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6 COVID-19 Crisis and the Future of Higher Education

Perspectives from Kenya

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Abstract

The chapter provides an understanding of the ways COVID-19 is affecting higher education and advances practical strategies for managing the challenges caused by the pandemic. To understand the effect of the COVID-19 pandemic on higher education, it is prudent to understand the context within which the institutions of higher learning operate. It also offers an overview of the education system in Kenya, followed by a situation analysis. It then explores how COVID-19 is affecting and shaping the future of higher education and based on literature, presents the strategies to manage the effects of the pandemic.

Keywords

future of higher education, COVID-19, Kenya, strategies for mitigating pandemics

Introduction

COVID-19 is the most devastating disease the world has ever experienced. Known to have originated in Wuhan, China in December 2019, the virus spread quickly around the world, and in less than a month, the number of COVID-19 confirmed cases were 3,634,172 worldwide, having claimed over 251,446 lives (World Health Organization [WHO], 2019). To control and curb the spread of COVID-19, WHO strongly recommended measures, such as social distancing, confinement, frequent washing of hands, and wearing face masks in public places. Since these measures seemed to work for China, countries across the world took up the same measures.

In education matters, the Government of Kenya (GoK) has developed a three-pronged approach to ensure the continuation of learning remotely, while adhering to the COVID-19 protocols of social distancing, quarantine, and self-isolation. The tertiary institutions (i.e., universities and other postsecondary

institutions) have developed online content that can be accessed by students through various channels to ensure that uninterrupted learning continues for students in the country while they are at home. According to Nguyen (2015), online learning is a wide range of curricula that uses the internet to facilitate instruction and provide materials as well as interactions between teachers and students or even among a group of students. In the same line, Paschal and Mkulu (2020) conceptualized online education as a general mode of teaching and learning virtually with the assistance of digital platforms and technology tools. The success of online learning programs in tertiary institutions has largely depended on digital skills, availability of educational technologies, and good internet networks in the learning environment, for both students and teachers. There are several platforms as well as tools that teachers and learners use in online learning in Kenya. These include WhatsApp.com, Zoom, Youtube.com, Skype.com, and Google classroom. However, it must be appreciated that the online program in tertiary institutions is riddled with a lot of challenges (Ministry of Education, 2020; Nyerere, 2020; Tarus et al., 2015). This was expected because the development of online programs in tertiary institutions of learning does not happen overnight, they take time.

The internet has made teaching and learning conceivable during the pandemic, and many educators and scholars are interested in online learning to enrich accessibility of learning resources and improve students learning, mainly in tertiary institutions of learning (Horn & Staker, 2011; Page, 2010), The students in tertiary institutions as well as other institutions of higher education come from varied backgrounds. Some come from well-to-do families while others come from a middle-class background. Others also come from disadvantaged backgrounds including slums, remote locations as well as informal settlements. Some of the students also come from families who have lost livelihood as a result of the effects of the COVID-19 pandemic among other difficult circumstances. There are also students who are refugees while others suffer from various disabilities. Despite the prevailing circumstances, it is a right for every citizen to achieve the highest attainable standard of education, training, and research as enshrined in the Constitution of Kenya (Munene & Otieno, 2007; Republic of Kenya, 2010). This chapter will therefore look at the Coronavirus (COVID-19) crisis and its effect on the future of higher education in Kenya. The focus will be on the increased online teaching and learning, the institutionalization of online learning, the challenges experienced as well the management of staff and students' education needs during the COVID-19 pandemic in higher education in Kenya.

Higher Education in Kenya

In Kenya, there has been extraordinary growth in the number of higher education institutions. According to the Economic Survey, the number of universities increased by 69.6% from 7 public higher education institutions in 2011 to 23 in 2015 (Republic of Kenya, 2014, 2016). Currently, there are 71 universities: 35 public and 36 private institutions and several tertiary institutions

(CUE, 2017). The rapid expansion in the number of public institutions is partly because of the conversion of many middle-level technical colleges to university colleges status through granting of charters, the introduction of new programs, and opening of new satellite campuses (Republic of Kenya, 2015; Wekullo et al., 2018).

Since the 1990s, enrollment in both public and private universities in Kenya has been on the rise. Most of the growth in student enrollment in public higher education institutions was partly due to the emerging of "parallel stream" (Court, 1999) and partly due to liberalization for these institutions to diversify their funding streams. Most institutions took advantage of the opportunity to admit self-sponsored students also referred to as "fee-paying students" alongside the government-funded students. The fee-paying students made up a significant majority of the total enrolment in the largest and best-established public universities (Odhiambo, 2011).

According to the Kenya National Bureau of Statistics, enrollment in universities sharply declined by about 43,600 students in the academic year 2017/2018, making it the first drop since the massive increase in the 1990s (Republic of Kenya, 2016, 2018). The drop in enrollment was due to a reduction in the number of students who scored c+ and above the minimum grade required for university entry. Since public universities admitted all students who scored c+ and above, there has been a reduction in the pool of students to enroll in private universities and as parallel degree students (i.e., fee-paying students) in public universities. The decline in enrollment has worsened the institutions' cash flows (Igadwah, 2018).

