

Education during COVID–19: Reflections of Kenyan Scholars in the USA

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Abstract

The World Health Organization declared the Coronavirus Disease 2019 (COVID-19) a pandemic on March 11, 2020. In the aftermath of this declaration, nations and cities went into lockdown to mitigate and control the spread of the virus. Similarly, institutions of learning across the globe were shut down as most in-person classes were cancelled, leading to an influx of online classrooms. These lockdowns, the death tolls, and the emerging physical and mental health issues, have impacted education and other social and economic structures, causing great losses and uncertainties. The resulting global recession casts a long shadow over the future of education and livelihood. At the moment, not much is known how the current pandemic will unravel the future of education, but without a doubt, the COVID-19 pandemic, has significantly transformed traditional teaching and learning by moving them to a new learning environment. Virtual classrooms are now a game changer for the current educational system. This article highlights the lessons learned from the lockdown, propositions that will shape the future of education, the needed changes in education perspectives or policy, and prioritization of educational planning and developmental opportunities.

Keywords: COVID–19, Online Learning, Education System, New Normal, Pandemic

INTRODUCTION

The coronavirus (COVID-19) outbreak in Wuhan, China at the end of 2019, caused a major public health emergency, which culminated in a serious public crisis (Ahmed et al., 2020; Goh & Sandars, 2020; Zhou et al., 2020). It has been the world's most difficult experience since the Great Depression of the 1930s. Many sources of livelihood have been affected significantly from the measures taken to curb the spread of COVID-19, including lockdowns and social distancing. These measures have negatively impacted educational sectors in the world, including Kenya. Both private and public institutions have been shut down while administrators and faculty ponder a way forward to enhance students learning.

From the socio-economic standpoint, lockdowns cast a shadow of uncertainty, leading to strained livelihoods and possibilities of a recession. Many economic experts concur that the COVID-19 pandemic will have adverse negative effects on the world economy. Statistical projections have indicated that even the most developed countries would lose at least 2.4 percent of gross domestic product (GDP) in 2020 and a decreased growth of 3.0 to 2.4 percent (Al-Baadani & Abbas, 2020; Duffin, 2020). Although these predictions were made prior to COVID-19

becoming a global pandemic and the implementation of social distancing restrictions, global markets have since suffered even more dramatic falls (Duffin, 2020).

Kenya has not been spared this global agony. Its 2020 GDP is estimated to fall to -5 percent if the outbreak is not effectively contained, representing a loss of \$10 billion in GDP (Bellamy, 2020). Majority of Kenyan families are struggling to pay for food and rent as COVID-19 lockdowns have caused massive unemployment and stopped billions of dollars in remittances from the Diaspora (Adow, 2020). School closures have also had negative implications for learners in many ways. For example, those learners who rely on school feeding programs as their main source of nutrition no longer have this provision. Equally, finances and tuition payment, which had been a challenge for some students before the pandemic, are now more pronounced. Despite these challenges, another struggle for these students is anxiety and mental health. At the moment, the Kenyan government who would help has focused its efforts on strengthening the health system to contain COVID-19 and care for the infected, instead of economic issues.

Furthermore, during these periods of global economic instability, institutions of higher learning have not been spared and they have been heavily impacted with some laying off and furloughing their employees as a budgetary measure. While the pandemic persists, teaching and learning has not come to a complete stop in institutions with internet access, technology and electricity. In fact, the pandemic has become a boon for online education, media platforms, and learning management systems. Many entities are embracing new skills, new technology, and new ways of thinking while transitioning to new learning modalities. The new paradigm shift has intrinsically become part of life and has forced people to accept, adapt, and acclimatize to it accordingly. Although this shift is viewed as a perfect expectation, Gu, Hoffman, Cao & Schniederjans (2014) notes that the organizational culture and institutional agility are hurdles to implementing transitional changes. Additionally, many scholars doubt whether higher education is prepared for this new digital era (Crawford et al., 2020; Zhong, 2020).

