Rapid Response Brief

July 2020

What can research evidence tell us about:

Considerations for re-opening academic institutions in Uganda amidst the COVID-19 pandemic

Key messages

- The decision to reopen schools should be guided by the country's national and sub-national context. The considerations to inform this decision include:
  - Up-to-date local and global understanding of Covid-19
  - Epidemiology of Covid-19 in Uganda
  - The ability of schools to maintain Covid-19 prevention and control measures
  - Inequalities in learning brought about by school closure
- The government should put in place different protocols for schools inorder to prevent and control COVID-19 spread. These protocols might be about:
  - Staff and student training in infection and control measures
  - Hygeine measures including personal and environment hygiene
  - Physical distancing measures for staff and learners in shared spaces like classrooms, dinig and lodging areas, and school buses
- In the event that school have been re-opened, authorities should

Where did this Rapid Response come from?

This document was created in response to a specific question from a policymaker in Uganda in 2020.
It was prepared by the Center for Rapid Evidence Synthesis (ACRES), at the Uganda country node of the Regional East Africa Community Health (REACH) Policy Initiative

+ Included:

- **Key findings** from research
- **Considerations about the relevance** of this research for health system decisions in Uganda

✕ Not included:

- Recommendations
- Detailed descriptions

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make it a point to follow up on how effective the guidelines are for potential contextual adjustments	

Summary

Background

School closure was one of the many measures implemented by the government of Uganda in her response to enforce social distancing and control the COVID-19 pandemic. However with the prolonged duration of- and uncertainity when the epidemic will end, plus few cases and no deaths reported yet, there has been increased public agitation for schools to be reopened.

Rapid response question

What COVID-19 prevention and control measures should the government of Uganda consider to reopen academic institutions in the ongoing COVID-19 pandemic?

Findings

There is no one-size-fits-all model for reopening schools. The decision and measures for reopening schools should be contextualised to a country's setting, and how the disease is manifesting within the country. The following considerations can inform the decision on reopening schools;

1. Country specific disease epidemiology: There is need to understand the disease epidemiology in the country. This entails the extent of disease in children and the role they play in disease transmission.
2. Surpassing the highest number of cases recorded per day: Countries that reopened schools did so after recording fewer cases a day than their highest during the epidemic. To consider reopening will require the country to have sufficient data indicating they have passed the peak of infections.
3. Considerations of the schools' local community epidemiology: The local community should have low prevalence of the disease, and have capacity to screen, test, track and isolate any suspected cases of COVID-19.
4. Inequalities and inequities brought by the school closures: School closures have been reported to create and widen social inequalities and inequities in many communities especially among females and persons living with disabilities. An assessment of the extent of inequality casued by school closures can be used to inform reopening of schools.
5. Schools' ability to adhere to reopening protocols: Schools should demonstrate the ability to adhere to different set protocols and considerations to prevent and control the spread of COVID-19 within their environment before they are allowed to reopen.

Some of the protocols that the schools need to adhere to prevent and control the spread of COVID-19 can broadly be categorised into;

1. Staff training in different infection prevention and control measures as well as engagement with parents and fellow staff who are suspected or have had contact with a COVID-19 patient.
2. Hygiene measures to implement to prevent and control COVID-19
3. Physical distancing measures reducing close physical interactions between learners, staff, and learners and staff members.
4. Cleaning premises including toilets, hand washing points, commonly touched surfaces etc.
5. Staff targeted measures to prevent staff from introducing the disease into the school such as
6. Other considerations such as use of face masks, temperature monitoring, and others

Conclusion

Whereas different countries are considering reopening schools, each country needs to follow the local context of disease epidemiology, created and exacerbated social inequalities and ability of schools to adhere to different prevention and control measures for COVID-19. Protocols and considerations for school reopening have to established to create a safe environment for learners and staff to prevent and control the spread of the disease within the school environment.

