

# **Distanced and Disadvantaged:**

A Study on the Effects of COVID-19 on Education for Learners with Disabilities in Kenya

Main Report, October 2020.



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*Irene Kirika-Mbari* Founder & Executive Director of inABLE.org

# Abbreviations and Acronyms

	-
COVID-19	Coronavirus Disease
DSNE	Directorate of Special Needs Education
E-Learning	Electronic Learning
IEP	Individualised Education Plans
KICD	Kenya Institute of Curriculum Development
KISE	Kenya Institute of Special Education
KNBS	Kenya National Bureau of Statistics
LwDs	Learners with Disabilities
MoE	Ministry of Education
PLwD	Parents for Learners with Disabilities
PRL	Parents for Learners without disabilities
RLs	Learners without disabilities
SNE	Special Needs Education
TLwDs	Teachers for Learners with Disabilities/Teachers for SNE
TRL	Teachers for learners without disabilities
TV	Television
WHO	World Health Organisation

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# **Executive Summary**

This study investigated some of the effects of COVID-19 pandemic on learners with disabilities in Kenya. It contended that the measures put in place to contain the pandemic have had adverse effects on learners, especially learners with disabilities; social distancing had disadvantaged learners with disabilities since they had limited access to learning, were more likely to have no access to their social circle of friends, and faced more challenges navigating environments at home. The study recommends that different stakeholders (parents, communities, non-state actors, governments, and especially the Ministry of Education) should put in place measures that would avert any further physical and psychological trauma on the learners with disabilities currently and in the future.

The report recommends that the different stakeholders should:

- i. Put in place inclusive measures that will also target learners with disabilities. For example, learners with hearing impairment are the most disadvantaged.
- ii. In cases of school closures during pandemics, facilitate access to learning materials, provide teacher support, and electronic devices which are critical for learning at home.
- iii. Put concerted efforts to equip and empower parents of learners with disabilities, their communities, and to have more inclusive approaches. This may include having community-based approaches that share information targeting children with disabilities;
- iv. Make e-learning platforms more accessible and interactive to effectively engage learners with disabilities. Television (e.g. the KICD supported EduTV) was the most common e-learning platform used but it was still not friendly to learners with visual and hearing impairment.
- v. Establish a county-based and robust database of children and learners with disabilities and consequently, implement social protection programmes that specifically target these families of children with disabilities to address their nutritional, health, and social welfare during emergencies.

## Background

During the COVID-19 pandemic, numerous countries of various industrialization statuses, healthcare systems, political structures, and education systems all faced the same challenge: a partial or total lockdown to curb the spread of the disease. This study was conducted in June 2020 when a majority of the countries had experienced some form of lock-down. The study identified a critical group of persons (learners with disabilities) who were likely over-looked by governments in the implementation of the total or partial lockdowns. For Kenya, the school closures happened in Mid-March 2020 and therefore at the time of the study, learners had been at home for almost three months.

Overall, the study found that the social distancing, lockdown, and quarantine measures taken by the Government has had an adverse effect on the learning for all children in Kenya. However, for learners with disabilities, school was where they were most comfortable due to the conducive physical, social, and learning environment. Thus, many learners were not only feeling more distanced from their peers, teachers, and society, but they also felt more disadvantaged and vulnerable.

# Study Design

The research adopted a comparative, descriptive approach to the investigation of the effects of COVID-19 on learners with disabilities. Although equal samples were targeted between learners with and without disabilities, the sample population was as follows: 163 Learners without disabilities (RLs), 166 parents of Learners without disabilities (PRLs), 39 teachers of Learners without disabilities, 131 learners with disabilities (LwDs), their 132 parents (PLwD), and 32 teachers for LwDs (TLwDs); these figures also show that RLs, their parents, and teachers, were more than learners with disabilities, parents of learners with disabilities, and teachers of learners with disabilities. The guiding hypothesis to the study was that there were no differences between the effect of the pandemic on the two categories of learners (those with and without disabilities). The study also targeted four categories of disabilities – learners with visual, hearing, physical or learning difficulties. All the targeted learners were enrolled in school at the time of the school closures. Four counties (Kiambu, Meru, Mombasa and Siaya) were selected to represent a large proportion of the Kenyan demography but also because these were counties in which inABLE had project interest.

The mixed method design adopted by the study consisted of: survey questionnaires for learners, parents, and teachers; in addition, there were interview guides for learners, parents, and teachers; finally, the study utilised literature review to discover existing information on the pandemic but also previous challenges faced by learners with disabilities during emergencies.

# Specific Study Findings

More specifically, the study found that there is some learning going on at home. The learning is through use of the students' own study notes and personal study. Where the learning is going on, there is significantly more learning happening among regular students compared to learners with disabilities. For learners with disabilities, the learners with hearing impairment and learners with learning disabilities are the most excluded. On the psychosocial effects, the learners with disabilities are most stressed about the continued closure of schools and a majority of them prefer schools re-opening immediately. This is so that they can continue with their academic calendar, make progress in their schooling, socialize with their teachers and friends, and avoid boredom at home.

For the parents, stress due to insufficient economic resources ranked as the most prevalent physiological effect as it was a common theme amongst many parents. This partly due the poor wages most parents would normally earn but also due to the exacerbated economic conditions that resulted from the COVID-19 pandemic. Other effects include lack of access to healthcare by children with disabilities. Another effect is reduced child safety: children face abuse and violence at home due to close proximity to adult strangers when parents are away trying to earn a living; these children would otherwise be engaged and safe at school. Lack of access to healthcare for children with disabilities also featured prominently as a direct result of the loss of economic opportunities that existed prior to the pandemic. Most of the parents also indicated struggling to feed and provide basic needs (e.g. housing and healthcare) to their children. Where they could access devices, they struggled to get internet bundles to ensure the learners (their children) are connected to e-learning.

For the teachers, a majority reported that they were not supporting home learning in any way. This was mainly due to lack of direction from their schools and no support at all. Most of the teachers who were supporting learning were doing so through tele-support, by either calling the parents or learners to encourage them, this was mostly for the candidates<sup>1</sup>. Another form of support was by sharing e-learning

<sup>&</sup>lt;sup>1</sup> These are either Class 8 students (nearing graduation from primary to secondary) or Form Four students (nearing graduation from secondary to college/university)

materials to the parents who had devices such as smartphones. Teachers were mostly affected by the restricted interactions with their learners (their students) and fellow colleagues. A number of the teachers were also uncertain about their finances because of the uncertainty of continued salaries now that the schools were closed for a long time<sup>2</sup>.

Unfortunately, even as a number of Learners without disabilities continue to learn – albeit with difficulties – it has been almost impossible for some learners with disabilities due to lack of accessible learning materials, assistive devices, or teacher support. For example, learners with hearing impairment complained that most lessons do not have sign language interpreters. Learners with learning disabilities noted that the lessons are too fast for them. Other infrastructural issues, such as lack of electricity and connectivity, also restrict certain students from accessing learning content.

Even then, regular students have also been affected as a result of being at home. For many Learners without disabilities, their parents have assigned house chores which have interrupted their learning. Moreoever, many Learners without disabilities found it challenging to access to digital learning content via the internet or traditional media their ill-equipped and illiterate parents could not help navigate the learning content.

Among the psychosocial effects of the COVID-19 pandemic, sadness among the learners and anxiety among parents featured prominently, while the teachers were mostly worried. The measures that had been undertaken by the state in order to curb the spread of the virus had a direct impact on the continuity of learning. The learners were sad and bored because most of them had already finished their study notes, had not obtained sufficient or any textbooks, and were now being engaged in house chores or even in income generating activities at home. The teachers on the other hand were worried about their learners, especially for the teachers for learners with disabilities. Their worry was mainly on the status of their health, security and education. One of the main concerns was that these learners may not return to school when it re-opens.

Social distancing as a result of government mandated lock downs has also led to increased levels of stress among parents, teachers and children. Almost all social gatherings and celebrations have been prohibited leading to even more social isolation. The study found that due to prolonged periods of being isolated at home, familial tensions have increased, and children bear the brunt of this phenomenon. As a result, there had been an increased number of cases of child abuse and exposure to domestic violence. Many children with disabilities who have faced an increase in negative behavior as a result of the accrued stress and trauma during the lock down period.

All is not doom and gloom. Multiple initiatives geared towards ensuring the continuity of learning have emerged from various sectors including government, charitable groups and individual and NGOs. The

<sup>&</sup>lt;sup>2</sup> At the time of data collection the Teachers Service Commission had not pronounced itself on the continued payment of the salaries of public schools teachers while most private schools owners had stopped paying their teachers causing anxiety among the public schools teachers.

emphasis of all of them has been on digital learning but there are other means that have been used to deliver learning content and materials to children learning from home. This includes traditional broadcast media (TV and radio), one on one tutoring, and more. In some areas, even politicians are ensuring that learners, including learners with disabilities, are engaged.

The study also found that there were different emerging issues in the different counties that were traversed. Some were positive and some were negative. For instance, in Siaya and Kiambu, there were two organizations undertaking initiatives geared towards bolstering home learning for both regular students and those with disabilities. Other emerging issues that were observed as a result of learning from home, lock downs, and social distancing measures include lack of adequate parental support in learning, increase in occurrences of child labor practices, increased cases of child abuse and statutory rape, disruptive cultural norms such as early marriages, and more. In many counties such as Mombasa, it was observed that there was also an increase in charitable activities such as the provision of food to the indigent.

There were various challenges that teachers, parents, and students experienced during the pandemic while in a bid to ensure learning continuity. Mainly, teachers and parents were not sufficiently familiar with digital technology being used to deliver learning content to students at home. There were no focused and tailor-made home-based curriculum for children with special needs; as a result they were severely falling behind in their learning.

Head teachers reported concerns about insufficient funding that has led to overburdening of the few available staff in teaching institutions that were still trying to provide learning opportunities where they could, while still observing government mandated procedures in the fight against Covid-19. A lot of the teachers felt overwhelmed as a result of this.

# A summary of the main findings are:

- i. <u>There was significantly more learning going on at home among Learners without disabilities</u> compared to the learners with disabilities. This was confirmed by both the parents and the learners. There were more Learners without disabilities (99%) compared to learners with disability (86%) who reported that they were reading at home. For the parents, 93% of Learners without disabilities' parents reported learning was going on while 82% of parents for learners with disabilities reported the same.
- ii. <u>There was significantly more Learners without disabilities at home with learning materials</u> <u>compared to the learners with disabilities</u>. According to parents' responses, it was noted that significantly more Learners without disabilities (94%) compared to learners with disabilities (80%) were equipped with learning materials (e.g. textbooks) from schools.
- iii. <u>There was significantly more participation on online/e- learning by Learners without disabilities</u> compared to learners with disabilities. There were more Learners without disabilities (52%) compared to learners with disabilities (39%) who reported that they were participating in online/e-learning while at home. For the parents, 49% of Learners with disabilities' parents reported learning was going on, while 35% of parents for learners with disabilities reported the

same. The most common modes of electronic learning were television, radio, and smartphones across the learners with disabilities.