Even with the decline in enrollment across universities in Kenya, teaching and learning is characterized by a large class size, which limits opportunities for students to engage in critical reflection and dialogue. Institutions of higher learning are also characterized by inadequate and poorly maintained physical infrastructure. Odhiambo (2011) observed that in public universities, windows, and doors were falling apart, residential halls were stinking, there was little to no subscriptions to journals. Also, there were no tutorials and that large lecture halls lacked efficient microphones.

Quality has become a significant challenge in most institutions of higher education. It all started when middle-level colleges were "upgrading" to university status, and several small campuses of established universities were set up in interior towns, often with precarious infrastructure. While public universities have the greatest concentration of highly qualified academic staff and research activity, they suffer from overcrowding, insufficient numbers of lecturers, and degraded facilities. Private universities have lower student-to-staff ratios, but also have severe challenges with staff with lower qualifications working in multiple institutions. Interestingly, the one significant group whose dissatisfaction cannot always be heard is the students themselves, yet as explored by McCowan (2016), the lack of a clear critical voice from students.

Currently, the Commission for University Education (CUE) has taken up actions to enhance the quality of higher education. The Inter-University Council for East Africa also has played an important role in quality assurance and has run a capacity-building program to develop institution-level practice. However, while these initiatives have brought some important changes, they are yet to ensure that quality across the system is enhanced, especially now during the COVID-19 pandemic and the health protocols that come with it.

Human Development Index

The Human Development Index (HDI) is a composite score used to rank countries based on their average achievement in three basic dimensions; life expectancy, education, and per capita income. A country has a higher HDI when it has a higher life expectancy, higher education level, and a higher gross national income per capita (United Nations Development Programme [UNDP], 2019a). Africa is one of the fastest-growing continents in its human development, but it also has the lowest average levels of human development compared to other regions in the world (UNDP, 2016). Kenya's HDI has steadily progressed in increasing people's choices in health, living standards, and education through its "big four agenda" of ensuring food security and nutrition, universal health care, affordable housing, and manufacturing (Republic of Kenya, 2018). Even though the pace of growth is slower, Kenya's HDI stood at 0.590 in the year 2019, a margin improvement of 0.042 from the year 2014. Kenya was ranked 142 out of 189 countries—a rank that placed the country into the category of medium HDI (UNDP, 2019b). Similarly, Kenya's life expectancy increased by 4.7% from 61.6% in the year 2014 to 66.3% in the year 2019. The expected years of schooling also increased by 0.1 from 11.0 years in 2014 to 11.1 years in 2019 (UNDP, 2019b).

Kenya's HDI was expected to further grow by 2020. Alas, this may remain a dream due to the global economic depression that is likely to devastate the economies of many nations and their higher learning institutions. Nevertheless, there is a need to create an awareness where the three basic achievements can be felt by a majority of the citizens who are still marginalized. Thus, affecting the HDI negatively.

On 15 March 2020, Schools and higher education institutions in Kenya abruptly closed in response to COVID-19, affecting over 17 million learners nationwide (Parsitau & Jepkemei, 2020). Even as some sectors, such as the economy and health reopened, and cessations in some counties were removed, schools and higher education institutions were still closed. The abrupt closure and the measures taken to curb the spread of the COVID-19 pandemic have had serious effects on the operations of higher learning institutions. While some effects of COVID-19 have been felt immediately, the consequences of some effects on the operation of higher education institutions will be felt for years to come (Mohamedbhai, 2020). At the onset of COVID-19, the winds of change started blowing through higher education, shaping and influencing various activities including the transition to online learning, enrollment, mobility of scholars, funding, focus on higher education, access, and equity. COVID-19 has affected higher education institutions in several ways.

Theoretical Framework and Philosophical Stance

The study is anchored on the Classical Liberal Theory of Equal Opportunities whose proponents are Sherman and Wood as cited by Njeru and Orodho (2003). The theory advances the perspective of the need for equal opportunities in education for all students. The philosophy of the classical Liberal Theory of Equal Opportunities is that every student is born with some ability, which is congenital and cannot be substantively changed. Therefore, education structures and systems need to be structured in a way that eliminates challenges of whatever form including but not limited to social, political, gender, and economic problems that may hinder ingenious learners from taking full gain of innate talents, which may fast-track their social promotion. The Classical Liberal Theory implies that social mobility would be motivated by the equal opportunity of educational structures for all students. According to this theory, education structures and systems need to be planned with the aim of eliminating obstacles or challenges of any form which may inhibit students from achieving their full potential including their talents.

