



The Covid-19 Pandemic and TVET Learning- A Critical Perspective

Susan Wanuri Ngure ^{a*}

^a *School of Business Management and Economics, Dedan Kimathi University of Technology, Kenya.*

Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

Corona Virus Disease of 2019 (Covid 19) emergence has had a huge impact on all levels of learning. The disruption to training was unprecedented in all parts of the world. TVET being a physical and interruptive process is still reeling from processes that were initiated to cope with diverse ways of dealing with the disruption. Such activities like digital and remote learning, was not only difficult to be impactful but also difficult to implement. The speed at which experimental learning methods were being introduced was potentially harmful.

Kenya being in the developing world experienced immense challenges in coping with training during the COVID pandemic. All training institutions were closed and various training methods hastily suggested.

This paper gives a critical perspective of the pandemic, it's effect on training, the government response and the opportunities arising from the experience. The paper borrows from researchers, Kenya government documents and pronouncements, and institutional (such as UNESCO, World Bank and ILO) documents to expound and analyse on how COVID 19 affected TVET learning.

Keywords: COVID; TVET; funding; mitigation.

**Corresponding author: E-mail: sngure37@gmail.com;*

1. INTRODUCTION

On 30 December 2019 ophthalmologist Li Wenliang, based in Wuhan, the capital of the Hubei Province of China, alerted the international community about the outbreak of a novel coronavirus [1]. He was immediately detained by the local police and died shortly afterwards. Within no time, infections were increasing rapidly around the world followed by mortalities. Soon an illness that was aptly named Corona Virus Disease of 2019 (Covid 19) was acknowledged by the medical world. The disease which was caused by a group of viruses not only affected humans but also animals and spread through the air. As the threat became evermore evident, the world was alarmed. In January 2020, the World Health Organization (WHO) declared the coronavirus outbreak a public health emergency of global concern.

The first Covid-19 case in Kenya was reported on 13 March 2020, spreading fear among the population [2]. To contain the virus, the government put in place confinement measures to reduce contact between people. The resulting Covid-19 lockdown measures had a severe impact on the economy as most people could not go to work or open their businesses. The years 2020 and 2021 saw the disease become unrelenting, metamorphosing to different strains, with dire social economic effects on national economies and their individual citizens.

Globally, the effect of the pandemic has been felt in all sectors of the economy, employment, and education and training [3]. The International Labour Organisation (ILO) [4] estimated that 114 million more jobs were lost in 2020 compared to 2019. The brunt of these losses were the youth and women, exacerbating job inequalities. As COVID spread around the world, the response to it took a multi-sectoral approach. For instance, in February 2020, the World Bank established a multi-sectoral global task force to support country response and coping measures [5].

2. IMPACT OF THE PANDEMIC ON EDUCATION

Given the highly contagious nature of the Covid-19 disease, most countries' response in the education sector was to resort to social distancing and closing institutions of learning [6]. In Kenya, the government stated early enough that the health, safety and well-being of learners, trainees and teachers was a priority in the

provision of quality education and training [7]. Hence, all institutions of learning were closed on 15 March 2020, unsettling nearly 17 million learners nationwide.

With the closure of the institutions of learning, Kenya faced another crisis – reports of domestic violence, sexual harassment and drug abuse among learners started to emerge [8]. Further, the prolonged closures had a disproportionately negative impact on the most vulnerable students compared to the more affluent ones [7]. The negative impact was because the vulnerable students had fewer opportunities for learning at home, leading to learning losses. Furthermore, their time out of school may have presented economic burdens for parents who faced challenges finding prolonged childcare, or even adequate food in the absence of school meals.

When the institutions were closed, Kenya introduced digital learning to ensure learning continued. Digital learning, though well intended, aggravated the disparities between the lower and higher socioeconomic groups [9]. Parents who are well to do could afford digital gadgets, which enabled their children to continue learning from the comfort of their homes [10]. Unfortunately, most of the learners could not afford distance/digital learning.

Statistics show that in Sub-Saharan Africa 89 per cent of learners do not have access to home computers and 82 per cent do not have access to the Internet [11]. Additionally, UNESCO released startling data in 2020 showing that about 56 million of the learners worldwide live in places that do not have Internet connectivity. Digital learning therefore opened doors to unequal learning opportunities, which complicates the status of the underprivileged and the susceptible learners [12].

Online learning in Kenya has other complications. Extended online learning disengages learners from what they are used to—face-to-face interaction as well as feedback – and has the potential cost of reversing gains made in the learning process [13]. Furthermore, the country does not have a well-defined infrastructure for digital learning. The abrupt change meant that institutions and the government had limited time to prepare. Instructors and education officials also had limited knowledge of the new learning system and there was uncertainty about cost implications as well as issues around online assessment and

evaluation [8]. In effect, online learning in Kenya has had little impact, especially in the rural areas.

