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Management of Higher Educational Institutions in Ghana amid COVID-19 Pandemic: The Case of the University of Cape Coast, Ghana

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Ethical Statement

The consent of all participants using an informed consent forms was sought before interviews and discussions after receiving ethical clearance from the University of Cape Coast Institutional Review Board (Ethical Clearance–ID NO: UCCIRB/EXT/2020/54).

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ABSTRACT

Aptly described as the biggest challenge to have confronted humanity since World War II, COVID-19 pandemic has caused major damages in all spheres of life. Using Mitroff's (2005) Crises Management Model, this paper focuses on Higher Education Institutions and investigate how Senior Management of a typical African Higher Education Institution reacted to the pandemic. Deploying the case study with phenomenological qualitative approach transcendental design, the study sought to explore the challenges the University of Cape Coast Management faced and the measures it adopted to manage the pandemic. The participants comprised of seven management members. It was found that the university was not prepared for a pandemic of this nature. The study also found that the pandemic posed key challenges namely, administrative, financial, and operational. Nonetheless, the University instituted some coping mechanisms which helped assuage the impact of the pandemic. It is recommended that the University must develop a comprehensive crisis-response plan which provides standard operational guidelines regarding administrative work and teaching and protocols for reducing the spread of infections. The paper proposes that the university creates an emergency fund and build the capacity of its members to adopt an appropriate technology to enhance teaching. learning, and administrative work.

Keywords: COVID-19, higher education, management, challenges, University of Cape Coast

INTRODUCTION

In 2019, the world was struck by the novel coronavirus. First identified in Wuhan, Hubei Province, China, in December 2019, the COVID-19 virus quickly spread throughout the globe and had, in 2 months, been declared by the World Health Organisation (WHO) as a Public Health Emergency of International concern. By March, 2020 (3 months after first detection), COVID-19 had been declared as a global pandemic and remains as such till date.

The first COVID-19 in Africa case was reported in Egypt on 14th February 2020 while the first case in West Africa, was confirmed in Nigeria on 27th February, 2020 (WHO, 2020b). The first two cases of COVID-19 in Ghana were reported on March 12th, 2020 (Kenu et al., 2020). The virus's telling negative impact on almost every sphere of human endeavour has caused it to be described by the United Nations' Chief, Antonio Gutterrez as the biggest challenge for the world since the World War II. The virus's effects have been felt economically, socially, culturally, and even, spiritually.

In response, a plethora of mitigation measures were initiated by key actors namely multinational organisations, governments, local authorities, and business conglomerates. In general, these measures centred on strategies to curb the spread of the virus and included protocols namely transport restrictions, social distancing, self-isolation, mask wearing, regular hand-washing with soap or alcohol-based sanitizer (OECD, 2020; WHO, 2020a). Also included were measures which necessitated closure of various public spaces such as restaurants and educational institutions as well as imposition of lockdowns in many places across the globe (Moser & Yared, 2020). Other preventive measures also included advanced prevention and treatment in healthcare facilities and the request of working from home (Bedford et al., 2020; Chahrour et al., 2020).

Educational institutions were perhaps, one of the single most affected social institutions. This is because the lockdown orders affected relatively more subgroups than in other sectors- educational administrators, teachers/lecturers, workers, parents and children. The abrupt closure of schools and some teaching and learning facilities has negatively affected over 90 percent of student enrolment all over the world (UN, 2020). This has brought interference in educational institutions displacing nearly 1.6 billion students worldwide.

Though all schools initially closed, the more technologically endowed ones quickly shifted their activities (administrative, teaching and learning) to online platforms and therefore experienced very little long-term disruptions in their programmes and academic calendar. While there has been an array of studies on the effects on the pandemic, relatively little is known about the effects it had on African Higher Educational Institutions and the strategies they adopted to mitigate its impact on their operations.

Related Literature

Pandemics, disasters, and crises have been an integral part of human existence and each era has had its own fair share of these. These misfortunes have ranged from environmental catastrophes to diseases and wars. Of the lot, wars have been known to wreak the most havoc. There have been serious pandemics in the past. The deadliest ones were that which occurred during the world wars I and II. One of such is what was referred to as the "Spanish" influenza pandemic which caused fatal sickness and claimed the lives of many people (Yamin, 2020).

