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COVID-19は発展途上国における教育の状況を どのように変えたのか ——ウガンダの学校閉鎖下のエビデンス—— Has COVID-19 Changed the Education Landscape in Developing Countries? Evidence Under School Closures in Uganda

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ABSTRACT

新型コロナウイルス感染症の世界的蔓延により、多くの子どもたちの学習が阻害されてきた。本稿では、学校が閉鎖された2020年3月から2年間の経験と課題について振り返る。無期限の学校閉鎖を強行することで、新型コロナウイルス感染症は「物理的な学校モデル」を真剣に見直す機会を提供し、子どもの学習における親の役割を拡大した。本稿は、パンデミック下における教育への親の関与と現場で培

われた解決策について分析する。著者らはウガンダ東部のブソガ地域において、親、教師、校長とともにラジオ・トークショーとオンラインによるグループサポート・プラットフォームを展開した。本研究により3つの結果が得られた。第一に、自宅学習活動が多くの子帯で行われ、子どもの学習における自らの役割に関する親と教師の認識に徐々に変化がみられた。第二に、多くの地域における学校閉鎖は、親、教師、学校の間関係性を強化するという予期せぬ効果をもたらした。第三に、遠隔の学習支援下において低学年の子どもの学習支援は、主に兄弟姉妹によって行われた。このように、困難な状況下においても幼い子どもたちの学習支援については、より地元の資源を探ることが可能であることが分かった。

The COVID-19 global health pandemic has led to learning disruptions for many children. In this paper we reflect on the experiences and lessons learned during the two years since March 2020 when school closures were first imposed. By forcing indefinite classroom shutdowns, COVID-19 brought the “physical school model” into sharp focus and amplified the parent’s role in children’s learning. This paper analyses parental involvement in education and the adoption of locally generated solutions to the learning crisis in Uganda under the COVID-19 pandemic. We conducted radio talk shows and online group support platforms involving parents, teachers and head teachers in Busoga sub-region. The study identified three key findings. First, home-based learning took root in many households and facilitated gradual changes in parents’ and teachers’ perceptions about their roles in supporting children’s learning. Second, school closures in many areas had the unexpected effect of strengthening (rather than weakening) relations between parents, teachers and schools. Finally, remote learning support in households with children in the foundational early grades was mostly provided by their older siblings. As such, communities could explore more such available local resources to organize group learning for the younger children even under a pressing situation.

1. Introduction

Even before the COVID-19 induced school closures in the early 2020, learning outcomes were very low in many developing countries (Conn, 2014; Pritchett, 2015; Snilstveit et al., 2015; The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2013; World Bank, 2018). This learning crisis starts in the very early formative years of school. In recent years, Uwezo citizen-led assessments of basic competences in literacy and numeracy in East Africa consistently found that less than one third of grade three school-going children achieved full competence on grade two level tasks in Kenya, Tanzania and Uganda (Uwezo, 2017).

In many countries, parental involvement in their children’s learning efforts has been low, many perceiving their role as limited to provision of

resource requirements for attendance. Yet, the COVID-19 pandemic-induced school closures left children confined at home. In Uganda, the adoption of remote learning programs for children was premised on the assumption that parents would provide the supervision and support needed for children to remain engaged with learning while at home. However, many parents did not know what to do to provide such support and kept hoping that schools would soon re-open for children to return to school. Many parents reached out to schools to seek guidance and support from the teachers.

This paper aimed to serve three objectives. First, to describe available evidence depicting the key changes that occurred in the primary educational contexts of many developing countries, especially in Sub-Saharan Africa (SSA) resulting from the disruptions to schooling caused by COVID-19

induced school closures. Second, to critically analyze the transformation in contexts and perceived roles of key players (i.e., parents and teachers) that supported children’s learning during the school closure periods in Busoga sub-region, in Eastern Uganda. Busoga is one of the poorest sub-regions with low levels of attained adult literacy and numeracy, extreme overcrowding in public schools, and high prevalence of child labor and early marriages in Uganda. Finally, to reflect on lessons learned from the response actions of key players in their efforts to support children’s continued learning during COVID-19 school closures and evaluate the viability of these responses as means for addressing the learning crisis.

2. Literature Review

2.1 COVID-19 Effects on Primary Education in Developing Countries

Across the world, 94% of countries shut down their schools pushing nearly 1.6 billion learners out of the classroom (United Nations, 2020). Almost overnight, education systems had to adapt to a range of remote learning interventions, covering online platforms, television, radio, mobile devices, paper-based take-home packages, and tutoring. Unfortunately, many of these interventions remained inaccessible to children from poor socio-economic backgrounds. United Nations Children’s Fund (UNICEF) estimated that about 463 million children globally were unable to access any form of remote learning intervention (UNICEF, 2021).

Online platforms were the most popular option globally, with 60% of all interventions being exclusively online (Giannini, 2020). However, only around 50% of learners worldwide have access to a household computer or internet (United Nations Children’s Fund and International Telecommunication Union [UNICEF & ITU], 2020). In low-income countries (LICs), that number drops to just 5%.