Background

The Corona virus disease 2019 (Covid-19) continues to devastate the world with over 10 million confirmed cases and over 500,000 deaths [1] as of July 2nd, 2020. The disease spreads from person to person via respiratory droplets expelled through the nose or mouth when an infected person coughs or sneezes. The droplets can persist for hours on surfaces. An infection with the virus can occur a person touches those surfaces and then touch their eyes, nose and mouth (commonly reffered to as soft parts in Uganda)[2]. One individual can spread the disease to upto 7 individuals. This informed the use of non-pharmaceutical measures (like physical distancing measures and use of face coverings) to prevent and control the spread of the disease. To achieve physical distancing, the government of the Republic of Uganda closed all academic institutions from primary schools through to vocational schools and universities [3, 4]. However, with the persistence of the disease, the government and the general public are pondering on school resumption.

The government of Uganda has proposed using online classes, use of radio and television stations as ways of continuing to offer an education to the pupils and students in Uganda [5]. These however have challenges such as; poor computer and internet accessibility in the country due to high associated costs, rampant load-shedding, low radio and television penetration in the country especially in the remote areas, and capacity and required skills to offer online classes on the side teachers. To avert this, government proposed purchasing a television set per village in Uganda [5] which raised many questions of its feasibility, and how different learners at different levels would use this set. Owing to the recorded significant success in controlling the disease in the country with 953 cummulative cases, 893 recoveries and zero deaths as of 6th July 2020 [6] coupled with governments move to relax different instituted COVID-19 prevention and control measures, some policy makers, stakeholders in the education sector and general public are viewing school opening as a possibility. The decision to reopen schools has paramount implications for and should be guided by a risk assessment of learners, their parents, school staff, the communities from which they hail and the society at large [7]. This has prompted policy makers to request for evidence on considerations that can be used to inform government decision to reopen schools amidst the ongoing pandemic.

Rapid Response Question: What COVID-19 prevention and control measures should the government of Uganda consider to reopen academic institutions in the ongoing COVID-19 pandemic?

How this Rapid Response was prepared

After clarifying the question being asked, we searched for systematic reviews, local or national evidence from Uganda, and other relevant research. The methods used by the SURE Rapid Response Service to find, select and assess research evidence are described here: www.evipnet.org/sure/rr/methods

Summary of findings

The timing of reopening academic institutions should consider not only the interests of the learners but also public health considerations [8]. There is no one-size-fits-all model for reopening schools, rather the decision should be contextualised to a country's setting by putting in consideration their current understanding of Covid-19, the ability of schools to maintain Covid-19 prevention and control measures and possible repercussions of keeping schools closed [7].

The evidence provided in this brief is mainly based on recommendations from different institutions and observations from countries which reopened academic instiutions. We do not appraise the quality of evidence in this brief as it is mostly recommendations and considerations, and not necessarily research based. The different considerations to inform governments decision on reopening schools are provided below;

Disease epidemiology: Countries that opened schools used the disease epidemiology to inform their decisions [9]. There currently is limited evidence on the impact of schools closure on the prevention and control of COVID-19. Current research based on mathematical modelling indicates that school closure only prevents 2 to 4% deaths from COVID-19, which is much less than what other social distancing practices can achieve [10]. Tentative evidence from countries that reopened schools indicated that children are not a primary vector for disease transmission, play a smaller role in its transmission, and are less vulnerable to serious disease illness and deaths as compared to adults [9, 11]. However, there are still uncertainities [7, 12]and split opinions on the role of children in transmitting infections, with some researchers indicating that children have the same transmission potential as adults with some reporting a potential increase in transmission following resumption of school. This split was further widened by increase in cases in France, South Korea, Denmark and South Africa following resumption of school, however this could as well have resulted from general relaxation of initially instituted measures such as lock down [13, 14]. A report by the indepent Scientific Advisory Group for Emergencies (SAGE) in the UK indicated that if an asymptomatic child is not detected until an adult contact develops signs and symptoms of the disease, then schools could become institutional amplifiers for the disease [15]. Furthermore, the disease is manifesting itself differently in Africa with less severe forms of the disease and significantly lower deaths as compared to the global north. This therfore would require an epidemiological understanding of the disease manifestation in Africa especially role played by children in transmission. Therefore, before the government considers to reopen schools, there needs to be evidence to support the notion that children are a less risk to disease transmission in Uganda.