The outbreak of the COVID-19 pandemic led to unexpected prolonged closures of learning institutions. As a result, online classes were the popular option to ensure continued learning in institutions of higher education. The shift to online classes ensured that institutions continued engaging their students during the lockdown and social distancing (Marinoni et al., 2020). Going online, however, has not been easy due to challenges such as limited connectivity, limited access to the internet, and power interruptions, not to mention smartphones, laptops and data (Gillett-Swan, 2017). Since several of these institutions have no adequate capacity and infrastructure to reach all students online, the move to online learning in some institutions will stop no sooner than they begin (Wang, 2020). In other instances, only a fraction of the learners will access the online classes. This means that some students will be marginalized due to a variety of reasons including but not limited to their socio-economic background. For successful online learning, proper infrastructures must be put in place at the beginning.

Method

We used a desktop analysis approach with careful consideration of the quality of the information sources. To create an effective and rigorous status update on the way COVID-19 is affecting and shaping the future of universities in Kenya, reliable sources needed to be used. A total of 52 sources were used. The emphasis was on information emerging from universities and government sources. Supplement information was derived from News articles, University World News, Higher Education News, and other forms of communications (i.e. e-mails to staff and students) (see Table 6.1). Content analysis was used in analyzing the information from the sources. Various themes were derived on some of the ways COVID-19 is affecting and shaping the future of higher education institutions in Kenya. The findings are presented below.

Table 6.1 Sources of information used for findings

| Sources | $\mathcal{N}umber$ | Percentage (%) |
|------------------------------------|--------------------|----------------|
| News articles | 10 | 19.23 |
| University World News | 8 | 15.39 |
| Higher education news | 6 | 11.54 |
| Government information | 10 | 19.23 |
| University communication | 11 | 21.15 |
| Other courses (i.e., social media) | 7 | 13.46 |
| Total | 52 | 100 |

Findings: How COVID-19 Is Affecting and Shaping the Future of Higher Education in Kenya

A Shift to Online Teaching and Learning

The closure of higher education institutions as a measure to control and curb the spread of COVID-19 disrupted studies of over 9.8 million students in Africa, including those in Kenya (United Nations [UN], 2020). The fear of contacting COVID-19 triggered institutions to opt for online teaching as an alternative to face-to-face learning. The sudden shift to online activities was also caused by the need for institutions to continue engaging their students during the lockdown and social distancing (Li, 2020; Marinoni et al., 2020; Napier et al., 2011). Going online, however, has not been simple for a nation that has challenges with limited connectivity, limited access to the internet, and power interruptions. Since several of these institutions had no adequate capacity and infrastructure to suddenly reach all students online, the move to online learning in some institutions stopped no sooner than it started.

For successful online learning, proper infrastructures must be put in place at the beginning. According to Schroeder (2001) providing infrastructure to support online learning is equivalent to building a new physical campus similar to the pre-existing ones. Similarly, Students taking online classes have similar or more needs compared to their counterparts on the physical campus. Equally, faculty teaching online classes have similar requirements as their counterparts in face-to-face classes (Schroeder, 2001). Surprisingly, most institutions had little capacity and inadequate infrastructure for online learning.

The wisdom and necessity to increasingly invest in information and communication technology (ICT) infrastructure to support online and distance learning can no longer be denied. Before COVID-19, most institutions of higher learning in Kenya had a small capacity that served few students. Currently, most institutions are investing in greater and heavy bandwidth to ensure steady connectivity, serve many students, and access the needed content. In the same efforts, several higher education institutions are increasingly seeking to partner with internet providers, such as Safaricom and

Kenya Education Network (KENET) to negotiate access to specific education websites at a reduced cost (KENET, 2020). Also, individual institutions are providing data bundles for their staff and students.

Given that most institutions had minimally invested in ICT infrastructure for online and distance learning, most faculty members were unprepared for this sudden shift to online teaching (Andrews & Moulton, 2009; Marinoni, 2020). Very few faculty members, staff, and students understood working virtually (Kashorda & Waema, 2014; Tarus et al., 2015). As Andrews and Moulton (2009) observed, online teaching requires a different teaching approach from the usual face-to-face teaching. Most institutions quickly held one-day capacity training workshops to equip faculty with new software and skills to enable them to move to online teaching. While some faculty members were good to go with only one training, some needed continual support in constructing online content for various courses. Yet most institutions had very few technical support staff to assist faculty members.

The unpreparedness of faculty and institutions in online delivery may further affect the quality of education offered at higher education institutions (Brooks et al., 2020). According to Mohamedbhai (2020) quality online learning can only be achieved when professional instructional designers are engaged in preparing teaching material, lecturers are adequately trained to deliver the courses and program, and students are equally exposed to strategies and approaches of learning online. Unfortunately, institutions had not adhered to most of these online quality requirements. As a result, a majority of the faculty members have resulted in either posting lecture notes or recording videos and sending them to students. Others are afraid of sharing their notes. On the one hand, some faculty members feared losing their status as experts. On the other hand, institution leadership had not established and communicated a clear policy on knowledge sharing.

