



Makerere University Students' Learning Challenges Associated with COVID-19 Pandemic Lockdown: A Case of Department of Adult and Community Education

Mugula Oscar^{1*} and Momanyi Marcella²

¹Department of Adult and Community Education, College of Education and External Studies, Makerere University, Uganda

²The Catholic University of Eastern Africa Nairobi, Kenya

***Corresponding author's email address:** moscar@cees.mak.ac.ug

Abstract

This study aimed to examine the challenges that were faced by university students because of COVID-19 lockdown and suggested interventions. The objectives of the study were to; identify the challenges associated with COVID-19 that were faced by students, and suggest interventions for continuity of learning by students at Makerere University. A descriptive survey design was followed and convenience sampling of students from the Department of Adult and Community Education was employed. Data was collected using a questionnaire, adapted and modified from ITHAKA S+R. The study revealed that the most significant challenges that students faced during lockdown included; balancing school, work, and home responsibilities, using digitalized documents, and accessing Makerere University E-learning Environment system (MUELE). From the findings, even those who can use these resources, they can try up to 60%. Interventions have been recommended in this study.

Keywords: COVID-19, Online learning, lockdown and MUELE.

INTRODUCTION

The novel coronavirus (COVID-19) shocked the world, and brought economies to a halt. Projects were delayed, workplaces were closed and schools to date in some countries are still closed. The World Health Organization (WHO) declared COVID-19 as a global public health emergency on 30 January 2020 and a pandemic on March 11, 2020 (Cucinotta & Vanelli, 2020). The pandemic forced the Ugandan government to close all universities, other educational institutions and businesses across the country, as a quick response to curb the spread of the virus. This adversely affected educational institutions and other businesses.

However, Ugandan universities developed ways later for students to continue their education through online learning and video-conferencing with their lecturers, which later up to date has faced resistance and criticism from students. Around the world, many countries adopted this online learning approach. For example, schools in New York, USA, responded to the epidemic by embracing online learning and made it possible by distributing gadgets to their students, ensuring they had access to learning materials (Rarkryana, 2020). Since the beginning of April, education authorities have distributed nearly 500,000 laptops and tablets to their students, allowing them to participate in online classes (Rarkryana, 2020).

Unfortunately, universities and the Ugandan government have not extended a hand to students who join without any preparation. They have not been provided with internet

and other gadgets that would help them embrace the modern learning methods. Many universities and schools are not yet ready to introduce home-based learning programs (Hollow, & ICWE, 2009). The online classes used in Uganda work differently from those in developed countries such as the US, Asia and Europe (World Bank, 2020). This is due to a lack of preparation in the country by the relevant departments and universities and other educational institutions.

While some students may be involved in home-schooling programs, an online school may be confused as familiar as it was previously unprepared. The majority of students reported that the home-schooling program was more stressful than standard courses. Some of the most common reasons for this are: "Ordinary classes can be difficult, but having friends makes them easier to manage and less stressful." Some complain that the burden of online classes is greater than normal. The common consensus is that home-based learning programs - although they are more profitable and a good way to get to school as schools are closed - still need some to get acquainted with students, as it is a novel concept and not many are familiar with.

However, while school closures have saved students' lives, there are many other challenges they must face at home. These challenges include; students do not have the devices and access to the internet to participate in an online class, and schools or universities cannot teach online. Unlike developed countries like the USA where devices are still distributed to students by schools and private companies (Rarkryana, 2020), Uganda still has a problem of hopelessness. This leaves many students in a quandary where they cannot get an education, but no one knows when the epidemic will disappear. This therefore required that the study be conducted in the department of Adult and Community Education, College of Education and External Studies at Makerere University to identify the challenges students face due to this long closure of COVID-19.

Purpose of the study

This study aimed to examine the challenges being faced by university students because of COVID-19 lockdown.

Objectives of the study

This study sought to;

- i. Identify challenges associated with COVID-19 pandemic lockdown that are being faced by students in the Department of Adult and Community Education of Makerere University
- ii. Suggest interventions for continuity of learning by students at Makerere University

METHODOLOGY

A descriptive survey design was followed. A descriptive survey typically seeks to ascertain respondents' perspectives or experiences on a specified subject in a predetermined structured manner.

Sample

Respondents were 138 students in the Department of Adult and Community Education. Using convenience sampling, all students who turned up for their end of semester examinations, participated in the study.

Instrument

The students' learning challenges instrument, was a self-administered (SAQ) questionnaire adapted and modified from ITHAKA S+R questionnaire. This questionnaire had nine (9) sections. Section A had respondents' demographics, B had student's activities during the lockdown, C had learning activities, D had students' resources, E had student's wellbeing, F had student's readiness, G had students' services, H had students' attitude regarding learning during lockdown and section I had an open-ended question for other challenges.

Data Analysis

Data collected were entered in IBM SPSS version 23 and descriptive statistics ran i.e., frequencies, means and percentages. All the 138 students who turned for their examinations participated in the study making the response rate to 100%. Results were presented using tables and graphs.