However, it is generally believed that the COVID-19 pandemic is the single most disastrous pandemic to date. At the writing of this piece, it has entered its third wave and has mutated into various strands each with its own effects claiming a total of 4.4 million lives (WHO, 2021). The economic effects have also been severe as the International Labour Organisation (ILO, 2021:1) indicates that labour markets around the world have been disrupted on a 'historically unprecedented level. The ILO further estimates that COVID-19 caused a loss of 255

million full time equivalent working hours in the year 2020. Coupled with these were the disruptions in production plans causing shortages of supply and the inevitable rise in prices of goods and services and unemployment (Asante & Mills, 2020; Su et al., 2021).

On the social front, studies have found (Alghamdi, 2021) the pandemic had a negative effect on social life. The literature identifies negative social challenges such as the pandemic affecting people's ability to relate to each other (Eddy, 2021) as well as an increased tendency to postpone key adult transitioning life events such leaving home, getting married, or buying a house or a car (Mather, 2020). The essential measure of controlling this pandemic is what is referred to as social distancing" or "physical distancing" which is intended to decrease human to human interaction (Weeden and Cornwell, 2020).

The pandemic's effect on education is also worthy of note. It created a big shock to the educational systems worldwide. UNESCO reports that 9.8 million African students in higher educational institutions are experiencing disruption in their studies due to the closure of their institutions. However, this has also prepared various institutions of higher learning to build their students' capacity to interact virtually (Setiawan, 2020).

While these interruptions caused by the COVID-19 pandemic affected both developed and developing countries alike, halting the lives of all groups in society, the effect on higher education and influence of students from weak groups may be higher than the average student population. In developing countries, students from less privileged areas have encountered severe difficulties as a result of severe resource and capacity constraints (Salmi, 2020).

The pandemic also resulted in the reduction in international education and other international activities. Many international students studying abroad had to travel back to their home countries during the peak of the pandemic due to closure of the higher education institutions across the world. As a result, international education has been affected negatively causing many students who were studying abroad not to continue their studies (Redden, 2020).

The general responses to the several pandemics recorded in history can be grouped into two namely; pharmaceutical and non-pharmaceutical measures. Pharmaceutical measures relate largely to antiviral and vaccination activities which seek to inhibit the growth of the virus (Regmi & Lwin, 2021). On the other hand, non-pharmaceutical measures concern with personal protection or isolation, household quarantine, school or workplace closure, restriction on travel, health, education and surveillance (Regmi & Lwin, 2021). This approach focuses on limiting the rate of spread. Until the emergence of COVID-19 vaccines, many institutions and countries including the University of Cape Cost depended heavily on the latter. While both measures are seen as reactionary in nature, the latter is more immediate, personal and less effective than the former (Reinert *et al.*, 2020). This means that responding to a pandemic with non-pharmaceutical measures can still cause infections and hence, more havoc.

Generally, pandemics unleash psychological social, economic and political effects on countries and the globe at large. However, these effects vary based on the conditions, understanding and knowledge of the time of the pandemic as well as readiness to respond (Reinert et al., 2020). In terms of psychological and social effects, pandemics exert a short-term shock and fear people. The fear of getting infected creates undue anxiety and panic which consequently disrupt social order and daily living (Haleem et al., 2020) such as limited movement and interaction. With regard to the economic sphere, myriad of effects are reported in the literature. Pandemics cause increased health expenditure by patients and governments. There is low labour supply due to increased absenteeism and deaths, truncation of the supply chain of products, loss of businesses and jobs, low revenue growth and general low economic growth (Haleem, Javaid and Vaishya, 2020) (Akin and Gözel, 2020).

To ameliorate these economic conditions, governments resort to unpalatable policies such as imposition of new taxes and increasing prices of goods and services (Akin & Gözel, 2020). This reverses the economic gains of

citizens and often engender labour unrest and revolt from social labour unions. In light of the above, pandemics arguably cannot be prevented from occurring but the preparedness to respond with appropriate measures is what is germane. Timely response to a pandemic has proven as an effective means to mitigating the effects (Reinert et al., 2020).

