

Managing Learning in the COVID-19 Period: Effects, Challenges and Options

Melap Sitati and Eldah Onsomu

Introduction

The COVID-19 pandemic has led to the most profound disruption to the education and training sector world over. Learning for over 160 countries across the globe came to a standstill due to the measures that were put in place to contain the spread of the coronavirus. The temporal closure of education institutions left over 1.6 billion children and youth out of school for close to one year (World Bank Education Global Practice 2020).¹

In Kenya, the declaration of COVID-19 a health pandemic led to the closure of all education institutions in the country in March 2020. The closure of these institutions² was progressive; primary and secondary day schools suspended operations from 16th March 2020; those in boarding schools were closed on 18th March

2020; and universities and tertiary institutions were closed on 29th March 2020.

The closure affected some 46,530 pre-primary institutions; 32,344 primary schools, 10,463 secondary schools and about 2,500 tertiary institutions with a total population of 17.2 million learners and an estimated 446,000 teaching staff (KNBS, 2020).³ The size of the education sector and the population made school closure necessary as a step to not only safeguard the health of learners and teachers but also to contain the spread of the coronavirus. Consequently, the closure of learning institutions affected the learners, educators and non-teaching staff in all the learning institutions, who in aggregate account for about 36% of the country's population.

Table 1: Key education indicators, 2019

Level of School	No of Institutions (Public and Private)	Enrolment (Public and Private)	No. of Teachers/ Tutors/ Lecturers (Public)
Pre-Primary	46,530	2,738,587	92,359
Primary	32,344	10,072,000	218,760
Secondary	10,463	3,260,000	105,234
Teacher Training Colleges	384	31,737	n/a
Technical Training	2,191	430,598	n/a
University Education	74	509,473	30,000
Adult education learners	n/a	209,082	n/a
Total	91,986	17,251,477	446,353

Source: KNBS Economic Survey 2020; n/a -data not available

Effects of the COVID-19 Pandemic on schooling

Loss of learning

The suspension of physical learning had various effects on schooling at all levels of education in the country. Foremost, there was loss of learning due to the seven months' suspension that lasted from March 2020 until phased reopening of schools, which commenced in October 2020 for learners in Grade 4, Class 8 and Form 4. The rest of the learners were out of learning institutions for additional 3 months and resumed school in January 2021. The effect of this closure of schools was a lag in curriculum delivery by almost one year. Learners in most grades had to re-take their 2020 school year in the year 2021 due to disruption of the school calendar and education programmes. Normally, the academic year takes about 38 learning weeks to cover 3 terms of schooling in basic education. However, the school calendar had to be revised by introducing a 30-week crash programme to cover the lost school time. Teachers had to adopt new ways of teaching to recover lost learning time. The emergence of the third wave and possibility of subsequent waves of infections of the virus will need to be adequately managed by government with support from education stakeholders to counter the effects of any potential challenge to the accelerated learning programme.

Disruption of national examinations and assessments for the 2020 school year

The planned conduct of annual national examinations and assessments for the 2020 school year were disrupted. The Kenya Certificate of Primary Education (KCPE) and the Kenya Certificate of Secondary Education (KCSE) was postponed from December 2020 to March 2021, and postponement in assessments of Competency-Based Curriculum (CBC) implementation at grade three to June 2021. Postponement of national examination assessment to March 2021 affected over 1.9 million candidates who had registered to sit for their exams in December 2020. Despite the postponement, the national exams were done in March 2021 and performance showed a slight improvement compared to the year 2019 suggesting, that the response measures yielded positive results. The number of candidates with minimum university entry qualification of Grade C+ and above rose to 143,140 (19.03%)

in the 2020 KCSE examination compared to 125,746 (18.02%) in 2019. On the downside, postponement of the national examination assessments delayed the admission and placement of students in tertiary institutions. The examination rescheduling to March 2021 is likely to continue until 2023 when the examination schedule will stabilize into calendar year period.