The current COVID-19 education situation in developing countries—Kenya

Kenya is a beneficiary of the World Bank funds. Working with the ministries of education in many countries, this organization supports efforts to utilize technology to promote student-learning opportunities while schools are closed (World Bank, n.d.). Indeed, Kenya's Ministry of Education has offered guidelines to enhance teaching and learning. To date, four platforms are being used to deliver educational programs and resources (World Bank, n.d.): First, Kenya Broadcasting Corporation (KBC) has partnered with other radio stations to broadcast radio programs during weekdays on multiple channels such as Radio Taifa, Iftini, and others. Second, education television broadcasts have begun showing the Edu Channel TV, owned by the Kenya Institute for Curriculum Development (KICD). Third, television programming is available via livestream on KICD's EduTV Kenya YouTube channel. Fourth, learners can access digital learning resources from the Kenya Education Cloud, hosted by KICD. For families without electricity or solar panels, Internet, TVs, and etcetera, at the onset of the pandemic, had to collect and return class assignments; however, this approach was not sustainable.

Although making content available to Kenyan learners is a good plan, Internet bandwidth coverage in remote areas of Kenya is poor. For this reason, Kenya Civil Aviation has partnered with Alphabet Inc. and Telkom Kenya to float Google's Loon Balloons to provide 4G-LTE Internet connectivity to rural and remote area (Feleke, 2020). However, this is not sufficient because people in many of these communities live below poverty levels and cannot afford to own

smartphones or laptops to enable them to access content. While learning may take place in urban areas, COVID-19 has sealed the learning fate for the marginalized children who live in remote villages. Since the only available models of education during the COVID-19 pandemic are tethered to Internet access and broadcast stations, a significant percentage of students are missing out on educational opportunities across the country. Thus, is this not the right time for the government to act? Is this not the right time for the government to develop a sound learning infrastructure that takes into consideration all the limitations mentioned above? Is this not the right time for teachers to be creative, pay forward and service their students? Is this not the right time for parents or guardians to explicitly homeschool their children in both formal and informal learning?

The aim of this article, therefore, is to shed light on the lessons and challenges facing Kenya's educational institutions, explore lessons and opportunities for planning, developing and executing learned opportunities, and set forth recommendations for reflection in ways the education sector can overcome the impact caused by COVID-19 pandemic. Note that this pandemic is unusual and an unexpected occurrence; thus, emerging issues and reflections herein may be scattered, yet still core to a new normal in academia to Kenyan stakeholders in both US and Kenya. The questions below guided our reflections on education during March-June 2020. The quoted reflections also stem from the responses that the authors shared with a television program, Kenya Digital Radio and Television (KDRTV) that aired on July 14, 2020 and can be accessed at the website: <https://youtu.be/AERA9pvF2gU>. The panelists were Patrick Mose, a Kenyan instructional designer at Ohio University, Penina Kamina, a mathematics educator at SUNY Oneonta, and Bernard Marasa, a drug safety reviewer with the U.S Food and Drug Administration (FDA).

Questions:

1. What lessons from the coronavirus pandemic will shape the future of education?
2. What lessons have we learned from the lockdown, both for the short and the long term?
3. How should parents, teachers, professors, and community leaders adapt their approach to education?
4. How can we, as an immigrant US community, use online education to our advantage?
5. How has COVID-19 changed the status of U.S international students? What are some of their coping strategies?
6. What words of wisdom can you offer to Kenyan educators and policy makers?

DISCUSSIONS AND REFLECTIONS

In this section, we give our responses, viewpoints and reflections on four of the six questions. Responses to the first question are woven into the other four, while the sixth question is part of the conclusion.

What lessons from the COVID-19 pandemic will shape the future of education in Kenya?

Lockdowns and economic devastation due to COVID-19 are the new issues to contend with in life. For this reason, there are a lot of stories of what the current crisis is uncovering about our society, economy, and educational systems. Although the lessons are tough, Patrick Mose, speaking on this

very issue, points out that this is an opportunity for educators to reflect, grieve, and make decisions going forward. He suggests that:

... learning has stepped up to a whole new level because of a combination of anxiety, fear, boredom, isolation, all of these things have catalyzed people to build a sense of community in online environments. And because of these, learning online ...and became a new normal. So, the future of education, I see it as a modification of a curriculum that fits the current needs caused by the pandemic. (KDRTV, 2020)

As a result of this shift, online learning has increasingly grown exponentially in many ways as discussed below. First, online education is an important learning modality for all to consider implementing. It is flexible, adaptive, and allows for enhanced individualized, authentic, and autonomous learning (Gacs et al., 2020). Many educators, teachers, and learners were not keen on online teaching and learning environments before COVID-19 pandemic. Kamina (KDRTV, 2020) notes the change to using technology and virtual teaching has become the lifeline of education. She insinuates that people have not yet taken advantage of the best practices of online learning tools by exploring the “fullest extent of these technologies,” but moving forward, she thinks that educators, teachers are going to take online learning seriously.

