

## GUEST EDITORIAL

### How to Frame a Resilient E-Learning Strategy During & Post-COVID-19



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#### **Introduction: Conceptualizing COVID-19 as an Act of War**

As Robert Greene puts it in his work, “.....life is endless battle and conflict.....”, the success of winning any battle, lies in the ability to identify the enemy and maintain your mental power, whatever the circumstance [1]. In this article I have likened the ravages of COVID-19 to the effects of warfare. Going back to Greene’s assertion on how to identify the enemy, the World Health Organization (WHO) did exactly that by recognizing the invasion of human population by the novel coronavirus (COVID-19) and announcing the epidemic disease as the global crisis on January 7, 2020. Consequently, on January 30, WHO pronounced the disease, a public health emergency of international concern (PHEIC). Medical professionals named the virus SARS-CoV-2 due to severe acute respiratory syndrome it caused [2]. As of 03 August, 2020, 18,056,310 confirmed cases and 689,219 deaths had been reported worldwide. 957,830 (5.3%) cases have been reported in Africa [3].

Scientists and researchers across the world are in the ‘race’ to develop a vaccine. However, considering the ethical issues and efficacy standards required for this process, it might take longer for a vaccine to be developed. Thus, countries have to rely on nonpharmaceutical interventions to put the transmission under control, including, social and spatial distancing, testing, contact tracing, isolation and treatment, and observing general hygiene standards. However, emerging modelling studies continue to reveal a grim situation; even though these practices were designed to slow down the rate of community transmission, unfortunately, in most countries, the epidemiological curve remains stubbornly on an upward mobility [4]. Worse still, the health system capacities are not able to meet the hospitalization needs due to the spiking cases of COVID-19 [5]. One thing the coronavirus has revealed in the society is the breadth and depth of spatial

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inequalities. These inequalities span from health systems to the inability of less developed countries to innovate new forms of normalcy across sectors-economy, social services and more importantly, education. Specifically, there seem to be an endemic lack of technological capacity to institute e-learning across levels of education in Africa.

### **Questioning Africa's Preparedness for Pandemics**

Concerns have been raised about the preparedness of African countries for pandemics generally, and COVID-19 in particular [6]. The 2019 Global Health Security Index, reveals a damning report; 14 out of the 18 least prepared countries come from Africa [7]. In terms of readiness, 21 out of 47 (45%) of countries in WHO African region have low operational readiness capacity with none ranked as having the highest level of operational readiness [8]. The operational unreadiness would mean, access to developmental services such as education remains bridled. Although the continent has previously managed other pandemics such as the Ebola outbreaks in DRC and West Africa, with progressive lessons that can inform COVID-19 response, the epidemiological uniqueness of COVID-19, calls for a different management strategy. The new management strategy should be one that triumphs the current piecemeal intervention to embrace a comprehensive approach. For example, instead of viewing the challenges posed by COVID-19 as exclusively a health issue, authorities should begin to frame it as a societal disruption that requires a compound solution.

Unfortunately, in the heat of COVID-19 battle, the minds of the government establishments coordinating the fight has tended to lose the balance. Most of the Ministers/Cabinet Secretaries charged with the responsibility to coordinate government policies have wasted time 'dreaming' of when the curve will flatten in future, instead of engaging in the present to chart the way forward on how to re-imagine the new normalcy. Most of them wear straight jacket mind, simply unable to enter new territories. But we know that their resistance to get into new territories or comprehensively respond to the disruption caused by COVID-19, they are simply buying our valuable *time-time to recover, to think, and to regain perspective*. It is simply not possible to accomplish anything, by doing nothing. In Kenya, for example, the CS's directive to open schools in January 2021 was simply lack of a grand strategy; inability to look beyond the battle and calculate a head. The suggestion by the Ministry of Education to have children 'learn under a tree,' is an insult to the learners in the era of 4<sup>th</sup> industrial revolution (4IR). Such ludicrous directives by the bureaucrats demonstrates their culture of mental *uncertainty*. Yet, we know that, in the battle field, projecting such a messy and incomplete conclusion can easily reverberate for a long time; symbolizing a lack of strategic wisdom, on when to plan for a realistic exit from the pandemic.

A challenge now facing most services, and especially the education sector in Africa is that, owing to years of neglect and the underdeveloped infrastructure for *e-learning*, the societal disruption caused by COVID-19, has essentially pushed the sector "*off the grid*", and as such, difficult to continue learning and teaching. Since there exist no evidence that COVID-19 transmission will be exterminated by January 2021, a majority of school going children and college students in these countries will continue to be *locked* out of educational development. This 'educational starvation' will not just lead to longer-term

diminished quality of life, it will exacerbate the already existing gap between the ‘have’ and the ‘have- not’ in the society. The question of socio-economic disparity has been worsened by the dredging irk of ‘digital divide in the global south. Addressing these types of socio-economic ills would require mind- set change. For instance, as a society, we have to begin viewing threats posit by COVID-19, not necessarily as *stressors* but as a process of rebuilding the societal *resilience*. Rather than ‘*waiting for the curve to flatten*’, those entrusted with public policy should invent counter-strategies to match the expectations of students. Put it differently, they should realize that, one’s rationality is the last lines of defense. How then do we build *resilience* amid *stressors* caused by the COVID-19?