Increase in dropout rates

The other effect of the COVID-19 pandemic on schooling was increase in dropout rates. It was a challenge to ensure children and youth return and stay in school when schools reopened after closure, especially when economic shocks place financial pressure on households. Data from the Ministry of Education (2021) shows that 8,325 and 3,989 candidates in the final year of primary and secondary schools, respectively, did not sit for the national exams. These dropouts varied across counties. For instance, in the coastal region, 139 candidates did not turn up for exams in Mombasa, 118 candidates in Kilifi, 59 candidates for Kwale, 48 candidates from Taita Taveta, 46 candidates from Tana River and 18 candidates from Lamu County. Some of the candidates failed to report back when schools partially reopened in October, while others did not show up when schools opened in January 2021 (Ministry of Education, 2020).

Teenage pregnancy

An upsurge in teenage pregnancy during school closure due to the pandemic has been cited among the effects of the COVID-19 pandemic on schooling. Between January and May 2020, 151,433 teenage pregnancies were reported nationally, with Nairobi County reporting 11,795 teenage pregnancies (Africa Institute for Development Policy, 2020). Moreover, and as an example, data collected from antenatal clinics in Meru County show that teenage pregnancies were on the rise. Statistics for between 2019 and 2020 from Igembe Central recorded 2,828 teenage pregnancies, while 2,255 and 2,513 teenage pregnancies were reported for Igembe North and South, respectively. Majority of these cases were teenage girls in primary and secondary schools. Nandi County reported 6,006 teenage pregnancies during the long closure of schools due to the COVID-19 pandemic. Although the Government has a return to school policy for teenage mothers, the occurrence of

Table 2: Additional infrastructure requirements to cope with COVID-19 health protocols					
Level of School	Masks- 2 per Learner per term	Water stations 1:50 learners	Desks 1: 2 for primary and 1:1 for secondary	Water (5 liters per day)	Liters of water per institution per year
Pre-Primary	5,477,174	1,847	1,369,294	2,601,657,650	55,914
Primary	20,144,000	4,375	5,036,000	9,568,400,000	295,832
Secondary	6,520,000	2,105	3,260,000	3,097,000,000	295,995
Teacher Training Colleges	63,474	n/a	31,737	30,150,150	78,516
Technical Training	861,196	192	430,598	409,068,100	186,704
University Education	1,018,946	600	509,473	483,999,350	6,540,532
Adult education learners	418,164	n/a	209,082	198,627,900	n/a
<i>Source: Ministry of Education 2020; n/a -data not available</i>					

teenage pregnancies has been identified as a barrier to education attainment by girls.

Additional school resources

The Ministry of Education COVID-19 health protocols guidelines for schools reopening imposed additional requirements that have implications on school resources. As a requirement to provide safe environment to learners, schools needed additional classrooms, desks, sanitation facilities, thermo-guns and sufficient reusable masks for learners. In this regard, the education sector required additional financial resources to comply with the health protocols.

Out of 32,344 primary schools, only 5,136 public institutions received 360,000 desks at a cost of Ksh 900 million to conform with the one-metre social distancing COVID-19 health protocol set forth by the Ministry of Health, while about half of the secondary education institutions (5,254) benefited with 263,157 lockers and chairs at Ksh 1 billion for the similar programme. At national level, learners required about 34,502,954 masks per term, 8,327 water points at basic education level and approximately 16,388,903,150 litres of water, among others. According to the Ministry of Education COVID-19 response plan, the education sector required an additional budget of Ksh 2.4 billion from June 2020 to June 2022 to provide for the COVID-19 health protocols.

Private schools solely rely on households in financing education, unlike public schools which receive government subsidies. The COVID-19 presented unique challenges for private schools, which entirely depend on school fees to run their

operations. Due to suspension of learning in over 28,000 basic education private institutions, over 300,000 teachers were forced to stay home with no pay. Some of the private schools, tertiary colleges and universities turned to online classes to generate income to survive; nonetheless, schools serving low income communities were at risk of total closure. In January 2021, nearly 400 private schools were forced to shut down due to the COVID-19 pandemic, thus affecting student population of about 56,000 learners (Kenya's Private School Association, 2021). Households were expected to bear the direct and indirect costs associated with COVID-19 pandemic, including cost of masks, data, gadgets, teacher salaries and sanitizers, among others. This situation would further worsen inequalities because learners from poor households are likely to drop out of schooling (UNESCO, 2020)⁴ if adequate mitigation measures are not put in place.