RESULTS

Demographics

Demographics (sex, year of study, course and residential status) of the respondents were collected and analysed as shown in Table 1.

Table 1: Demographics of the respondents

Demographics		Frequency	Percent
Sex of the respondents	Male	61	42.2%
	Female	77	55.8%
Year of Study	Year I	45	32.6%
	Year II	22	15.9%
	Year III	71	51.4%
Your Course	Bachelor of ACE	138	100.0%
Residential Status	On-campus	30	21.7%
	Off-campus	108	78.3%

Field data, 2020

Results in Table 1 indicate that majority 77(55.8%) of the respondents were females, whereas 61(42.2%) of the respondents were males. Also, majority of the respondents 71(51.4%) were in year III, followed by 45(32.5%) of the respondents who were in the year I and 22(15.9%) in year II, all pursuing bachelor of adult and community education. Majority of the respondents 108(78.3%) stay off-campus, whereas 30(21.7%) stay on-campus. Since most of the students stay off campus, it's anticipated that they face numerous learning challenges related to wireless access and learning spaces.

Students' activities during the lockdown

Students were asked how easy different activities have been for them during the lockdown. Their responses were rated on a scale of 0%, 20%, 40%, 60%, 80% and 100%. Based on this rating, 0-60% shows low, hence challenging situation to students, depending on the direction of the item to respond to. The findings are presented using frequency counts and percentages as shown in Table 2.

Table 2: During lockdown, how easy have each of the following been to you?

Items	0%		20%		40%		60%		80%		100%	
	n	%	n	%	n	%	n	%	n	%	n	%
During lockdown, balancing family and school responsibility has been easy for me	7	5.1%	36	26.1%	31	22.5%	43	31.2%	16	11.6%	5	3.6%
During lockdown, time management has been easy for me	4	2.9%	19	13.8%	37	26.8%	42	30.4%	25	18.1%	11	8.0%
During lockdown, adjusting to nline instruction/learning has been easy for me	15	10.9%	45	32.6%	36	26.1%	24	17.4%	15	10.9%	3	2.2%
During lockdown, balancing work and school responsibilities has been easy for me	7	5.1%	30	21.7%	33	23.9%	47	34.1%	17	12.3%	4	2.9%
During lockdown, finding a quiet space for completing coursework has been easy for me	19	13.8%	42	30.4%	36	26.1%	23	16.7%	17	12.3%	1	0.7%
During lockdown, getting help with completing coursework has been easy for me	22	15.9%	45	32.6%	35	25.4%	21	15.2%	10	7.2%	5	3.6%
During lockdown, communicating with friends, peer and/or family has been easy for me	6	4.3%	23	16.7%	32	23.2%	30	21.7%	30	21.7%	17	12.3%
During lockdown, having reliable access to internet has been easy for me	16	11.6%	36	26.1%	28	20.3%	30	21.7%	15	10.9%	13	9.4%
During lockdown, maintaining or securing stable housing has been easy for me	7	5.1%	22	15.9%	29	21.0%	34	24.6%	27	19.6%	19	13.8%

Field data, 2020

Table 3: During the lockdown, how easy has it been to perform each of the following course activities or assignments?

Items	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
During lockdown, it has been easy to perform group projects and/or presentations	35	25.4%	42	30.4%	29	21.0%	18	13.0%	9	6.5%	5	3.6%
During lockdown, it has been easy to perform research or reports	37	26.8%	43	31.2%	31	22.5%	16	11.6%	8	5.8%	3	2.2%
During lockdown, it has been easy to perform individual presentations	32	23.2%	29	21.0%	25	18.1%	30	21.7%	15	10.9%	7	5.1%
During lockdown, it has been easy to perform online quizzes or tests	41	29.7%	37	26.8%	21	15.2%	17	12.3%	16	11.6%	6	4.3%

Field data, 2020

Findings from Table 2 indicate that majority of students 43(31.2%) agreed that balancing family and school responsibility during lockdown has been easy for them and also majority 42(30.4%) agreed that it has been easy for them to manage time during lockdown by 60%. However, the majority of 45 students (32.6%) indicated that it was difficult to get used to online teaching/learning during lock-up which is why they get 20% of course work done. Also, the majority of 47 students (34.1%) agreed that it would be easier for them to balance work and school obligations during lockdown at 60%. However, the majority of the 42 students (30.4%) admitted that they found it difficult to find a quiet place to complete their studies and to get help to complete their studies during the closing period was difficult which is why they score it at 20%. Findings continue to show that the majority of 45 students (32.6%) admitted that it was difficult to get help with completing their studies during the closing period and the majority of 32 students (23.2%) admitted that they found it easier to communicate with friends, peers or family by 40%. Also, the majority of 36 students (26.1%) admitted to having reliable internet access during lockdown by 20%. Furthermore, findings indicate that majority of the students 34 (24.6%) found it easy to maintain or secure stable housing during lockdown by 60%. These findings therefore indicate that the students were affected negatively.