Thus, only the most privileged children had access to online platforms. In countries with available data, only 65% of households from the poorest quintile have electricity (Dreesen et al., 2020). Additionally, the intensive use of radio and mobile phones for educational purposes requires additional spending on batteries and mobile data that families may not have been planning for. Many countries rolled out paper-based take-home packages and in-person tutoring to reach at-home children. Uganda designed paper-based take-home packages for distribution to children to accompany radio and television programs. In Jamaica, the government distributed “learn and play” kits (p. 5) for children in zones where schools were shut down (Dreesen et al., 2020). However, even these low-technology interventions required a great deal of coordination, time, and resources to reach all at-home children who needed them.

In general, school closures shifted the burden of keeping children learning to parents and caregivers. Not surprisingly, children from affluent families were more likely to have access to learning resources and opportunities than children from disadvantaged backgrounds (Kirsch et al., 2021) – accentuating the existing inequities in access to learning. Parents also played a key role of supervising and assisting children to learn. However, the ability of parents to provide meaningful support is contingent on factors such as socioeconomic status, level of education, available time outside of work, technical abilities, beliefs, and socio-cultural norms (Iivari et al., 2020).

Studies from the United States showed that parents and children spent more time engaged in learning activities when schools were able to provide diversified educational resources such as both online and paper-based learning materials (Bansak & Starr, 2021). In other words, in contexts where schools were able to provide families with more than one modality of remote learning, parents

spent more time supporting their children's learning. Relatedly, an experimental study in Botswana found that parents who were reached with educational instructions using mobile-based SMS and phone calls reported greater self-efficacy in supporting their child's learning than the control group (Angrist et al., 2021).

The failure by education systems in many LICs to effectively reach all at-home learners will likely have significant implications for children's education outcomes in the long-run. While about half of all children globally fell below minimum proficiency levels in reading and math, a 2020 report from the World Bank estimates up to 63% could be "learning poor" when schools finally reopen (Azevedo, 2020, p. 1). Moreover, many LICs closed schools for much longer periods than the global average of 17 weeks in 2020. Previous research has shown that school closures for shorter amounts of time contribute to major learning losses. In Malawi, children's reading skills declined significantly during extended holiday breaks (Slade et al., 2017). Similarly in the United States, students' achievement scores declined by a month's worth of learning during summer holidays (Quinn & Polikoff, 2017). The threat of learning loss is compounded by the risk that children could drop out of school altogether. UNESCO estimated that 4.3 million learners were at risk of dropping out or not re-enrolling, with the largest proportions expected to be from Eastern Africa (UNESCO, 2021).

A 2020 survey found that girl children falling behind in learning was one of the most pressing concerns arising from the closures (O'Donnell et al., 2020). With schools closed, girls faced an increased risk of pregnancy and early marriage. Cousins (2020) finds that as many as 2.5 million additional girls around the world are at risk of early marriage due to the COVID-19 pandemic. Spikes in early pregnancies across the world have also

been reported, more so in LICs. During the pandemic period, a 60% increase in births for mothers under 18 years was reported in South Africa's largest province of Gauteng (Bhengu, 2021). This rise in pregnancies is largely due to the reduction in social services available to young girls during the pandemic, many of which are commonly provided through schools.

2.2 COVID-19 Disruptions to Primary Education in Uganda

On 18th March, 2020, the Government of Uganda (GoU) announced a 30-day closure of all educational institutions as one of the preventive actions against the spread of COVID-19. A national lockdown was imposed on 25th March, 2020 and gradual easing of lockdown measures began in May 2020, schools remaining shut. The Ministry of Education and Sports (MoES) rolled out television and radio-based remote learning programs, and distributed self-study materials through local council leaders targeting children from poor households with no access to radio or television. On 15th October, 2020, schools officially reopened for the first time for only candidate students (i.e., 7th graders at primary level) to prepare for their final examinations. Beginning in March 2021, a staggered approach to re-opening of schools was introduced – starting with semi candidates reporting back on 1st March, 2021. Table 1 shows the MoES' comprehensive plan for staggered re-opening and the amount of time out (back) of school per primary grade cohort for the academic year 2020.

Following the resurgence of the COVID-19 pandemic, the GoU announced complete closures of all educational institutions on 6th June 2021. This second phase of school closures meant that children of grades 1 – 3 never returned to school at all since 20th March 2020. At the time of writing (early November 2021), all schools in Uganda were still closed.

Table 1

Primary Schools' Academic Year 2020: Effects of Staggered Re-opening After 20 March 2020 Closures

Grade	Re-open date	# weeks out	2020 acad. year-end	# weeks back
Pri. 7	15 Oct. 2020	30	31 Mar. 2021	21
Pri. 6	1 Mar. 2021	49	4 Jun. 2021	14
Pri. 4 & 5	6 Apr. 2021	54	4 Jun. 2021	9
Pri. 1 – 3	7 Jun. 2021*	63	24 Jul. 2021	7

* On this day, the second phase of school closures country-wide came into effect.