While online teaching is taking shape, it was abruptly implemented without consulting all students and other stakeholders. In reality, students taking courses online have higher learning expectations compared to the traditional face-to-face setting (Andrews & Moulton, 2009; Schroeder, 2001). It was, therefore, prudent that students receive technical training and support similar to that of their faculty to be able to navigate the online platform, conduct research, download class materials, submit assignments, communicate with their professors and peers, and get support services (Schroeder, 2001). Unfortunately, the majority of the students except for those taking courses through distance learning had not received the training. In some institutions like the Masinde Muliro University of Science and Technology, virtual training for students on how to navigate the online platform was organized. Indeed, not all students received communication for training leave alone, taking part in the actual training.

The increasing championship for online teaching, as the alternative mode of learning, has been met with resistance from students. Students from various universities have voiced serious concerns about the system, excluding their marginalized colleagues with little or no access to internet services and those with no money to buy laptops. Some students expressed their dissatisfaction with being forced to take online classes. For instance, some university students were actively engaged in a trending discussion on Twitter on 30th March 2020. A student by the Pseudonym Prince tweeted

You want me to take online classes. I live in Turkana (in far-off remote northern Kenya). Does this university even care that I obviously can't access [the] internet. It is University of Main[pseudonym] ..., not University for people of Main.

Another student by the Pseudonym May tweeted "Training is an inevitable part of any business but depending solely on an e-learning platform can make learning less personal, less engaging, and in the process, less effective. We urge comrades to boycott such shenanigans by the university."

This was just but a sign that not all students embraced online learning. Further, students of one public university took the university management to court because they felt it was not right for them to take examinations online. This has made some institutions to suspend online learning and postpone examinations for the semester (Austrian et al., 2020).

The shift to online depended on discipline. While online learning was implemented with ease in social sciences and humanities, it was a challenge in technical and practical courses (Marinoni et al., 2020). Technical courses are the most crucial for Kenya's development. Thus, they cannot be offered online, but required blending online and face-to-face.

Changes in Student Enrollment

COVID-19 has hurt student enrollment for the new academic year 2020/2021. The admission and recruitment process is also bound to change. Like elsewhere, higher education institutions in Kenya select students for admission from those who have completed the Kenya Certificate for Secondary Education (KCSE), the National Examinations. Now that the KCSE national examination has been postponed, it will eventually affect the 2021 intake of first-year students. Higher education institutions will have to come up with a new approach to selecting their new cohort of students. This may include re-evaluating the current admission practices and being flexible with admission dates.

Internationalization of University Education

The COVID-19 has also changed the perspective and prospects of students from Africa, Kenya included, about studying abroad. Wuhan, the city in China, where the virus was first reported, is home to over 25 universities that attract international students across the world. Approximately, there are about 4,600 students from over 12 African countries in Hubei province, where

Wuhan is located (Sawahel, 2020). Overall, there are about 81,562 African students in higher education institutions in China, representing 16.57% of the continent's international students (Sawahel, 2020). With the outbreak of COVID-19, the findings of a survey showed that COVID-19 has affected the plans of some students to study abroad. Out of about 2,000 students from Africa, Asia, and Australia surveyed, three in ten students had changed their plans of studying in China due to the Virus (Marguerite, 2020).

The lockdowns and travel constraints implemented by various national governments as a way to curb the spread of COVID-19 have left many nations and institutions of higher learning to wonder who would be their future students. With the closure of learning institutions across the world, most international students including those from Kenya were caught in and held up by countries and cities, lockdowns, and travel bans. Even with support from their home country, most of these students preferred going home and being quarantined there than in a foreign country.

Apart from living in fear of conducting COVID-19, some international students from Africa were stigmatized, discriminated against, and suffered stress related to their visa status. There was limited to no direction on safety and protection against the hostile environment international students were exposed to in foreign countries. What international students experienced during the COVID-19 pandemic is evidence that universities are far away from the customer experience such caliber of organizations needs to develop to be successful. This could be a replica of what happens during learning, where there is less focus on different needs, abilities, and teaching and learning support for international students. Moreover, the uncertainty of such pandemics relapsing has caused most international students, including those from Kenya to prefer studying from home and in universities close to their homes (Jaschik, 2020; Svanholm, 2020). It is no doubt that the future of higher education in Kenya and elsewhere will depend on institutions' ability to recruit international students after the crisis.

Changes in Funding for Higher Education Institutions

The economic impact of coronavirus on higher education institutions in Kenya, like elsewhere, is quite significant. Tamrat and Teferra's (2020) analysis of the effect of coronavirus on over 2,000 higher education institutions in Africa showed that funding for colleges and universities could be affected severely because of the competing demands from sectors such as healthcare, agriculture, and business. Higher education institutions are likely to suffer from the decline in government budget allocation, yet these institutions should be considered a priority in helping the country overcome such challenges and many other economic and development issues.

Apart from causing a decrease in state budget allocation for higher education, the COVID-19-induced recession is likely to have severe shortand long-term effects, including an increase in tuition fees institutions charge. Like other recessions, the COVID-19-induced recession is likely to cause a state of financial uncertainty in institutions that will make them shift from long-term to short-term planning. In such cases, students together with their parents are likely to dig deeper into their pockets to finance higher education. This has its implications; higher education will no longer be the public good. It will lock out most students - mainly from low-income families- with the inability to pay tuition at all.