- iv. <u>The main gaps identified in electronic learning (including KICD platforms) for learners with disabilities were teacher centeredness, lack of accessible learning materials, and lack of assistive devices</u>. The main needs for effective e-learning was access to materials, devices, and teacher support. Learners with hearing impairment seemed to need more support compared to other types of disabilities.
- v. <u>The parents for Learners without disabilities had significantly more knowledge on electronic</u> <u>learning compared to parents for learners with disabilities</u>. The proportion of parents of Learners without disabilities (85%) who indicated knowledge on electronic learning was much higher than that of parents for learners with disabilities (76%).
- vi. <u>Mothers were the most likely to support home learning</u>. Mothers were two times more likely to support learning at home compared to fathers in the family. For learners with hearing impairment, they were more likely to support themselves. Siblings were also key in supporting learning, especially for learners with learning difficulties.
- vii. <u>There was minimal difference in the life related challenges faced by parents of Learners without disabilities and parents of learners with disabilities</u>. The parents reported challenges with supervision of children learning at home (51%), meeting the learners basic needs (46%), and inadequate or lack of learning materials (27%). Even though parents for learners with hearing impairment seemed to have the most challenges in supporting their children, with 83% indicating this.
- viii. <u>The COVID-19 pandemic has exacerbated financial challenges faced by a majority of the parents</u>. The parents were stressed about the providing the daily basic needs for the children, worried about supporting the health crisis and the restrictions imposed, and anxious about the inadequate learning because of the closure of the schools.
- ix. <u>The COVID-19 pandemic has affected the general perspectives of the learners because they want</u> to go back to school immediately. The learners were sad that they cannot interact with their peers, bored because they do not have books to read (had already read the books they had), and anxious or worried about repeating classes.
- x. <u>The COVID-19 pandemic had rendered the teachers dysfunctional</u>. The teachers indicated that they were not supporting the learners. This was partly because there had been no directives from the schools on how to engage with the parents and learners. Those who were supporting were doing so on their own initiative and it was mostly basic follow ups and / or sharing of e-learning materials via smart phones. Teachers for learners with disabilities were supporting over the phone while teachers for Learners without disabilities were supporting by providing e-learning materials.

The study concluded that the four priority needs for the learners from the parent's perspectives were learning materials (accessible materials), availability of devices at home, personal assistant or teacher support and availability of basic needs. For the devices, other than the television, the smart phone would be the preferred device for learners with disabilities while for Learners without disabilities, the radio would be the preferred device. The recommendation is that learners be allowed to access their learning materials so that they can continue to do personal study. The teachers can then support the learners by giving them regular assignments.

Supporting the teachers to increase their interaction with learners would greatly increase the positive outlook of the learners. The teachers' communication with either parents or learners to encourage, give tasks, follow up on assignments, or support the learner would greatly enhance the learning at home. This is as long as there is a way of communication between the teacher and the learner or parent.

Provision of non-educational support, especially to families of learners with disabilities is critical in managing the effects of COVID-19 on families. Majority of the families have reduced incomes. However, for the families with learners with disabilities, this was perceived as an "extra burden" because of the additional costs such as health costs, more nutritional needs, or even requirement to have someone to take care of the child with disabilities. The parents therefore need support on taking care of these children. This support can be mostly in terms of access to health services (e.g. physiotherapy, skin cream, eye care cream etc), nutritional support, and information on how to keep the children secure.

The study recommends that the teachers be given some airtime, finances, and/or guidelines by the schools (through the Teachers Service Commission direction) so that there is a structured follow up on learners. Where learners do not have learning materials, the schools can allow them to access the learning materials. For learners with disabilities, disabled persons organisations can create accessible materials that can be shared or distributed to these learners and the teachers facilitated to support them. For the parents, especially for learners with disabilities, the government, county governments and disabled persons organisations should reach out and support these families with basic needs, health care support, and nutritional support.

# 1.0 Introduction

The study sought to find if there was a difference in learning experiences between learners with disability and Learners without disabilities while at home during the COVID-19 crisis. The study was conducted in June 2020 when part of Kenya (three counties of Nairobi, Mombasa and Mandera) were on lockdown.

# 1.1 Background

In Africa, like most other parts of the world, the COVID-19 pandemic has led to the sudden shift of education classes to online, television, radio, and other remote/virtual platforms, and general learning-from-home contexts. This shift from regular institutionalized education to home-schooling was largely unplanned and unsupported. Learners with disabilities have experienced substantial challenges with this dramatic shift, along with the rest of the student population and their families because of the measures made to combat COVID-19. This study documents and distils the lived experiences of a sample of young learners with disabilities in Kenya, and compares their experiences to those of learners who do not have disabilities

# 1.2 Literature Review

The advent of the Coronavirus Disease 2019 (COVID-19) has become a significant issue in all countries where it has been reported. Effects of the disease have been felt across the globe in varied levels and in all spheres of life. Healthcare systems have been overwhelmed in some countries. Social conduct and cultural changes have been so drastic that a phrase "the new normal" has been coined to accommodate and rationalize the new way of life for people everywhere. Most countries have been forced to close certain institutions, limit the movement of people, and even declare curfews and lockdowns to safeguard the health of their people. Education is one of the most affected sectors of society, especially in Kenya. This section shall discuss the issues surrounding the impact of the COVID-19 related closures on education and other spheres of life for learners with disabilities.

Coronavirus Disease 2019 is caused by a strain of a virus which falls under the category of a group of viruses referred to as Corona Viruses. The strain that causes the disease is called the novel corona virus because it is a new strain (WHO, 2020). Symptoms of Coronavirus include: common symptoms like fever, dry cough and fatigue; less common symptoms like aches, sore throat, diarrhea, conjunctivitis, and headache, loss of taste and smell, and skin rash; while serious symptoms include difficulty breathing, chest pain as well as loss of speech and/or movement. Symptoms appear between 5 and 14 days after infection. Children with disabilities are among the most vulnerable to the disease, given that they are more likely to have conditions that predispose them to the disease. Others require personal assistance at close proximity, hence exposing them more to infectious diseases. For instance, children with visual impairment may require assistance in mobility among other areas, while those who are deaf require an interpreter to communicate with hearing people who are the majority population.

Persons with disabilities in the world are estimated to be around 15% of the world population. However, these estimates vary from one country to the next, depending on various factors. Factors that influence prevalence of disability in a country include national levels of income among others (WHO, 2011).

Estimates of the number of persons with disabilities in Kenya differ from study to study. According to the Kenya National Survey for Disabilities (2009), 4.6% (currently about 2.185 million people, based on

population estimates of the national census of 2019) of Kenyans have some form of disability. The Kenya Population Housing Census estimated 3.5% of the population in Kenya as persons with disabilities (Republic of Kenya, 2010). That would make about 1.6 million people based on the 2019 census. The Kenya Integrated Household Budget Survey puts the population at 2.8% (KNBS, 2018). The National Survey (KISE, 2018) puts the prevalence at 11.4% i.e. 5.4 million individuals by the most current population estimates. The KISE study targeted persons between ages 3 - 21 years of age. These disparities and uncertainty in the population of persons with disabilities in Kenya create significant challenges including difficulties in planning and allocation of resources for service provision in education. Access to education remains a big challenge to Learners with disabilities in Kenya with only 39% having accessed primary education and a mere 9% accessing secondary education (NGEC, 2016). The situation has become worse because of the effects of COVID-19, including the lockdown and prolonged closure of schools across the country. Given results from previous studies, learners with disabilities bear the brunt of such actions.

The statistical year booklet (MoE, 2016) indicated that the number of learners with disabilities enrolled in primary schools was 222,700. Only 11,400 students were enrolled in secondary schools, of which 45% were girls, while 55% were boys. The numbers above are an indicator of the low level of access to education for learners with disabilities. In primary schools, 44% of pupils with disabilities had intellectual disabilities, 17% had hearing impairment and another 17% had visual impairment. About 14% of learners in primary schools had physical impairments, while 8% percent had multiple disabilities.

In secondary schools, a third of students with disabilities had visual impairments. Students with physical disabilities accounted for 28% of the population while hearing impairments accounted for 24% of total enrolment of students with disabilities. Learners with Intellectual Disabilities accounted for 44% in primary schools, and only 13% of the total enrolment. This disparity raises concerns regarding the circumstances that lead to such a significantly low transition rates for this category of learners.

From the data presented above, it seems rational to conclude that learners with disabilities face unique challenges due to the effects of societal reactions towards impairment, which result in disabilities. Their situation of special needs has been exacerbated by the challenges escalated by the impact of COVID-19. Some of the needs of learners with disabilities are discussed below.

Inappropriate, inadequate, or lack of infrastructure, facilities, and equipment for learners and trainees with disabilities is commonplace in institutions serving them. The situation of need is expected to be worse in non-formal settings such as villages and regular Kenyan homes where learners with disabilities have had to retreat to upon closure of all educational institutions. Considering the fact that a majority of the homes in Kenya have no access to professional services such as Braille transcription, Sign Language interpretation, and various therapies, it seems safe to hypothesize that majority of learners with disabilities have significantly limited access to health, educational, and social services while at home.

Learners with different disabilities face different challenges emanating from limitations caused by impairments as well as the failures of society to accommodate persons with disabilities. Learners with disabilities are likely to face challenges of orientation and mobility, access to appropriate learning materials, inadequate human and material resources, as well as communication. As previously indicated,

it is more likely than not, that family members may not be able to use Kenyan Sign Language and Braille or provide much needed therapy to their children who may require these services. Learners with disabilities are likely to face more challenges than those without disabilities. It therefore seemed necessary to carry out a study to find out the challenges learners with disabilities are facing at home during the lockdown period. The findings of the study may influence planning in the future and inform intervention strategies to ensure that necessary services reach the learners.

Government supports learners with disabilities by providing human and material resources, policy guidance, financing, supervision, maintaining quality and standards in education, as well as coordinating partners. The Ministry of Education (MoE), State Department of Basic Education hosts a directorate of Special Needs Education, which provides guidance in Special & Inclusive Education. The Ministry provides more financial support for learners with disabilities than those without disabilities as guided by the Sector Policy (MoE, 2018). Foreign governments, national and international civil society organizations also partner with the government of Kenya to provide financial and technical support in areas where it is required. Drafting of certain policies have been funded by partners, for instance, drafting of the Sector Policy (2018) was done with financial assistance from over 5 partners. Currently, projects financed with money from international lenders like the World Bank must include learners and/or trainees with disabilities. This has enhanced the development of learners with disabilities and their welfare.

In order to serve learners with disabilities better in the lockdown period, organizations have come up with innovative ways of running projects and programs. Some of the strategies used by organizations to serve learners with disabilities include online educational classes, health and exercise programs. In Kenya, certain civil society organizations, in partnership with relevant government ministries and other partners are implementing educational, health and sports related programs that heavily rely on online platform to reach out to learners with disabilities. Others are carrying studies to establish what challenges and opportunities exist in the COVID-19 related lockdown period, the proposed study by inABLE organization is one that is expected to inform the next steps in implementation of innovative educational projects and programs to serve learners with disabilities.

# 2.0 Methodology

# 2.1 Study Design Study Population and Sample

The focus of this study was comparison of the involvement of learning at home by learners with disabilities and their counterparts without disabilities. The learning, both on e-learning platforms and other methods, were investigated. The opinions of parents, for both learners with and without disabilities, and teachers were also investigated. In conducting the study, the targeted sample size was 720 respondents; 320 learners (160 with disabilities and 160 without disabilities), 320 parents (160 parents for learners with disabilities and 160 parents for learners without disabilities), and 80 teachers (40 for learners with disabilities and 40 for Learners without disabilities) were targeted. A total sample of 666 respondents was achieved for the surveys; 294 learners (131 with disabilities, 163 Learners without disabilities), 298 parents (132 for learners with disabilities, 166 for Learners without disabilities), and 74 teachers (35 for learners with disabilities, 39 for Learners without disabilities).

For the qualitative sample of 80 informants that consisted of 16 learners with disabilities, 4 Learners without disabilities, and their parents, 24 teachers (16 SNE teachers, 8 regular teachers) and 16 head teachers. The selection of the sample (both qualitative and quantitative) take into consideration equal representation of all the 4 categories of disabilities and the Learners without disabilities for comparison. The same also applied to the parents and teachers. The county and gender representation were also part of the criteria.

Data was collected via tele-interviews for all the respondents except for learners with hearing impairment which was collected through a sign language interpreter. The data collection tools included survey questionnaires and interview guides. The parents, teachers and learners were all sampled, and all these tools applied to them. The same sample size was targeted for both the parents, learners and teachers.

The primary methodology used for this study was descriptive comparative questionnaire research. Therefore, quantitative and qualitative data were collected from willing participants. Consent of participants was directly given by the participants. For the children, consent was first asked to the parents before being affirmed by their children through their willingness to complete a distributed questionnaire. Comparative and descriptive statistics with cross tabulations and frequencies, were used to determine comparisons of learners and parents' responses among three subgroups; the type of functional disability, gender, school level and county. Findings were compiled and analyzed.