Secondly, enhancing learning through collaboration is another important lesson COVID-19 has taught society. Educators, teachers, and learners can connect digitally in online spaces using videos, audios, and texts. Creative Commons License, a copyright license that enables free distribution of creative works, has given us opportunities and rights to share, use, and build upon other people’s works. Kamina (KDRTV, 2020) reports that people have become generous in collaborating and sharing resources—there are significant amounts of new information on the open educational resources that people can access without membership requirements, including some textbook from publishing companies and free sharing of scholarly resources on various websites.

Besides collaboration, flexibility and adaptation are important lessons to be learned from this pandemic. To clarify, Marasa explained that:

...We have to learn to adapt. Life sometimes throws curve balls and this pandemic, COVID-19, is a perfect example of that. And one of the easiest or simplest lessons that I can pick right from this pandemic is that as human beings, we have to learn to adapt. One of the key things, a lot of companies have had to adapt is, of course, to allow their employees to work from home. (KDRTV, 2020)

This idea of adapting to new modalities, be it in academia or other sectors, is a new norm that we must all embrace for our very viability. This cannot happen without planning and preparation. Unfortunately, COVID-19 caught most institutions off guard. There was little time to prepare for remote-online teaching. Faculty had no adequate preparation time to transition online and, thus, course design, and delivery was affected because all in-person classes were cancelled unexpectedly.

Planning and preparation for the future should be taken into consideration moving forward. Policy administrators should take an active role in identifying both short and long-term goals to avert future disruptions should another crisis arise. Marasa affirms that preparedness is a very important aspect that should be observed and considered since pandemics or natural disasters are inevitable. Similarly, Mose notes that this planning should encompass all stakeholders, because the COVID-19 pandemic has relatively necessitated self-made learning experts to plan for a new kind of future that is accelerated to an online environment. This calls for planning and flexibility

that has to be manifested in institutional policies, especially those that promote meaningful professional development and investment in faculty and staff. Thus, creations of policies that are geared towards having a sustainable way of handling crises in the future are urgent.

How should parents, teachers, professors, and community leaders adapt in education?

Education discourse has been influenced lately by many factors, including emerging technology trends, the COVID-19 pandemic, and other socio-economic factors. A common denominator that connects these factors is parents' involvement in the academic success of their children. During this COVID-19 pandemic, it is critical to engage parents, teachers, and community leaders to ensure that learning is successful under the current situation. Positioning parents as experts is crucial, since parents have in-depth understanding of their children. Seale (2020) explains that they are uniquely positioned to accumulate a wealth of knowledge about their children as learners. He maintains that there is no better way to personalize instruction than through a parent. Parents and teachers have complementary skill sets and a common purpose of helping students learn and succeed.

Homeschooling is a relatively new concept among Kenyan parents because majority of them are accustomed to abdicating teaching and part of their parenting responsibilities to teachers. For this reason, COVID-19 is a disguised blessing that drove many parents to take critical steps in owning the responsibility of homeschooling their children and collaborating with teachers to facilitate online learning during the pandemic. Kamina explains that teachers are trained, for the most part, to see how to involve parents, guardians, and caregivers in the learning of their children and many teachers do not follow-up on it. Although she is skeptical that prior to COVID-19 teachers and parents worked together, the pandemic has ushered new ways for them to collaborate. For example, teachers can encourage parents to come up with creative ways to engage learners using extracurricular activities. Laying emphasis on informal aspects of education, Kamina appeals to all stakeholders to educate communities to on childcare and upbringing responsibilities. This appeal is a call to return to societal norms.

The responsibility of educating the young was a communal affair, but has lately changed due to legal liabilities for care and discipline-related concerns. Marasa advises parents to encourage their school-age children to collaborate with their teachers and use them as mentors (KDRTV, 2020). He recommends that mentors adapt their pedagogy to suit the online model whereby they guide the students to learn, but not dictate to them. This approach helps students attain the special skillset essential for them to achieve mastery in the required content area.