Given the expected harsh financial climate, public universities are likely to merge. Private universities, which entirely depend on tuition and fees for their operations, are already hard hit. Currently, most private and some public universities are struggling to pay employees' salaries and allowances. In the aftermath of the COVID-19 pandemic, some private universities are likely to close some of their branches or completely close, as they do not receive any support from the government.

The focus on higher education institutions has also reduced. As Marinoni et al. (2020) observed, COVID-19 has seriously affected higher education institutions' partners in that they could no longer offer financial support to these institutions. Also, COVID-19 has weakened institutional partnerships as institutions have to concentrate resources on local issues (Marinoni et al., 2020). Moreover, higher education institutions have experienced huge drop in support from development partners, mainly for research and collaborations, which institutions have heavily depended on in the past (Tamrat & Teferra, 2020). On the contrary, COVID-19 has provided an opportunity for creating new partnerships and strengthening the existing partnerships, shown when researchers from various institutions coordinated their efforts to respond to COVID-19 (Marinoni et al., 2020).

Access and Equity in Higher Education

Like other nations, Kenya had no choice but to close its higher education institutions as part of lockdown measures to control and curb the spread of the virus. These institutions had no option but to shift to online learning. The process has exacerbated the existing inequity in learning institutions. The shift from face-to-face to distance learning strategies and ensuring that these strategies provide access and equity have been a challenge (Mohamedbhai, 2020). It is estimated that about 96% of students in Africa have been left out because of a lack of access to technological resources, devices, and support needed for effective online learning. Only 4% of the students in Africa have forged on with learning through sophisticated soft and hardware, high performing devices with well-trained faculty (Berry & Hughes, 2020; Crawfurd, 2020). Similarly, in Kenya, very few students, mainly those living in urban areas have access to online learning. Whereas, the majority of students from rural areas, and the vulnerable groups or communities in urban slums, and refugee camps can barely afford to access internet services.

Coronavirus is laying out new layers of economic disparities that may end up setting our society back even further. Coronavirus has reduced the economic capacities of most families and those who cannot pay are likely to drop out. Also, those with insufficient funds to enroll in higher education may opt for technical colleges even if they qualify for University. Right now, students from low- and middle-income families are deciding if they will start college or defer.

COVID-19 has also exposed deep gender inequality and inequity that exist in higher education institutions. As the economic effect of the pandemic continues, women are likely to bear the greater brunt. Women are likely to become unemployed as some institutions have resulted in stopping all contracts and casual workers as a way of coping with COVID-19. A majority of women are affected because they fall into this category of workers. With the upending of daily life and the shift to virtual learning that is a challenge to everyone, women take on additional work as households and caregivers. Moreover, women are likely to be used to cushion families' income. The situation exposes women to risks of sexual exploitation and gender-based violence (Parsitau & Jepkemei, 2020), which is likely to put women students at high risk of dropping out when universities reopen compared to males. The statistics already show an increase in pregnancy among adolescents in Kenya.

Although the future is uncertain, the COVID-19 crisis has proved that education institutions will never be the same as it has always been. It is, therefore, important to consider equitable access to resources in covering up for the lost time during institution closures. Meeting the needs of all students, especially girls and those from low-income families, students living with disabilities should be a priority for the nation and all institutional leaders.

Management of Staff and Students' Needs during COVID-19

Higher education institutions were at the forefront in responding to COVID-19. The level of response to the pandemic, however, depends largely on institutions' leadership, whose decisions may affect the future. As institutional leaders are likely to deploy resources and time to what they consider as a major priority.

The abrupt closure of learning institutions left many faculty members, staff, and students struggling to keep a sense of normalcy besides experiencing their uncertainties, fears, and anxieties. At such time it was prudent that higher education institutions come up with a mechanism to assist staff, faculty, and students to deal with the psychological and social effects of COVID-19 during the pandemic. At such time everyone be it staff, faculty, and students seek compassion, caring, and communication that acknowledges the brunt of the pandemic they face (Wu et al., 2020). It is imperative that higher education institutions reach their community and assure each of flexible and reasonable

accommodation, to show that the institution cares for their wellbeing. Institutional leaders could also create a virtual community that allows staff and faculty to check in with each other, resonate with each other's experience and make room for a new normal.

Surprisingly, there was no evidence on how higher education institutions in Kenya addressed the effects of abrupt closure of learning institutions and social distancing on students. Yet, students' mental health has been reported to have a high effect on students' outcomes, such as well-being, readiness to learning, and completion (Chessman & Taylor, 2019; Wu et al., 2020).