Passing the peak of infections: Many of the countries in the global north that have moved to reopen schools have done so after passing the peak of infections [9]. It is assumed that past the peak of infections and with low levels of COVID-19 in a given community, the transmission rate drops [15], and therefore reopening schools would pose low risk of transmission. However, many African countries, Uganda inclusive have had low testing rates and thus available data might not fully explain the public health disese progression. Governments might not be able to fully determine if they are past the peaks of infection inorder to inform decisions on reopening schools. Therefore, before the decision is made, there is need for a full assessment epidemiological curve of the disease in the country.

Considerations of Local Community: The independent SAGE in the UK has advocated for ample preparation of the local community before schools reopen. Their report indicates that before schools reopen, each local community should have the capacity and a well functioning system in place to coordinate local tests, track contacts and isolate suspects and contacts for atleast 14 days. Furthermore, governments have to take the additional step of ensuring that each local community has sufficiently low levels of disease transmsion to allow for schools to reopen within the community [9, 10, 12, 14, 15].

This however has contextual challenges for the case of Uganda. In Uganda, many school going children, especially for the middle and high income families, donot attend schools within their community and therefore any one local community meeting these requirements doesnot necessarily translate into majority of learners resuming school within that community. Furthermore, the current response in Uganda is fully coordinated by the the central government which would require decentralisation of the response.

Inequalities brought by school closure: School closure can and has contributed to increased inequality among children, especially those from families with low social economic status [7]. To many children, continued access to education has been impossible because of lack of access to radio, television and internet leading to a loss in academic gains. Some children only have access to regular meals while in school and their closure has rendered it inaccessible [9]. In addition, the possibility of abuse during school closure is high, with women and children disproportionately affected. Much as Uganda has supplied food, there are reports of inefficiency in the food supply [16]. There are also reports of women and child abuses during the lock down, further strengthening the inequalities arising from school closure. Therefore, considering these possible inequalities resulting from school closure, the government of Uganda needs to carry out an assessment to determine the extent of inequalities to inform the decision on opening schools.

Schools' ability to adhere to reopening protocols: Reopeining of schools will require schools to adhere to strict protocols of infection prevention and control [7, 9]. The World Health Organisation (WHO) recommends that

national authorities should at their local level, provide guidelines (standard operating procedures/checklists) for schools which are contextualised to their local priorities. The guidelines should arise from adjusting Public Health and Social Measures (PHSM) to suit the local schools' context [7]. These measures vary according to the level of education (kindergarten, primary, secondary and tertiary institutions), type of learners (special needs students versus students with no special needs) and category of school (day school versus boarding school). In addition, the schools would have to institute plans of screening and testing and offering additional mental and emotional support to the learners. Governments have to critically assess the ability of schools to adhere to set protocols before reopening schools. It is widely acknowledged that school reopening protocols might be difficult to adhere to [9], however to ensure inclusiveness and avoid propagation of inequalities, the requirements must be achievable for majority of the schools, but must meet a certain bare minimum requirement.

School reopening protocols

When a decision is made to reopen accedmic institutions, there are certain protocols and provisions that have to be adhered to [7]. These are meant to to offer a safe environment for the learners and minimise or reduce the risk of spread of the virus among the learners and to the wider community. **Table 1** below indicates the suggested provisions from different institutions and countries.

Many of the suggested measures might possible but serious questions remain about the extent at which these are possible – how many schools can afford the expenses involved and how long it would take for schools to put the measures in place acquire.

It would require lots of additional funds to:

- Train staff and learners
- Acquire additional equipment and materials like desks
- Expand school premises which might include setting up new or temporary structures and acquiring more land to enable physical distancing in class, sporting areas, dining and lodging areas. In some schools in Uganda, even when money is available, they would find it hard to get land in their current locations
- Hire more teachers to meet requirements in the newly created classes so that all leaners have enough contact time with teachers,
- Acquire cleaning services and handwashing equipment – in many schools across Uganda, learners clean their own environment. More time would be spent on ensuring that the school environment is clean which will encroach on their learning time. The other option would be hiring cleaning services. The question is though, how many schools can afford those services?

