# Challenges and Opportunities in Curriculum Monitoring and Evaluation During Covid-19 Pandemic in Kenya

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**Abstract**

*Sustainable Development Goal number four envisions provision of quality education and training. Curriculum monitoring and evaluation is a vital exercise that undergirds and guides delivery of quality education. However, the COVID-19 pandemic posed diverse challenges, while presenting unique opportunities in curriculum monitoring and evaluation. This paper examines the opportunities and challenges in curriculum monitoring and evaluation in Kenya during the COVID-19 pandemic. Specifically, it addresses the necessity for curriculum monitoring and evaluation for education quality, discusses the challenges in monitoring and evaluation of the curriculum process during COVID-19 pandemic, and finally examines the opportunities availed in curriculum monitoring and evaluation. This being a theoretical study, the methodology used included review and synthesis of secondary data materials. The authors find that the challenges caused by COVID-19 included disruption of internal assessments, inequalities in learner assessment, postponement of national examinations, interruption of talent assessment from co-curricular activities, and inability of external monitoring officials to visit schools for monitoring exercise. The opportunities presented through COVID-19 pandemic included embracing use of digital platforms in evaluation, opportunity to address inequalities in access to education, and opportunity for investment in ICT. The paper gives recommendations with a view to develop resilience, as well as enhance efficiency in educational strategies by addressing the challenges and leveraging on opportunities.*

*Keywords: Curriculum, COVID-19, Opportunities and Challenges, Monitoring and Evaluation*

## 1. Introduction

Curriculum monitoring and evaluation is a vital exercise that ensures delivery of quality education, which is a right of every child. The COVID-19 pandemic however, in diverse ways affected many sectors of society including education. The pandemic which disrupted societal systems globally, also presented vast opportunities and challenges to the education sector. COVID-19 is an acute respiratory and highly infectious disease caused by a new coronavirus that belongs to the SARS-COV family. It was first reported to the World Health Organization (WHO) on 31st December 2019. On 12th January 2020, the WHO confirmed that a novel corona virus was the cause of respiratory illness in a cluster of people in Wuhan City, Hubei Province, China. On 30th January 2020, the disease was declared a Public Health Emergency of International Concern (PHEIC) by the WHO. On 13th March 2020, the first case in Kenya was confirmed and the disease declared a pandemic. According to the WHO, the signs of infection include high fever, coughing, shortness of breath and/ or difficulties in breathing. In more severe cases, it can lead to pneumonia, multiple failure of body organs and even death.

The highly infectious nature of COVID-19 progressively turned the disease into a pandemic. Madhav, *et al* (2017) have defined a pandemic as "a large-scale outbreak of an infectious disease that can greatly increase morbidity and mortality over a wide geographic area and cause significant economic, social, and political disruption". Thereafter, it continued to spread to many nations, causing over 3.34 million deaths globally as at 13th May 2021 (World Health Organization, 2021). And as Parnell, *et al* (2020) explain, these reported case numbers could still be underestimates, given the shortage or complete lack of test kits in many countries, coupled with evidence of viral shedding from

asymptomatic infected people. Part of the quick response by many governments was to set up heath protocols to minimize spread of the disease. There was also closure of all learning institutions to cease face-to-face instruction for some time (Daniel, 2020). In Kenya, the government abruptly closed all schools and colleges nationwide in March 2020 upto January 2021, disrupting approximately 17 million learners across the country.

The measures that were put in place to minimize spread of COVID-19 had far-reaching effects on diverse areas of life. Nicola, *et al,* (2020), while examining the socio-economic implications of the coronavirus disease observed that business, education, tourism, transport, health and sports sectors had grounded most of their activities to a halt. Most governments globally closed down learning and training institutions temporarily in a bid to reduce the spread of COVID-19 pandemic (UNESCO, 2020). The government adopted distance learning and online education delivered through radio and television and internet. This widened the learning lacuna, as most leaners from poor, vulnerable and marginalized households could not access these mediums of learning, thus raising questions of quality and access. Similarly, curriculum monitoring and evaluation was faced with diverse challenges and opportunities, which need to be examined. This will help the government and stakeholders in education to address these challenges and build on opportunities in laying strategies for enhancing future curriculum monitoring and evaluation for quality education at all times.