Learning activities during the lockdown

Respondents were asked to indicate how easy it has been to perform coursework activities or assignments during the lockdown. Their responses were rated on a scale of 0%, 20%, 40%, 60%, 80% and 100%. The findings are presented using frequency counts and percentages as shown in Table 3.

Findings in Table 3 indicate that majority of the respondents 42 (30.4%) were able to perform projects and or presentations by 20%, and the majority of the respondents 43(31.2%) were also able to perform research or reports by 20%. Findings further indicate that majority of respondents 32(23.2%) found it most difficult to perform individual presentations. 41(29.7%) majority of respondents found it most difficult to perform online quizzes or tests. Since all these percentages are below average, this implies that students' course activities or assignments were terribly affected.

Students' resources during the lockdown

Respondents were asked to indicate how easy or difficult it has been for them to use different learning resources for completing their coursework. Findings are displayed in Table 4.

Table 4: During the lockdown, how easy has it been to use each of the resources for completing your coursework?

Items	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
During lockdown, it has been easy to use digitalized collections of historical documents or records (such as a rare book, handwritten letters/diaries or artifacts for completing my coursework	37	26.8%	43	31.2%	35	25.4%	14	10.1%	9	6.5%	0	0.0%
During lockdown, it has been easy to use journal articles or other academic articles for completing my coursework	39	28.3%	39	28.3%	27	19.6%	22	15.9%	10	7.2%	1	0.7%
During lockdown, it has been easy to use videos, audio or other academic articles for completing my coursework	24	17.4%	43	31.2%	33	23.9%	19	13.8%	16	11.6%	3	2.2%
During lockdown, it has been easy to use study resources provided by your lecturers (such as notes or study guides) for completing my coursework	8	5.8%	24	17.4%	33	23.9%	37	26.8%	24	17.4%	12	8.7%
During lockdown, it has been easy to use learning/course management system such as MUELE) for completing my coursework	24	17.4%	39	28.3%	32	23.2%	21	15.2%	19	13.8%	3	2.2%
During lockdown, it has been easy to use news or magazine articles for completing my coursework	30	21.7%	43	31.2%	27	19.6%	20	14.5%	14	10.1%	4	2.9%
During lockdown, it has been easy to use online video tutorials such as videos available on courser or YouTube for completing my coursework	39	28.3%	39	28.3%	23	16.7%	20	14.5%	14	10.1%	3	2.2%
During lockdown, it has been easy to use Wikipedia or other online encyclopedias for completing my coursework	33	23.9%	32	23.2%	21	15.2%	28	20.3%	16	11.6%	8	5.8%

*Field**data,**2020*

Table 5: Students' wellbeing during the lockdown

Wellbeing	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
I was connected to my fellow students during lockdown	19	13.9%	36	26.3%	33	24.1%	26	19.0%	11	8.0%	12	8.8%
I was connected to my university lecturers during lockdown	41	29.7%	33	23.9%	28	20.3%	19	13.8%	12	8.7%	5	3.6%
I knew what I needed to do to be safe during COVID-19 pandemic	4	2.9%	10	7.2%	12	8.7%	21	15.2%	50	36.2%	41	29.7%
I was concerned about my physical health during the COVID-19 pandemic	2	1.4%	10	7.2%	12	8.7%	23	16.7%	42	30.4%	49	35.5%
I was concerned about my mental health during the COVID-19 pandemic	5	3.6%	9	6.5%	10	7.2%	31	22.5%	38	27.5%	45	32.6%
I was concerned that I wouldn't have enough food to eat during lockdown	15	10.9%	19	13.8%	15	10.9%	33	23.9%	32	23.2%	24	17.4%
I was concerned that I wouldn't have enough money during lockdown	13	9.4%	18	13.0%	21	15.2%	24	17.4%	30	21.7%	32	23.2%
I was concerned that I wouldn't be able to afford my rent or mortgage during lockdown	34	24.6%	18	13.0%	16	11.6%	18	13.0%	28	20.3%	24	17.4%
I was concerned that I wouldn't be able to afford my utility bills such as gas, electricity, internet etc during lockdown	22	15.9%	24	17.4%	18	13.0%	25	18.1%	23	16.7%	26	18.8%

Field data, 2020

Table 6: Students' readiness

Items	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
I now know where to go to find the most up-to-date information about my university's policies during COVID-19 pandemic	12	8.7%	30	21.7%	17	12.3%	29	21.0%	30	21.7%	20	14.5%
I currently have the tools and resources I need to complete my coursework this semester	8	5.8%	22	15.9%	29	21.0%	27	19.6%	24	17.4%	28	20.3%
I currently know where to find help in case of COVID-19 emergency	8	5.8%	15	10.9%	15	10.9%	31	22.5%	40	29.0%	29	21.0%
I feel connected to other students at this university	7	5.1%	3	2.2%	21	15.2%	32	23.2%	39	28.3%	36	26.1%