Lecturers and students continue to improve on the use of electronic media for sharing information by making use of these virtual platform (Jena, 2020). They have been sharing important documents with their group members and creating online local repositories.

Theoretical Framework

Many frameworks have been propounded to look at crises management processes of which COVID-19 is no exception (Reilly, 1993; Shrivastava, 1993; Smits & Ally, 2003; Elsubbaugh et al., 2004). The frameworks look at various steps in dealing with how to manage crises such as the novel corona virus pandemic in the higher education sector. Mitroff's (2005) crisis management model was identified as suitable for this current study. This framework, as shown in Figure 1, discusses how to identify and manage crises situation.

Figure 1.

Crisis management model - Mitroff, 2005; Mitroff & Pearson, 1993.



In the crisis management framework proposed by Mitroff (2005), there exist six different stages of crises management. The signal stage which is the first of this framework explains how a crisis emerges. The first signal was WHO's announcement of the outbreak of the COVD-19 pandemic. The second signal in Ghana was the opening of the borders to travelers coming from Europe and other part of the world was a potential risk. The second stage is the detection stage. And this refers to the ability to detect the potential crises. Once the crises are detected, the institution or the individual has to find immediate solution to the emerging crisis. In view of that, the University of Cape Coast was closed down and students were asked to go home until further notice. In the containment phase, it discusses the actions that the institutions need to undertake to avoid the spread of the particular crises. In this phase, actions are taken to prevent the escalation of the crises. For example, in the University of Cape Coast, to finish the academic year, students were asked to report to School in batches to complete the semester. Stringent measures were put in place to ensure students observed all the COVID-19 protocols.

Another phase of Mitroffs's (2005) framework that is relevant to managing the COVID-19 crisis is the recovery phase. In the recovery stage institutions put in place mechanisms that help to bring things to normalcy. New

behaviours are adapted to improve institutions crises and also to forge new path. Some containment issues that can be undertaken by the institution is to provide an emergency relief information to the people involved so that they can be properly catered for as they go through the crises period.

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Mitroff (2005) encouraged organizations to engage in no-fault learning except in cases of criminal behavior and liability. Finally, at the redesign phase, the new ideas acquired will enable the individual or institution due deal with the problem. This model is relevant to this current study because it provides a structure for exploring the interventions adopted and how they helped in the recovery efforts by the university of Cape Coast. It also signals an important variable 'institutional learning', i.e., the degree to which the University learnt from the pandemic. We will return to this later in the paper.

The University of Cape Coast, a Ghanaian University, was established in October, 1962. The University started with two departments, namely: Arts and Science. These departments developed into Faculties in 1963. It is currently organized into five Colleges headed by Provosts; namely: College of Agriculture and Natural Sciences, College of Humanities and Legal Studies, College of Education Studies, College of Health and Allied Sciences and College of Distance Education. From an initial student enrolment of 155 in 1962, the University of Cape Coast, as at the end of the 2020/2021 academic year, had a student population of over 80,000. The University also has a staff population of 4954 comprising 1074 senior members, 1524 senior staff and 2356 junior staff. Out of the total number of 1074 senior members, 801 comprises of the teaching staff representing 16% and 273 representing 5.5% of the entire staff population are senior members non-teaching.

METHOD

Research Design

The qualitative case study approach with phenomenological transcendental design was chosen for this study. The phenomenological transcendental design aims to uncover contextual complexities and key dynamics of a particular phenomenon for a sub-population (Gerassi et al., 2017)). Additionally, this design stresses on the need to understand how a phenomenon occurs (Neubauer et al., 2019). The study sought to explore the issues and challenges associated with COVID-19 and its management at UCC. The study therefore, required participants providing verbal account on the issues.

Setting and Participants

Purposive sampling was used to select two categories of participants for the study. The target population was the three principal officers comprising the Vice-Chancellor, Pro-Vice Chancellor and Registrar as well as and four Directors in charge of Directorates in the Central Administration of the University. The "census method" was used to select the three principal officers (Lavrakas, 2008), however, only two of the principal officers were available during the period of the data collection but all the four (4) directors were duly interviewed. These informants were purposively chosen with a deliberate attempt to elicit first-hand information from them because of the active role they played in managing the university during the early days of the pandemic (Etikan, Musa and Alkassim, 2016). The Directors were selected because they provide support and logistics that aid in teaching and learning and the overall administration of the University.