This study was grounded on the Constructivist Theory, which espouses the notion that the basis of meaning is found in one's direct experience with a responsive and dynamic world (Quay, 2003). As the world keeps changing, we form new knowledge and new realities through our experiences. The historical roots of this theory are anchored in Piaget's understanding of knowledge formation. Constructivism generally is a theory of learning which posits that "people actively construct or make their own knowledge, and that reality is determined by the experiences of the learner' (Elliott et al., 2000). For instance, Tabakin, Patel and Singer (2021) in their examination of lessons learned from the COVID-19 pandemic called for a national video-based curriculum platform for urology students. Their experience with reality, actually generated new realities which they sought to guide future curriculum for urology students. In this study therefore, the researchers hold that the novel experience of COVID-19 pandemic should help educators construct new realities and new knowledge that can inform future educational trajectories.

## 2. Research Methodology
This theoretical study sought to achieve the following objectives:
  i. To establish the challenges in curriculum monitoring and evaluation during the COVID-19 pandemic in Kenya.
  ii. To examine the opportunities in curriculum monitoring and evaluation during the COVID-19 pandemic in Kenya.

The methodology used involved review and synthesis of secondary data materials, with a view to establish the opportunities and challenges in curriculum monitoring and evaluation in Kenya resultant from the COVID-19 pandemic.

## 3. Challenges in Monitoring and Evaluation of Curriculum Process During Covid-19 Pandemic.
Curriculum monitoring and evaluation are crucial in development, implementation and maintenance of curriculum (Ornstein & Hunkins, 2009). Curriculum monitoring is a process of gathering information for evaluating the effectiveness of the curriculum, and ensuring that the intended, implemented and attained curricula are aligned. It helps to confirm whether what is being done is what is expected to be done as stated in the aims. Ogula (2016) defines curriculum evaluation as "the systematic process of collecting, analyzing and interpreting data for the sake of facilitating decision-making at the various stages of the curriculum process". Ultimately, curriculum monitoring and evaluation is the means of assessing the value of the total curriculum process. It involves gathering of evidence for judging the level to which educational goals have been realized, so as to facilitate decision-making (Hughes, 2001).

The importance of curriculum monitoring and evaluation in education cannot be underestimated. This process helps to guide and safeguard the quality of the education processes, and benchmarks the outcomes. Wotela (2017) proposed that monitoring and evaluation of curriculum, due to its centrality in educational quality control, needed to be institutionalized. It means that each institution should have a valid framework of carrying out the process. According to Ogula (2016), it is vital for identifying educational needs, improvement of the curriculum and for determining if

objectives have been achieved. Monitoring and evaluation enhance public accountability, by attesting to how public money is being spent in education. Hughes (2001) listed the benefits of monitoring and evaluation as:

> It promotes and improves high quality processes and outcomes at individual institutions and provides a basis to disseminate sound practice, leading to overall system improvement: it informs student choice, so that they may make sense of a variety of offerings based on their quality and usefulness; it informs parents on the progress of their children and on how to assist their future decisions and work; it provides teachers with comparative data on the effects and efficacy of their teaching; it is the major effective means of curriculum improvement as it provides information on what works well and what is unproductive or even harmful.

During the COVID-19 pandemic, this important process faced various challenges globally.

### 3.1 Disruption of Internal Assessments
The closure of schools, colleges and universities not only interrupted the teaching and learning process, but it also coincided with End of Term Examinations for Term 1, 2020 for basic education programme in Kenya. In Nigeria, a survey done by Ogunode (2020), 100% of the respondents strongly agreed that schools close down due to COVID-19 had led to the suspension of internal and external examinations. Internal assessments give information about the learner's progress for parents and teachers. Results of these assessments help to recognize learning challenges, which if not diagnosed in good time can have negative consequences for the learner.