Recommendations for future research are proposed. The documentation of learners with disabilities remains a challenge. The categorization of learners with learning disabilities at recruitment was also a challenge. There is little documentation of the county level data of learners with disabilities and this could be a good starting point in setting the stage for further research on learners with disabilities.

The purpose of this study was to explore and compare the difference circumstances and factors that are affecting learning at home during the COVID-19 pandemic crisis. The study hypothesized that there was no difference in the learning taking place at home between the learners with disabilities and the Learners without disabilities.

Hopefully, these findings can be useful to target populations of learners with disabilities. The findings should also be useful in providing a glimpse of the different issues affecting learners with disabilities by the counties they are from. The study also sought to compare the differences of opinions among the learners, teachers, and parents on issues of learning, e-learning, and general reaction to the COVID-19

pandemic. Analysis of these factors indicated the trends of learners with disabilities being disadvantaged but also in varying degrees across the functional difficulties. Findings may be useful in developing appropriate educational strategies for the learners with disabilities.

#### Limitations and Delimitations

- 1. The population that was studied consisted only of those schooling in four counties (Kiambu, Meru, Mombasa and Siaya), and therefore the characteristics of these counties may have influenced the results.
- 2. The recruited learners with disabilities and the Learners without disabilities were for those in the database of the EARC coordinators or those that they are in contact with.
- 3. The learners with learning disability seemed to have varied definitions based on the individual EARC coordinators' understanding. A few of the coordinators recruited learners that were out of the scope of learners who typically have learning disabilities<sup>3</sup>.

<sup>&</sup>lt;sup>3</sup> According to the Sector Policy for Learners and Trainees with Disabilities (2018), learning disability categories specifically mentioned are dyslexia, dyscalculia and dysgraphia) but the EARC coordinators also included learners with speech and language difficulties, autism and other similar categories that are regarded independently and as such non-learning disabilities according to the policy.

# 3.0 Study Findings

The study findings are discussed in two different components, section 1 summarises the profile and demographics of the respondents, and section 2 summarises the discussion of findings.

# 3.1 The Profile of Respondents

A total of 35 teachers for learners with disabilities and 39 teachers for Learners without disabilities were reached. For parents, a total of 132 parents for learners with disabilities and 166 parents for Learners without disabilities were reached. Whereas for learners, a total of 131 learners with disabilities and 163 Learners without disabilities were reached. On average there were 40% male respondents and 60% female respondents across the different categories.

Functional Disability		Teachers for LWDs			Parents for LwDs				Learners with Disabilities						
	м	F	Total	M (%)	F (%)	м	F	Total	M (%)	F (%)	м	F	Total	M (%)	F (%)
Visual	5	4	9	56%	44%	22	27	49	45%	55%	25	22	47	53%	47%
Hearing	3	4	7	43%	57%	9	22	31	29%	71%	9	21	30	30%	70%
Mobility	1	6	7	14%	86%	14	18	32	44%	56%	19	13	32	59%	41%
Learning	1	1	2	50%	50%	6	13	19	32%	68%	10	10	20	50%	50%
Other	2	8	10	20%	80%	0	1	1	0%	100%	2	0	2	100%	0%
Total LwD	12	23	35	34%	66%	51	81	132	39%	61%	65	66	131	50%	50%
Total Learners without disabilities	16	23	39	41%	59%	62	104	166	37%	63%	72	91	163	44%	56%

Table 1: Representation of Respondents by Disability

Desegregated by counties, Kiambu had 173 respondents; Meru (149); Mombasa (167); and Siaya (172). While of the total 294 learners (235 were from primary school, 56 secondary school and 6 did not have any designated class).

County/Level		Teacher		Parents			Learners		
	TLwD	TRL	Total	PLwD	PRL	Total	LwD	RL	Total
Kiambu	10	9	19	35	42	77	35	42	77
Meru	8	9	17	26	41	67	26	41	65
Mombasa	7	12	19	35	42	77	35	42	75
Siaya	10	9	19	36	41	77	35	41	76
Primary	28	37	65	94	142	236	92	143	235
Secondary	7	2	9	35	24	59	36	20	56
Total	35	39	74	3	0	3	3	0	3
				132	166	298	131	163	294

Table 2: Representation of Teachers, Parents and Learners by County and Level of School

The teachers and learners in the sample represented 58 schools and 112 schools respectively.

County	Teachers	Learners
Kiambu	16	33
Meru	11	24
Mombasa	15	25
Siaya	16	30
Total	58	112

# **3.2 Discussion of Findings**

This section presents and discusses the findings under the sub-themes of status of learning at home, status of e-learning, uptake of KICD e-learning, effects of the COVID-19 on learning, and the challenges and support from the perspectives of parents, learners and teachers. The key highlights have been presented in each of the sub-section with as much comparison between learners with disabilities and that of Learners without disabilities. Where the findings of a category of disability varies from the other disabilities, these have also been highlighted.

### 3.2.1 Learning at Home

This sub-section discusses if learning is happening at home, learning modes, and the comparison between learners with disabilities and Learners without disabilities. The main findings here were: (i) There was significantly more learning going on at home among Learners without disabilities compared to the learners with disabilities; (ii) There was significantly more Learners without disabilities with learning materials compared to the learners with disabilities; (iii) the main modes of study was personal study using text books, own notes or homework or assignments given from school; (iv) among learners with disabilities, the learners with hearing impairment and those with learning disabilities were the most disadvantaged in relation to learning from home; and (v) between house chores and learning, there was more engagement of children in house chores compared to learning.

### (a) Is learning happening at home?

## **Key Findings:**

•House chores First: The parents reported learners were engaged more in household chores (83%) compared to homework or own studies (81%). For learners with disabilities, a learner with physical disability (91%) was reported to be more likely to be studying as opposed to doing household chores (67%) while a learner with hearing impairment (90%) or learning disability (65%) was more likely to be doing household chores as opposed to studying (67%, 65%) respectively.

•No Textbooks or Learning materials: Even though a majority of the learners reported that their main mode of study is through t textbooks and own notes. They have either exhausted reading these materials or did not carry sufficient reading materials. According to parents' responses, significantly more learners without disabilities (94%) compared to learners with disabilities (80%) came with learning materials from schools.

• Minimal Teacher Support: More teachers for learners with disabilities (34%) compared to teachers for learners without disabilities (18%) indicated that they were doing NOTHING to support learning. Notably, for teachers supporting learners via telephone, there were proportionately more teachers for learners with disabilities (29%) compared to the teachers for learners without disabilities (18%). The support for learning at home was mainly from thers (43%)

Learning was reported to be happening at home for both learners with disabilities and the Learners without disabilities. However, there was significantly more learning among the Learners without disabilities compared to learners with disabilities. Asked directly whether there was learning going on at home, parents (88%) indicated there was learning going on compared to learners (93%). However, there were more parents for Learners without disabilities (93%) compared to parents for learners with disabilities (93%) compared to learners with disabilities (82%) and more Learners without disabilities (99%) compared to learners with disabilities (86%).

The same comparable trend was seen across the disability types, counties and the school level. For instance, 97% of the learners with physical/mobility challenges indicated they had continued learning at home and the same proportion was mentioned by parents. This figure was much lower in parents and the learners with disability for hearing impairment (68%, 77%) and learning difficulty (74%, 80%) respectively. This finding was consistent with the number of parents who also indicated that their children came home with books and learning materials.

However, it was also noted (see figure 1) that even though reading or learning was happening at home, when asked to report on the main activities children are engaged in at home, doing house chores was the main activity that the parents reported at 83% with more parents for Learners without disabilities (86%) compared to those of learners with disabilities (80%).

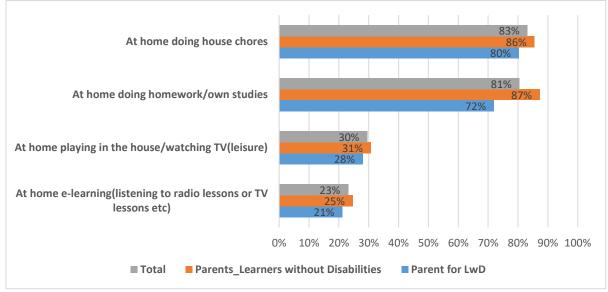


Figure 1: Parents reporting activities children are engaged at home

Interviews with Learners without disabilities confirmed that the children were not fully engaged in learning because they were either undertaking house chores, lacked access to learning materials, had unconducive environment, and / or had parents that were ill equipped to support their learning. A learner from Mombasa had this to say about how house chores are interfering with his learning;

"Most of the time when we are at home, a lot of time is consumed in running errands. So when I get even 1 hour I use it to study... There are times when I am usually too tired to even study... I cannot lie to you, I don't follow through with the radio programme but I know there are such programmes. Most of the time I am always in the farm when these programmes are aired on

radio... Like, today I have not done any reading; I was at the farm for like 5 hours from 8am to 12pm. I am exhausted."

(Male Learner, Visual Impairment, Mombasa)

For learners with hearing impairment, learning was affected by lack of sign language interpreters; they were also prone to being isolated and left in solitude. Furthermore, the teachers noted that there were different variations of the sign language - they reported that different regions have different signs. For example, a sign in Siaya might mean something different in Mombasa. A learner can get a different message from what was intended. They indicated that learners without disabilities are at an advantage because they do not have to go through such problems as they receive the message directly from the teacher.

"...Yes, and another thing with the sign language we normally say it's somehow regional we have different signs meaning the same thing. For example, when I say those in Murang'a school of the deaf sign something this way those in Isiolo sign it the other way and those in Meru sign in another way now harmonizing for the kids becomes a challenge." (Female teacher for Hearing Impaired, Meru)

Whereas most of the parents for learners with learning disabilities were at a loss to help their children because the e-learning platforms available were not adapted to their children.

For the learners with physical disabilities, the teachers were concerned about their health as the learners might regress in progress since they miss physiotherapy sessions and life skills taught at school. A teacher from Kiambu stated that...

"Even to do the individual programs, these learners forget a lot. We call them IEP. We are sure when they come back; they will be at different levels." (Female Teacher for Learners with Physical Disability, Kiambu)

Another teacher from Siaya also explained that...

"We also have what we call individualized education programs/IEPs. This is where we have identified that a certain child is having a particular problem in a given area. For example, if they cannot feed on their own, I have to find out how to solve this problem until the child becomes independent. And so that the people he lives are not bothered to feed him every time. I normally start a program for them to help them overcome all these problems. We call them lesson plans. If I start this program in school, I always find that there is lack of continuity at home by the parents or guardians. With that lapse, the training cannot continue and I may not be able to achieve my objective." (Female teacher for Special Unit, Siaya)

#### (b) What mode of learning is happening?

#### **Key Findings:**

• No Textbooks or Learning materials: Even though majority of the learners reported that their main mode of study is through textbooks and own notes. They have either exhausted reading these materials or did not carry sufficient reading materials. According to parents' responses, significantly more learners without disabilities (94%) compared to learners with disabilities (80%) came with learning materials from schools.

The main mode of learning happening at home was personal study as reported by 79% of the learners, reading of own notes (69%), and doing homework or assignments given by teachers (39%). However, the children were getting very bored with these activities. Nearly 4 out of 5 or 83% of male learners with disabilities (74% female LwDs) were finding it easier to do personal study at home while 66% preferred reading own notes (67% male LwD, 64% female LwD).

Majority of the learners indicated that personal study through either reading textbooks 78% (70% for LwD, 83% for RL), own notes (75%), or revision papers 42% (38% for LWD, 45% for RL) were the easiest to do at home. This was followed by TV lessons (30%) and radio lessons (13%) as per figure 2.