Table 1: Suggested protocols and considerations that have to be in place in schools for schools to reopen [7, 13, 17]

Consideration	Local Applicability in Uganda
Train staff regarding infection control measures	
Provision of information to parents and guardians about instituted measures at schools	There are several new measures that have to be instituted in the schools to prevent and control COVID-19. All staff members in the school would need adequate training to get well grounded in these measures and their importance so as to communicate the same to parents and guardians. This is achievable in Uganda as the public has been generally sensitized about COVID-19 and thus making the work of staff members relatively easy. However, with a general perceived loss of trust in the government response to COVID-19 by the public, there is likely to be some resistance, therefore government will first have to rebuild and regain community trust. The other challenge is who would meet the costs of training staff members and covering refresher trainings. This would have to be clear from the start to ensure adherence to the training protocol. The trainings most likely will have to be coordinated through the Ministry of Health (MoH) or by teams qualified and approved by the ministry.
Design and communicate a hand washing procedure in the school	
Design and prepare written procedures for cleaning of school premises	
Prepare plans for establishing and organising learners into cohorts	
How to establish dialogue with any learner and respective parent/ guardian and staff who are in a high risk group of COVID-19	
How to establish dialogue with a learners with special needs	
Hygiene measures	
Create hand washing stations within the school	There have been drives in different schools in Uganda to support handwashing in schools, however some schools still have challenges with access to flowing water and funds to printer posters. Fully instituting different hygiene practices in such schools would be very costly, especially in Universal Primary Education and Universal Secondary Education schools where raising additional funds to what government has provided is difficult. This situation might not be unique to governement funded schools only, but also shared in some privately owned schools. To fully institute and implement hygiene measures in different schools, there is need for goverenment to support all schools. The support can be in form of financial grants, technical support, central designing and printing of posters and eventual distribution to schools, and central or decentralised procurement of hand sanitisers and distribution to schools at no cost to the schools. For water supply, government or through development partners can consider building boreholes for schools with challenges in accessing water.
Avail a sufficient supply of soap, running water and if possible paper towels at all handwashing stations and toilets	
Train learners in handwashing procedures	
Train learners in respiratory hygiene	
Put up posters in the school compound, classrooms, and handwashing stations about handwashing procedures and respiratory hygiene	
Where possible, in places with no handwashing facilities, provide alcohol-based sanitisers	
Physical distancing measures	
Using rooms that are relative to the number of learnerss in the cohorts	Many schools in Uganda have limited number of rooms that can afford suggested physical distancing practices while streams have on average 60 to 120 leaners at a time. The same applies to providing one desk or chair per learner; this is not feasible in the current structure of classes in Uganda, even in private schools. It might only possibly be achieveable in international schools. For this to be implemented in Uganda, learners would have to study in shifts which would require additional staff or staff hours and therefore an added expense to the schools. Another option to achieving social distancing in classes is to adopt outdoor classes. Whereas many traditional schools and some peri-urban and rural
Plan for outdoor classes	
Plan for staggered times of outdoor activities such as access to play grounds, and during break and lunch time	
Divide outdoor areas according to cohorts of learners to avoid mixing insofar as is possible	
Avoid large gatherings of learners such as assemblies	