Field data, 2020

Table 7: Students' services during the lockdown

Items	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
I would like to hear from our college or university about academic advising	5	3.6%	8	5.8%	18	13.0%	26	18.8%	37	26.8%	44	31.9%
I would like to hear from our college or university about personal counseling/mental health services	11	8.0%	12	8.7%	23	16.7%	29	21.0%	32	23.2%	31	22.5%
I would like to hear from our college or university about registration	15	10.9%	13	9.4%	23	16.7%	23	16.7%	28	20.3%	36	26.1%
I would like to hear from our college or university about career services	7	5.1%	12	8.8%	17	12.4%	28	20.4%	35	25.5%	38	27.7%
I would like to hear from our college or university about residential life	19	13.8%	14	10.1%	19	13.8%	31	22.5%	28	20.3%	27	19.6%
I would like to hear from our college or university about library	6	4.3%	21	15.2%	19	13.8%	25	18.1%	33	23.9%	34	24.6%
I would like to hear from our college or university about IT	13	9.4%	18	13.0%	10	7.2%	25	18.1%	31	22.5%	41	29.7%
I would like to hear from our college or university about disability services	48	34.8%	20	14.5%	14	10.1%	13	9.4%	26	18.8%	17	12.3%

Field data, 2020

Table 7: The main reason for limited internet access

Items	0%		20%		40%		60%		80%		100%	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
The main reason for limited internet access is too expensive	12	8.7%	7	5.1%	11	8.0%	15	10.9%	29	21.0%	64	46.4%
The main reason for limited internet access is signals/network availability	9	6.5%	17	12.3%	18	13.0%	20	14.5%	31	22.5%	43	31.2%
The main reason for limited internet access is I don't know how to use it	47	34.1%	35	25.4%	10	7.2%	19	13.8%	20	14.5%	7	5.1%

Field data, 2020.

Findings from Table 4 indicate that majority of the respondents 43(31.2%) indicate that it has been easy for them to use digitalized collections of historical documents or records (such as rare books, handwritten letters/diaries or artifacts) for completing their coursework by 20%. Findings further indicate that majority of the respondents 39(28.3%) found it so difficult to use journal articles or other academic articles for completing their coursework and majority of the respondents 43(31.2%) also found it so difficult to use videos, audio or other academic articles for completing their coursework by 20%. 37(26.8%) majority of the respondents found it easy to use study resources provided by their lecturers (such as notes or study guides) for completing their coursework by 60%. Also, 39(28.3%) majority of the respondents found it easy to use learning/course management system such as MUELE for completing coursework by 20% and 30(21.7%) majority of the respondents found it so difficult to use news or magazine articles for competing for their coursework and other 43(31.2%) found it easy to use news or magazine articles to complete their coursework by 20%. Findings show that the majority of the respondents 39 (28.3%) found it so difficult to use online video tutorials such as videos available on courser or YouTube for completing their coursework. Majority of the respondents 33(23.9%) found it so difficult to use Wikipedia or another online encyclopedia for completing their coursework, and 32(23.2%) found it easy to use it for completing their coursework by 20%. These findings show that all percentages are below average, implying that students faced difficulty in using resources to complete their assignments and learning.

Students' wellbeing during the lockdown

Respondents were asked to indicate the extent to which they agree with the statements regarding their well being during the lockdown, on a scale of 0-100% provided. The findings are indicated in table 5.

From Table 5, findings indicate that majority of the students 36(26.3) agreed that they were connected to their fellow students during lockdown by 20%, but again the majority of students 41(29.7%) were not connected at all to their university lecturers during the lockdown. However, the majority of 50 respondents (36.2%) knew what to do to stay safe during the COVID -19 pandemic and the majority of 49 (35.5%) students were 100% concerned about their physical health during the COVID-19 pandemic, and 45 (32.6%) students were 100% concerned about their mental health during the COVID-19 pandemic. According to the findings in Table 6, the majority of students 33(23.9%) admitted that they were worried that they would not have enough food to eat during the closure and that most of them 32 (23.2%) were completely worried that they would not have enough money during the closure. Findings continue to show that the majority of the students 34 (24.6%) were not worried about not being able to pay their rent or mortgage during the closing period. However, the majority of the students 26 (18.8%) were concerned that they wouldn't be able to afford their utility bills such as gas, electricity, internet etc during the lockdown. The percentages for all these findings are low, implying that students' well-being was affected negatively during lockdown.

Students' readiness during the lockdown

Students were asked to tell the extent to which they agree with the statements regarding their readiness on the scale ranging of 0 -100%. Findings are presented in Table 6.