How does the Kenyan immigrant in U.S. use online education to their advantage?

Mose (KDRTV, 2020) states that learning in the future will be different, thus it is worth exploring the need to build a resource bank for online learning. Although this practice is not a common phenomenon among Kenyan immigrant communities, embracing new online teaching and learning practices while changing attitudes to favor this relatively new mode of learning is long overdue. Digital skills are vital for our survival even after the COVID-19 era, and many will need the 21st century learning skills (Hallerman et al., 2019) and metacognition. Mose points out that “moving forward, we need to start building or developing our digital literacy. It is also something that comes [gradually]” (KDRTV, 2020). The immigrant community will need to reset their goals to adapt quickly and apply what they have learned to solve new and novel problems.

How does COVID-19 change the status of international students from Kenya?

To be an international student in the U.S. means undergoing a competitive vetting process by both the U.S. consulate and the institutions to which they apply. Once admitted, students have to adhere to a strict code of conduct and also live within the parameters of their visa requirements. As such, international students need to navigate the system judiciously, get to know how it functions in order to avoid any violations that could lead to their removal from the U.S. Again, international students have not been spared by the socio-economic impacts of COVID-19. Since their visas restrict them from working off campus for extra income to support them, many students are struggling to meet their living expenses. Subsistence under these circumstances is a challenge for many international students, as most of them depend on teaching assistantship stipends for their living. The cost of living is escalating with no reliable income or prospects of working outside campus for extra income due to visa restrictions. Though there are not many tenable ways to fix the current circumstances, the United States Citizenship and Immigration Services (USCIS), offices for students and faculty services, offices of global studies, and the federal government should explore special exceptions to allow international students to work off campus until the pandemic is over.

By and large, students should never waive health insurance or legal fees. Mose advises that once these fees are waived, it is very difficult to re-enroll, leading to the college administration's financial trouble. Contrarily, Kamina suggests some coping mechanisms that students can apply to sustain their psychosocial and mental health and self-care. She indicates that most campuses have activities that will take international students to where Americans live. There is need for international students to put an effort in making friends with Americans. A friendship, in this context, is crucial to ensuring social and emotional stability.

An important lesson that international students need to learn is building a community—a sense of brotherhood and sisterhood where they remain keepers of each other. International students may also join other professional organizations such as Kenya Scholars and Studies Association (KESSA), Kenya Diaspora Alliance (KDA), and Kenya Students in Diaspora (KESID), where they can network professionally and participate in and benefit from internships and diverse mentorship opportunities. Many Kenyan scholars have expressed willingness to be part of advisory boards of various organizations where they can serve as pro bono advisors.

CONCLUSION

In this section we propose ideas to shape the future of education—the *new normal* educational recommendations.

The COVID-19 pandemic has driven many educational stakeholders to rethink how education needs will be addressed in different contexts. Throughout the pandemic, our reflections are mainly focused on COVID-19 learning challenges and solutions. We provide a set of recommendations that might help to overcome similar challenges in the future. These recommendations may be advanced to help shape the dialogue for the future of education, beyond this COVID-19 pandemic:

- Planning and preparedness for a crisis
- Training teachers—professional development and technology support
- Online learning
- Hybrid–flexible education system

Planning and preparedness

As history has shown, pandemics have dissipated and reappeared with some degree of continuity in the past (Fontanarosa & Bauchner, 2020; Lauer et al., 2020; Shaw-Taylor, 2020). Thus, one of the most important challenges facing the global community is coping and moving alongside COVID-19. Experts postulate that this pandemic may return in a more or less virulent form. Setting priorities and planning for preparedness is the best strategy moving forward for any crisis. Institutions should make plans because the pandemic trends will continue, while being vigilant in responding to any adjustment or regression to normal patterns of living. COVID-19 is disruptive and requires great reconsideration of development priorities, policy change, and sustainable resource allocation. For successful planning and implementation of change, panelists recommended adopting an open-minded approach to embracing change and development. Mose suggested that thinking creatively and out of the box is the best bet, "... the future of education, I see it as a modification of a curriculum that fits the current needs caused by the pandemic" (KDRTV, 2020).