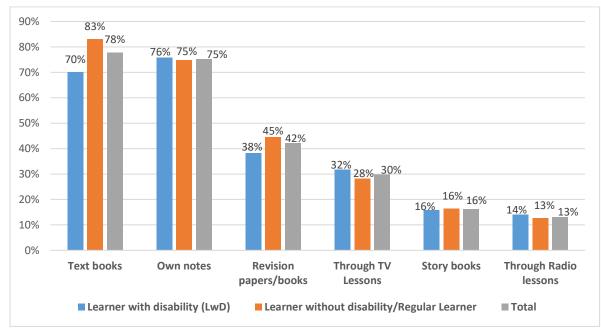


Figure 2: Common Modes of Learning at Home (Learners)

The modes reported by learners were similar to those reported by parents. The parents indicated that personal study (87% for Parents for LwDs, 91% for RLs) was the most common learning method. This was followed by learning through TV lessons (28% for Parents for LwDs, 35% for Parents for RLs) and learning through radio lessons (15% for Parents for LwDs, 15% for parents for RLs).

Asked if the learners had come with textbooks or other learning materials to do personal study, according to parents responses, it was noted that significantly more learners without disabilities (94%) compared to learners with disabilities (80%) came with learning materials from schools as stated by a learner below:

# "I haven't been reading. I don't have textbooks to read". (Female Student, Learning Disability, Kiambu)

A comparison of the accessible materials at school and at home revealed that for learners with visual impairments had no accessible materials at home. They reported that they were more than three times likely to have materials at school compared to home. While the teachers for learners with visual impairment indicated that they were more than ten times likely to have accessible materials at school compared to home. Similarly (as represented in figure 3 below), whereas 44% of the learners with visual impairment indicated that there were no accessible materials at home, 75% of the teachers indicated the same, only 7% of the same learners indicated that there were no accessible materials at school. The most common materials for learners with visual impairments were regular print/textbooks, braille materials and print magnifiers.

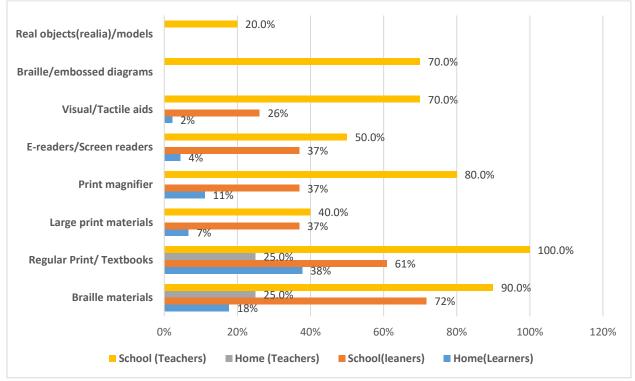


Figure 3: Comparison of materials available for visually impaired at Home and School (Learners and Teachers views)

On the other hand, for the learners with hearing impairment, 97% of these learners reported having no materials at home while one learner only (3%) reported having access to sign language interpretation at home. The teachers also indicated that whereas there were no accessible materials available at home. The most common accessible materials available at schools were sign language interpretation services and visual/tactile aids.

The interviews with learners with hearing impairment found that following e-learning programs was difficult as some lack interpreters. Even when there was one, the signs might not synchronize with what was being taught, so the message was distorted. Also, the learners could not consult their siblings as they were not knowledgeable. Learners without disabilities on the other hand could hear well and consult parents and siblings if something was unclear. It was difficult for learners to learn without a well-versed guide in sign language. According to an explanation given by a learner:

"It is also quite difficult for a learner with hearing impairment to learn without supervision from someone that understands sign language. For this learner, communication is also a challenge since no one understands sign language in the family and also around the community." (Form Four learner, Hearing Impaired, Meru)

## (c) Who is supporting learning at home?

## **Key Findings:**

• **Minimal Teacher Support**: More teachers for learners with disabilities (34%) compared to teachers for learners without disabilities (18%) indicated that they were doing NOTHING to support learning. Notably, for teachers supporting learners via telephone, there were proportionately more teachers for learners with disabilities (29%) compared to the teachers for learners without disabilities (18%). The support for learning at home was mainly from mothers (43%)

More teachers for learners with disabilities (34%) compared to teachers for learners without disabilities (18%) indicated that they were doing nothing to support learning. For teachers supporting learners via telephone, there were proportionately more teachers for learners with disabilities (29%) compared to the teachers for learners without disabilities (18%). On the other hand, fewer teachers for learners with disabilities (9%) compared to regular teachers (31%) were sharing e-learning materials to the learners as well as making follow ups with parents. Figure 4 below outlines this:

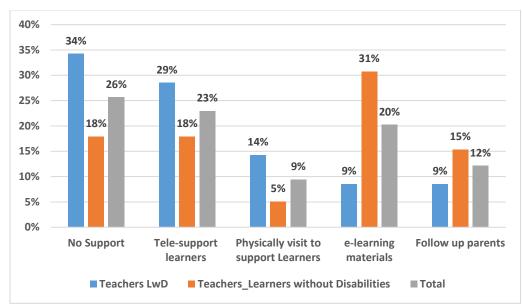


Figure 4: How teachers are supporting learning

Furthermore, the teachers for LwD (63%) indicated that they were not giving any e-learning support to their students compared to 49% of the teachers for learners without disabilities.

On the other hand (as shown in Figure 5 below), the parents reported that mothers (37%) were the ones who have taken up the responsibility of supporting learning at home. It was noted that for learners with disabilities there were more mothers (43%) reported to be supporting learning compared to 34% of the mothers for learners without disabilities. For learners with disabilities, generally mothers were also more involved in the learning process with learners with learning disabilities (57%) having the highest involvement while those with hearing impairment (33%) had the lowest involvement by their mothers and supported themselves (38%). For learners with learning disabilities, there was more involvement by siblings (21%) compared to their fathers (7%).

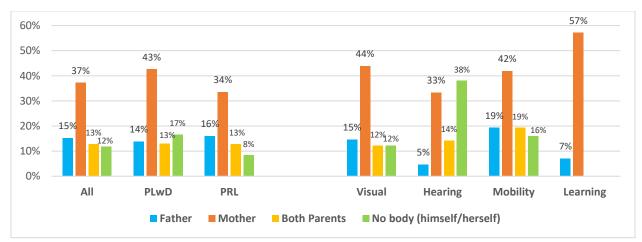


Figure 5: Parents reporting on who supports learning at home

#### 3.2.2 Electronic Learning at Home

Fewer students are participating in any form of electronic learning. There are significantly more learners without disabilities (52%) compared to learners with disabilities (39%) participating in online or electronic learning. Apart from television, the learners with disabilities prefer radio to smartphone contrary to learners without disabilities who prefer smartphones.

#### (a) The extent of e-learning at home

#### **Key Findings:**

• House chores First: The parents reported that learners were engaged mostly in household chores (83%) compared to homework or own studies (81%). For learners with disabilities, a learner with physical disability (91%) was reported to more likely be studying as opposed to doing household chores (67%) while a learner with hearing impairment (90%) or learning disability (65%) was more likely to be doing household chores as opposed to studying (67%, 65%) respectively

More learners without disabilities were engaged in e-learning compared to learners with disabilities. From Figure 6 and 7 below, there were more learners without disabilities (52%) compared to learners with disability (39%) who reported that they were participating in online/e-learning while at home. For the parents, 49% of learners without disabilities' parents (PRLs) reported e-learning was going on while 35% of parents for learners with disabilities (PLwDs) reported the same. However, it was noted that when the parents were asked to list the activities that children are engaged in at home, only 23% (21% PLwD, 25% PRL) mentioned e-learning was going on at home.

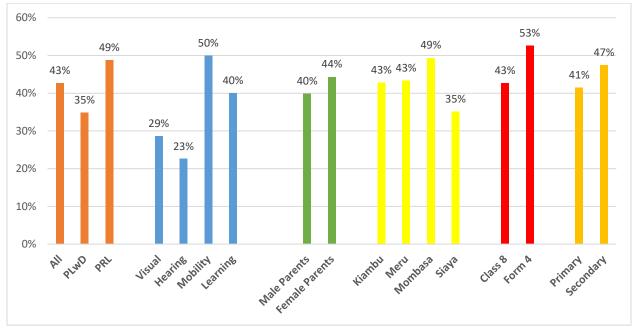


Figure 6: Parents: Children Participating in Online/E-Learning

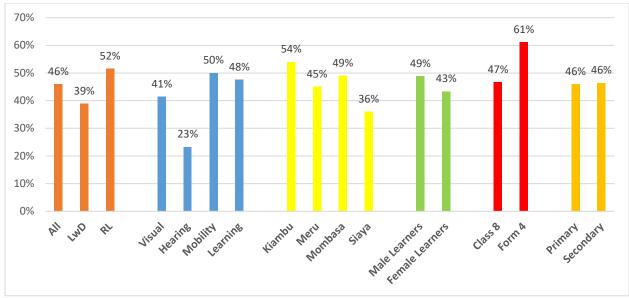


Figure 7: Learners Self reporting Participation in Online/E-Learning

There was more or less agreement on the proportion of participation of learners in online learning. Asked whether children are participating in any online or e-learning, 43% of all parents (35% PLwD, 49% PRL) indicated that there was e-learning compared to 46% of all children (39% LwD, 52% RL). The same comparable trend on the overall proportions was observed between parents and learners for the different subgroups across disability types, counties and school levels. However, there were some slight deviations.

For instance, whereas in all other counties there was a major difference between the participation of online learners for learners without disabilities and learners with disabilities, for Mombasa, there was no difference. Both in primary and secondary school levels, there were proportionately more learners without disabilities participating in online learning compared to learners without disabilities. This was explained from the interviews by more engagement of the politicians (members of county assemblies) in the learning of children in Mombasa for both learners without disabilities and learners with disabilities.

The proportions of parents reporting that online learning was going on at home was at 43% of all parents (35% PLwD, 49% PRL). This was different when parents were asked to list some of the activities children are involved in, from Figure 8 below, it can be seen that only 23% of all the parents (22% PLwD, 25% PRL) indicated that there was e-learning at home. The proportions indicated parents listing e-learning at home as part of activities, are shown below.

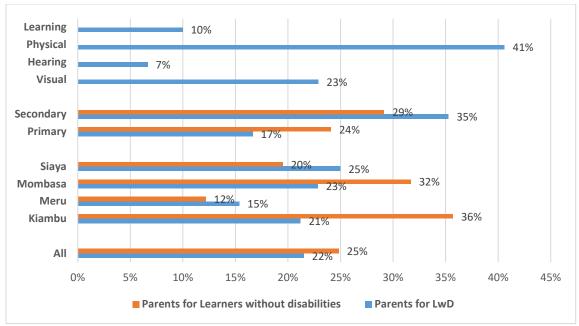


Figure 8: Parents reporting e-learning at home as part of ongoing activities in selected counties

#### (b) What is the mode used for electronic learning?

#### **Key Findings:**

• **Television most preferred:** Both learners and their parents reported that the most preferred or common method of accessing electronic learning was by television. There were more learners without disabilities (78%) and parents for learners without disabilities (35%) reporting use of TV lessons compared to learners with disabilities (67%) and their parents (28%).

•Learners with disabilities preferred radios over smartphones: According to learners with disabilities, the devices most commonly available at home for use in electronic learning were television (69%), radio (38%), and smart phones (25%). Learners without disabilities preferred smartphones (48%) over radio (37%).

•More e-learning in urban than rural areas: Majority of learners with disability from Kiambu (79%) and Mombasa (78%) that were more urbanised indicated that they learned through TV lessons compared to Meru (50%) and Siaya (44%).

•Parents for learners with disabilities were less knowledgeable on electronic learning: Parents for learners without disabilities (85%) had significantly more knowledge on electronic learning compared to their counterparts for learners with disabilities (76%).

The most common ways of participation in e-learning according to the learners were through TV lessons (74%), radio lessons (31%) and WhatsApp (22%). Whereas according to parents, were through TV lessons (32%), radio lessons (15%) and WhatsApp (12%).