2.3 Positive Deviance (PD) Studies Covering Primary Education in Uganda.

PD is an asset-based approach to solving complex social problems. It begins from the observation that communities are endowed with capabilities to solve their problems and need not find extra resources for solutions to emerge (Pascale et al., 2010; Tufts, 2010). Positive deviants are individuals or organizations who, despite their challenging circumstances, have devised unique solutions that enable them to overcome a social problem that still affects many others in the community. After identification of these unique but accessible PD behaviors, the PD process progresses towards replication, evaluation, and wider dissemination of the unearthed local wisdom.

An East African non-governmental organization called Twaweza East Africa recently conducted a PD inquiry covering primary school communities from ten districts in Uganda, and unearthed two key strategies – bridging the gap existing between schools and parents and fostering a supportive school environment for teachers and students (Twaweza East Africa, 2019a; Twaweza East Africa, 2019b). Leveraging the findings from this study, we designed a randomized controlled trial intended to extend these strategies to neighboring communities and measure effects on children's learning. We intended to hold regular peer-level pedagogical support sessions for teachers and

school-community information sharing interactions in randomly assigned program school communities. The intervention targeted public primary schools that are mostly attended by children from poor households in rural areas. A baseline survey was conducted in October-November 2019 covering 150 school communities from six districts in Busoga sub-region. Descriptive evidence from this survey suggested very low levels of parental involvement in their children's learning efforts beyond the provision of basic requirements, and high prevalence of child labor (Atuhurra, 2021). All surveyed respondents¹ highlighted provision of better and actionable information to parents as a top priority need for improving children's learning in Busoga.

3. Methodology

The roll out of this intervention suffered a major setback at the piloting stage in March 2020 due to the pandemic-enforced school closures. Instead, a re-strategized remote engagement intervention was developed. This adaptation targeted supporting home-based remote learning and mitigation of the negative effects of school closures on children's behavioral, socioemotional, and other education-related outcomes. The adjusted intervention was rolled out in August 2020, with the key program component being the holding of weekly radio talk

shows involving parents, teachers, and head teachers sharing their experiences and local solutions to the challenges of learning under school closures². The talk shows would facilitate the broad sharing of local solutions to the challenge of ensuring continued remote learning for children at home. Under the currently ongoing second phase of school closures in Uganda, we are running a social media-based peer-level head teacher informational support intervention to motivate school-level support actions for children’s remote learning.

3.1 Research Questions and Conceptual Framework

The study set the following research questions:

1. How did teachers and parents perceive the contextual change and their respective roles in learning under school closures?
2. What kind of locally adopted remote learning support strategies did teachers and parents take and how did they perceive their viability?
3. What essential transformations did COVID-19 bring to the learning context in Uganda?

Schools as the designated conventional spaces for the conduct of formal learning activities faced a huge challenge under COVID-19 and the children’s learning space penetrated into households where parents and teachers were forced to jointly oversee the learning process. Whereas this sudden change brought confusion among many stakeholders who were used to the conventional school system, it created an opportunity for teachers and parents to interact and deepen their mutual understanding of the content and contexts of learning. The conventional schooling system often fell into a dichotomous accountability-based interpretation with schools seen as service providers and parents as clients (World Bank, 2003). However, such a dichotomous view of stakeholders tends to overlook collaborative accountability systems often

observed in sub-Saharan Africa (Nishimura, 2019; Nishimura, 2020).

This study challenged key stakeholders to revisit their concepts and meanings of learning under the pandemic and possibly post-pandemic. It also created an opportunity to re-contemplate stakeholder roles, reframe and activate a new learning space. As shown in Figures 1 and 2, the learning space may have changed the learning framework in schools. Whereas school and home were generally functioning separately by delegating teaching and learning function from home to schools in the conventional school system, the COVID-19 schools’ closure situation necessitated head teachers, teachers, and parents to work more closely to create a conducive learning environment at home. Under such circumstances, it was deemed essential to examine what kind of perceptive and behavioral transformation happened (or did not happen) under school closures.

Figure 1
Delegated Partnership Model of Schooling Under the Stakeholder Relationships Framework

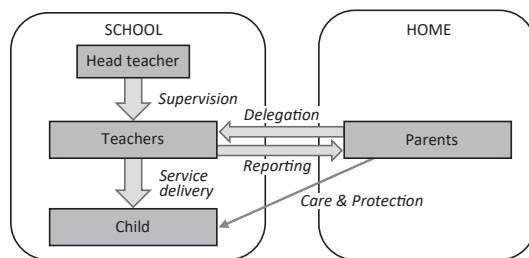
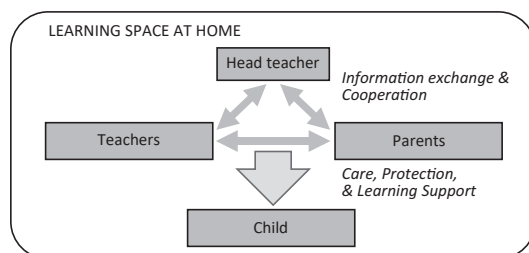


Figure 2
Collaborative Partnership Model of Learning Under School Closures - the Current Framework