3. THE IMPACT OF COVID-19 ON TVET

It is widely acknowledged that most learners in TVET institutions come from lower socioeconomic households. In Ghana and Kenya, for example, those who attend TVET, compared with those who enter a general education track, tend to come from families with lower socioeconomic status (although they are not among the poorest in the overall population), as measured by educational level of the parents [6].

One major challenge of digital or online learning is that TVET emphasises on practical skills in most programmes. Its orientation is that learners should acquire occupation-specific practical skills that require physical presence [6]. This kind of learning-by-doing is best done in institution-based workshops and laboratories or through hands-on experience in work environments. Additionally, closure of TVET institutions affect many students who, as already noted, tend to be more vulnerable than those in secondary and general education or universities [5]⁴.

Government funding continues to be affected by the impact of the pandemic. In most developing countries, financing of the education sector is grossly inadequate [14,2]. UNESCO estimates that high-income countries are, on average, spending 43 times as much on the education of primary-school-aged children as the average low-income country.

Notwithstanding the high rate of expenditure, low and middle-low-income countries are making

substantial progress in increasing education investments and improving access to educational opportunities [2]. For example, before the pandemic, the Kenya Government was spending a significant amount of its budget on education, and especially in the TVET sector [15]. Of the Kenya shillings (Kes) 56,420 fees per year student, the government provides Kes 30,000 (approx. USD 300), which is paid directly to the institution. Students who cannot afford to pay the difference of Kes 26,420 have the option of applying for a loan from the Higher Education Loans Board (HELB). HELB awards up to Kes 40,000 to cater for the Kes 26,420 with the balance being out-of-pocket allowance. The facility ensures that every learner has an opportunity to access TVET.

According to UNESCO, Covid-19 widened disparities in learner access during 2020 as the developing countries grappled with extra expenditure in the health sector. Government spending in the East African region increased by approximately 13 per cent in real terms during the Covid-19 response. As part of government response, it was necessary to reprioritise budgets towards health and social protection in the short term. Programmes that had been planned for the TVET sector in Kenya were shelved or delayed [15].

Furthermore, institutions of learning were expected to enforce the Ministry of Health Covid-19 Protocols and Guidelines, which included regular handwashing with safe water and soap [7]. The guidelines meant installing new handwashing areas as well as purchasing thermal guns and masks, among others. With limited budgets, many institutions had to struggle to fully implement these protocols [10].

Table 1. Real growth in education spending per capita (%)

	Pre-Covid	2020 (b)	2020 (d)	2021
<i>Upper Income</i>	1.3	5.4	-5.1	-2.6
<i>Upper Middle Income</i>	1.9	1.8	-8.3	0.4
<i>Low Middle Income</i>	2.5	1.8	-8.3	0.4
<i>Low Income</i>	14.0	11.1	0.0	2.5
<i>East Asia and Pacific</i>	1.8	5.0	-5.5	0.3
<i>Europe and Central Asia</i>	2.0	4.3	-6.1	-1.7
<i>Latin America and the Caribbean</i>	3.6	3.1	-7.2	1.2
<i>Middle East and North Africa</i>	1.9	3.8	-6.6	-2.4
<i>South Asia</i>	7.2	4.0	-6.4	-2.4
<i>Sub-Saharan Africa</i>	7.7	6.5	-4.2	0.0
<i>All Countries</i>	3.6	4.8	-5.7	-0.5

Source: World Bank calculations based on IMF (2019a, 2019b, 2020a & 2020b), various documents

Note: (b) = baseline; (d) = downside

The effects of Covid-19 are likely to be felt for a long time; the pandemic is attributed to disrupted growth in the economy as different work models evolve at a heightened pace. Many businesses have made substantial losses, while others have closed down [12].

It is expected that this global phenomenon will cut down planned increase in educational spending. For example, the World Bank estimates that per capita education spending in Sub-Saharan Africa is expected to fall by 4.2 per cent. Table 1 presents a forecast on education sector expenditure in different regions pointing to a significant slowdown in public education spending.

4. COVID-19 MITIGATION STRATEGIES

The coronavirus causing the Covid-19 disease has been mutating into different variants and attacking the population in phases, also called waves [1]. By July 2021, Kenya was battling the third wave with the Delta variant – a highly contagious SARS-CoV-2 virus strain that was first detected in India [15]. Subsequent mutations tend to be stronger and more pervasive than the earlier strain. Indeed, it is said that mitigation strategies that had worked on the other variants were not responsive to the SARS-CoV-2 [1].

One of the biggest breakthroughs in the fight against Covid-19 has been the development, manufacture and deployment of vaccines [16]. Though controversial, the vaccines started being administered early 2021, giving hope that the worst would be over. The developed countries were able to buy and vaccinate most of their populations, while in the developing world, they had been mostly unavailable to a majority of the population [4]. For example, in Kenya, only the most vulnerable, those aged over 58 years, frontline workers, including teachers and trainers, were vaccinated by mid-2021, comprising only 2 per cent of the population [15].