Instruments

In gathering data, a semi-structured interview guide was used. This guide allows the interviewer to ask follow-up questions and responses (DeJonckheere & Vaughn, 2019). This was to enable the researchers' probe further for information provided by informants. The validity and reliability of the interview guide were determined based on results from a pre-testing exercise on some Deans of the university. The pre-testing provided a variety of perspectives that helped to frame, challenge and reframe the interview guide as stated by(Atkinson, Delamont and Housley, 2008).

Procedure

In all, a period of one (1) month (19th February to 20th March, 2021) was used for data collection. The participants were asked questions pertaining to their administrative background in addition to their knowledge of the COVID-19 pandemic and the roles they played in mitigating or containing the ravages of the pandemic. The interviews were conducted in the offices of the respondents as their preferred locations. They were tape-recorded and later transcribed.

Data Analysis

The study made use of thematic analysis framework in analysing the transcribed data. (Braun & Clarke, 2006) distinguished between a top-down or theoretical thematic that is driven by the specific research question(s) and/or the analyst's focus, and a bottom-up or inductive one that is more driven by the data itself. Our analysis was driven by the research question and so it was more "top-down" than "bottom-up". Again, (Braun & Clarke, 2006) 6-step framework for thematic analyses was employed. The transcribed data was read quiet a number of times by the authors to familiarize with the content. Themes were generated from the readings and further reviewed. Similar responses from the informants under the various themes identified were synthesized. Subsequently, the themes generated were explained and the transcribed data was analyzed under the themes based on the researchers' focus.

Analysis of the data was based principally on the principle of grounded theory (Strauss, 1987) and therefore was thematic and inductive in nature. All potential identifying details of the respondents have been anonymized using pseudonyms to ensure the confidentiality and anonymity of the respondents.

RESULTS

The findings are presented using the following subheadings reflective of the conceptual framework: signal/detection, containment measures, effects and recovery strategies. Table 1 indicates the gender distribution of the management members used for the study.

Table 1

Biographical details of respondents

Management Member	Gender	Months in the position
A	F	26
В	Μ	7
С	Μ	48
D	F	48
E	F	78
F	Μ	5

Half of the members (N=3; 50%) were males and the other half were females. It was also clear that majority of the members interviewed had been in their position for more than two years. These details imply that the participants had been in their positions long enough to understand the issues and provide valid answers.

Signal/Detection

The first suspected case of the virus was detected in UCC in mid-March, 2020. According to participant A the alert came from the regional health directorate.

We first knew the virus was close when we had a call from the regional directorate of the Ghana Health Service that one student in a group of international students on a study abroad visit had demonstrated signs of possible symptoms.

Containment/ Damage control

All the participants indicated that the University instituted several measures to control the spread of the pandemic. These can be classified under administrative and operational.

Administrative

The study found that the university undertook some administrative intervention by issuing orders concerning travel. That same day an emergency management meeting was hosted by the Vice Chancellor. If I recall correctly, present at the meeting were the Pro VC, Registrar, Director of Academic Affairs, Dean of International Education, Dean of Students, Director of Finance, Director of University Health Services and Deputy Regional Director of Public Health. At that meeting, it was decided that all stringent measures should be put in place to avoid being getting infected with the virus. Again, Management agreed that all travels, both inbound and outbound should be suspended until further notice. [Management Member A]

The university issued a communication to its international partners suspending all travel both inbound and outbound. This meant that it would not sanction any international travel by faculty, staff or students; neither would it welcome international visitors in any of these categories. [Management Member C]

Operational

Some operational interventions were also made by the University to contain the spread of the virus. An immediate decision was made by the Management to set up quarantine bases as well as to procure the requisite personal protective equipment as prescribed by the Ghana Health Service. The following narratives mirror the issues better:

The University followed the national protocols: washing of hands, use of sanitizer', we are not doing very well on social distancing. We instructed the lecturers to sack students who do not wear nose masks in class. We worked with the university health services to ensure that students and staff who report with the least symptoms should be isolated and designated a space on campus for students who will be contact traced and asked to isolate at the hospital. We also set up a task force to enforce these directives [Management Member A].