Ensure a sufficient supply stationery and other equipment/materials to avoid or limit sharing	schools have sufficient space, many private schools and urban schools donot have sufficient space to hold outdoor classes.Even if they had money, they would find it hard to acquire land in their locations. Staggering outdoor activities, alternating times for breaks and planning for additional adults to supervise outdoor activities are possible in Ugandan schools irrespective of the available space, and the supervision of learners while outside can be performed by the teachers of the respectiove classes that are outside. This same approach can be considered to achieve social distancing at meals time by letting different classes out at a time for lunch. Some schools providing transport for learners to and from the school might be in position to implement an increase in shifts and reduce the number of learners ferried at a time. This however places additional workload on the drivers, and also increases the amount of time required to assemble the classroom to start studies. Most schools in Uganda use private means of transport and where possible, they hire vehicles to transport the learners to and fro school. This is already being done in the country and therefore its implementation during the COVID-19 pandemic is feasible.
Limit number of learners in a shared space by providing a separate desk/chair per learner with atleast 1 to 2m between learners	
Ensure social distancing at meals and possibly serving meals when learners are seated	
Plan to reduce crowding in toilets and at premise entries and exits	
Where possible, apply markings on floors to ensure safe distances in areas where crowding may occur	
Alternate times for class breaks to limit the number of pupils who are outside at the same time	
Plan for additional adults to be out at break times in order to help pupils maintain a safe distance from each other	
Adequately plan school transport with additional shifts to avoid carrying many learners at once	
Where possible, avoid using public transport for school trips	
Cleaning	
Design a cleaning plan, which describes the cleaning materials, frequency and methods to be used, and the incharges for different points in the school. The plans must cover different places in the school such as toilets, hand washing points and equipment, and frequently touched objects (door handles, stair banisters, light switches, etc)	Schools will have to design, implement and adhere to a cleaning plan for different places within the school. The schools will also need to have the required supplies to enable cleaning most importantly water and soap or detergent.
Recommendations for staff	
Limit physical meetings, and avoid aggregating in staff spaces	The challenge is with the limit to use of public transport especially for teachers who stay far away from the school premises. However with the current measures instituted by the government in use of public transport, the risk of spread of the virus in public transport is reduced if the protocols are adhered to and thus teachers and learners alike can use public transport.
Maintain social distancing during breaks	
Establish procedures for cleaning shared tablets, computers/keyboards	
Face covering	
Limit use of public transport	
Other considerations	
Use of face coverings	There is need to cover faces for individuals above 6 years of age. Therefore all learners above 6 years and staff will have to put on face masks. In the event that a teacher cannot be heard while in a face mask, he/she can remove it, but however maintain distance with the nearest learner. Special considerations for special needs learners are required, with provision of face masks with a transparent patch to allow learners who read lips to follow in class. The government can also extend the supply of face masks for the public to the schools or provide grants to the manufacturers to

	offset the schools for the schools. The alternative will be for schools to transfer this to the parents.
Plans for temperature monitoring, screening and testing	Schools will need to institute temperature monitoring of learners on a daily basis, and work with the school nurses and medical personnel to screen suspected learners and staff members; although there are concerns about the effectiveness of this method in identifying children with COVID-19 [18]. Nevertheless, the school needs to have a working relationship with the local COVID-19 response team to refer suspected individiauls for testing and eventual isolation or treatement for confirmed cases.
Adjustments to the curriculum	There might be a temptation for schools to adjust the curriculum inorder to catch up on lost time not to cause . learners and school administration should avoid this.
Considerations for special needs students	Schools need to plan for learners with special needs such as slow learners, learners with learning disabilities, etc when resuming classes.
Prepare to offer behavioural and emotional support to learners	The resumption of classes after the forced COVID-19 break might come with behavioral and emotional challenges to learners. Schools will have to adequately plan to offer emotional and behavioral support to learners. This can be through training of the school medical team or collaboration with health centers within the schools vicinity.
Vulnerable staff and learners	The school needs to screen learners and staff who are vulnerable (with underlying medical conditions) to COVID-19 and adequately plan for them.
Plans to close in the event of excursions	Schools need to have a plan and policy for school closure in the event of excursions in number of COVID-19 cases. This can be according to cohorts that have registered the cases or entire school closure for a recommended period of time and reopen if it the infection was localised and all contacts have been isolated for the recommended time period.
Age specific interventions	Schools to note that certain interventions cannot work for certain groups of learners. Children in kindergarten cannot adhere to social distancing practices and donot use face coverings. However this category of learners is also the least affected with COVID-19. Such differences have to be considered in implementing different practices on reopening schools.

Conclusion

For successful implementation of the necessary measures for prevention and control of Covid-19, it is imperative to create collaborations between authorities, schools and communities around. Decisions about approaches to follow should include perspectives from all stakeholders including the community. It is important to remain flexible and modify approaches as needed, and to maximise safety and learning.

It is not enough to implement Covid-19 preventive measures, it is also important to follow up on how effective they are, including how well schools have been able to put in place requirements from authorities for Covid-19 prevention and control, proportion of learners reached, feedback from stakeholders, effects of policies and measures on health and wellbeing of stakeholders and on educational objectives and learning outcomes among other things.

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Conflicts of interest
None known.

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