There were more learners without disabilities (78%) and parents for learners without disabilities (35%) reporting use of TV lessons compared to learners with disabilities (67%) and their parents (28%); for the radio lessons there was no difference (30% learners and 15% for parents). As for the common devices, of those learners who indicated participating in e-learning, television (73%) was the preferred device for e-learning with 76% of learners without disabilities and 69% of learners with disabilities citing this. Similarly, for parents, 73% indicated television as the most common device for e-learning (70% for Parents for LwD, 70% for Parents for learners without disabilities). This is expounded in Table 4&5 below.

Modes of online participation	PLwD	PRL	Total	
Through TV lessons	28%	35%	32%	
Through radio lessons	15%	15%	15%	
Whatsapp	8%	15%	12%	
With friends	6%	8%	7%	
Through teachers	6%	4%	5%	
Website	5%	4%	4%	
Facebook/Youtube/Google classroom	2%	2%	2%	
Ν	108	152	260	

Table 4: How learners are participating in E-learning (Parents views)

Table 5: Device	s being us	ed in E-leari	ning (Parents views)
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Devices used at home for online learning	PLwD	PRL	Total
Television	70%	75%	73%
Smart phone	34%	48%	43%
Radio	53%	37%	43%
Ordinary phone(Kabambe)	13%	9%	10%
Internet	17%	7%	11%
Tablet	4%	4%	4%
Ν	47	81	128

When analysed by counties, majority of learners with disability from the urban and peri-urban counties of Kiambu (79%) and Mombasa (78%) indicated that they learned through TV lessons compared to the more rural counties of Meru (50%) and Siaya (44%). From the parents' survey, overall proportions indicated that Kiambu (37%) and Mombasa (37%) had the highest proportions of those children learning through TV lessons. On the other hand, for parents of learners with disabilities, the highest proportion of parents whom reported learning through television lessons, was by those for physically challenged (44%) and visually impaired learners (29%).

For the devices, the learners with disabilities who reported engaging in electronic learning mentioned television (69%), radio (38%), and smart phones (25%) being the most common devices used. This was also the case for parents for learners with disabilities who prioritized television (70%), radio (53%), and smart phones (34%). This was different from learners without disabilities and their parents who prioritized smartphones (48%) over radio (37%). Furthermore, for learners with disability, there were more female

learners (72%) compared to male (65%) who indicated that the device of choice was television. The preference of radios over smartphones was mainly because of the affordability of smartphones including the cost of charging and buying data bundles for internet connectivity while the radios have the options of using dry cell batteries.

The interviews re-affirmed the findings from the survey. Learners from Mombasa learned from television, radio lessons, and smartphones via platforms such as WhatsApp. Teachers sent audio notes and assignments to them. Learners said they preferred the audio notes as they were slow in reading the normal notes since they read word for word due to their low vision. Yet, teachers are concerned that there were some learners who cannot be contacted and thus, were not receiving learning materials being sent. A teacher from Meru stated:

"Ok now the biggest challenge is that of learners not having the required facilities, so no learning will take place. Facilities like the smart phones and we have TV teaching some can't afford that and so if they lack these there is no learning but if we have them we can have learning, that's my reasoning" (Female Teacher, Physical Disability, Meru)

The learners were disadvantaged as those with low vision could worsen their vision by watching the TV too closely.

Some of them accessed the devices such as smart phones, radios, computers, and TVs from the neighbours' or relatives' houses and the totally blind have to depend on a guide who can take them there. However, there was a digital divide because in Siaya, learners were aware of e-learning but could not access the platforms anywhere.

#### (c) Participation in Government-KICD E learning Programme

### **Key Findings:**

•Learning through KICD e-learning platforms are low: There were fewer learners (44%) accessing government supported (KICD e-learning) platforms for online learning according to parents. There were more learners without disabilities (46%) compared to learners with disabilities (41%) accessing the KICD e-learning platform.

•KICD e-learning platforms accessed by more female learners than male: More female (49%) compared to male (36%) and more learners from Kiambu (52%) and Mombasa (48%).

•Learners with hearing impairment least served by KICD e-learning platforms: For learners with disability, learners with physical disabilities (53%) had the highest proportion of parents reporting they access KICD e-learning while learners with hearing impairment (26%) had the least access.

•Little support for KICD e-learning by teachers: Few teachers reported supporting learners on the KICD online platforms or e-learning channels.

Less than half (44%) of the teachers indicated they supporting learners on the online platforms or elearning. However, the teachers pointed some major gaps and challenges they were observing about online delivery of learning. The teachers indicated the following as the main gaps: the teacher-centred approach that is the focus of the e-learning platforms was the main issue raised by the teachers for learners with disabilities and teachers for learners without disabilities. For the teachers of learners with disabilities, 41% indicated that the online learning classes were inaccessible for learners with disabilities.

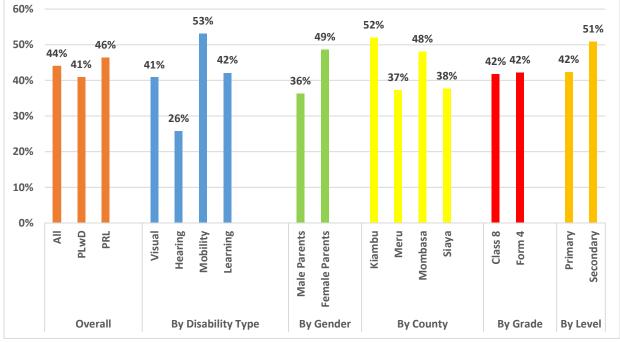


Figure 9: Parents: Children following KICD

Nearly all (95%) of the teachers were aware of the KICD e-learning programmes. The teachers reported accessing KICD e-learning platforms using either the television (63%), radio (35%) or smartphones (34%). The devices that teachers for LwDs preferred to access KICD e-learning were television (65%), smartphone (41%), and radio (35%) while teachers for learners without disabilities reported television, radio (35%), and smartphone (27%) as the order of priority. This trend was similar for learners and their parents.

(d) Reasons for non-participation in e-learning

### **Key Findings:**

•Learners had no devices for e-learning: Parents and learners prioritised access to devices as key to participation in e-learning. This was more apparent for learners without disabilities than the learners with disabilities because of the added challenge of accessibility that faces the learners with disabilities.

•The e-learning platforms were largely not accessible/disability unfriendly: The online learning mode faced the challenge of being disability unfriendly and teacher-centred. For learners with

The main reasons for non-participation in e-learning as reported by parents and learners were lack of devices (parents-59%, learners-63%) such as television, radio, and smartphones in the home, with more learners without disabilities (67%) compared to learners with disabilities (59%) indicating this as the main reason. For learners with disabilities, the problem of access to devices was compounded by the accessibility of the devices themselves and how they respond to their different disabilities.

The other common reason among the parents and learners was lack of internet/electricity. Parents for learners with disabilities noted that the learners had difficulty following due to their disabilities, especially for the learners with hearing impairment (33%). For the learners, this difficulty was interpreted to mean that the learners or their parents had technical knowledge gaps, especially for the learners with hearing impairment (29%). Indeed, it was noted that the proportion of parents for learners without disabilities (85%) who indicated knowledge about e-learning or online learning was significantly higher than that of parents for learners with disabilities (76%).

Few teachers reported supporting learners on the online platforms or e-learning channels. However, asked on their opinion of the major gaps and challenges faced by the online delivery of learning. The teachers indicated the following as the main gaps. (i) The issue of the teacher-dependent approach was the main issue across the teachers of learners with disabilities and teachers of learners without disabilities. This had 30% mentions with teachers of learners without disabilities (34%) and teachers for LwDs (27%). (ii) In addition, for the teachers for learners with disabilities, 40% indicated that the online learning classes were disability unfriendly as shown in figure 10 below.

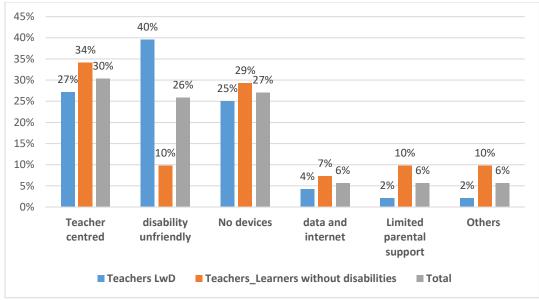


Figure 10: Teachers views on gaps on e-learning

The learners who were interviewed reported that the lack of teacher interaction affected their concentration on the electronic learning. Most of the learners were not consistent and not following the TV Lessons as they did not have the timetables, many of them watched what was available. One standard seven learner said he watched a lesson only to realize it was a class four lesson in the middle of the lesson. Whilst, the totally blind learners could not see displayed drawings, images, and sketches on TV and therefore do not learn well. This disadvantaged them because learners without disabilities could view pictures and drawings and follow the lesson.

The findings indicated that the learners were also tempted to switch to other stations and watch other programs. They were not able to interact with the teacher on television, ask questions, or get feedback. One of the learners said that:

"It is better to be in school because what is on TV is not much. I can't ask the TV teacher questions where I don't understand. There is also little concentration (he laughs then continues...) You know in school I can ask my teacher questions and he/she will help explain. Now when I watch TV, I desire to watch other things like cartoons, movies so I don't concentrate on school materials shown on TV." (Learner, Visually Impaired, Kiambu County)

Furthermore, learners with learning disabilities were not benefitting from the Kenya Institute of Curriculum Development curriculum. What they learned were activities of daily living to enable them to survive in society such as hygiene; they were not continuing their regular learning.

#### 3.2.3 Effects of COVID-19

#### (a) How COVID-19 has affected learning

#### **Key Findings:**

• Learners wanted to go back to school immediately: Both learners without disabilities and learners with disabilities preferred being in school. This was mainly because they felt they were missing lessons (since majority were studying on their own) and instead they were involved in house chores or bored at home after finishing reading their notes.

•The learning at home was inefficient or ineffective: The learners who were engaged in either own study or electronic learning felt that the learning was ineffective. This was because they were finding it harder to undertake any discussions with their classmates, clarify any problems with their teachers or access textbooks or learning materials.

•There were some innovative ways of interacting with learners: Some teachers used business and community spaces to leave learning materials and assignments for parents or learners to pick and drop. However, these too have proved expensive for parents because they require printing or photocopying.

Most of the learners (59%), both regular (62%) and those with disabilities (54%), preferred being in school and wanted the schools to be re-opened immediately. The findings indicated that generally there were no differences across the disabilities and grades on the proportions who wanted to go back to school immediately. The main reason being, students were concerned about missing sessions; some were anxious about joining the next school level while some did not want to repeat the classes they were currently in. Other reasons included feeling bored at home and missing their friends and teachers at school. Learners also found it harder to undertake group discussions (69%), clarify difficult problems with teachers (70%), and access textbooks or learning materials (49%).

Learning-related activities (see Table 6&7 below) that were mentioned by LwDs as harder to do due to COVID-19 crisis included group discussions (70%), clarifying problems with teachers (69%), and accessing learning materials (53%). However, it was noted that learners with hearing impairment had the most difficult with highest proportions across all three activities. Similarly, proportionately more female learners with disabilities indicated that it was harder to clarify with teachers (75%) or have group discussions (74%) compared to all other learners. On the other hand, the male learners with disabilities (56%) and male learners with disabilities (56%) indicated that it was harder to access learning materials. The learners with disability in Siaya County reported many more difficulties in learning from home compared to other learners with disability from other counties. On the other hand, for learners without disabilities, those from Mombasa had more difficulties compared to the rest as shown in Figure 11 below.