From the findings in Table 6, the majority of the students 30(21.7%) reported that they know where to go and find the most up-to-date information about their university policies during COVID-19 pandemic. Majority of the students 29(21.0%) agree that they had the tools and resources they needed to complete course work during the

semester. Furthermore, the majority of the students 40(29.0%) agree that they know where to find help in case of COVID-19 emergency. Majority of the students 39(28.3%) further agreed that they felt connected because they felt connected to other students at their university during lockdown by 80%. Results have showed that students felt connected to their fellow students but had limited resources to complete their course works hence making them unready.

Students' services during the lockdown

Students were asked whether they would like to hear from their college or university about current services and resources provided. Their responses were rated on a scale of 0-100%, as indicated in Table 7.

Table 7 findings indicate that majority of the students 44(31.9%) would like to hear from their college or university about academic advising 100% and another majority of the students 32(23%) would like to hear from their college or university about personal counselling/mental health services by 80%. Also, majority of the students 36(26.1%) would like to hear from their college or university about registration and 38(27.7%) majority of the students would like to hear from their college or university about career services by 100%. Also, majority of the students 31(22.5%) would like to hear from their college or university about residential life by 60% and also another majority of the students 34(24.6%) would like to hear from their college or university about library services by 100%. Furthermore, majority of students 41(29.7%) agreed that they would like to hear from their college or university about IT services 100% and also another majority 26(19%) would like to hear from their college or university about disability services by 80%. The general findings indicate that students need university services such as academic guidance, health services, library, IT, registration and disability services.

Students' attitude regarding learning during the lockdown

Students were asked to indicate what they think is the main reason for limited internet access and their general attitude towards learning. The findings are indicated in Table 8, using a scale of 0-100%.

Findings from Table 7 indicate that majority of the students 64(46.4%) agreed that the main reason for limited internet access is because it's too expensive, whereas another majority 43(31.2%) strongly agreed that it signals/network availability issues 100%. Majority of the students 47(34.1%) agreed that they know how to use the internet whereas 7(5.1%) strongly agreed that they know how to use the internet by 100%. Generally, findings indicate that students know how to use internet but there are limited by signals and internet being expensive for them.

Table 8: Attitudes towards learning

Attitude towards learning	Disagree		Somewhat agree		Agree	
	Count	%	Count	%	Count	%
I feel qualified to use a computer/laptop	25	18.1%	47	34.1%	66	47.8%
No difference between online and conventional learning	80	58.0%	40	29.0%	18	13.0%
Complete university courses can be completed effectively through internet	75	54.3%	38	27.5%	25	18.1%
It is easy to complete group projects/assignments digitally	63	45.7%	50	36.2%	25	18.1%
Face-to-face contact with the lecturers is necessary for learning	9	6.5%	10	7.2%	119	86.2%

Field data, 2020

Findings from Table 8 indicate that majority of the students 66(47.8%) strongly agree that they feel qualified to use a computer/laptop. However, majority of the students 80(58.0%) agree that there is a difference between online and conventional learning, and majority 75(54.3%) disagree that complete university courses can be completed effectively through the internet. Majority of the respondents 63(45.7%) feel that it's not easy to complete group projects/assignments digitally and the majority 119 (86.2%) agreed that face-to-face contact with lecturers is necessary for learning. Generally, the findings show that students need help in e-learning.

Other challenges faced by students during lockdown

Students were asked to list other challenges which they faced during lockdown which could affect their studies. Students mentioned;

(1) much poverty issues, (2) the type of food, (3) no friends, (4) no discussions, (5) transport issues, (6) denial of freedom to move after curfew, (7) little time for internship, (8) failure of face-to-face learning, (9) failure to complete coursework, (10) tuition fees, (11) access to internet, (12) idleness, (13) fear of disease (COVID), (14) geographical location, (15) police brutality, (16) poor feedback from university authorities, and (17) home affairs.

DISCUSSIONS

From these study findings, COVID-19 lockdown has affected students and their activities negatively. Most students live outside the campus, which means that even those who would benefit from the university's WiFi are locked out as there is nothing on campus and it is a place of inconvenience. In a study conducted by Lynch (2017), it was found that while it may seem that almost everyone has internet access, a staggering number of families do not have a fast or reliable internet connection. Offline students are unable to contact teachers or classmates, do independent research, or receive homework help online and this leads to poor academic performance (Lynch, 2017).

Findings from the current study indicate that the majority of students at Makerere University's Department of Adult and Community Education have agreed that balancing family and school load during closure was not easy and accustomed to teaching online. In many countries, large sections of society lack the necessary tools to connect either to an active device or to a reliable Internet connection (Cohendet, 2003). This so-called digital divide is most prevalent in China, where more than 540 million people or about 40% of people are offline, according to a 2019 government report. Many children, who once travelled long distances to a nearby school, now have to contend with the lack of digital access to lockable devices.

Globally, more than 1.5 billion students, or more than 90% of the world's students, are trapped at home due to school closures in some 190 countries, according to a UNESCO estimate (UNESCO, 2020). As teachers scramble to establish online learning courses to educate young people far away, CNN experts spoke to them from Asia, Africa, Europe and the US fearing that the coronavirus problem exacerbates educational inequalities that put students at the least socio-economic level more expensive than their wealthy peers.