Another had this to say:

So, like I said, we had protocols and all students were informed and educated about the protocols. What we did was that in the halls, at the entrances, there were sinks, hand wash basins and soap, because those are part of the protocols. The police was here some time ago and the culture of mask wearing went up slightly. We also set up a campaign team to complement the work of the task force. [Management Member B]

Effects of the Pandemic

Responses from the participants revealed three broad categories of challenges that the university faced in managing the COVID-19 pandemic. These were administrative and academic, finance and Information Communication & Technology (ICT).

Administrative and Academic Challenges

Management unpreparedness to close the university coupled with difficulties in managing students to leave without getting infected with COVID-19 were revealed as part of the series of challenges the University Management faced. Associated with these was the truncation of the academic semester which affected the academic calendar and related activities. In relation to the truncation of academic semester, staff needed to switch to virtual classrooms to continue with teaching and learning but they were unable to reach to the student population and vice versa. Two factors accounted for this. First, lack of robust internet connectivity particularly at the homes of students and secondly, lecturer's unpreparedness to move fully into virtual teaching. Participant A had this say:

When the President of the Republic of Ghana announced that students should go home, we had not prepared for that break. Everybody was apprehensive at the time because nobody knew what the pandemic was; nobody understood the pandemic. So, we were all following the Western world and what people were telling us to do. So, we were apprehensive about how to get all the students to leave campus without them getting infected. We wanted to get them safe to their parents.

With regards to academic related challenges Participant D had this to say:

First, there are different types of challenges the University faced. We have the student and staff challenges such as the inability to reach the student population especially when it came to teaching as well as learning. There was also a challenge with connectivity for the students to be able to reach their lectures and vice versa. Students in the remote areas could not connect to the lecturers which made teaching very difficult. We realized that we were not prepared to do a fully online course because our internet is not that robust.

Financial Resource Challenge

The University also had challenges with finances in the hit of the outbreak of COVID-19. There were two dimensions to this. First, management needed to spend more than it had budgeted for and secondly, students were unable to pay school fees in time. These issues created financial crisis for the university. In fact, because the pandemic was least expected, the University had not made budgetary allocation for COVID-19 related expenses. Worse of it was the fact that there was no money elsewhere for management to resort to. A benevolent individual came to the aid of the University with some financial support which cushioned management efforts as narrated by Management member E:

We, like any other university did not budget for COVID-19. We spent a lot of money that we had not planned to spend. There was the problem of students not paying their fees on time because they complained that their parents have lost their jobs and that they couldn't pay the full fees on time.

ICT Challenges

One of the striking issues that emerged from our data was the ICT challenges faced by the Management which negatively affected the online teaching and learning. Participant A had this to say:

Online teaching is more tedious than the face-to-face due to varied reasons. Last week we had a meeting and I asked the provosts to tell me how the online teaching was going. He said that the lecturers preferred the face-to-face teaching. Nobody was able to finish the course outline for the semester due to challenges with our ICT systems.

Relatedly, Participant B commented that:

...majority of our students do not have the gadgets to access online teaching. Secondly, they do not have the data bundle – you know the financial situation of some of our students. It was even a problem for lecturers because not all lecturers were used to this online teaching. They also lack certain ICT software's and systems. But because of the sudden nature of the pandemic, we could not make provisions...

Coping Strategies

The study found that management instituted some measures in reaction to the 'new normal' that had been set by the crisis. These are presented in the ensuring sections.

Medical Support

The University of Cape Coast provided medical support for students, staff, and local communities.

The University Health Services issued a directive on COVID-19 which suggested a number of protective actions to be taken by UCC students and staff. Subsequently, the university hospital made efforts to ensure sufficient supply of personal protective equipment for the hospital. The university hospital continued to run the 24-hour services, especially the treatments of symptoms that exhibited traces of COVID-19 such as coughing and common cold. The hospital also provided voluntary outpatient services and guidance to staff, students, and the local communities [Management Member C].