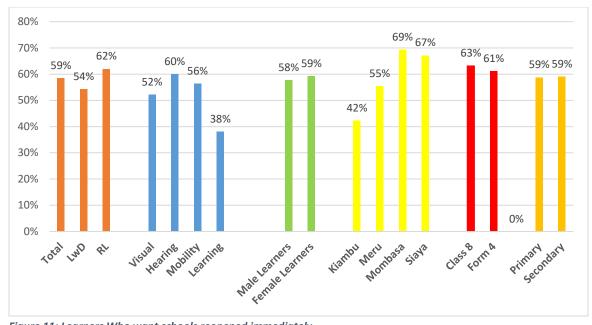


Figure 11: Learners Who want schools reopened immediately

Why learning is not happening at home	Learners with Disabilities	Learners without disabilities	Total
Lack of teacher support	73%	69%	71%
Lack of devices (smartphone, tablet etc)	54%	37%	44%
Inadequate conducive environment	34%	42%	38%
Power/electricity	28%	28%	28%
Lack of personal assistant	39%	20%	28%
Internet availability/data	31%	21%	25%
Lack of TV or Radio	27%	24%	25%
Unfamiliar with technology	6%	3%	4%
Lack of Health Support	5%	1%	2%

Table 7 Reasons why learners want schools reopened (Immediately)	Table 7 Reasons wh	/ learners want schools reoper	ned (Immediately)
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What learning activity is harder to do at home	Learner with disability (LwD)	Learners without disabilities	Total
Group discussions	70%	68%	69%
Clarifying difficult problems with teachers	69%	71%	70%
Accessing text books or learning materials	53%	46%	49%
Accessing a conducive learning environment	29%	29%	29%
Personal study	26%	13%	19%
Doing homework/assigns	18%	8%	12%
Reading my notes	17%	6%	11%
Listening to audio recordings/notes	14%	8%	10%
Lack of Health Support	6%	2%	4%

Interviews with the learners found out that learners were not able to access the library, teachers, classmates, and infrastructure necessary for successful learning. Findings suggested that the only learning taking place is revision as most learners were behind syllabus and could not understand new concepts taught via the KICD e-learning platforms.

To mitigate some of these issues, teachers in Siaya, Mombasa, and Kiambu Counties were leaving learning materials for learners to pick at the cyber. This was only working for a few learners. Initially, the strategy worked well in the counties, but with time, it was only candidates who picked the materials. Findings showed that the materials were not picked due to printing charges which ranged between 400-500 shillings, that the majority could barely afford.

Learners suggested that the online learning platforms be made accessible offline as the majority of them could not access internet bundles. This was a cross-cutting issue across learners without disabilities and those with disabilities. Some of them lacked learning materials such as books and pens. In Mombasa, according to a teacher, parents were not keen to buy the materials as they have become dependent on Caucasians and tourists for assistance. In Meru, according to learners, parents were unable to purchase the materials due to high levels of poverty.

#### (b) Challenges and Concerns of Parents and Teachers

## **Key Findings:**

• Learners were missing out on learning: Parents and teachers were concerned that because of the unconducive environment at home, lack of accessible learning materials, devices, and lack of teacher support, the children would fall behind in learning. Parents for learners with hearing impairment were the most concerned.

•Supporting and monitoring the learning process at home stressed many parents: Majority of the parents, both literate and illiterate, were challenged monitoring and supporting the learning process at home. The reasons varied from lack of knowledge of curriculum, sharing time between working and supporting learners, and lack of learning materials and/or technical knowledge for electronic learning.

•Learners had minimal teacher support and inadequate materials/devices: Teachers were mainly concerned that they were not giving sufficient support to the learners; the learners did not have adequate or accessible learning materials and devices.

•Learners were insecure and not getting sufficient nutritional intake and health services: Parents and teachers for learners with disabilities were concerned about the safety and security of their learners who were often left at home unattended when their guardians go off to work. They also felt they were not offering adequate health care and nutritional needs that these learners would receive at school.

•Parents for learners with disabilities most stressed about basic needs: More parents for learners with disabilities mentioned challenges on finances and providing basic needs for their children.

The three main concerns for the parents, in relation to learning, during the COVID-19 season were learners falling behind because of lack of conducive e-learning environment (83%), lack of accessible materials/learning materials (56%), and lack of teacher support (43%).

The three most common barriers or concerns reported by teachers about the continued stay of children at home and how it affected learning were lack of teacher support, inadequate or inaccessible learning materials, and lack of devices to access e-learning. The commonly cited barriers by teachers for learners with disabilities were lack of devices (73%) to access online learning, lack of a competent personal assistant to support the learner with disability (70%), and lack of accessible materials (67%) and devices (61%). This was different from what was cited by teachers for learners without disabilities who prioritized lack of devices such as smart phones (71%), television and radio (68%), and lack of infrastructure such as electricity or network coverage (47%).

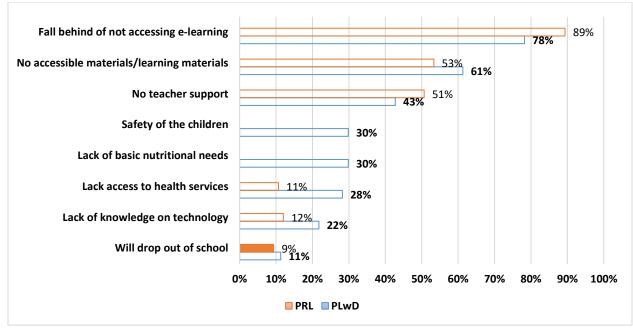


Figure 12: Parents Concerns or Factors Affecting Learning at Home

The parents for learners with disabilities had additional challenges affecting the safety of the children (30%), their basic nutritional needs (30%), and inadequate access to health services (28%). These parents felt that because of the different programmes and projects that targetted the schools directly and not households, their children were likely to get better healthcare and nutritional intake at school compared to at home. They would also have a more conducive environment for their psychological development.

On the teachers' biggest concerns, the teachers for learners with disabilities or SNE Learners indicated that they were concerned about the lack of teacher support for their learners (59%), lack of accessible materials (53%), inadequate or no devices for e-learning (50%), and inadequate provision of nutritional needs for the learners (50%). On the other hand, the teachers for learners without disabilities were concerned about lack of devices (82%), likelihood of the learners dropping out (47%) either due to truancy or to engage in economic activities, and learners not having sufficient or no learning materials (37%).

Teachers opinion on barriers at	Teachers for SNE	Teachers for Learners	Total
home	Leaners	without disabilities	
Lack of assistive devices	73%		
Lack of personal assistant/teacher	70%	38%	31%
support			
Lack of accessible materials	67%		
Lack of other devices (smartphone,	61%	71%	66%
tablet)			
Lack of TV or Radio	61%	68%	64%
Lack of infrastructure eg electricity	36%	47%	0%
Internet availability/data	30%	32%	54%
Cost of data/airtime	24%		
Lack of safety and security at home	21%		
Unfamiliarity with technology	15%	12%	0%

Table 8: Teachers Perspective on Barriers for Learning at Home

Teachers biggest concerns	Teachers for SNE Leaners	Teachers for Learners without disabilities	Total
No Teacher Support	59%	26%	44%
No Accessible/Learning Materials	53%	37%	44%
No Devices for E-learning	50%	82%	67%
Inadequate Nutritional Provision	50%	16%	31%
Not Safe or secure	41%		
Likely to Drop Out	28%	47%	39%
No Health Services	28%		
Lack knowledge on Technology	16%	11%	13%

Table 9: Teachers Perspective on Concerns on Learning at Home

Overall, there seemed to be no major difference in the challenges faced by parents of learners without disabilities and those of learners with disabilities. The main challenges were the need for supervision and support of children during home learning (50%), the challenge of finances to cater for basic needs, data bundles, and other related learning needs (45%), and the inadequacy of learning materials (26%). However, when analysed by disability type, it was noted that 83% of parents for learners with hearing impairment believed the main challenge was supporting children studies compared to the average of 51% for all parents for learners with disabilities.

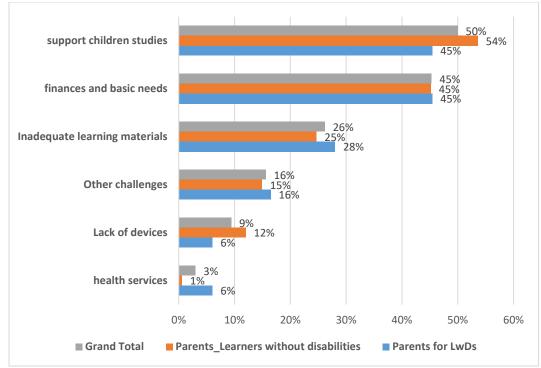


Figure 13: Challenges faced by Parents during COVID-19 Crisis

Disability Type	Support children studies	Finances and basic needs	Inadequate learning materials	Lack of devices	Others
Regular	52%	43%	24%	12%	9%
Visual	33%	52%	23%	4%	25%
Hearing	83%	17%	24%	10%	14%
Mobility	45%	66%	31%	3%	21%
Learning	39%	72%	44%	11%	6%
Total Average	51%	46%	26%	10%	13%

 Table 10: Challenges faced at home during COVID-19 crisis (Parents Perspectives)

There were higher mentions on finances and basic needs from parents for learners with learning (72%), mobility (66%), and visual (52%) compared to the parents for learners without disabilities (43%). On health-related challenges, these were mentioned by parents for learners with visual impairment (8%) and learners with mobility or physical challenges (10%). This was summarised by a head teacher,

"Some of them are very much worried because they haven't ever seen such pandemic because they have been used to the daily routine of the school feeding and parents taking them to school. But now it has changed, every day they stay at home, most of the days they don't feed, even dressing is a problem, like today I met two or three of them on the road so you see they cannot be contained at home because some of them are roaming on the highway loitering just looking for something to feed on." (Deputy head teacher, Learners without disabilities\_ Meru County)

On the issue of <u>availability of devices</u>. The availability, servicing fees, required supplementary gadgets, and running fees (such as internet bundles) posed a challenge to majority of parents. Some of the digital television sets required decoders. Due to the poor economy brought about by the crisis, many learners were not able to access the lessons as the monthly subscription fees were not paid. Some parents sold their TVs and radios and directed the money for other uses but now needed those devices would be in use for learning during this time.

The most consistent barrier mentioned by parents for effective home learning was the issue of <u>teacher</u> <u>support</u>. When it came to parents guiding their learners, there were mixed feelings as few parents were guiding their children. Majority of the parents were ill-equipped for distance and home schooling due to low literacy levels; some parents lacked education resources such as textbooks and revision books. Others were away for work, while a few parents did not value education. Religious studies in Mombasa were seen as more important than school studies. Parents took learners to Madrasa or got tutors to teach them religious studies at home. One of the teachers had this to say,

"You know these are children, how can they learn without the teachers... If the teacher is not in the picture there is no syllabus being covered, so there is nothing that the children are doing. These are children, you have to guide them as per the syllabus. A child cannot read on his or her own even for two weeks, it's very difficult. A child is like an empty vessel they come to school to filled, how can she/he fill himself at home?" (Head teacher, Regular, Primary, Mombasa)

The interviews with teachers generally indicated minimal teaching support being given by teachers. Parents were not aware of how they can assist or guide the learners with disabilities (especially for learners with hearing impairment and learning disabilities) because the parents were not equipped to do so. As for the learners without disabilities, parents who were literate can comfortably assist them and therefore focus on the learners without disabilities at home. Teachers given lesson suggestions to parents of learners with learning disabilities, e.g. informing them to use the TV PP1 and PP2 timetables for coloring and creativity lessons since the parents lacked learning materials.

#### 3.2.4 Psychosocial Effects of COVID-19

There was adverse psycho-social and financial distress among majority of the families because of the COVID-19 crisis. However, there was no major difference in the life related challenges facing parents for learners without disabilities and those for learners with disabilities. However, on financial distress, the COVID-19 pandemic had exacerbated the financial challenges faced by majority of the parents and learners with disabilities.

#### **Key Findings:**

•Parents were stressed about finances: Parents (78%) were most concerned about the financial situation brought about by COVID-19 pandemic, were struggling to meet the basic needs and therefore stressed and worried. They were also worried about the effect of the school closures on learning. The parents felt that the pandemic was causing the children to be sad and worried, with more parents for learners with disabilities mentioning loneliness as another effect of the COVID-19 restrictions.