Discussion of Strategies for Responding and Managing the Effects of COVID-19 Pandemics in Higher Education

Following the coronavirus (COVID-19) pandemic outbreak, the World Health Organization led the world in an effort to respond to the virus. The WHO warned the virus could spread and all nations needed to do everything they could to prepare for the pandemic (UNESCO, 2020). Since there was no panacea to the pandemic, the WHO recommended that nations carry out several activities currently, namely testing, contact tracing, quarantining, social distancing, wearing of masks, and staying home. These efforts enhanced response capacity to the pandemic.

To ensure adequate response to emerging challenges, Higher education institutions must focus on quality, relevance, and quickness. This can be achieved through a more coordinated and collaborative system inclusive of not only institution leaders, administrators, faculty, and students, but funders, government policymakers, and international agencies (United Nations, 2020). For instance, one of the major effects of COVID-19 in higher education institutions includes a reduction in funding and cash flow. Institutions have lost cash that was emanating from auxiliary services, hostels, and cafeterias, besides the high cost of mounting online learning. To respond to the challenge of a reduction in cash flow, Friedman et al. (2020) suggested that institutions need to restructure their operations to fit their already thin budget. Moreover, institution leaders need to consultatively develop a rolling forecast of their revenues and expenses and closely monitor it (Friedman et al., 2020). Though forecasts are never perfect, they can help detect any shortfalls that need to be addressed.

The move to online teaching and learning as a new normal in an attempt to maintain social distance came with challenges related to student engagement, socialization, and the need to modify the curriculum to fit the current situation. Powerful learning occurs only when students are engaged, energetic, and focused (World Economic Forum, 2020). This aspect, however, is completely missing in online learning. As institutions adopt online learning as the new normal, they must modify the curriculum, contact time, and teaching strategies to ensure students stay engaged during remote learning.

Moreover, as much as institutions are working to ensure online learning is effective, they need to be aware of other factors such as anxiety, fear, and isolation that come with COVID-19. Faculty, therefore, need to think about building a community of learning where students can reach out to others to share their experiences.

Besides, enhancing infrastructures for online learning, holding technical training workshops for faculty, staff, and students, higher education institutions should plan to have an inclusive approach at the time of crisis. This will ensure that marginalized students including those living with disabilities are not left out. Besides, institutions should develop a comprehensive plan and a rigorous follow-up structure to ensure that faculty and students properly use digital platforms (Tamrat & Teferra, 2020). Moreover, as McWilliams Nsofor stated, it is imperative for each institution to have an epidemic preparedness and rapid response team to guide and advise the university on how to detect, prevent, and respond to infectious virus outbreaks (Sawahel, 2020).

Since it would be hard for institutions to project their enrollment as most students are likely to study in universities close to home or will defer studies because of inability to pay fees in this harsh economic time, institutions already in financial stress or are operating in deficit may consider merging some campuses or shutting down some units. The decision to do so may be reinforced by the uncertainty in state funding and the short-term unanticipated expenses. For instance, private and public universities alike are closing down some of their campuses.

Coronavirus has caused some form of a recession that is projected to last for at least five years (Bethwell, 2020; Meredith, 2020). The coronavirus induced recession on higher education in developing countries in Sub-Saharan Africa and South Asia is projected to have a significant effect on the flow of scholars between countries. Until the recovery period, countries together with their higher education need to rise as regional and local hubs in providing education during the recovery period. In that effort, national governments in developing countries need to create new markets for higher education. Before the pandemic, few countries and cities had gained the title of premier institutions, known for the quality degree. Of course, tuition and fees in these institutions are a bit high, but most individuals have been able to bear and are willing to sacrifice. COVID-19 crisis has presented countries with an opportunity to diversify markets for international students. As those would contribute to the nation's economic development and ensure affordability and quality in the education offered.

As a future strategy, higher education institutions need to increase partnerships and collaborations as an alternative way of operating. As Thornton (2020) stated, institutions need to re-evaluate their operations and structures to maximize shared services, increase centralization, and reduce duplication of duties.

Higher education institutions can only thrive when the staff, students, and faculty are mentally and emotionally healthy (Wu et al., 2020). Looking ahead, COVID-19 has taught institutions to keep mental health a priority by maintaining consistent and clear communication, supporting faculty and staff as they respond to the needs of students, planning, and budgeting for mental health, and ensuring equity in addressing issues related to mental health.

Moving forward, the COVID-19 pandemic offers an opportunity for higher education institutions to better prepare to deal with a similar crisis in the future. Though most institutions are still coping with the crisis of the situation, it is a learning moment for institutions to equip themselves with crisis management skills. This will increase institutions' resilience and agility when dealing with unforeseen circumstances in the future.

Conclusion

This chapter discusses some of the ways COVID-19 has influenced and shaped the future of higher education institutions. The literature showed that the COVID-19 crisis has disrupted activities and the operations of higher learning institutions in several ways. Due to the closure of learning institutions, institutions of higher learning abruptly shifted to online learning to continue engaging their students. While immediate online learning was considered as the best alternative, it was received with mixed feelings from stakeholders. Yet, it may be here to stay as a new normal. The literature showed that the COVID-19 crisis is likely to cause a decline in funding levels and resources for higher education institutions, a decline in student enrollment, a reduction in mobility of students and scholars across countries, and an increase in access and equity disparities that already exist in higher education institutions. Whereas some effects of the COVID-19 crisis are already being felt, others will be felt in the future.