Further, students had to incur losses as they had to forfeit upkeep expenses that had already been paid. In the same vein, learning institutions had to bear running costs and staff salaries during the unprecedented closure. Majority of these institutions embraced technology and telecommunication platforms to ensure continuity in education, training and research, not all of them fully implemented the online teaching and learning due to: lack of requisite ICT infrastructure to support e-learning and online teaching, training and evaluation; insufficient capacity in online libraries; lack of regulatory framework with a clear quality assurance framework for online teaching, learning and

evaluation; and inadequate capacity of the teaching staff in the creation of online content and delivery.

Psychosocial effects

Another effect of COVID-19 on schooling is the psychosocial effects especially on vulnerable groups of learners including pre-primary learners, those with disabilities and girls and hence the need for psychosocial support. These categories of children are not only deprived of schooling but also support systems such as feeding during school programmes, guiding and counselling, among others. With the current movement restrictions, girls and boys who fall victim of violence would face obstacles to seek help and have access to support systems. Restrictions of movements constrained children's access to socialization, play, and even physical contact, which are critical for their psychosocial well-being and development (UNICEF, 2020). Young children are particularly vulnerable in disasters and emergencies. School closures prevented children from access to face-to-face learning and limited their interactions with teachers and peers. In effect, the affected children's human development is likely to be constrained. These children will require psychosocial support, which entails the help accorded to an individual social and emotional well-being during and after emergencies and disasters.

Policy Issues and Options to Mitigate the Effects of the Pandemic on Schooling

Financial resources

Although there is no recent evaluation to assess the implications of the COVID-19 response measures in the education sector, these measures have substantial financial resource implications and will have a radical shift on school operations. The COVID-19 pandemic has created a need to increase expenditures. Financial resources were shifted and prioritized towards initiatives to control and manage the effects of the virus in learning institutions. Further, the projected fiscal pressure is expected to have implications on government allocation to education programmes. This has implications on budget ceilings to the education sector by making public finances more strained. From the Budget Review Outlook Paper projections, the share of the education expenditure to total budget will shrink from 26.8% in 2020/2021 to

25.3% in 2023/24. Slow growth in economic activity would also have adverse effects on resource mobilization for education financing,⁵ both in the short and medium-term.

In light of resource constraints, the sector and stakeholders will need to focus on efficient utilization of available resources and enhanced innovativeness in provision of education services. The sector could prioritize and enhance resource allocation to the education sector to adequately address health and safety protocols with a focus on ensuring the safety of learners, teachers and non-teaching staff. The pandemic pushed the country into economic contraction, which will have a negative effect on public finances. Before the outbreak of the pandemic, economic growth prospects for 2020 were robust, with the National Treasury projecting a growth of 6.3% in 2020. The growth outlook for 2020 has since been revised to 0.6% in Kenya's Budget Policy Statement (2021). It will therefore be important for the education sector to be cushioned to adequately implement health and safety protocols and expand infrastructure and sanitation facilities to enhance containment measures. Critical interventions include provision of full capitation of Free Primary Education, Free Day Secondary Education, student loans and conditional grants on a timely basis. In addition, the government with support from stakeholders could introduce targeted vouchers for uniforms, transport and other ancillary school inputs such as masks and sanitizers targeting the poor households. This is need to strengthen domestic revenue mobilization from the private actors to address inefficiencies in education spending.

Infrastructure

In the wake of COVID-2019, schools are required to comply with COVID-19 health protocols, including enforcing social distancing and ensuring limited number of learners in classrooms, dining halls, dormitories, extra-curricular activities and school assemblies, among others. This entails putting in place measures that will facilitate observation of social distancing guidelines and high standards of hygiene. In addition, schools are also required to expand infrastructure, including water, sanitation and hygiene (WASH) facilities and increasing learning amenities such as desks. There exists inadequate teaching and learning materials and information technology infrastructure for both students and teachers, which poses a threat to

quality education and meeting the COVID-19 health protocols.