•Learners were distressed, socially isolated and wary of their education: Majority of the leaners were either worried (50%) or sad (40%) because of the COVID-19 and its effects. More learners without disabilities were worried (51%) and sad (43%) compared to learners with disabilities. Learners were sad because of the restrictions of movement which impeded interaction with their friends.

•Teachers were wary of the effects of quarantine and social distancing on learners: Majority of the teachers (69%) were affected by the restricted interaction with their peers; more teachers for learners with disabilities (71%) indicated this compared to those for learners without disabilities (67%).

## (a) Effects on Parents

Parents (78%) were most concerned about the financial situation brought about by COVID-19 pandemic, struggled to meet the basic needs, and therefore stressed and worried. They were also worried about the effect of the school closures on learning. The parents felt that the pandemic was causing the children sadness and worry with more parents for learners with disabilities mentioning loneliness as another effect of the COVID-19 restrictions. On the other hand, more parents for learners without disabilities (42%) compared those of learners with disabilities (29%) cited worry as what their children were feeling. On the other hand, the parents themselves were worried (56%), sad (25%), and stressed (22%) about their children.

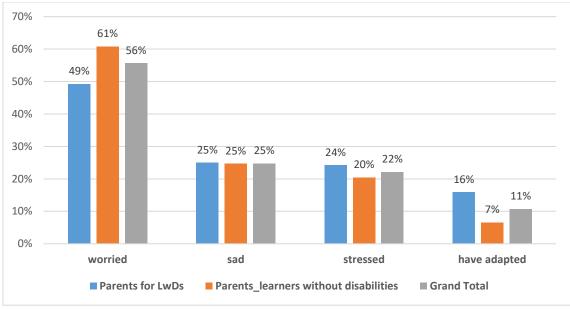


Figure 14: Parents feelings about their children

The interviews with parents, teachers, head teachers, and learners also noted that the parents were worried, stressed, and sad because of their inability to provide basic needs such as food, shelter, and health care. There were also reports of increased cases of abuse, especial sexual, and gender-based violence.

Lack of Food and adequate nutritional needs: Parents noted that learning at home was presenting different types of financial distress, especially in providing basic needs such as food. For example, whereas normal learning pre-COVID-19 provided some form of support to learners in terms of school-feeding programs which has saved many children from food-insecure households from hunger and starvation as they learn, this is no longer the case as such children were expected to obtain this support from their homes even as they pursued home learning. According to a parent,

"I look for someone and pay like 2000 KES to teach my children at home but now we have problems even getting food is a problem we are just confused.." (Female parent, Regular learner, Meru)

Another parent also said that...

"The government should provide food for these children when at home because we are suffering with them a lot." (Female parent, Learning Disability, Kiambu)

Yet another parent from Siaya said;

"I run a small business, but things are tough now. I usually depend on that business to feed my children and right now, money is hard to come by. Getting food has become a problem too. With no income, I cannot afford to buy food." (Female parent, Regular Learner, Siaya)

Lack of Shelter: For the parents in urban (Mombasa) and peri-urban areas (Kiambu), the economic disruptions occasioned by the COVID-19 protocols have exposed many households to severe economic

stresses as many families struggled to meet their needs, including housing. Therefore, families that were evicted had to live with other family members, friends, or in extreme cases, well-wishers as they planned the next course of action. This state of the affairs has left children vulnerable, without proper shelter. In some instances, such arrangements placed children at risk of abuse and vulnerability to violations.

Lack of Healthcare: Loss of economic opportunities exposed children to lack of access to proper medical care, including therapy, as the parents could not afford the cost of health care after lost of livelihoods. Incidentally, learners with some forms of disabilities were also exposed to physiological stresses, including lack of access to special needs education facilities while undergoing school learning. These included access to medical aid such as physiotherapy and occupational therapy that they received in school before COVID-19. This was because some of these school-based reliefs were hard to come by and out of reach for most poor parents. A head teacher of an institution of the physically impaired had this to say;

"In school, they get medical care because the government has seconded a medical nurse to attend to them in school. She goes round to do physiotherapy and occupational therapy. They also receive free medical care at Thika Level 5 which isn't there now." (Head teacher, Physically Impaired, Kiambu)

<u>Increased Family Tensions</u>: Based on the above and many other challenges increased due to steps taken to social distance, quarantine, lock down and the economic downturn, it was noted that there was increased tensions in families. Issues of domestic violence in families were on the rise and there was fighting between parents and siblings for being together in the house for a long period of time.

"Also, domestic violence is on the rise, there are so many disagreements. You find that most of them share one room, people no longer do much they are just indoors, now they are discovering mistakes, discovering some of the disabilities that their children have then they begin blame games for example the mother is blamed for not taking care of the child." (Female teacher, Learning Disabilities, Mombasa)

Findings from the study revealed that domestic violence has been on the rise, increased intake of illicit beer by parents, and even defilement. A teacher reported that one of her pupils with a learning disability was defiled in Meru.

## (b) Effects on Learners

Majority of the leaners were either worried (50%) or sad (40%) because of the COVID-19 and its effects. More learners without disabilities were worried (51%) and sad (43%) compared to learners with disabilities. Learners were sad because of the restrictions of movement which had made them not to interact with their friends. They were worried because of the missed schooling and the threat of repeating classes. Some of the coping mechanisms that the learners were using to address the worry, sadness and boredom were mainly reading (41%) and doing house chores (38%). Other mechanisms included relaxing. Very few learners (6%) mentioned playing as mechanism they are using to cope with their restricted movement.

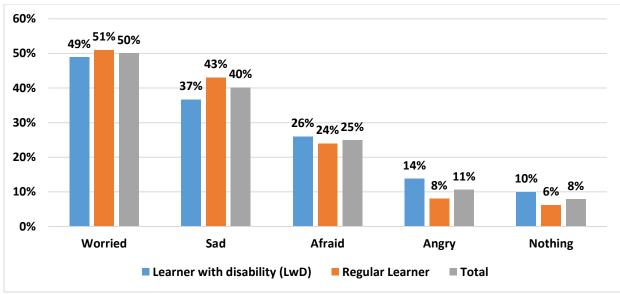


Figure 15: What Learners Feel about Coronavirus

The discussions with learners, teachers and parents indicated that various effects of the COVID-19 measures weighed down on the learners and threatened their mental and physical health.

<u>Social Distancing/Isolation</u>: Many of the children felt overwhelming stress. They lacked social support, suffered from loneliness, social disruptions in social statuses as they could not afford the things they used to before COVID-19. Consequently, there was social disintegration. Findings showed people were treating one another with a lot of suspicion and there was avoidance by neighborhood.

In Mombasa, Ramadhan celebrations were affected as people could not eat together, invite friends over to their houses, or gather. Prior to COVID-19, people ate together and shared the same tray, but that is no-longer the case. When asked how community interactions have changed a parent mentioned that,

"At the Idd celebrations, the leaders are normally rewarded, there is plenty of eating as well as merry making. This year I missed this, because we were at home." (Male parent, Visually Impaired, Mombasa County)

<u>Increased Truancy</u>: Parents reported indiscipline and rebellion in children. Learners with hearing disabilities were irritable and banging doors on their parents. A parent who was responding to a question on challenges she is facing explained that,

"We give her instructions which she doesn't follow and she doesn't take seriously any advice given. She is rude and very arrogant and bangs doors on us maybe because of her age but she shouldn't do that to us. She says that it is normal to bang a door. She is temperamental. She doesn't have negotiation skills, like if I told her something, she can't say yes, I get you but I will approach that this way." (Female parent, Hearing Impaired, Kiambu County)

The cases of truancy and abuse were also reported in the other counties. A learner with physical disabilities in Siaya sneaked out of the house through the window after being locked in as their parents

went for work. Another with a learning disability (autism) in Meru went missing from home only to be found at school.

Coping Mechanisms by Learners	Learners with Disability	Learners without disabilities	Grand Total
Reading	37%	45%	41%
Housechores	45%	32%	38%
Relaxing	15%	9%	12%
Playing	6%	6%	6%
Others	2%	3%	3%
Income Generation	2%	2%	2%
Social media	1%	1%	1%

 Table 11: The Coping Mechanisms Adopted by Parents for Learners

In the interviews with learners and teachers, as much as house chores was cited as one of the coping mechanisms by children at home, it was enforced by parents, sometimes at the disadvantage of some children. For instance, due to house chores, learners without disabilities lacked sufficient time for personal study. A lot of time was consumed running errands and the learners were too tired to study after.

Unlike the learners with learning disabilities who had their own special class, learners without disabilities were worried about wasting time at home because they do not want to repeat grades/classes. However, this was not the case for all learners with disabilities. Learners with low vision complained that house chores took up time and they were normally too tired to study by the time they were done with house chores. However, those that were totally blind were not given a lot of duties. When asked whether she was given enough time to study, one learner who is totally blind said that,

"Yes, my parents give me enough time to study. Most of the time I am just alone in the house and I can do my studies without any interruptions. Even the younger children do not interrupt me. Most of the time, they are out playing." (Female Learner, Visually Impaired, Siaya County)

In other cases, the learners with disabilities complained of being bored because they did not have routines, chores, or participated in any activities at home. Some of the visually impaired learners (totally blind) did not have a routine. They were idle at home. Some of their parents were not empowered and did not give them chores as they feared being judged; e.g. if the child is seen by neighbors washing clothes or utensils. The parents feared being seen as bad parents and what neighbors might say. Learners without disabilities on the other hand had established routines where they performed house chores then watched lessons on television before going to play with their friends outside. It is important for learners to have a routine to cope with mental health and to be secure as they know how their day will look like tomorrow. When asked how learners in his school have been psychologically affected, the deputy head teacher of an integrated school cited this about learners with visual impairment,

"Some of them are very much worried because they haven't ever seen such pandemic because they have been used to the daily routine of the school feeding and parents taking them to school. But now it has changed, every day they stay at home, most of the days they don't feed, even dressing is a problem, like today I met two or three of them on the road so you see they cannot be contained at home because some of them are roaming on the highway loitering just looking for something to feed on." (Deputy head teacher, Regular Learner, Meru County)

# (c) Effects on Teachers

All the teachers interviewed were teachers in public schools. Although the government had not made an announcement on their salaries, most teachers were worried about their jobs. Majority of the teachers (69%) had been affected by the restricted interaction with their peers; more teachers for learners with disabilities (71%) indicated this compared to those for learners without disabilities (67%). Those teachers who were engaged in any other economic activities complained of reduced incomes (31%). However, more teachers for learners with disabilities (31%) compared to teachers for learners without disabilities (18%) were worried about the effects of the COVID-19 on their learners. This was the issue raised by more teachers for learners with disabilities (40%) who indicated that it was harder for them to study at home compared to teachers for learners without disabilities (33%), these teachers also noted that these learners were likely to be neglected by parents and did not have assistive devices.

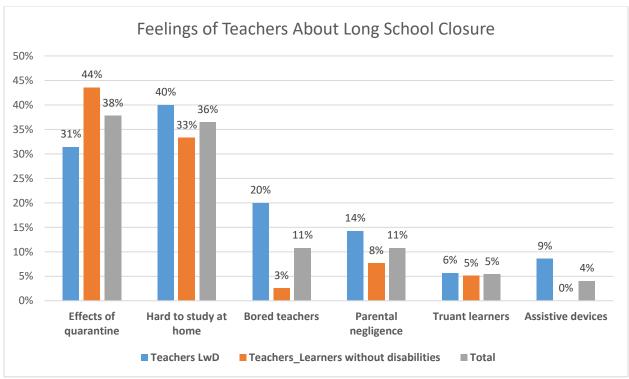


Figure 16: Feelings of Teachers About Long School Closure

## 3.2.5 Support for learning at home

There was more preference of schools re-opening rather than remaining closed among learners, parents, and teachers for effective learning. Majority of the learners, parents and teachers would rather have the schools re-opened but for different reasons. Learners wanted schools re-opened because there was minimal learning at home, too much house chores, and little social interaction; parents also cited lack of support of children learning, lack of finances, and basic needs and inadequate learning materials; while

teachers confirmed giving little or no support to learning at home, no assistive devices, and accessible learning materials to learners.