The majority of students in the current study admitted that they had limited access to the Internet during locking time. Those whose families did not have the money to buy computers and Wi-Fi internet were in trouble. Zhong (2020) reports in the New York Times that insufficient access to and access to the Internet and the lack of the latest

technology have affected the organization's response and the ability of students to participate in digital learning. The success of remote learning and teaching depends on infrastructure and support. A study by Butucha (2020) at the University of Eastern Africa found that the majority (73%) of respondents indicated that the lack of reliable internet communication was a major challenge for them while studying far away.

In this study, students found it difficult to get help by completing classes and interacting with friends, peers and family during the closure. In online learning, students only communicate with their peers numerically and have never seen other students in person, so the real-time distribution of ideas, knowledge and information is partially lacking in the digital learning world (Britt, 2006). Also, if you do not have the skills that need to be set up at home, staying in touch with other students and completing your studies can be difficult. Sometimes the academe world may feel cut off or removed from others (Krieger, 2020). Students who complete their studies and complete quotes have had to do so during the Covid-19 disaster, as students face post-epidemic disaster.

Findings continue to show that student projects or presentations and research or reports were difficult for students to do and were difficult to do online questions or tests. These findings may be consistent with Wains and Mahmood (2008) who found that the unavailability of fast, inexpensive and reliable internet connections hinders the online learning process especially for those living in rural and discriminated communities in Pakistan. Basilaia and Kwavadze (2020) wrote that online learning can work in developed countries digitally. This could be the reason why it is still difficult here in Uganda.

Students agreed that digital collections of historical documents or records such as rare books, handbooks or artefacts, tutorials and magazine articles to complete their studies were used to a lesser degree. Students who go online using smartphones cannot benefit from online learning because a significant amount of online content is not available through Smartphones (Adnan & Anwar, 2020). MUELE which is a student e-learning management system was not fully utilized by students during the lockout period according to the findings of the study. The findings continue to show that students have difficulty using online video tutorials, Wikipedia or any other online encyclopedia to complete their studies.

Findings from the current study show that few students reported being connected to other students and their university lecturers during the closure. This can have a detrimental effect on the lives of students. In a study of student experiences during the pivot epidemic, students had no sense of being social media at their institution (Blankstein, Frederick, & Wolff-Eisenberg, 2020). While they felt they were somehow connected to their teachers, few reported that they felt too connected to other students. A study by Rosov Consulting in partnership with Prizmah, Center for Jewish Day Schools, found that the majority of students who feel overwhelmed by what is happening in the future are those who focus on negative things:

Students also admitted that they know what they need to do to be safe during the COVID-19 epidemic and are concerned about their physical and mental health.

The students were worried that they would not get enough food and enough money during the lockdown. Research from the outside world shows how hard the students struggled when the semester ended abruptly. The most unexpected end of the year is a catastrophe when parents have not made a lot of money, and the debt is accumulating

(Ellison, 2020), but they need to support children, pay rent and electricity. Students were worried that they would not be able to pay rent, work bills such as gas, electricity, internet etc during the closing period.

Most students have admitted that they know where to go and get up-to-date information about their university policies during the COVID-19 pandemic and know where to turn for help in the event of a COVID-19 emergency. However, students felt connected to other students at their university during the closure and even though few had the equipment and tools they needed to complete the course during the year.

Most students have admitted that they would like to hear from their college or university about academic counselling, personal counseling / mental health science, enrollment, residential health, library services, IT, employment services and disability services.

Students acknowledged that the main reason for limited internet access was that it was expensive and that it was a sign / problem of network availability, however, they acknowledged that they could use the internet.

Most students strongly agree that they feel comfortable with using a computer / laptop and believe that there is a difference between online and regular reading. Research suggests that online graduates learn as much as those face-to-face, receive equal marks, and are equally satisfied (Jahng, Krug, & Zhang, 2007; Phipps & Merisotis, 1999; Sitzmann, Kraiger, Stewart, & Wisher, 2006; Zhao, Lei, Yan, Lai, & Tan, 2005). Sponsors of postsecondary online education have recently been encouraged by a meta-analysis sponsored by the US Department of Education which suggests that, in many cases, student learning outcomes in online courses are higher than traditional face-to-face studies (Jaggars & Bailey, 2010).

However, students do not agree that full university courses can be successfully completed online. Studies show that online students are less likely to complete their studies (Beatty-Guenter, 2003; Carr, 2000; Chambers, 2002; Moore, Bartkovich, Fetzner, & Ison, 2003). Believers in online learning raise concerns about the quality of online courses (Jaggars & Bailey, 2010). Some suggest that student-teacher interactions with students are often limited (Bambara, Durban, Davies, and Athey, 2009). These practices can contribute to low levels of online completion.

