, many students missed out on social contact that is essential to learning and development.

“I miss my friend and discussion group mate. She would help me a lot in learning” – Student F (3rd year, undergraduate)

“Being together physically is far better” – Student D (2nd year, undergraduate)

**Effects of COVID-19 school closure on lecturers**

According to the lecturers, some learners did not have a computer or WiFi at home. Several did not have credit on their mobile phones to buy internet data and therefore could not learn effectively. Similar technology barriers have been described as a huge barrier for engagement with learners.

**Theme 1: Confusion and stress**

When universities closed unexpectedly and for unknown durations, teachers were unsure of their obligations and how to maintain connections with students to support their learning. A transition to distance learning platforms was quite messy and frustrating, causing confusion and stress for many teachers.

“The start was too difficult. I didn’t know well how to proceed but I adopted to the new normal system of learning much later” – Lecture X

“It took me a lot of time to settle down and do my work” – Lecturer W

“It is not easy. But we have learnt something” – Lecturer Y

It is evident that adopting the online teaching system caught many lecturers without adequate preparation. It took them much time to adapt.

**Theme 2: Loss of jobs**

When universities closed, some teachers and lecturers lost their jobs. The impact of closures on teachers led to leaving the teaching profession and financial distress.

“I could not continue with the teaching profession. I had to leave and look for ways to earn a living. I couldn’t get alternative work easily but I got it later” – Lecturer V, who did quit the teaching profession

“For me I had to look for survival coping approach to support my family” – Lecturer Y

**Theme 3: Challenges in creating, maintaining and improving distance learning**

The sudden demand for distance learning overwhelmed existing portals to remote education. Moving learning from classrooms to homes occurred at a large scale and in a hurry. This presented enormous challenges for many lecturers.

**Theme 4: Challenges measuring and validating learning**

Assessments of learning, such as high-stakes examinations, that determine advancement of students to new educational levels, were thrown into disarray due to the COVID-19-related schools closure. Strategies to postpone, skip or administer examinations at a distance raised serious concerns about fairness, especially when access to learning varied from student to student.

“My Dean queried the quality of how I assessed the performance of my learners. I had to explain to her” – Lecturer X
“It’s not easy to have uniform and fair assessment for all students because there are in a different environment at the time of assessment. You just have to assume that all was well” – Lecturer W

It is thus evident that the quality of student assessment became highly subjective and questionable.

Effects of COVID-19 school closures on administrators

The experiences of university administrators were related to:

1) **Loss of jobs**: as there was limited opportunity for physical supervision and due to the low financial base for private universities following the closure of universities, administrators either resigned or were made redundant.

2) **Challenges in creating, maintaining and improving distance learning**: Demand for distance learning when universities closed overwhelmed the administrators. It resulted in a suboptimal and stressful administration of remote education.

3) **Challenges measuring and validating learning**: Supervision of assessments, such as high-stakes examinations that determine advancement of students to new educational levels became challenging for administrators. They thus had to delegate this task to individual lecturers. Strategies to postpone, skip or administer examinations at a distance raised serious concerns about fairness, especially when access to learning differed greatly amongst students.

   “Most of the lecturers were demanding for more than usual from me […] and I could not provide all […] I did my best” – Administrator 1

   “I became confused and didn’t know how to proceed with my work” – Administrator 4

Effects of COVID-19 school closures on community

The community and other stakeholders equally suffered:

   “I used to make money from petty business and students were my customers. It’s a loss now” – A community business woman

Discussion

As a consequence of the school closures during the COVID-19 pandemic, the teachers and learners in this study experienced a number of barriers to their abilities to provide and support learning. Thus, having to teach and communicate with the learners remotely meant that teachers could not reach all learners equally due to technical and other limitations. Primdahl et al. (2020) found similar results. In the context of widespread school closures to slow the spread of COVID-19, UNESCO is now working with many ministries of education in affected and concerned countries to ensure continued learning for all children and youths through alternative channels (UNESCO, 2020b).

The results of this study demonstrate an increase and change in workload for both lecturers and students. Online education could support learning for many students but needs to be carefully designed and individualized. Otherwise, it could deepen inequality and social divides. The forced move to online learning may have been the catalyst to create a new, more effective hybrid model of educating students in the future. Kaden (2020) previously noted that not one single model for online learning will provide equitable educational opportunities for all and that virtual learning cannot be seen as a cheap fix for the ongoing financial crisis in funding education.

Conclusions and recommendations

In conclusion, the results of this study demonstrate an increase and change in workload for both lecturers and students. Online education could support learning for many students but needs to be carefully designed and individualized. Otherwise, it could deepen inequality and social divides. The forced move to online learning may have been the catalyst to create a new, more effective hybrid model of educating students in the future. Kaden (2020) previously noted that not one single model for online learning will provide equitable educational opportunities for all and that virtual learning cannot be seen as a cheap fix for the ongoing financial crisis in funding education.

Acknowledgements

The author would like to thank the lecturers, students and Uganda Martyrs University administrators and community for participating in this study.

Disclosure

Whereas the author is a lecturer of Uganda Martyrs University, there was no conflict of interest.

Funding

No external funding was received for this study.

References


Copyright © 2021 Kizito Omona. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.