

APRI COVID-19

Briefing Series

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LEAVE NO ONE BEHIND ENGENDERING INNOVATION IN UGANDA'S EDUCATION SYSTEM FOR EQUITABLE EDUCATION IN A CRISIS

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1,500,000,000

learners **worldwide**
impacted by
school closures

WEF, March 2020

15,000,000

Ugandan school-going
children affected by COVID-19
induced closure

UNICEF 2020



10.7m

Primary

2m

Pre-Primary

2m

Secondary

314,548

**University
&Tertiary**

OVERVIEW

Globally, countries are grappling with adapting to new frontiers of innovation and how education can keep pace with a changing world in the fields of economy and technology¹.

Breakthrough innovations, such as artificial intelligence, have increased in the past 15 years, and are being assimilated at increasing rates in countries which have the requisite supportive infrastructure.

This policy brief argues that instead of focusing on short term 'band-aid' fixes for the continuity of learning during the COVID19 lockdown, the education sector in Uganda should focus on reforms that will transform the education sector into a world class education system. We propose policy options for consideration that, if adopted, would ensure the system bounces back not only more resilient to crises, but also more equitable. The dilemma countries face now is how to ensure access to high quality and equitable education amidst the technological explosion despite the growing differences in the socio-economic status. The COVID19 crisis has complicated this dilemma further, because of the mass disruptions in national health and education systems.

1 OECD 2019. Trends Shaping Education 2019 available at https://read.oecd-ilibrary.org/education/trends-shaping-education-2019_trends_edu-2019-en#page15

INTRODUCTION

The COVID-19 crisis has, without any warnings or preamble, majorly disrupted the international education systems. We have had to reckon with school closures affecting over 1.5 billion learners globally, representing up to 91.4% of the total enrolled learners up to upper secondary level as of April 2020^{1 2}. More than 15 million learners in Uganda's education system have been affected by school closures³. While in systems with more technological adaptations schooling has moved online and, in the home, these shifts are untested and are upon us at an unprecedented scale. Therefore, they can have long-term consequences for the affected cohorts and are likely to exacerbate inequalities⁴ – in access to education services, in learning outcomes, in examination systems and, at a broader level, in social inequities. The COVID19 crisis is likely to have different effects on the education levels/functions. Details on the likely effects on each level and options of what to do are presented in the annex.

A Tale of Two Worlds in Uganda's Education System

The depth of the impact and the likely effects of the COVID19 crisis on Uganda's education system can be better explained through the experiences of two Ugandan teenage school-going children from different walks of life and how they are coping during the school lockdown.

Child 1

Chloe: She is 15 years old; goes to a high-end government secondary school (non-USE) in metropolitan Kampala; and her parents have already attained middle income status. Chloe comes home after the close-down of schools, having been picked by her father's driver in an air-conditioned car. Chloe already owns a smartphone on which she communicates with her parents, while she is away in Boarding school. Chloe's teachers have assigned her self-

1 <https://en.unesco.org/covid19/educationresponse>.

2 See also <https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/>

3 In addition, approximately 600,000 more children are attending schools in the refugee settlements. The system has approximately 548,000 active teachers according to the MoES Plan for Continuation of Education, April 2020.

4 Burgess, S. and Sievertsen, H.H. (April, 01, 2020). Schools, Skills, and Learning: The Impact of COVID19 on Education. VOX CEPR Policy Portal. Available at <https://voxeu.org/article/impact-covid-19-education>

study to do online, and they have also given her guidelines and a time table to log into Zoom for live classroom sessions during the lock-down. Chloe's father, not happy with the quality of the picture on her phone during her first Zoom class session, buys her a brand-new smart phone. Chloe's education has been minimally interrupted.

Child 2

Jacinta: She is 16 years old; goes to a universal secondary school in Alebitong district and her parents are very poor. Her only opportunity at education is through Universal Secondary Education (USE); a not very well facilitated government program. Her parents are peasants, whose livelihood activity is subsistence farming on a small piece of land, and looking after one goat donated to them by NAADS; another government program. Jacinta is an intelligent girl, having scored aggregate 18 at primary seven three years ago, to earn herself a place at her current secondary school. Since the school close-out was announced in March, 2020, she has been home helping her mother with household chores. She did not come home with any self-study materials from school, and her head teacher informed the whole school that they will re-open when the president lifts the close-out. Jacinta's education has been significantly affected, and her prospects are bleak.

It is, therefore an existential paradox that the two girls, Chloe and Jacinta, exist in the same space and are expected, after their far cry journeys through our glaringly mismatched school systems, to compete for placement opportunities!

What the stories of these two girls reveal is the depth of the disparities within our education system that spawn from deeply rooted socio-economic inequalities. The experiences of these two girls enable us to diagnose the inherent problems within the system. School closures have put learning at risk, especially for the poor communities with no access to innovative learning avenues. Further, the amount of time, knowledge, and skill-sets available for parents to support their children during at-home learning greatly varies, and this will consequently result in the inequality of human capital growth for the affected children⁵.