3.2 Data Collection Method

This study adopted a case study of Busoga region in Eastern Uganda, derived from action research whereby the authors had been conducting a Positive Deviance (PD) study since 2019. We followed the official procedures for ethical review to obtain research approval from the Uganda National Council for Science and Technology. We conducted radio talk shows between August and December 2020 since radio is the most accessible communication tool in rural Uganda. Facilitated by Community Based Organizations (CBOs) operating within the sub-region and in collaboration with the authors, the talk shows were designed as interactive conversations among parents, teachers, head teachers and listener participants. They were organized around specific themes of relevance to the prevailing educational context (see thematic content in Table 2) and targeted at sharing participant experiences and strategies used to alleviate the challenges to children’s learning during the period of school disruptions. Data was

collected from head teachers, teachers and parents in the six intervention districts, namely Bugiri, Bugweri, Iganga, Kaliro, Luuka, and Mayuge. In August 2020, we surveyed (by phone) a total of 80 participants (50 parents, 20 teachers and 10 head teachers) to gauge the prevailing situation in homes and schools at the time under the first phase of closures. In November 2020, after schools partially re-opened for candidate classes, we surveyed 150 head teachers to ascertain the return-to-school statuses for candidates. Radio talk show transcriptions were also analyzed to identify challenges, solutions and lessons learned by schools and households under closure situation. Furthermore, we also used some insights from the online peer discussion forum via WhatsApp involving 50 head teachers covering the period from 20th July to 20th August 2021 for interpretation of the data.

Table 2
Weekly Radio Talk Shows (August – December 2020): Content and Participation

	Date	Theme Content	Panelist	# Calls from listeners
1.	29 Aug.	Introduction, Household situation	Parent, Teacher, Head Teacher	8
2.	5 Sep.	Child behavior	Parent, Teacher, Head Teacher	9
3.	12 Sep.	Child labor	Teacher, Head Teacher	14
4.	19 Sep.	Schools, Teachers, Supporting leaning	Parent, Teacher, Head Teacher	14
5.	17 Oct.	Primary school leaving exam candidates’ return	Parent, Teacher, Head Teacher	9
6.	24 Oct.	Staying motivated	Parent, Teacher, Head Teacher	9
7.	31 Oct.	Schools engaging at-home students	Local Government Education Official, Teachers	10
8.	7 Nov.	Communication between stakeholders	Parent, Teacher, Head Teacher	6
9.	21 Nov.	Teacher roles	2 Teachers, PTA Chair	7
10.	28 Nov.	Parents’ roles 1	2 Parents, Foundation Representative	6
11.	5 Dec.	Head teacher roles	2 Head Teachers, School Management Committee Chairperson	6
12.	12 Dec.	Parents’ roles 2	2 Parents, Local Council Member	8

3.3 Data Analysis Method

We used open coding to analyze the qualitative data into summary descriptions, action-driven processes and depicted values, attitudes and beliefs. Following Saldana (2020), the codes were sorted into categories thereby generating thematic clusters. Within and between-cluster interrelationships were developed by juxtaposing the thematic narratives and generating reflective questions arising from these juxtapositions. Quantitative data was analyzed by way of generating summary descriptive statistics using the statistical software Stata, version 12.

4. Findings

4.1 Perceptions of Changes in Context and Stakeholder Roles

For many communities in the six districts covered by this study, school closures over time strengthened connections between parents, children and their schools. Particularly among these three players, interactions significantly increased over the two years as they sought means to provide the required support for home-based learning for the children (see section 4.2). About 22% of households surveyed in July 2021 reported being visited at least once by a teacher from their local school, representing a 14%-point increase from the 8% a year earlier (see Table 3). Overall, these interactions led to changes in knowledge and attitudes about education, and stakeholder roles in supporting children to learn.

The following direct quotes from individual parents and teachers in August 2020, five months after school closures, show confusion and hesitation to understand their roles in children's learning at home. Parents and teachers even blamed one another by pushing their roles to the other end while crying for learning loss.

My children have lost interest in education, they don't care anymore. They no longer want to

attend the radio lessons, because of lack of a direct interaction with the teachers. Their teachers have not followed up to find out the extent to which they are engaging in studies at home. It is impossible for the children to learn without their teachers. (Parent – August 2020)

Accessing the learning materials for children to use at home is quite difficult. Learning using the radio is difficult since the children cannot write as fast and the teachers on radio don't give full explanation. I cannot monitor their learning because they don't listen to me.

The children were safe at school, but now we are finding a big challenge to keep them safe at home when their teachers are not around. The environment at home has become very stressful for us. (Parent – August 2020)

Parents were overworking their children at home, in markets and gardens leaving them with no time to study. They are using them as a source of cheap labor on the farms and to sell merchandise in the markets, instead of putting emphasis on spending their time studying at home. (Teacher – August 2020)

Some parents developed negative attitudes about remote learning even before they tried it out with their children. They think that because there are no assessments, learning through radio is not effective – which has made many children lose interest for learning. (Teacher – August 2020)

Some parents developed negative attitudes against us teachers – reasoning that we were getting paid for doing nothing since schools are closed. (Teacher – August 2020)

Our intervention of Positive Deviance (PD) study under schooling disruptions, however, witnessed some changes in the educational context and perceptions about the roles of parents and schools. Over the two years, home-based learning took root in many households, and was characterized by direct involvement of parents and teachers and new

Table 3
Descriptive Statistics for Selected Variables – Surveys in 2020 and 2021.