### 3.2 Inequalities in Learner Assessment
Not all learners could be assessed due to inequalities in access to online educational resources. Only a small fraction of about 17 million leaners in Kenya, mostly in urban centers had to access digital gadgets, while their counterparts in rural areas and urban informal settlements were unable to study digitally (Areba, 2020). Kenya has a fairly prescriptive national curriculum that does not give wide circumstantial discretion to teachers to choose content. Learner assessment is thus expected to be uniform, an expectation that could not be realized during the pandemic. Furthermore, remote learning lacks well-defined infrastructure, hence posed a challenge in total evaluation of learner progress. Children lack the gadgets to use for online learning and this resulted to part of the challenges in access to online learning. It consequently means that totally no learning was going on for those particular children, hence nothing to evaluate.

### 3.3 Postponement of National Examinations
The interruption of learning processes necessitated postponement of national examinations. According to Areba (2020), this could have created anxiety and uncertainty, and possible psychological trauma among learners which would ultimately reflect in their performance. This agrees with Akat and Karataş (2020) who indicated that the psychological effects of COVID-19 pandemic on society had ramifications on education. Son, *et al.,* (2020) in their study in the United States found out that COVID-19 had a negative impact on students' mental health. This included difficulty in concentration, disruptions of sleep patterns, increased social isolation, depressive thoughts and concerns about academic performance. A study done in Zambia (Sintema, 2020) found that there was likely to be a drop in the pass percentage of Grade 12 secondary school students in the year 2020's national examinations due to the abrupt untimely closure of all schools in the country that disturbed the schools' calendar.

### 3.4 Interruption of Talent Assessment through Co-curricular Activities
The overall school curriculum includes co-curricular activities. Due to COVID-19, the co-curricular activities scheduled for first term in the Kenyan schools' calendar like drama, athletics and ball games were interrupted in March 2020 by the abrupt and indefinite closure of schools. This thus interfered with assessment of learners' performance in talent. In the study by Ogunode (2020) in Nigeria, 100% of the respondents agreed that schools close down due to COVID-19 had led to the suspension of all co-curriculum activities in schools.

### 3.5 Inability of eternal monitoring personnel to visit schools for monitoring exercise
In Kenya, responsibility for the monitoring and evaluation of the education system is vested on the Ministry of Education. This process is done at two main levels; internal evaluation and external evaluation of curriculum. Internal Evaluation of Curriculum is done at school level. It involves focusing on teaching and learning: the performance of pupils, the effectiveness of teachers and hence the standard of achievement across the whole school. All staff are involved in this process all the time, although certain teachers carry specific responsibilities for aspects of the process

and there is a systematic programme for monitoring and evaluating over time which allows for different degrees of scrutiny and analysis for different areas of the curriculum at different times.

External monitoring and evaluation of curriculum is done by the Ministry of Education through the Quality Assurance and Standards Officers (QASO) and Curriculum Support Officers (CSO's). It involves the collection of information on a regular basis to give an appreciation of the system as a whole or some part of it. Such indicators may be straightforward such as enrolments, attendance, learner progress, the context of education, utilization of resources, staff work performance and examination results. This has advantages of greater objectivity, ease of access to decision makers and external evaluators possess greater authority, hence contributing to the success of the evaluation. With the requirement of maintaining social distance, and occasional restriction of movement in some regions, this external monitoring was hampered.

### 3.6 Inability to assess leaner progress through digital platforms
There is inadequate preparedness of teachers for implementation of digital learning integration in most public schools (Kiugu, 2020). Furthermore, not all learners have access to online educational resources and digital gadgetry (Areba, 2020). This inadequate preparedness of teachers coupled with lack of access to digital learning equipment hindered possibility of conducting learner assessment online.

## 4. Opportunities in Monitoring and Evaluation of Curriculum Process During the Covid-19 Pandemic

### 4.1 Embracing Online Examinations as a Digital Platform in Educational Evaluation
Online examinations provide instant feedback and have a further benefit of reduced printing costs (Tekin, *et al.,*2020). However, the security and integrity of such exams may be compromised by exam malpractices due to absence of supervision. Bishnoi & Suraj (2020) in their case study of online examinations in India found substantial proof indicative of a higher incidence of academic dishonesty in online examinations when compared to in-person examinations. This thus provides an opportunity for investment in advanced technology that can invigilate exams. The digital infrastructure should also include high-level online examination systems that can minimize cheating plus establishment of computer laboratories in all learning institutions.