Remote Teaching and Operational Logistics

Another intervention was in providing teaching and learning support:

The university organized teaching and other essential operations such as research and administration remotely, through different channels and platforms such as zoom and emails. The Quality Assurance Unit of the university monitored the online teaching. UCC Management made substantial efforts in providing logistic support to the delivery of education and the operation of the university. For the very few staff that did not have enough resources to access digital devices in their homes, the university provided them with a modem. There was a comprehensive installation of automated hand washing machines and dryers at vantage points of the University for usage [Management Member B].

Support for Students and Staff

There were also direct interventions made by the University to students and staff. On the student front we identified that direct beneficiaries were the international students as per this quote:

The government of Ghana and the Students Representative Council (SRC) of the university as well as other student associations supplied nose masks and hand sanitizers to students in ensuring that they follow the COVID-19 protocols [Management Member A].

There was also direct support to international students which came in the form of cash, protective material, and shopping vouchers

As a result of the abrupt closure of educational institutions and borders, some international students could not travel to their home countries. The university management gave them financial support and other logistics to help them live comfortably on campus during the pandemic. This logistics came in the form of shopping vouchers and other protective material such as nose masks, hand sanitizers and detergents. This is particularly important because in UCC, most of the international students reside in campus accommodation arranged by the international office [Management Member D].

Secondly, the university financially supported staff who were locked down in other countries due to the closure of international borders. All these logistical supports were covered by extra-budgetary funds, which were raised by the university.

Another form of support came by way of the creation of flexible working arrangements which required adjusted working hours to suit the needs of staff.

To ensure social distancing, the administrative staff of the university were made to run a shift system. As a result, the maintenance of skeletal staff on rotation basis, where possible, compression of working week, where staff may work longer hours on a number of days per week and take time-off on the remaining days of the week. There was also the introduction of off-site work which allowed work to be done from home or other locations through the use of ICT. However, some services were considered essential and these personnel were made to work around the clock. These staff who worked during the peak of the pandemic was remunerated by the University management. For some offices like delayed opening hours and early closing hours were introduced. [Management Member B]

DISCUSSION

Mitroff's (2005) model proved a useful tool in guiding the study because many of the constructs it offered, particularly the signal detection, containment measures, damages, and the strategies for recovery. It is quite clear from the findings that the University was not prepared for a crisis of this magnitude. However, such unpreparedness

appeared to be a reflection of failure on the part of National leaders to prepare ahead, given that it took a couple of weeks when the news about COVID-19 broke for Ghana to record its first case. As revealed in the quotes, management of the University relied heavily on information from western countries about the pandemic. They virtually did not understand the pandemic at the beginning as well as the necessary measures such as training of staff on how to use e-learning systems and facilities. Nonetheless, it is commendable that in spite of its unpreparedness, the university management acted swiftly to the first signal. Swift reaction to crisis signals plays a major role in determining the ultimate impact (Pedersen, Ritter and Di Benedetto, 2020).

The finding about the financial squeeze is to be expected as it is consistent with the economic downturn occasioned by the pandemic (Bhagat and Kim, 2020). The university's two traditional source of revenue-government subventions and student fees were both encumbered as a result of the COVID-19 pandemic. In the case of the former, the world-wide restrictions on movement of goods and services meant that an import-dependent country like Ghana faced major challenges with raising revenue at the ports to support government expenditure. Student fees were also bound to suffer as their parents, already suffering from loss of job hours (ILO, 2021) struggled to raise the needed fees. Pandemics cause both governments and individual's expenditure to increase with a contrary decrease in revenue and incomes (Akin & Gözel, 2020).

The ICT challenge identified by the participants is also not new. UCC is known to have perennial ICT challenges which still persist in spite of the enormous resources invested to ensure the University has robust internet connectivity and e-learning systems. There are constant complaints at every forum by students, staff and faculty about poor connectivity and how it makes administrative and teaching work difficult. In this particular instance, the ICT challenges affected the smooth and timely completion of the semester and the academic year resulting in the delay and change of the academic calendar in the University. In terms of the former, management of the University was required to establish strong internet connectivity and related software's across faculties and departments for staff and students. Thereafter, train them on how to use those systems. Meanwhile, it was also necessary for students to acquire ICT gargets like laptops and data packages to facilitate their participation in virtual classroom activities. As explicitly captured in the narratives, these things were not done for varied reasons. The University's inability to procure the needed ICT facilities could be a result of its financial constraints. More so, students' poor financial background may have contributed to their inability to secure the needed ICT gadgets for e-learning activities.