	N	Mean (1=Yes, 0=No)
A. Aug. 2020 phone survey (parents, teachers)	80	
<i>A1. Children engaging in learning at home</i>	50	
MoES printed home study package	12	0.24
Notes revision	24	0.48
Radio lessons	22	0.44
Television lessons	1	0.02
Discuss with classmates	3	0.06
Home visits by teachers	4	0.08
Older sibling support	16	0.32
No remote learning	9	0.18
<i>A2. Schools supporting remote learning</i>	30	
School is open, children pick extra study materials	12	0.40
School is open, teachers visit homes & follow-up calls	8	0.27
No support	10	0.33
B. Nov. 2020 phone survey (head teachers)	150	
School is open, children pick extra study materials	36	0.24
School is open, teachers visit homes & make follow-up calls	15	0.10
No support	99	0.66
C1. July 2021 phone survey – parents	1,222	
Teacher visited at least once (0 – 7 times)	264	0.22
<i>Remote learning support practices used at home</i>		
Parent attends radio lessons with children	308	0.25
Phone calls to teachers for guidance	150	0.12
Buying extra home study materials	299	0.24
Parent reads together with the children	259	0.21
Parent supervises children during home study sessions	252	0.21
Parents tutors or coaches own children	251	0.21
Parent continuously encourages and guides children	359	0.29
Use of a timetable of activities	74	0.06
Older sibling support	459	0.38
No remote learning support	287	0.23
C2. July 2021 phone survey – head teachers	119	
<i>School supported home study for grades 1-3</i>	31	0.26
Provided home study resources	19	0.61
Assign & grade children's home tasks	5	0.16
Home visits by teachers	15	0.48
<i>School intends to provide support (phase 2 closures)</i>	43	0.36
<i>Priority issues to engage parents on</i>		
Child labor situation	36	0.30
Parent-child relations	42	0.35
Parental support for remote learning	37	0.31
Roles of different players in supporting learning	37	0.31
Keeping safe from contracting COVID-19	37	0.31

practices such as use of timetables to organize child activities at home (see panel C1 in Table 3). Many parents gradually got to see it as normal for children to regularly dedicate time (and space) when at home to attend to lessons on radio, television or online and to complete relevant learning tasks or assignments. With more schools sending teachers to visit children's homes, the perception of the home as a center for the child's learning increasingly became acceptable to all stakeholders.

To support children's remote learning efforts during the closures, many schools issued home-based study materials and work tasks for children to complete at home. To assess child-level progress with the given work tasks, teachers regularly visited children's homes, graded the completed work, and provided guidance and corrections where necessary. Through these home visits, the connection gaps that previously existed between schools and the communities in which they existed and served narrowed. Schools were now viewed as component parts of the communities. Some quotes from teachers below show such transformation of learning space and gradual acceptance of teachers and parents to play their respective collaborative roles in ensuring children's learning at home.

During this period of school closures our connections with parents have been strengthened through home visits when we take materials and guide the children and their parents on how to use them for study. The home visits have enabled us to know the families where our learners come from. The strong collaboration we have now with the community is an opportunity we can build on in future to improve children's learning even after schools have re-opened. (Teacher – August 2021)

Before COVID-19, children used to spend most of their time at school, and so we knew these children better and they trusted us more than

their parents. In a way, the school closures have given parents a great opportunity to stay with their children for a long period, know their needs, abilities and how they can better support their education. (Teacher – August 2021)

Following up on the guidance and advice obtained from teachers, a significant proportion of parents surveyed in July 2021 (Table 3, panel C1) reported that they were attending radio lessons with their children and continuously kept reminding, encouraging and guiding them to remain committed to learning at home. Such practices also served as means of supervising learning at home and placed parents in a position where they could respond to children's follow-up questions or reach out to their teachers to provide further guidance.

Schools lent out textbooks to learners for use to support studying at home. To ensure their proper use and handling, schools directly involved parents in monitoring the study process and safeguarding these school resources being used by children at home. Through direct regular follow-up phone calls with parents, schools enabled parents to know what they could do and how they were best placed to support efforts for learning at home. This contextual change normalized the view of the parent as an important player in directly facilitating the learning process as revealed by the following quote from a head teacher.