Parallel to governments continued focus on their countries' immediate needs are ongoing efforts towards the next phase of recovery. For instance, as Kenya's positivity rate slowed down, the government responded by adjusting the academic calendar, prioritising students in the final grades [2]. Most institutions around the world also put in place mechanisms for distance learning in parallel to face-to-face learning [10].

Institutions such as World Bank are actively assisting countries to prepare, cope and recover during and after the pandemic [4]. The World Bank has advised that TVET can leverage on the pandemic to develop important and needed skills to mitigate its effects, as it has aggravated the critical importance of practical skills [17].

IT software and hardware have become a core necessity in homes and offices. TVET can therefore focus on delivery of short-term practical skills and modular training to rapidly upskill workers in essential sectors of health, education, manufacturing and innovation [18]. The upskilling and reskilling of individuals is vital in emergency response.

The pandemic has challenged the status quo of traditional training programmes. While economies will recover, the effects of Covid-19 will however be felt for a long time. Many businesses will be restructured, some will require new skills, while others will need upskilling [17]. New infrastructure and business models will result in structural changes with emerging skills needs. For instance, there will be increased demand for digital and IT and other technical skills in almost all social, economic and political spheres as people and businesses adapt to the changing environment [19]. TVET can play a critical role in the recovery process by building more relevant and responsive training programmes.

In most countries, especially in the developing countries, response to changing skills needs and demands is often awfully slow and inflexible [17]. Kenya's TVET sector will be required to rapidly identify, research and document emerging skills needs and then respond through the necessary curriculums [19]. As discussed earlier, short modular and targeted skills are particularly important. The government will need to remove the bottlenecks and bureaucracy that make response to new programmes long and painful.

The pandemic has taught the world the need to manage and respond to emergencies in a timely, coordinated and urgent manner. Governments world over can use this opportunity to accelerate reforms and systems in the TVET sector to enable them respond to emerging skills needs [17]. For instance, some institutions of higher learning in Kenya were able to respond to the pandemic by innovating and designing equipment that was urgently needed [7]. Some of

these include face masks, ventilators and hand washing stations. Others were able to manufacture sanitisers, soaps and concoctions that could relieve some of the Covid-19 symptoms. Governments could support innovators and the experimentation and innovation ecosystems to ensure that the momentum created is not lost [18].

The governments that will invest in creativity and innovation are likely to realise gains through shifting focus and giving impetus to the TVET systems. Investment in remote learning is likely to ensure a more inclusive, effective, resilient and efficient training systems outside the TVET classrooms learning such as learning at home, learning at work and virtual simulations.

5. MITIGATING LONG-TERM CHALLENGES

According to the World Bank, the learning losses arising from Covid-19 disruptions will likely have a long-term negative compounding effect on some children's future well-being [20]. Furthermore, these learning losses could result in less access to higher education, lower labour market participation and lower future earnings [21]. Governments can mitigate these challenges while also building more resilient systems that can withstand future crises through the following are strategies, that have been proposed by the World Bank [22].

1. *Establish learning recovery programmes.* There is need to ensure that students who experienced learning losses during the pandemic receive all the support they need to catch up on the expected learning targets.
2. *Protect the education budget.* Economies have experienced significant financial strain during the pandemic, leading to budget cuts in some countries. This strain has the potential of reversing gains made in recent years in terms of access to education and improved learning outcomes. Education budgets should therefore be protected. Further, the institutions of learning that need financing the most should be supported.
3. *Prepare for future disruptions by building back better.* While special focus should be given to recovery from the Covid-19 pandemic, governments should also use this experience to become better

prepared for future crises. In this regard, there is need for governments to start building capacity for blended models of education. Institutions of learning should be better prepared to switch swiftly between face-to-face and distance learning as needed.

6. CONCLUSION

Education systems are underpinned by the classical liberal theory of equal opportunities. The theory was proposed by Locke (1688) and has been advocated by a number of authors among them Sherman and Wood (1992) as cited by Kerby, [23]. Locke's theory argues that every learner is born with some amount of ability which cannot be substantially altered. Education opportunities are therefore expected to level the playing field for all learners and social mobility is stimulated by equality in the educational structures [20].

Locke's theory further presupposes that education systems and structures are planned with a view to eliminating obstacles or challenges that may comprise sociocultural, socioeconomic and ecological factors. Thus, when education is delivered to marginalised and vulnerable learners, their lives would be socially promoted, and hence achieve equity through education opportunities [9].

The Kenyan government has made great strides in ensuring that TVET opportunities are evenly distributed nationwide. The government has allocated funding for the construction and equipment of institutions so that all those who aspire to learn skills have the opportunity to do so. Further, learners receive money through capitation grants and loans to enable them fund their education. Unfortunately, Covid-19 threatened to derail this process by disrupting the training schedule. The most affected learners have been those from poor and marginalised backgrounds who are unable to access online and distance learning [10].

Covid-19 mitigation strategies have enabled learners to resume face-to-face learning. In addition to instituting guidelines on health and safety protocols for institutions of learning, the government has also funded the implementation of the same. These are welcome first steps in building a more resilient system that can withstand future crises.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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