To some extent, coronavirus brought some positive aspects to higher education. For instance, COVID-19 has forced institutions to accept and adopt the technology. Online learning may be considered as a cheaper and more advanced option of learning in the long run. Also, students and faculty may be reluctant to turn back to traditional face-to-face learning after experiencing an alternative mode of learning at a cheaper cost. The experiences during the COVID-19 are a catalyst for institutions to improve their digital interactions with students and other stakeholders.

The chapter also illuminates strategies for responding and managing the effects of the COVID-19 crisis in higher education institutions. As noted from the literature, these strategies are intertwined and require a coordinated and collaborative system that is inclusive of not only institution leaders, administrators, faculty, and students, but funders, government, policymakers, and international agencies. Moreover, while the strategies and the management approaches suggested may not be an all-encompassing canon to resolving pandemics in higher education institutions, they certainly are a step towards getting institutions of higher learning prepared to handle pandemics of such magnitude in the future.

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*STARSCHOLARS

Praises for this volume

COVID-19 pandemic and digital innovation are making unprecedented disruption to the global higher education landscape. These disruptions have increased academic discussion on how to reimagine the future of higher education after post-COVID 19. Thus, the book, Global Higher Education During COVID-19: Policy, Society, and Technology problematized these realities from a global policy context with policy recommendations on issues of racial justice, funding, technology among others. Therefore, I would like to congratulate the editors: Joshua S. McKeown, Krishna Bista, and Roy Y. Chan for this excellent publication.

Dr. KS Adeyemo, Senior Lecturer, University of Pretoria, South Africa

Global Higher Education During COVID-19: Policy, Society, and Technology is a highly recommended resource for higher education institution policymakers and educators around the globe. Not only does this book provide invaluable insights from higher education institution policymakers, educators, and students during the COVID-19 pandemic, but it also offers useful suggestions on dealing with possible challenges and seeking opportunities in future higher education.

Dr. Misty So-Sum Wai-Cook, Centre for English Language Studies, National University of Singapore

It's a timely book reporting the most recent responses of international higher education across the world during the Covid-19 pandemic. Besides providing the theoretical contributions, the book also offers practical implications for stakeholders, including policymakers, education managers and practitioners, international students, and parents.

Dr. Hiep Pham, Director, Center for Research and Practice on Education, Phu Xuan University, Vietnam

Global Higher Education During COVID-19: Policy, Society, and Technology is timely and relevant providing a critically engaged reflective account of geographically diverse higher education institutions' response and practice during the COVID-19 pandemic. This book illuminates some of the current

impediments to higher education internationalization within the context of COVID-19 and provides insights into shared learning experiences that address new challenges to internationalisation imposed by the pandemic. A must read for international higher education specialists, practitioners, scholars and researchers.

Dr. Tasmeera Singh, Advisor, International Office, University of KwaZulu-Natal, South Africa

A worldwide phenomenon: Strategies and inspiration to address the challenges and opportunities for the new normal in the field of global higher education. I cannot recommend it highly enough.

Dr. Daisy Kee Mui Hung, Associate Professor, Universiti Sains Malaysia, Malaysia

The movement of people across borders furthered the spread of Covid-19. This inevitably impacted international higher education, which although not reducible to student mobility is its primary form. *Global Higher Education during COVID-19: Policy, Society, and Technology* is therefore a timely edited collection that begins to unpack the multifaceted impact the pandemic has had on higher education worldwide. It adds to the growing conversation on reimagining higher education. The collection will be valuable to current and future scholars of higher education, offering an important snapshot of policy and practice during the pandemic.

Dr. Will Brehm, Lecturer of Education and International Development, UCL Institute of Education, UK

With the COVID-19 crisis having upended higher education around the world, this timely book provides a deep and much-needed analysis of the roles and responsibilities of universities going forward. It sheds light not only on the shared challenges countries have faced, but also reveals how the impact of the pandemic has varied in important ways across countries.

Dr. Rajika Bhandari, Author/Advisor, STAR Scholar Network, USA

Case studies provide valuable baseline information for practitioners of higher education as the world begins to emerge from the pandemic. A must-read for those looking to understand how various regions reacted, and how institutional systems changed their models to survive.

Dr. L. Amber Brugnoli, Assoc Vice-President and Executive Director for Global Affairs West Virginia University, USA This book presents a comprehensive and rigorous worldwide account of Covid-19 impact, challenges and new opportunities. It stands out as a ground-breaking valuable companion for all those involved in the future of internationalization in higher education.