We inform the parents that they are responsible for ensuring the safe use of the school textbooks their children have borrowed. We encourage them to add a protective cover, and many have responded positively to this request. But also, this ensures parents are taking keen interest in how the child is using the textbook – which is a good way to supervise the learning process at home. (Head teacher – August 2021)

Close collaborations between schools and parents during the period of closures also covered areas of children's socioemotional development. Over the

two years of the school closures, many children experienced high levels of frustration and some trauma-inducing violent events in homes (e.g., domestic violence), leading to loss of interest in learning and increase in incidences of unruly behavior. The first phase of the closures found parents ignorant of what to do to support their children's educational and other psychosocial needs. Many parents sought to impose their will on children by enforcing home stay and requiring attendance of radio lessons. This approach created stressful home environments and many children became rebellious. Leveraging their experiences of providing emotional and other social support to children when at school (e.g., through child counselling and guidance, playing the guardian teacher role), schools guided parents in practicing child-friendly social support approaches that also benefit their learning. Subsequently, parents' ability to emotionally support, counsel and guide their children increased. When asked about the activities they personally participated in to support learning at home, about 35% of surveyed parents mentioned the social support activities of counselling and guidance.

In the early months when school closures were first imposed, many parents reached out to teachers requesting for support towards their children's remote learning efforts – a clear departure from the earlier finding by Atuhurra (2021) that parents were mostly disengaged from their children's learning efforts beyond the provision of school requirements. Over the two years, schools experienced close collaborations with parents in supporting children's learning at home – suggesting that schools' perceptions of parents' willingness to get directly involved in children's learning also changed. Accordingly, schools observed that parents were increasingly becoming more responsible for their children's learning and willing to directly contribute to the teaching and other

support efforts of the teachers. On the other hand, parents also developed a clear appreciation of the important role and value teachers contributed towards their children's development. The following quote from a head teacher reveals how parents changed their perception on teachers.

As teachers, school closures have played an important role in getting parents to appreciate the very important role we play in their children's lives. When parents call me on phone, they spend some time expressing their gratitude for the commitment of our teachers who visit their homes. Also, our teachers have reported that they are always received very warmly in the homes. As teachers, we feel very proud of this, and it goes a long way in enhancing our motivation. (Head teacher – August 2021)

4.2 Locally Adopted Remote Learning Support Strategies and Their Viability

In the early days of the closures, only a few schools ventured into supporting home-based learning. In May 2020, the government rolled out home-based remote learning programs through lessons delivered on radio and television. Realizing the inadequacy of the government remote learning programs, many parents grew desperate and reached out to their schools requesting for teacher support to supplement the government programs. For most schools, the early support responses focused on learners in candidate classes who were preparing for the high-stakes national examinations. In this section, we reflect on the local response actions taken by schools and parents in Busoga during the two years to support remote learning for their children. Further, we discuss the viability of these local responses as accessible solutions for addressing the learning crisis.

Under a country-wide lockdown, some school premises were converted into field centers for purposes of isolating and managing COVID-19

cases in the communities. With partial easing of the lock down starting in May 2020, some schools decided to “open” and make teachers available at the school to attend to parents’ and children’s consultative needs whenever they arose. Only three of the ten schools we surveyed prior to rolling out the re-strategized remote intervention in August 2020 were not open. When we surveyed all the 150 schools in November 2020, 34% reported that they had been open since May 2020 (Table 3 – panel B). Since then, many schools adopted this position of keeping the school open and making teachers available to support children’s home learning needs. This is a potentially powerful and viable approach to institutionalizing home study programs for all children. Adopting this strategy would mean parents do not have to wait for an invitation from the school to attend a meeting to seek guidance and support on the specific issues affecting their children’s home study efforts.

To supplement the government’s remote learning program, some schools developed and distributed home study materials to their learners. The following quotes from parents and teachers reveal how little the government intervention had impacted children’s learning in reality:

The government did not provide any home study materials for the children in our village and so, all parents here did not get. I have no radio and it is difficult to facilitate all my children with enough learning materials ever since the pandemic occurred, I just hope the schools will re-open soon, and they go back. (Parent – August 2020)

I have children in P4 and P5 but what they are teaching on the radio, my children cannot understand. I have been encouraging my children to revise their notes as I also plan to buy home study packages from the hawkers. (Parent – August 2020)

Many homes in this community do not have radios, and so their children are missing out on

the lessons organized by the MoES. But even for those who have, the parents don’t have the time to listen to the lessons and explain to their children. For lower primary children, using radio lessons is not effective since these children cannot concentrate on radio, except with strict supervision of the parents. (Teacher – August 2020)

Many children are not available in homes, they are involved in economic activities such as fishing, sand mining and harvesting sugar canes. Parents are very worried about their children who are joining bad peer groups that influence them to go and make money instead of staying at home. Parents keep asking us whether school is about to re-open, so their children can be rescued. (Teacher – August 2020)

Teachers developed appropriately targeted home study materials and included work tasks to be completed by the learners for assessment of learning progression. These assignments were designed to help keep children engaged on learning tasks when at home and provide them an opportunity to interface with their teachers at school or in their homes whenever they brought their work for grading. Providing home study materials and implementing individual child progression assessment programs in schools are interventions that would facilitate entrenchment of home study programs and enable children get individualized right-level support from their teachers. Additionally, such a program is likely to ease the classroom workload for teachers while also ensuring they cover the intended syllabus content in the allocated time.