Training, professional development, and technology support

Before embarking on training and professional development, Kenya should carefully understand her needs and context. Mobile technology is relatively advanced, but many other technologies and platforms needed for virtual learning are at foundational stages of development. Additionally, prudent decisions regarding budgets for software licenses, subscriptions, offices, and training infrastructure are needed. We recommend establishing faculty innovation centers and hiring of instructional designers and technologists who will address professional development training needs and help develop an infrastructure that will promote the successful execution of e-learning.

Online learning

Sub-Saharan Africa has a very good IT infrastructure (World Bank, n.d.), such as high-speed bandwidth, yet it is not integrated into the school system. The Kenyan Ministry of Education should integrate the existing IT infrastructure with the school systems to begin the era of learning using technology. COVID-19 cannot stop teaching and learning; instead, new skills, new technology, and web-based teaching and learning should be leveraged. While Kenya boasts of advanced mobile technology, issues of bandwidth are not common. Schools should take advantage of high-speed bandwidth connections to implement online learning. In addition, policy makers should explore the implementation of competence-based curriculum where learners can make real-life connections with what they learn.

Given the dangers of COVID-19, in-person instruction would be an irresponsible undertaking, without proper social distancing measures being in place and given the financial challenges. Learning management systems (LMSs), the online tools used to support content delivery, assessment, and organization (Sejzi & Aris, 2013), play a vital role in bridging the gap of connecting learners and content. Use of LMSs in Kenya is still at an early stage and is not so common in many institutions. The Ministry of Education should consider building an LMS infrastructure across the education system. Post-COVID-19, it appears that the trend may shift towards virtual universities due to affordability, where LMSs will provide opportunities to manage learning, administration, and development of suites to manage content, as well as communicate with students.

Although cost is a factor in establishing LMSs, many open-source versions are free of charge, including Moodle, Myicourse, Sakai, Forma LMS, Dokeos, and Google Classroom. We recommend that the government should consider exploring the use of Moodle and Google Classroom LMSs. Both are free and open-source platforms that enable users to create customized courses. Sharma (2020) explains that LMSs offer tools that manage virtual classrooms, generate certificates, and measure learners' success. LMSs have social learning functionality that allows learners and instructors to send direct messages to each other on course forums. An incremental approach of implementation is proposed to initiate and implement these suggestions.

Hybrid-flexible education system

Online learning has not yet fully been developed in Kenya. Many stakeholders concur that there is a need to initiate faculty development centers and community centers that will promote digital literacy and other 21st century skills for learning in Kenya, but the Kenyan education system has consistently followed traditional teaching methodologies. Shifting from traditional to technology-based learning is a classic paradigm shift in the Kenyan educational system. There is a dire need to explore new learning opportunities that have arisen from the disrupted economic situation by creating new avenues of success to survive the pandemic situation. It might be the right time for Kenya to adopt a hybrid-flexible (HyFlex) design model for teaching and learning to accommodate different learning needs and scenarios. The HyFlex course design delivers a student-directed multi-modal learning experience. Students choose between attending and participating in class sessions in a traditional classroom (or lecture hall) setting or online environment (Beatty, 2019). Online participation is available in synchronous or asynchronous mode; sometimes combined online and sometimes, only the online mode. As policy makers continue debating about opening in-person or purely online instruction, the HyFlex model gives them both opportunities to open schools responsibly.

Suggestion

We encourage the Kenyan government, and any interested stakeholders to explore the above recommendations to address immediate concerns facing their institutions while thinking about future infrastructural aspirations. As COVID-19 continues, virtual classrooms are a game-changer for education systems around the world.

The pandemic has opened considerable opportunities to re-shape the education system that will focus on emerging trends in technology. Initially, many educators, teachers, learners, and institutions approached virtual classrooms with cautious optimism, but that has since changed due to lack of other learning alternatives during the pandemic. As authors, we are not calling for an instant or immediate transformation to online learning. However, we believe these recommendations of establishing and implementing a hybrid education system will develop capacities and move Kenyan institutions of learning forward.

It is reassuring to note that the 21st century classroom is not passing as a fantasy, but rather serves as a perfect layout for a 21st century learning characterized by competencies such as collaborative learning, digital literacy, critical thinking, and problem-solving skills essential for schools to help learners thrive not only in today's world, but also in their future.

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