Embracing online examinations in educational evaluation needs stakeholder sensitization. This is because online assessment may call for educators to alter their methodology. It means that development of effective and reliable assessment for online students may require peak effort for innovation, and a departure from traditional practices. This change requires sensitization. Dias, Lopes and Teles (2020) conducted a study among virtual classes done via zoom during COVID-19 pandemic. They found that not all students accepted to take virtual classes. Some simply decided not to engage in virtual classes, preferring to wait for the pandemic to end. This shows that some learners have not embraced the digital platform in education, hence evaluation using this platform can be challenging. This thus also presents an opportunity for sensitizing stakeholders on the need and the use of digital platforms.

### 4.2 Opportunity to Address Inequalities in Access to Education
Access to education is a significant hinge upon which the door of success for individuals and nations turns. However, inequalities in access to education is still a matter of concern in most developing countries. Jandra, Huda and Maseleno (2020) indicated that many children with special needs still do not have equal access to education. Other inequalities exist along gender, socioeconomic status and geographical locations of persons. During the COVID-19 pandemic when digital learning platforms came to the fore, inequalities along access to digital learning resources were conspicuous. Students in urban areas had a significantly different educational experience from students with poor ICT access in peri-urban and rural areas (Lembani, *et al.,*2020). Digital platforms ideally should enable equitable access for learners to digital books, simulated science labs and related innovative learning resources (Jantjies, 2020). But some learners lack the means of access the same, sharp inequalities are created that would be difficult to bridge if not addressed aptly and urgently. The move to e-learning is a vital opportunity which if taken advantage of could be an important step towards addressing inequalities in access to education.

### 4.3 Opportunity for Investment in ICT
Disasters have a way of exposing lacunas in society that would otherwise remain unnoticed. COVID-19 has shown that technology is no longer a luxury but a vital necessity in the education process (Jantjies, 2020). As Kenya moves towards Vision 2030 as well as realization of the Sustainable Development Goals (SDGs), the ICT sector is key to this process. Just as the developments in the mobile industry, especially the electronic money transfers like M-PESA

have put Kenya on the technological world map, the realization of Vision 2030 greatly depends on the development of the ICT sector in the nation, and its integration in education. The Kenyan government realized and underscored the universal access to the ICTs as a major objective of Vision 2030 that commits to transforming Kenya into a middle-income nation by the year 2030. Computer technology and internet technology are without doubt the best possible aid in education, and effective use of computers and internet can prove fruitful to both teachers and students. It can improve the quality of education in many ways. The experience of COVID-19 sobers us up to the opportunity to invest heavily in ICT.

## 5. Conclusion and Recommendations

In view of the findings of this study, the authors conclude that technology is no longer a luxury but a vital necessity in the education process. However, the level of access to educational technology in Kenya is low especially in rural areas and informal urban settlements. This encumbers possibility of effective online learning and online examinations. The authors recommend that: the government should provide infrastructural facilities that will support online education in primary and secondary schools; teachers and parents should be capacity-built on use of digital resources; universities and other tertiary institutions should adopt online learning as a way to prepare for any eventuality that may hinder face-to-face instruction. Overally, there is need to develop resilience, as well as enhance efficiency in educational strategies by addressing the challenges and leveraging on opportunities created by the COVID-19 pandemic.

## 6. References

Akat, M., & Karataş, K. (2020). Psychological Effects of COVID-19 Pandemic on Society and Its Reflections on Education. *Electronic Turkish Studies*, *15(4)*, 1-13.

Areba, G. N. (2020). COVID-19 Pandemic Impact on Kenyan Education Sector: Learner Challenges and Mitigations. *Journal of Research Innovation and Implications in Education. 4(2).* 128-139

Bishnoi, M. M., & Suraj, S. (2020). Challenges and Implications of Technological Transitions: The Case of Online Examinations in India. In *2020 IEEE 15th International Conference on Industrial and Information Systems (ICIIS)* (pp. 540-545). IEEE.