A key practice adopted in many schools was that of teachers conducting home visits to check on children’s remote learning status and encourage or guide learners and their parents. As shown in Table 3 (panel C2) out of the 31 schools that had been providing remote learning support for children of

lower primary grades 1 – 3 during the phase 1 closures, a half (15 schools) reported conducting home visits. Visiting teachers would provide on-the-spot support, clarify difficult concepts, check and correct completed tasks. Teachers also supported parents in developing home activity schedules (timetables) for the children. Home visits played a key role in bridging the school-community gap by bringing together parents and teachers to jointly address the remote learning challenge. As a result, teachers reported feeling appreciated and valued by parents. On the other hand, home visits are costly and likely difficult to implement on a large scale when schools are fully back in session. However, they need not be regular nor widespread to establish a strong school connection with its community (Twaweza East Africa, 2019a).

Considering that children were spread out in homes in various places, many schools increased their collaborations with other local stakeholders to ensure a wide reach of their learning support initiatives. Stronger collaborations developed with local political leaders, religious bodies, and members of the SMC and PTA. Key activities in which these stakeholders were involved included spreading information relating to the additional initiatives the schools were taking, mobilizing and sensitizing parents on the need for their involvement in supporting children's learning at home, helping the teachers to identify homes in which target children resided, distributing home study materials prepared by the schools, and increasing their efforts toward reducing occurrences of key risk activities in their areas such as incidences of child labor, domestic violence, child marriages, etc. Increased collaboration of schools with other local players in mobilizing parents to support remote learning is a key positive development that can energize communities to jointly address social issues affecting them.

Many parents got involved in providing direct

support that was needed for their children to access and benefit from remote learning. Stretching from initiating link up with their children's teachers to ask for guidance, visiting the school to collect home study materials for their children, to participating in encouraging, motivating and counselling the children, many parents got deeply involved in their children's learning efforts for the first time during this period. This level of parental participation in supporting their children's learning is important for reversing the learning crisis in developing countries.

For the very few able parents in the study area covered by this research, involvement in their children's remote learning was even more direct and reflected high levels of privilege – buying extra home study materials, paying for private tutors or parents themselves coaching their children, scheduling and monitoring child time use at home to ensure they fully attended to their studies. Some parents enrolled their children into commercially available online learning programs. While this form of parental involvement can be highly impactful for children's learning, a large majority of the parents covered in this study cannot afford it.

4.3 Transformations to the Learning Context

From the foregoing discussions, it is clear the COVID-19 induced school closures transformed the learning context in Busoga sub-region. Over the two years of school closures, attitudes towards the new education reality gradually changed and stakeholder roles and responsibilities got reframed as learning outside the “physical school” became normalized. Crossing borders of traditional roles and divisions of labor among stakeholders was difficult during the initial stages and stakeholders first adopted a “wait-and-see” attitude since school closures had been imposed as a top-down political decision. However, when it became clear to communities that children's learning responsibilities

extended beyond the realm of government, mutual explorations between parents and schools led to the reconstruction of the home as a learning space.

Although school closures were ordinarily expected to weaken the existing community-school relations, in many instances these connections got strengthened. This resulted from increased interactions between parents and teachers as they actively engaged in efforts to support remote learning for the children. Admittedly, our analyses also depict variation in remote learning support responses with sizeable proportions of parents and head teachers reporting little to no involvement in such initiatives (Table 3 panel B and C1).

During the two years of school closures, teachers engaged in various economic activities to earn supplementary incomes. Examples included farming, commercial trading, etc. Involvement in these economic projects offered them the chance to relate more with the communities outside the school premises as well as allowing them to diversify their sources of livelihood. This ‘coming closer’ to the community through daily interactions in activities not directly related to education can indirectly benefit children’s learning as teachers get more embedded in these communities and can be held socially accountable. On the other hand, teacher involvement in other economic activities can increase their turnover rates and thus negatively affect learning once schools fully re-open. This is likely to be the case for schools that had large numbers of privately hired teachers who were left with no formal earnings once the schools shut. Such teachers would likely have a low incentive to return to teaching when schools re-open since a decision to return to teaching can be highly risky for the survival of their other income-generating projects.

The failures by government and schools to provide all children with the required home study materials during the period of school closures

exposed to parents the highly constrained resource situation that many schools operated under – never mind the government’s fee-free Universal Primary Education (UPE) and USE (Universal Secondary Education) policies. Parents surveyed pre-intervention in August 2020 mentioned that they incurred large costs in photocopying for their children the MoES’ learning packages that were meant to be distributed freely to all children. Other education-related expenditures incurred by parents included buying copies of newspaper education inserts following advice from the schools, buying workbooks to keep their children engaged on task at home, paying nearby teachers to provide private coaching or tutoring services, etc. This realization could lead poor parents to completely withdraw their children from school, while the rich ones decide to increase their resource allocations to support their children’s education – a situation that would worsen the learning inequality gap.