Students went on to report that it is not easy to complete group projects / assignments digitally and agreed that face-to-face contact with teachers is necessary for learning. Debowski (2003) agrees that the full online provision of offshore programs is often seen as less effective than options including part-to-face. Ziguras (2001) argues that there is a face-to-face relationship between students and teachers that is important in making external factors relevant to students. It should also be noted that computer access for overseas students is not a safe place to think. For example, Singh and Han (2005), while working at Jilin University in China, found that most of their classmates and students had limited access to their personal desktop computer, the Internet and email; they had to pay for timely access to their email accounts and download attachments, and they did not have access to very fast data networks. Because for those users, their offline education can be extended, but can be changed, with the ever-changing advances of online technology (Singh & Han, 2005).

CONCLUSION

COVID-19 has affected negatively the general learning process of educational institutions around the world. However, the management of universities has chosen online lectures / classes as another way to restart education. Although online learning seems to be helpful in protecting student health and technology in the midst of COVID-19 disease, it still does not work as normal learning. Online learning may not produce the results you want in less developed countries like Uganda, where most students have reported limited access to the internet and signals/network availability issues.

This study talked about how easy or difficult learning activities, resources have been during lockdown and also students' wellbeing, their readiness, services and attitude towards learning. The study has revealed that the most significant challenges that students faced during lockdown include balancing school, work, and home responsibilities, using digitalized documents, journal articles and Makerere University E-learning Environment system (MUELE). Therefore, students should be equipped with basics about e-learning systems e.g MUELE.

Students lacked a sense of belonging and connection to their fellow students and their university lecturers during the lockdown. However, majority students agree that they know where to find up-to-date information about their university's policies during COVID-19 and where to find help in case of COVID-19 emergency. Students therefore need to be taught some modern communication skills that involves technology to prepare them for any other calamity that may result into separation from each other.

Findings have indicated that the majority of students need services from their college or university. Services such as; academic advising, personal counselling/mental health services, college or university registration, career services, residential life, library services, IT services and disability services. Majority of students agreed that their limited internet access is because of the internet is expensive and signal/network issues. Students agreed that they know how to use the internet, they are qualified to use a computer/laptop. However, the majority believe that it is not easy to effectively complete university courses, projects/assignments digitally. Therefore, students need basics of e-learning and access of other services online.

RECOMMENDATIONS

We hope that the analysis provided in this report not only identifies the challenges faced by students and Makerere University during the 2019/2020 academic year but also several interventions for continuity of learning by students in the coming academic year and beyond have been suggested. We propose the following recommendations for Makerere University and other higher education institutions:

1. In colleges and universities, video and reference links should be shared with students in advance to give them a full-time theme; it also provides them with a preparation window that leads to increased participation during class assignments and thus solves the problem of difficulty in completing online questions and assignments.
2. Universities should partner with ICT providing companies to ensure provision of laptops and modems or MiFi at subsidized prices to all university students who are charged tuition fees. This will help realize digital inclusion among all students.

3. Improve communication and collaboration. Despite significant efforts in the field of higher education to ensure continuous teaching, many students have reported a lack of communication with others, which is an important part of the educational experience. Also, from an academic point of view, group projects and presentations are considered to be some of the most challenging types of assignments.
4. Invest in academic and financial advice. It is understandable that many students are concerned and insecure about their financial and academic services and want more information from departments that provide related services. Facilitating access to a large number of students and strengthening awareness of these services may require investment in additional staff and programs.
5. Identify the students with the greatest need. Students from groups that were previously poor and ostracized before the COVID-19 epidemic may face challenges in the new normal era. When resources are scarce, which occurs in all tertiary institutions but very few, they should be provided to those who need them most. This is not only important in furthering the purpose of higher education institutions in helping the community but also is an effective step in ensuring that students do not leave university before studying.
6. To students who are struggling especially with academics, tuition and mental health, seek for supportive services. Meet a counselling psychologist or even any other person you feel that you can confide in is very helpful for your mental health. This may help you to come to terms with the pressing situation that you may be encountering.
7. Students, sieve all information you receive. Being updated on what is happening currently may be of great importance especial on information related to COVID 19. However, if you are very much worried, relax and give yourself a break.
8. To students, keep in touch digitally: To remain in touch with your colleagues and friends afar, utilize the various communication technological platforms in place. For example, what's app, video conferencing, and sms texting.

Limitations

Small sample size could be the major limitation of this study. This study was limited to the Department of Adult and Community Education, under the College of Education and External Studies of Makerere University which limits the ability of generalization of the results to the whole university. Future researches should increase the sample size to include samples from all colleges.

Only students were sampled leaving out their lecturers and administrators. As the results are only based on students' perspectives, the inclusion of faculty opinions in future studies might help in understating the challenges faced by all students and lecturers during any emergency like COVID-19 lockdown.

Declaration of conflict of interests

The authors declare that they have no competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Online Submission*, 2(1), 45-51.