The national average classroom size level is 40 for primary school and 45 for secondary school. Although the national levels of class size compare well with the standard norm of 1:40, there still exists disparities in class sizes across the counties. Turkana has on average 76 learners per class, Bungoma had a class size of 60, Mandera and Trans Nzoia had 55, Busia and Kakamega 50 and Nairobi and Kilifi 48 (Ministry of Education, 2020). These counties are overcrowded, which makes it difficult to observe social distancing. A study by Masato et al. (2020) found that reducing class size reduces the droplet infection, including influenza and COVID-19. Similar patterns are reflected for sanitation facilities, libraries, laboratories and other related infrastructure across the country.

Enhancing infrastructure to decongest school environment to help meet the minimum COVID-19 health protocols will include provision of additional classrooms, desks, laboratories, libraries, latrines and health facilities with a view to maintaining physical distance and implementing public health measures. However, schools with overcrowded classes and those without basic infrastructure and services will require additional investment and adopt a two-in-one school approach to ease crowding. Priority could be given to counties with higher class size. The safety of learners and education personnel is paramount, given the schools could be hotspots for COVID-19 spread. The government in collaboration with education partners could ensure provision of water sanitation and hygiene facilities in and around schools, access to testing, isolation facilities and vaccination is adequate, accessible and affordable.

Access to technology, and digital divide

Though the government shifted mode of learning from face-to-face towards online and digital-based learning, learners from poor, vulnerable and marginalized households may not have had access to these modes of learning due to low access of technology. The Kenya Institute of Curriculum Development (KICD) estimated that 47% of learners were accessing lessons through radio, TV or the Internet in 2020. This means that over half of students at basic education level were not able to access remote lessons, either because they were outside of broadcast

range or did not have the necessary equipment. Further, online teaching and learning approach was fraught with challenges in technology integration, including poor connectivity, high cost of internet, lack of access to digital devices, internet and data, frequent electricity blackouts, limited ICT literacy skills, among learners, and parents leading to low participation. As a result, there was limited e-learning that happened for basic education level during the closure period. In the same breadth, the challenge of cybercrime, which is highly associated with digital learning is a threat to e-learning.

There is an increasing disparity between basic education institutions in terms of meeting technology requirements and individual households in digital divide. Only 12% of households have internet connection, which translates to 9 in 10 households with no access to online resources for learning (KNBS, 2016). The COVID-19 pandemic brought a deeper understanding of the digital divide and related equity gaps that require urgent attention. Some households were struggling to meet the unique challenges posed by COVID-19, especially those that are marginalized due to lack of access to requisite facilities. Thus, there is likely to be a significant gap in learning between those who had access to online learning materials and those who did not.

The pandemic has also revealed existing opportunities that can be harnessed to provide equitable access to education. These include use of ICT platforms and digital content. For instance, to maintain learning continuity, the government and private sector adopted blended learning and remote teaching to support distance learning and online education delivered through radio and television and internet. Some learning institutions were able to offer teaching and learning by sending instructional materials using bulk SMS, emails, school websites and online platforms such as Microsoft teams, Zoom meetings, webex, among others. Further, the Kenya Institute of Curriculum Development (KICD) also developed online content for primary and secondary school learners to ensure uninterrupted learning. In addition, the government strengthened the Kenya Education Cloud and provision of YouTube, radio and television programmes at the primary and secondary school levels. The Ministry also supported access to textbooks and other teaching and learning materials in remote areas.

There is a need to enhance the effectiveness of these curriculum delivery modes without leading to inequalities, and ensuring that quality of education is not compromised. The brief recommends enhancing infrastructure that will support online teaching and learning and access to education content. The focus could be on areas that are underserved with internet connectivity, electricity, and digital devices. The Ministry of Education and the ICT Authority could enhance current effort in investing in provision of ICT infrastructure and electricity that supports digital learning, digitizing textbooks and technology-based resources both in school and at home. This will not only minimize costs but also provide up-to-date materials to inform and support teaching and instruction in the long-run.