Other forms of perpetuation of systemic educational inequality were also laid bare to parents during the school closures. These included delivery of remote lessons through media that was mostly inaccessible to the poor such as television and online lessons, and designing of remote lessons that were high-pitched for most children from poor backgrounds – such as use of an unfamiliar or complex language, distribution of home study materials that were difficult to understand, assigning children work tasks that were too hard that they only served to frustrate and discourage their efforts, etc. Armed with this new understanding of the existence of systemic inequalities, parents might get more incentivized to get involved in supporting their children and schools. Alternatively, poor parents could choose to exit their children (to low-cost private schools or completely out of school) believing that the government system is designed to serve only the children of the rich.

5. Discussion and Tentative Conclusion

As illustrated in the previous sections, there was active participation by teachers and parents over the two years despite prolonged continuation of school closures in Uganda. Our intervention to motivate teachers, parents, and communities focused on sharing stories, talking about lived-experiences, and discussing potential solutions to learning losses due to COVID-19 school closures. These discussions intended to create a forum for sharing practical ways to mitigate the negative effects on learning under difficult circumstances with no additional resource inputs.

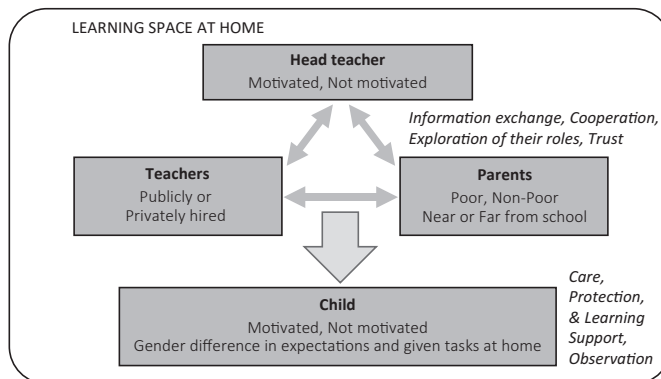
The study explained changes in key stakeholder perceptions of the educational context and their roles in facilitating continuation of learning under school closure situation. School, teacher and household-level PD practices that were used in the intervention communities to support remote learning were discussed at length. The study also identified some challenges relating to socio-economic diversity among parents, variations in head teacher quality, difficulties related to teachers' hiring status, and variation in children's socioeconomic and other characteristics – all acting as major influences on their remote learning

choices. While our analyses did not delve deeply into parents' and teachers' attributes, our qualitative inquiries revealed significant gradation and nuance in forms of teacher-parent interactions. Households far away from school and in impoverished areas were scarcely reached by teachers. Children who lost interest in learning, became pregnant or were forcefully married-off thus could hardly be saved by a teacher's one-time visit. Some parents still held an indifferent attitude towards schooling and did not think it their role to keep children learning. Teachers' reactions also varied significantly with some entirely focusing on their side-businesses and not caring for children's remote learning. Some of those who cared rode bicycles to children's homes and tutored without a salary. Subsequent investigations will analyze factors for this variance and PD strategies for reducing it.

As shown in Figure 3, our conceptual framework warrants a revisit to incorporate parent, teacher and child-level variations. Future work will investigate how the radio talk-shows and school-level peer support interventions affected observed stakeholder actions for remote learning support in our study locations.

This study also revealed some limitations of remote learning, a critical one being the failure to

Figure 3
Diverse Collaborative Partnership Model of Learning Under School Closures



generate a sense of ownership of the remote delivery model across the whole range of stakeholders. Our radio talk shows and the interactions between role-model teachers and parents had increased some parents' and teachers' involvement in supporting children's remote learning and care. Future analyses will examine more 'the *how*' of using remote technology to bring all stakeholders into the fold, than 'the *what*'.

Finally, our study noted the significance of expanding stakeholders' intervention in children's learning at home and in communities. As our survey revealed, the role of siblings at home seemed viable for children's learning in early grades. As such, communities could explore more local human resources in their respective communities to organize group learning or tutorials among children. Teachers may delegate some power such as marking and giving feedback to children to local resource persons, while concentrating on material development and analysis of children's performance in more broader and comprehensive terms. As the Uwezo household-level learning assessments and the Teaching at the Right level (TaRL) literature have demonstrated for many developing country contexts in the recent past, youths with a secondary education certificate may be available to play such role of tutoring young children in respective villages. There is still a possibility to even go beyond teachers and parents' relationship to include various leaders and youths in ensuring children's learning space in localities.

The COVID-19 pandemic generated the opportunity to rethink the conventional form of learning through schooling that has been prevalent over the past century. It might be the perfect time to consider a major revision of the concept of learning and how various stakeholders link up with one another to support it. This study suggests children's learning achievements could greatly be enhanced by merging or harmonizing the socio-

cultural context of children's lived experiences and the conventional school and textbook-based teaching. Remote learning technologies may have introduced one additional learning path, but the most essential transformation might perhaps be the reimagination and reconstruction of the learning community.

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Notes

- 1 The survey covered 150 head teachers, 150 local government leaders, 592 teachers, 4,071 household heads and 12,429 children aged 6 – 16 years who were assessed for basic reading and counting.
- 2 Twelve radio talk shows were held between August – December 2020.

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