### **How do we Leverage on Resilience for E-Learning?**

Resilience has been defined differently by various schools of thought. The definition by Anne Masten [9], seems to capture the essence of my article: “it is the capacity of a system to adapt successfully to significant challenges that threaten its function, viability or development.” One of the systems disrupted by COVID-19 is the education sector. According to UNESCO’s April 2020 report [10], more than 290 million students are out of school due to COVID-19. With 40% of poorest countries having no support for disadvantaged learners during the COVID-19 pandemic [11], there is an evident need to respond to these disparities in ways that account for and ensures educational continuity. But the COVID-19 pandemic is definitely not the first crisis in modern human history. Indeed, evolution of human adaptation has been witnessed during the World Wars (I & II), the 1918 Spanish influenza, and the Great Depression that lasted from 1929-1939. In fact, it is believed the science of resilience seems to have evolved out of these global events [12]. These events inspired scientists to seek better ways of understanding how adversity threatens human survival and what could be done to mitigate risks associated with disasters [13]. In view of the anticipation of disasters, researchers conducted studies on traumatic losses, violence, homelessness, and the consequences of disasters [14]. Inadvertently, these studies concentrated on the negative consequences of adversity. The challenges were conceptualized in terms of stressors, dysfunction, breakdowns and other problematic outcomes [15]. This approach to understanding adversities is somewhat problematic, because the challenges are absolutely perceived in terms of vulnerabilities. Yet, from human evolution point of view, for every adversity there must be a ‘*silver lining*’, of some sort. As a sign of relief from the initial *closed thinking*, the great insight of pioneering scholars of resilience recognized the importance of promoting positive adaptation side of adversities [16].

As we appreciate the pioneering work of the scholars who viewed adversities as a continuum, and especially the positive end of it, it would be important to suggest how this approach can be helpful in supporting the e-learning processes in the face of COVID-19. Even though online learning is relatively a new phenomenon (the first course delivery via the web having started in 1994), there are several options available for learning institutions to customize to their needs. They include: *ad hoc* online courses and programs; fully online programs, school-as-a-service; educational partnerships; competency-based education; massive online courses (MOOCs); and the blended and the flipped classroom.

The blended learning platform is, particularly ideal for universities, at a time when physical interaction is restricted due to the pandemic. The model is highly structured to combine *online* and *face-to-face* class time. Rather than creating an atmosphere of *uncertainty* on when learning should resume, universities have the opportunity to create *flipped* classroom content from face to face to online delivery [17]. This model can also allow practical courses time for actual application through the face to face hours or computer-aided simulations. Whilst the *stressor* approach to the management of adversities concentrate on the incapacities caused by restriction of physical interaction, the *resilience* continuum could allow for videos to form part of the online content-dissemination portion of a course to either replace or augmenting material from the professors. Studies continue to emerge showing widening inequalities in access to educational facilities amid COVID-19 [18]. In this case, the solution to access problems lies in the MOOCs model of e-learning. In a MOOC model, the content and breadth of the course is scaled to enable unlimited number of students to take the course from the instructor. The flexibility of this approach then helps to replace the master course concept by leveraging on the natural scaling power of online tools.

#### **Advise to the African Bureaucrats and Political Elites**

E-learning has the potential of dislodging the traditional ‘rot’ learning that is based on the “*I need to pass exam*” attitude. According to the Education Corner [19], rot learning has been found to stagnate retention rate (only 10% participation) and 90% teaching. Educationists have observed that this has negative implications on not only retention but also application of knowledge within the ‘learning pyramid.’ Teaching as a method of transmitting knowledge is well executed in face-face experiences. However, with safety-related challenges posit by COVID-19 and other foreseeable pandemics, the popularity of class-room learning is diminishing.

Finally, for e-learning to navigate through the infrastructural limitations, the concept must address the following limitations: engage students in the development of content; develop revenue models to make the concept self-sustaining; enable students actually perceive the value for the online learning; address the issue of digital divide by bridging the access gap between the rural and urban students; and authenticate students so that accrediting institutions are satisfied that a student’s identity is known. From the foregoing, it is, clear, that the grand strategy in winning the battle against COVID-19 and other unforeseeable pandemics is to dissolve the threat into the twist, turn off the battle, and train our bureaucrats and political elites on how to ‘read and understand the threats’, ‘how to pick up the signals’ and ‘when to attack the enemy from the most vantage point.’

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