The finding about the disruption to teaching and learning activities is consistent with experiences from other parts of the world as narrated by Simon and Hans (2020) who averred that the global lockdown of educational institutions was going to cause major interruptions in teaching and learning and other extracurricular activities. Against the background of the aforementioned technological challenges, it is not surprising that the UCC was not ready to assume full online delivery. Indeed, the World Bank (2020b) had earlier declared that not all HEIs will be able to equip themselves technologically to offer students a complete virtual teaching. The World Bank further asserted that even if some HEI will be able, it may not be on a large scale. Switching from face-to-face teaching and learning to virtual classroom require time and resources to procure and install the needed technological infrastructure both from HEI domains and that of students (World Bank, 2020b).

CONCLUSION AND RECOMMENDATIONS

Conclusion

Higher Educational Institutions were not spared from the ravages of the COVID-19 pandemic. The study shows that the University of Cape Coast's response mirrors the key stages and procedures outlined in Mitroff's (2005) Crisis Management Model. The innovative efforts deployed to help manage the crises were however hampered by some daunting challenges which need to be addressed. The pandemic has ushered the world into a 'new normal' which the university must rapidly adjust to and prepare itself adequately to participate in.

Recommendations

It is recommended that the University of Cape Coast develops a comprehensive crisis-management plan to safeguard the future. Depending on the nature of the crisis, such a plan can include details about emergency response actions, movement plans and logistical outlays.

Closely related to the first recommendation is the need for management to set up a Risk Management Fund. The absence of such a fund fundamentally disrupted the university's finances. As has been leant from the pandemic, crises could strike without warning at any time and creating such a fund could help stabilize the volatility associated with such uncertainties. Even during non-crises times, the funds could be invested to grow, thereby creating a win-win scenario.

It is also important to assure a strong technological backbone to fully support e-learning. UCC needs to invest in developing and improving existing online learning platforms as well as expanding the provision of internet access and online library resources. Training and orientation programmes about online learning, including lessons on online teaching and learning tools and strategies, need to be offered on regular basis so that students, teachers, and staff could have the opportunity to advance their knowledge and understanding of the different aspects and distinctions of online teaching and learning. However, participants recommended that UCC should consider not only making short-term adjustments in terms of accessibility, infrastructure, and equipment, but also drawing the right conclusions for the medium to long term. This applies not only to modalities for teaching and learning, where a stronger emphasis on blended learning and more and better opportunities for online learning will be a desirable result. Emphasis should be placed on stronger continuity of operations, student support, and welfare including preparing for any possible future crises.

It was evident from our participants that management instituted some measures to deal and curb the spread of the pandemic which were are aimed at minimizing the probability of persons being infected or exposed to the virus. It is recommended that, restrictions such as cancellation of exchange programmes by students and the introduction of working from home and the safety protocols that were put in place in the heat of the pandemic should be kept in place and strictly adhered to until conditions improve as part of its contributions to global control of the ravages of the COVID-19 pandemic on higher educational institutions.