- Bambara, C. S., Harbour, C. P., Davies, T. G., & Athey, S. (2009). Delicate engagement: The lived experience of community college students enrolled in high-risk online courses. *Community College Review*, 36(3), 219-238.
- Beatty-Guenter, P. (2003). Studying distance education at community colleges. *Journal of Applied Research in the Community College*, 10(2), 119-126.
- Blankstein, M., Frederick, J. K., & Wolff-Eisenberg, C. (2020). Student experiences during the pandemic pivot. *Ithaca S+ R*.
- Butucha, K. G. (2020). Students' Emergency Remote Learning Experiences during the COVID-19 Pandemic Lockdown in a Selected University in Africa. *American Journal of Educational Research*, 8(12), 899-905.
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *Chronicle of higher education*, 46(23).
- Chambers, T. E. (2002). *Internet course student achievement: In Ohio's two-year community and technical colleges, are online courses less effective than traditional courses?* (pp. 1-66). Bowling Green State University.
- Cohendet, P. (2003). The digital divide in the European enlarged economic scenario: an assessment of the socio-economic effects. *Strasbourg: University Louis Pasteur*.
- Cucinotta, D., & Vanelli, M. (2020). WHO Declares COVID-19 a Pandemic? *Acta bio-medica: Atenei Parmensis*, 91(1), 157–160. <https://doi.org/10.23750/abm.v91i1.9397>
- Debowski, S. (2003, October). Lost in internationalized space: The challenge of sustaining academics teaching offshore. In *17th Australian International Education Conference, Melbourne Australia* (pp. 21-4).
- Donna, R. (2020). <https://www.jpost.com/diaspora/majority-of-students-say-lockdown-has-negatively-impacted-their-education-639453>. *The Jerusalem Post*.
- Ellison, M. (2020). <https://www.nbcnews.com/think/opinion/coronavirus-closed-colleges-sent-students-home-some-them-have-nowhere-ncna1170866>
- Hollow, D., & ICWE. (2009, November). eLearning in Africa: Challenges, priorities and future direction. In *International Conference on Web Engineering* (pp. 1-10).
- Jaggars, S., & Bailey, T. R. (2010). Effectiveness of fully online courses for college students: Response to a Department of Education meta-analysis.
- Jahng, N., Krug, D., & Zhang, Z. (2007). Student achievement in online distance education compared to face-to-face education. *European Journal of Open, Distance and E-Learning*, 10(1).
- Krieger, K. (2020). Graduate studies and campus closures.
- Lynch, M. (2017). The absence of internet at home is a problem for some students (Tech. Rep.). *The Advocate*.
- Merisotis, J. P., & Phipps, R. A. (1999). What's the difference?: Outcomes of distance vs. traditional classroom-based learning. *Change: The Magazine of Higher Learning*, 31(3), 12-17.
- Moore, K., Bartkovich, J., Fetzner, M., & Ison, S. (2003). Success in cyberspace: Student retention in online courses. *Journal of Applied Research in the Community College*, 10(2), 107-118.
- Rarkryana, P.A. (2020). *Challenges of home learning during a pandemic through the eyes of a student*. The Jakarta Post. Retrieved 12 March 2021, from <https://www.thejakartapost.com/life/2020/04/11/challenges-of-home-learning-during-a-pandemic-through-the-eyes-of-a-student.html>.
- Singh, M., & Han, J. (2005). Globalizing flexible work in universities: Socio-technical dilemmas in internationalizing education. *The International Review of Research in Open and Distributed Learning*, 6(1).
- Sitzmann, T., Kraiger, K., Stewart, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59(3), 623-664.
- UNICEF. (2020). *How many children and young people have internet access at home? estimating digital connectivity during the COVID-19 pandemic*. UNICEF.
- Wains, S. I., & Mahmood, W. (2008, October). Integrating m-learning with e-learning. In *Proceedings of the 9th ACM SIGITE conference on Information technology education* (pp. 31-38).
- World Bank (2021). The World Bank in Uganda. Downloaded from: <https://www.worldbank.org/en/country/uganda/overview>
- World Bank. (2020). *How countries are using edtech (including online learning, radio, television, texting) to support access to remote learning during the COVID-19 pandemic*. World Bank. Retrieved 12 March 2021, from <https://www.worldbank.org/en/topic/edutech/brief/how-countries-are-using-edtech-to-support-remote-learning-during-the-covid-19-pandemic>.
- Zhao, Y., Lei, J., Yan, B., Lai, C., & Tan, H. S. (2005). What makes the difference? Practical analysis of research on the effectiveness of distance education. *Teachers College Record*, 107(8), 1836.
- Zhong, R. (2020). The coronavirus exposes education's digital divide. *The New York Times*.
- Ziguras, C. (2001). Educational technology in transnational higher education in South East Asia: the cultural politics of flexible learning. *Journal of Educational Technology & Society*, 4(4), 8-18.