Parents, learners, and teachers proposed provision of learning materials, devices, and teacher support for learning to continue at home. Availability of learning materials and accessible learning materials was the most important support proposed by learners, parents, and teachers for learning to continue at home. Other suggestions were availability of devices, teacher support, or personal assistant. Teachers also suggested more parental support for LwDs.

## **Key Findings:**

• Parents required educational support and basic needs support for their children: For parents for LwDs, provision of learning materials and/or accessible materials (72%), availability of devices at home (55%), personal assistant/ teacher support (48%), and availability of basic needs e.g. nutritional needs (47%) were highly important.

•Learners required learning materials, devices, and teacher support: The learners with disabilities indicated that they required provision of learning materials (43%), devices (37%), and teacher support (24%) as the key areas of support for them to continue learning at home.

•Schools should communicate more: There was generally very little support from the schools' management to the parents. Of the parents interviewed, 67% indicated that they had received no communication at all from the schools' management since the sudden school closures. Yet, more communication and interaction from the school would re-assure the parents and learners.

## (a) Support from the school

There was generally very little support from the schools' management to the parents. Of the parents interviewed, 63% indicated that they had received no communication at all from the schools management since the sudden closure of the schools (a further 4% indicated the only communication was to be told about this study); 20% indicated that the school management through the head teacher or teachers had called to check on the child and give assignments (13%). The parents for learners with hearing impairment had the least reported communication from their schools at 19%, while those for learners with physical disability had the highest reported communication (53%). In the counties, parents for learners with disabilities in Mombasa (51%) and Kiambu (48%) reported significantly higher communication compared to those from Siaya (31%) and Meru (19%). Similarly, there was significantly more communication to households with candidates (44%) for both learners with and without disabilities compared to other households (28%) reporting receiving communication from schools. For the teachers, only 6% of the teachers for learners with disabilities and 13% of the teachers for learners without disabilities reported that they had the support they needed to help their students to continue learning at home.

The teachers for learners with disabilities indicated that availability of accessible/learning materials (65%), teacher support or personal assistant (59%), and parental/caregiver support (47%) were the three main priorities in addition to availability of devices (44%) and basic needs (41%).

Support required for Learning	Teachers for SNE Learners	Teachers for Learners without disabilities	Total
Availability of materials/ accessible materials at home	65%	62%	63%
Personal assistant/teacher aide to support child	59%	35%	46%
Parental/caregiver support	47%	32%	39%
Availability of devices for the students at home	44%	57%	51%
Availability of Basic Needs	41%	46%	44%
Internet availability for my students	35%	43%	39%
Internet availability for my students	26%	27%	27%
Internet availability for myself	21%	16%	18%
Training on how to use technology	13%	7%	20%



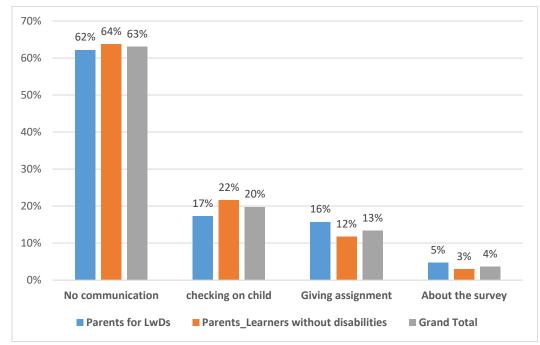


Figure 17: What are schools communicating

## (b) Support Required by Parents

The parents indicated (see Table 13 below) that the support required for learning to continue at home included provision of learning materials and/or accessible materials (72%), provision or availability of devices at home (48%), personal assistant or teacher support (46%), and availability of basic needs - especially nutritional needs (47%).

Type of Support	Visual	Hearing	Physical	Learning	Total (PLwD)	Total (PRL)
Availability of learning materials	80%	77%	61%	65%	72%	72%
Availability of devices at home	61%	63%	55%	25%	55%	45%
Personal assistant/teacher aide to support child	29%	93%	48%	25%	48%	43%
Availability of Basic Needs	47%	30%	55%	60%	47%	36%
Internet availability for my child	37%	47%	18%	0%	29%	22%
Internet availability at my home	20%	37%	33%	0%	24%	15%
Parental/caregiver support	16%	17%	30%	15%	20%	13%
Availability of appropriate reading space	14%	20%	9%	5%	13%	11%
Unfamiliar with how to use technology for distance learning	10%	0%	0%	0%	4%	2%
N	49	30	33	20	132	166

Table 13: Support required for learning (parents) by disability type

#### (c) Support Required by Learners

The learners indicated that they required provision of learning materials (45%), devices (37%), and teacher support (25%) as the key areas of support for them to continue learning at home.

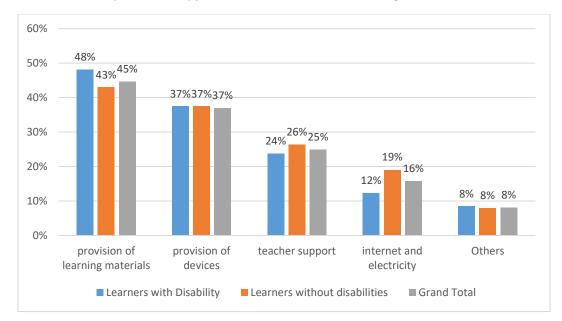


Figure 18: Recommendations by Learners

<u>Siblings were assisting the learners to learn</u>: to address the gap of teacher support, siblings were supporting the learners with visual impairment by reading for them, helping them, and downloading notes and assignments from WhatsApp. Particularly, learners doing set books had to rely on their siblings to read to them the regular set books as the brailed ones were left at school. They were forced to memorize everything as they could not write notes. A learner mentioned the following,

"When the schools were closed, we were not allowed to carry any books home. This is a big challenge for me because I need the braille books when studying. Although I have been listening to the radio lessons, they do not cover some lessons. For example, they do not discuss the set books that we are supposed to be reading right now. I have been forced to rely on my siblings to read for me the normal set book. I have also been told that these set books are on the internet. But the challenge is how I can access them because I do not have a smartphone. I need assistance with getting braille books." (Form four learner, Visually Impaired, Siaya County]

<u>Learners with disabilities required assistive devices</u>: Learners with low vision were straining to read at home due to lack of visual aids such as print magnifiers which students were not allowed to borrow from school. Those who were totally blind needed braille textbooks to learn. They were not allowed to borrow any braille textbooks as these books were scarce. They were unable to write notes as they did not have the braille machines at home as they are too expensive and too heavy to carry from school.

# 4.0 Conclusions and Recommendations

# 4.1 Conclusions

Some learning was going on at home albeit with a lot of challenges. This learning was mainly through use of textbooks and own notes (personal study). The few learners that were engaged in electronic learning were mainly accessing the KICD e-learning platform via television (Edu-channel). There was a lot of interference in the learning at home because of engagement in house chores, unconducive learning environment, and lack of adequate learning materials or devices to access e-learning. The parents and learners were also stressed. The teachers on the other hand were not supportive because the schools had not engaged them.

- From the findings presented, it was evident that there is minimal/no learning taking place at home for learners across all categories. The learning happening was dependent on personal study (textbooks and own notes) was unregulated and without a structured timetable hence largely ineffective;
- E-learning also presented a challenge for learners because due to poverty, a majority of learners faced challenges accessing learning devices such as smartphones, computers, radios, and TVs that can facilitate their access to e-learning. In addition, for the few who have access to these devices, poor internet connectivity, lack of electricity, and the high cost of data bundles limited them from continuously accessing online learning materials;
- On the other hand, the absence of teacher-learner interactions possesed its own challenges. Learners were unable to seek guidance and clarification on the topics that they do not understand, and teachers were unable to measure how much learning has taken place because there was no feedback from the learners. Because of this particular challenge, majority of candidates expressed anxiety on failing the national exams and repeating a class;
- Findings also showed that the home environment also greatly affected learning. Children that lacked parental supervision generally had no motivation to learn. In addition, children were assigned a lot of house chores by their parents which affected their ability to study;
- For the learners with disabilities, the shift to remote learning has been particularly challenging because many of them relied on other support services that were difficult to replicate at home. For instance, the e-learning platform was not fully accessible to learners. Learners with hearing impairment and those with learning difficulties were the most affected, followed by those with visual impairment. In addition, majority of learners with disabilities required constant supervision while learning; a majority of parents could not provide this due to work commitments or inability to handle their children's disabilities;
- From the findings, it was also evident that there were a number of financial and psychological changes for learners due to the COVID-19 pandemic. Majority of parents had lost their sources of income and were struggling to provide their families with the basic needs of food, shelter, healthcare, and education. Teachers, in particular, expressed their concern about the learners' health because parents were unable to provide adequate food or health support services;
- For a majority of learners with disabilities, the closure of schools also intensified the stigmatization and neglect from their parents and community members. As most of the parents do not know how to handle these learners, they viewed them as a burden and chose to keep them

confined in the house. This denied them any interaction with the outside world and exposed them to exploitation and abuse from their caregivers. In the process, these learners suffered a lot of mental anguish.

# 4.2 Recommendations

From the parent's perspectives, the crucial needs are learning materials (accessible materials), availability of devices at home, personal assistant or teacher support, and availability of basic needs. Teachers need to be facilitated so that they can support learners at home, while parents and households, especially ones with children with disabilities, need additional support to access proper nutrition and healthcare services.

COVID-19 has worsened many learning challenges already faced by many of the learners with disabilities and those from poor households. In order to ensure effective and equitable home-learning, all education stakeholders need to assess the individual needs of every category of learners and take the necessary action to support them as they continue to learn remotely.

#### 4.2.1 Short term measures

(a) For all learners

- The Ministry of education should allow schools to access the textbooks
- The Ministry of Education and schools should collaborate with various stakeholders to organize capacity-building forums for parents and teachers on how to support remote learning
- The government should provide in-kind support to struggling homes to assist their basic needs and aid the purchase of e-learning devices. Food distribution drives can also be organised with various stakeholders
- The telecommunication companies should offer heavily discounted learning devices and free internet bundles to facilitate learners to access online learning
- The government should collaborate with schools and parents to facilitate group learning for learners. For instance, learners from the same locality can be grouped together and teachers provided by the schools to assist them to learn with all safety measures in place

(b) For Learners with disabilities

- The Ministry of Education needs to tailor the e-learning platform to address the specific learning needs of these learners
- The government, with various stakeholders, should provide these learners with assistive learning
  devices such as braille machines and hearing aids. Alternatively, given that the majority of special
  schools are boarding schools with small population sizes, the government should consider
  allowing these learners and their teachers to resume school so that they can utilise the assistive
  devices that are readily available in school
- The government can conduct community sensitization campaigns to raise awareness on the issues affecting children with disabilities and to educate members of the community on how to handle and support them

• The government in collaboration with stakeholders can undertake to train and employ community based health volunteers and teachers who can reach out to children with disabilities on health information and offer them one-on-one support

#### 4.2.2 Long term measures

(a) For all learners

- The Ministry of Education, in collaboration with other stakeholders, should upgrade schools' ICT infrastructure and ensure that teachers and learners are utilising these technologies in the classroom. This will help ensure that teachers and learners are equipped with the ICT tools and skills that can support remote learning
- The government, together with various stakeholders, should allocate funds to facilitate the provision of much needed ICT support infrastructures in the remote areas. In particular, increased access to electricity and internet connectivity for the marginalized areas

(b) For Learners with disabilities

 Resources allowing, the Ministry of Education can launch a separate e-learning platform for learners with disabilities that is loaded with interactive tools and resources for parents and learners to access. E.g. sign language training notes and videos for parents, simplified exercises for learners with learning difficulties, and audio narration for the visually impaired

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