Daniel, J. (2020). Education and the COVID-19 Pandemic. *Prospects 49***, 91–96. https://doi.org/10.1007/s11125-020-09464-3

Dias, M. D. O., Lopes, R. D. O. A., & Teles, A. C. (2020). Will virtual replace classroom teaching? Lessons from virtual classes via zoom in the times of COVID-19. *Journal of Advances in Education and Philosophy*, *4*(05), 208-213

Elliott, S.N., Kratochwill, T.R., Littlefield Cook, J. & Travers, J. (2000). *Educational psychology: Effective teaching, effective learning (3rd ed.)*. Boston, MA: McGraw-Hill College

Hughes, P. (2001, February). The monitoring and evaluation of curriculum reforms. In *Final Report of the Muscat Seminar on the Management of Curriculum Adaptation for Curriculum Specialists in the Persian Gulf Region* (pp. 53-59).

Jandra, M., Huda, M., & Maseleno, A. (2020). Inequalities in access of learning in primary school: Voices from children with special needs. *International Journal of Psychosocial Rehabilitation*, *24*(1).

Jantjies, M. (2020). How South Africa can address digital inequalities in e-learning. *The Conversation., http://theconversation. com*.

Kiugu, D. K. (2020). Preparedness for Implementation of Integration of Digital Learning in Public Primary Schools in Meru County, Kenya. *Doctoral dissertation*, *Kenya Methodist University*.

Khare, A & Lam, H. (2008). Assessing Student Achievement and Progress with Online Examinations: Some Pedagogical and Technical Issues. *International Journal on E-learning*, *7(3)*, 383-402.

Lembani, R., Gunter, A., Breines, M., & Dalu, M. T. B. (2020). The same course, different access: the digital divide between urban and rural distance education students in South Africa. Journal of Geography in Higher Education, 44(1), 70-84.

Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., & Wolfe, N. (2017). Pandemics: risks, impacts, and mitigation. Available at World bank group e-library https://elibrary.worldbank.org/doi/abs/10.1596/978-1-4648-0527-1_ch17

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., ... & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (Covid-19): A review. *International Journal of Surgery (London, England)*, *78*, 185.

Ogula, P.A. (2016). *Monitoring and Evaluation of Educational Projects and Programmes: A manual for Evaluators*

*of Educational Programmes*. Nairobi: Mwenge Academic Publishers.

Ogunode, N. J. (2020). Effects of COVID-19 Schools Close Down on Academic Programme of Senior Secondary Schools in Abaji Area Council of Federal Capital Territory Abuja, Nigeria. *Electronic Research Journal of Social Sciences and Humanities. 2(2)*, 84-94.

Ornstein, A.C & Hunkins, F.P. (2009). *Curriculum: Foundations, Principles and Issues.* Boston: Pearson Education. Inc

Parnell, D., Widdop, P., Bond, A., & Wilson, R. (2020). COVID-19, networks and sport. *Managing Sport and Leisure*, 1-7.

Quay, J. (2003). The Experience and Participation: Relating Theories of Learning. *Journal of Experiential Education*, *26 (2)*, 105.

Robles, M., & Braathen, S. (2002). Online assessment techniques. *Delta Pi Epsilon Journal*, *44*(1), 39-49.

Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(7), em1851.

Son, C., Hegde, S., Smith, A., Wang, X., & Sasangohar, F. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of medical internet research*, *22*(9), e21279.

Tabakin, A. L., Patel, H. V., & Singer, E. A. (2021). Lessons learned from the COVID-19 pandemic: a call for a national video-based curriculum for urology residents. *Journal of Surgical Education*, *78*(1), 324-326.

Tekin, P. S., Ilgaz, H., Yildirim, D., & Adanır, G. A. (2020). Flipping e-Learning for teaching medical terminology: a study of learners' online experiences and perceptions. *Official Journal of Online Learning Consortium*, 24 (2)

UNESCO (2020). Education: From disruption to recovery. Available at https://en.unesco.org/COVID19/educationresponse

Wotela, K. (2017). A proposed monitoring and evaluation curriculum based on a model that institutionalizes monitoring and evaluation. *African Evaluation Journal*, *5*(1), 1-8.

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