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REFERENCES

- Akin, L. & Gözel, M.G. (2020). Understanding dynamics of pandemics', Turkish Journal of Medical Sciences, 50(SI-1), 515–519.
- Alghamdi, A.A. (2021). Impact of the COVID-19 pandemic on the social and educational aspects of Saudi university students' lives. *Plos One*, *16*(4), e0250026.
- Asante, L.A., & Mills, R.O. (2020). Exploring the socio-economic impact of COVID-19 pandemic in marketplaces in urban Ghana. *Africa Spectrum*, 55(2), pp. 170–181.
- Atkinson, P., Delamont, S., & Housley, W. (2008). Contours of culture: Complex ethnography and the ethnography of complexity. Rowman Altamira.
- Bedford, J. et al. (2020). COVID-19: Towards controlling of a pandemic. The Lancet, 395(10229), 1015-1018.
- Bhagat, S. and Kim, D.J. (2020). Higher education amidst COVID-19: challenges and silver lining. *Information Systems Management*, 37(4), 366–371.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101.
- Chahrour, M. et al. (2020). A bibliometric analysis of COVID-19 research activity: A call for increased output. Cureus, 12(3).
- DeJonckheere, M., & Vaughn, L.M. (2019). Semi-structured interviewing in primary care research: a balance of relationship and rigour. *Family Medicine and Community Health*, 7(2).
- Eddy, C.M. (2021). The social impact of COVID-19 as perceived by the employees of a UK mental health service. International Journal of Mental Health Nursing [Preprint].
- Elsubbaugh, S., Fildes, R., & Rose, M.B. (2004). Preparation for crisis management: A proposed model and empirical evidence. *Journal of Contingencies and Crisis Management*, 12(3), 112–127.
- Etikan, I., Musa, S.A., & Alkassim, R.S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, *5*(1), 1–4.
- Gerassi, L., Edmond, T., & Nichols, A. (2017). Design strategies from sexual exploitation and sex work studies among women and girls: Methodological considerations in a hidden and vulnerable population. *Action research*, *15*(2), 161–176.
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID-19 pandemic in daily life. *Current medicine research and practice*, *10*(2), 78.
- Jena, P.K. (2020). Challenges and opportunities created by Covid-19 for ODL: A case study of IGNOU. International Journal for Innovative Research in Multidisciplinary Field (JJIRMF), 6.
- Kenu, E., Frimpong, J. & Koram, K. (2020). Responding to the COVID-19 pandemic in Ghana. Ghana Medical Journal, 54(2), pp. 72–73.
- Lavrakas, P.J. (2008). Encyclopedia of survey research methods. Sage Publications.
- Moser, C.A. & Yared, P. (2020). Pandemic lockdown: The role of government commitment. National Bureau of Economic Research.

Neubauer, B.E., Witkop, C.T. & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others.

Perspectives on Medical Education, 8(2), 90.

- OECD. (2020). OECD policy responses to coronavirus (COVID-19). Testing for COVID-19: A way to lift confinement restrictions [Preprint].
- WHO. (2020a). Novel Coronavirus (2019-nCoV): Situation report, 11.
- WHO. (2020b). WHO Director-General's opening remarks at the media briefing on COVID-19-11 March 2020. Geneva, Switzerland.
- Pedersen, C.L., Ritter, T. & Di Benedetto, C.A. (2020). Managing through a crisis: Managerial implications for businessto-business firms. *Industrial Marketing Management*, 88, 314.
- Redden, E. (2020). International and study abroad students see major disruptions. Inside higher Ed [Preprint].
- Regmi, K. & Lwin, C.M. (2021). Factors associated with the implementation of non-pharmaceutical interventions for reducing coronavirus disease 2019 (COVID-19): A systematic review. *International journal of environmental research* and public health, 18(8),4274.
- Reilly, A.H. (1993). Preparing for the worst: The process of effective crisis management. Industrial & Environmental Crisis Quarterly, 7(2),115–143.
- Reinert, M.-C. et al. (2020). Serum neurofilament light chain is a useful biomarker in pediatric multiple sclerosis. Neurology-Neuroimmunology Neuroinflammation, 7(4).
- Salmi, J. (2020). COVID's lessons for global higher education: Coping with the present while building a more equitable future. *Lumina Foundation* [Preprint].
- Setiawan, A.R. (2020). Scientific literacy worksheets for distance learning in the topic of Coronavirus 2019 (COVID-19). *EdArXiv. DOI: https://doi. org/10.35542/osf. io/swjmk* [Preprint].
- Shrivastava, P. (1993). Crisis theory/practice: Towards a sustainable future. *Industrial & Environmental Crisis Quarterly*, 7(1), 23–42.
- Smits, S.J. & Ally, N.E. (2003) "Thinking the unthinkable"—Leadership's role in creating behavioral readiness for crisis management', Competitiveness Review: An International Business Journal [Preprint].
- Su, C.-W. et al. (2021). COVID-19 pandemic and unemployment dynamics in European economies. Economic Research-Ekonomska Istraživanja, 1–13.
- Weeden, K.A. & Cornwell, B. (2020). The small-world network of college classes: implications for epidemic spread on a university campus. *Sociological science*, 7, 222–241.
- Yamin, M. (2020). Counting the cost of COVID-19. International Journal of Information Technology, 12(2), 311–317.