Dr. Elena de Prada Creo, Vice Dean for International Affairs Facultad de CC. Empresariales y Turismo, Spain

The STAR Scholars Network Titles

We seek to explore new ideas and best practices related to international and comparative education from the US and around the world, and from a wide range of academic fields, including leadership studies, technology, general education, and area and cultural studies. STAR Scholars publishes some titles in collaboration with Routledge, Palgrave MacMillan, Open Journals in Education, Journal of International Students, and other university presses. At STAR Scholars Network, we aim to amplify the voices of underrepresented scholars, epistemologies, and perspectives. We are committed to an inclusion of a diversity of racial, ethnic, and cultural backgrounds and are particularly interested in proposals from scholars who identify with countries in the Global South.

We value linguistic diversity. Although many of the volumes that we publish are written in English, we welcome proposals in any language. More information at https://starscholars.org/open-access/

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Global Higher Education During COVID-19: Policy, Society, and Technology Joshua S. McKeown, Krishna Bista, and Roy Y. Chan

Global Higher Education During COVID-19

Policy, Society, and Technology

Global Higher Education During COVID-19: Policy, Society, and Technology explores the impacts of the novel coronavirus (COVID-19) for institutions of higher education worldwide. Specifically, this book responds to the growing need for new insights and perspectives to improve higher education policy and practice in the era of COVID-19. The sub-theme that runs through this book concerns the changing roles and responsibilities of higher education leaders and the demand to rethink global higher education post-COVID. Topics in this book include: international student experiences, pedagogical innovations through technology, challenges to existing organizational cultures and societal roles, international academic relations, and shifting national policy implications for global higher education.

With the increasing threat of COVID-19 on all aspects of the global economy and workforce, this book serves as an opportunity for teacher-scholars, policymakers, and university administrators to reconsider and reimagine their work and the role of higher education in a global context. The ultimate goal of this book is to provide a critical reflection on the opportunities and challenges brought by COVID-19 and how tertiary education systems around the world learn from each other to address them.

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Policy, Society, and Technology

Editors Joshua S. McKeown Krishna Bista Roy Y. Chan



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Cataloging in Publication Program 101 Independence Avenue, S.E. Washington, DC 20540-4283 In memory of those who lost their lives during the COVID-19 global pandemic (as of August 2021):

4.38 Million

And to the 204 million heroes worldwide who recovered from the disease.



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Foreword

Yingyi Ma

COVID-19 is upending daily life, and its impact on global higher education (HE) is seismic. How to understand the impacts and improve policy and practice in the field of international HE during and post-COVID? Colleges and universities around the world are wondering about the above questions, and this book has provided a much-needed discussion for those questions.

The editors of this book have done a tremendous job in assembling a wide range of in-depth studies, both in terms of substantive topics and geographic regions. The topics range from the role of HE in society, crisis and innovation through technology in HE, international student experiences navigating the pandemic, national policies, international academic relations, public and private university responses, and the innovative engagement efforts of global HE institutions. Despite the expansive topics, various articles share the theme of exploring the traditional and changing roles of HE in society. Part I presents a few studies grounded in diverse national contexts that show how HE operates and adapts to society changed by the pandemic.

I commend the editors for their efforts to include a wide variety of contexts of HE institutions in different countries. While the impacts of COVID-19 on HE may be uncertain, what is certain is the increasing inequality among countries in dealing with the pandemic due to the unequal access to resources, technologies, and public health management. Part II in this book, in particular, focuses on the Global South (lower-income countries). The studies have shown the devastating impact on HE in countries of the global south due to the faltering economy during the pandemic as well as the incredible resilience of faculty and students in these countries to lessen the hardship through impressive innovations.

Technology-powered online education has been the quintessential innovation of 21st-century HE. Technology is liberating as much as limiting. COVID-19 has forced global HE to confront, leverage, and manage the power of technology to engage with students, experiment, and explore new pedagogy. The editors of this book have presented a wide range of empirically based studies in different HE settings to show that technology is indeed the double-edged sword, and it is incumbent on global HE leaders and educators to figure out innovative ways to use technology well, while fully recognizing and managing its limitations. Part III has been devoted to this theme.

This book is for anyone who is interested in HE in the global world, including but not limited to scholars, teachers, administrators, and students, and for any concerned citizens to reimagine and redesign the global HE in a new era.

Bio

Yingyi Ma is an Associate Professor of Sociology and Director of Asian/Asian American Studies. She is the Provost Faculty Fellow on internationalization at Syracuse University (New York), carrying the term between 2020 and 2022, where she leads and supports culturally responsive pedagogy and programs for international education and partnership. She received her Ph.D. in sociology from Johns Hopkins University in 2007. Ma's research addresses education and migration in the U.S. and China and she has published about 30 peer-reviewed articles and book chapters, in addition to books. She is the author of Ambitious and Anxious: How Chinese College Students Succeed and Struggle in American Higher Education (Columbia University Press, 2021). This book has won multiple awards from the Comparative and International Education Association and has been featured in national and international news media such as The Washington Post and Times Higher Education. She is the co-editor of Understanding International Students from Asia in American Universities: Learning and Living Globalization (2017), which has won the honorable mention of the Best Book Award from the Comparative and International Education Association's Study Abroad and International Students Section.

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