Teenage pregnancy and retention

The COVID-19 pandemic also increased incidences of teenage pregnancies, causing girls to drop out of schooling and therefore limiting their access to opportunities gained from schooling. These problems exacerbate the vulnerability of young girls to poverty, exclusion and exploitation. Some of the causes of teenage pregnancies include unsupervised long stay at home during the COVID-19 school closure, inadequate support and guidance from parents and guardians, idleness, poverty and loss of jobs by parents/guardians, thus forcing children to fend for themselves, among others. The Ministry of Education has provided a policy framework for readmission even for teenage mothers. However, this framework will need to be enforced to ensure that social roles do not disproportionately burden the young mothers.

To eliminate dropout and wastage in the education system, it will be important to implement initiatives that keep learners in school and ensure those who dropped out return back to school, with deliberate focus on marginalized populations including arid and semi-arid lands (ASAL) counties that have a large number of out of school children. In addition to scaling up community awareness, specific interventions could include provision of targeted bursaries for learners from poor households, scaling up programmes for adolescent girls and boys to access quality Sexual Reproductive Health Education, information and youth friendly services and provision of alternative learning for out of school learners to promote

grade progression and retention. Alternative approaches include support for homeschooling by instituting legal and policy frameworks that support alternative delivery of curriculum that may include homeschooling, virtual learning, double shift school and other innovative approaches that will help respond to the effects of the pandemic on schooling.

Enhance psychosocial support

The Ministry of Education with support from stakeholders need to deepen programmes to help learners cope with the psychosocial effects and changes to the education system due to COVID-19 pandemic. The psychosocial support interventions could be designed alongside the school programme. Implementation will require budget allocation, collaborations with all stakeholders including private sector, community-based organizations, faith-based organizations, among others; and capacity building of education personnel on provision of psychosocial support. The Ministry of Education could also prioritize learners who are most vulnerable. These include early grade learners, learners with special needs, teenage mothers, learners from conflict-prone zones, among others.

Conclusion

Generally, COVID-19 affected schooling negatively, thus causing loss of learning, disruption of national examinations, increased dropout rates, teenage pregnancies, increased education costs and psychosocial effects. Cognizant to these effects, the Government has put in place measures to curb the spread of and manage the coronavirus disease during learning. The interventions include provision of additional financial resources, enhancing infrastructure, access to technology, improve retention, enhance psychosocial support and homeschooling. Therefore, the sector could provide additional resources, mobilize stakeholders and fast-track implementation of these interventions. The COVID-19 situation is dynamic and therefore calls for development of long-term policies and strategies that will not only address vulnerabilities exposed by the pandemic but also any future emergencies and disasters with implications on the education sector.

Endnotes

1. The World Bank Education Global Practice (2020), Guidance Note: Remote Learning and COVID-19. Washington, DC: World Bank, pp. 1–4.
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3. KNBS (2020), Economic Survey 2020. Nairobi: Kenya National Bureau of Statistics.
4. Education during COVID-19 and beyond August 2020, United Nations
5. World Bank (2020), The Impact of the Covid-19 Pandemic on Education Financing

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KIPPRA Policy Briefs are aimed at a wide dissemination of the Institute's policy research findings. The findings are expected to stimulate discussion and also build capacity in the public policy making process in Kenya.

KIPPRA acknowledges generous support from the Government of Kenya and the various partners who have continued to support the Institute's activities over the years.

For More Information Contact:

Kenya Institute for Public Policy Research and Analysis
Bishops Road, Bishops Garden Towers
P.O. Box 56445-00200, Nairobi
Tel: 2719933/4, Cell: 0736712724, 0724256078
Email: admin@kippra.or.ke
Website: <http://www.kippra.org>
Twitter: [@kippra.kenya](https://twitter.com/kippra.kenya)