5 Burgess, S. and Sievertsen, H.H. (April, 01, 2020). Schools, Skills, and Learning: The Impact of COVID19 on Education. VOX CEPR Policy Portal. Available at <https://voxeu.org/article/impact-covid-19-education>

WHAT IS THE PROBLEM?

The preponderant problem in Uganda's education system viewed through the COVID-19 crisis lenses is that up to 70% of the learners are from the rural communities⁶, and are at a greater risk of being 'left behind'. While the minority of the learners represented by Chloe will thrive and survive through alternative means of access to education, mainly through electronic modes, the Jacintas will, unfortunately, live through the crisis with no, or very minimal, options to accessing education services.

the gravity of lost time, in comparison between the two classes of learners, will be great, and poses more significant future losses in terms of learning outcomes and incomes, and will inevitably increase social inequity and distress.

Given that there is no clear indication yet as to when schools will be open again, the gravity of lost time, in comparison between the two classes of learners, will be great, and poses more significant future losses in terms of learning outcomes and incomes, and will inevitably increase social inequity and distress.

Globally, there is recognition that the COVID-19 crisis has illuminated the importance of building resilience from immediate threats, including building rapid technological change. The World Economic Forum⁷ projects that the pandemic could reshape education in three specific ways: one; the way millions of children are educated; two, innovations in education; and, three; exacerbating the digital divide, hence widening the equality gaps. The ways in which the COVID-19 will change the mode and delivery of education services compels governments across the world to build and strengthen systems and resilience for education delivery.

The school closures are expected to affect girls more; exacerbating the likelihood of dropouts, further entrenching the gender gaps in education, and increasing their vulnerability to physical and sexual abuse

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6 MoES 2020, COVID19 Response Plan

7 <https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/>

the gender gaps in education, and increasing their vulnerability to physical and sexual abuse. This will be worse for girls in refugee and emergency situations, who are half as likely to enroll compared to their male peers⁸. For example, in Sierra Leone, during the Ebola Crisis, an increase in adolescent pregnancy, up to 65%, was documented in some communities⁹.

In any case, if schools were to re-open soon, it is not clear whether parents would have enough confidence in the system to send their children back to school. It might be a while before parents have enough trust in the system to build enough confidence to send their children back to school.

Ministry of Education and Sports COVID-19 Plan for Continuity of Learning
The Ministry of Education and Sports (MoES) has put forward a plan for “continuity of learning amidst COVID-19 crisis”. The plan presents scenarios for the continuity of learning during the lockdown (recess) through e-learning, electronic media (TV, radio) and printed materials. Specifically, the plan provides for the following stop-gap measures in the worst-case scenario whereby schools are closed for one to six months, projected to cost up to USD 6,000,000:

- Print and distribute self-learning materials to all learners;
- Provision of air time (telephone, radio, TV) to mobilize teachers to remain in touch with learners and support continuity of learning;
- Provide lessons through digital TV and radios;
- Continued support to distance learning (radio, online, offline digital content, printed material), with special measures for candidate classes;
- Prepare accelerated learning materials to run remedial classes to help children catch up with loss of time;

the assumption that printed materials to be distributed by the local government teams will reach every child at risk of being left behind is a miscalculation

The Plan by the MoES does not address the major inhibiting factor to access for continued learning by the 70% of the learners, who live in rural communities. The assumption that these children have access to TV and radio is grossly

8 <https://en.unesco.org/news/covid-19-school-closures-around-world-will-hit-girls-hardest>

9 See also <https://www.savethechildren.org/content/dam/global/reports/emergency-humanitarian-response/ebola-rec-sierraleone.pdf>

inaccurate. Further, the assumption that printed materials to be distributed by the local government teams will reach every child at risk of being left behind is a miscalculation.

For the MoES to assume that a rural father will relinquish his treasured radio to his child for lessons is, at the very least, a misunderstanding of our social set up. The delivery chain for the printed materials through the Local Government leaders will fail because of the fault lines presented by the identification and targeting problems. The MoES plan does not provide practical options for the rural learners without access to radio and TV¹⁰ .

What is needed at this critical time is targeted system strengthening to the education system to address the existing bottlenecks and systemic failures. As some scholars have intimated, “indiscriminately throwing large amounts of money is not an effective way to deal with the myriad of bottlenecks that stand to grip the economic machinery¹¹” or even perpetually broken systems.

FROM RECOVERY TO RESILIENCE

The COVID-19 crisis will have negative effects on social capital, although these are yet to be determined. What is fairly easy to determine is how this pandemic will continue to change how our children are educated. For example, we can predict that there will be an observed increase in the numbers of children being home schooled; increased use of virtual and online learning tools/spaces; and improved development of technology tools to support such innovations in learning, globally.

Uganda has not been hit hard by the COVID-19, based on the relatively few numbers of confirmed cases compared to the neighbouring Kenya and Tanzania and, therefore, recovery in Uganda might not be a steep curve. The important factor for the education sector to consider is moving from recovery to building resilience in the system. The policy options for recovery in the education sector to ensure equity is restored and maintained depend on how

10 Lessons on TV and Radio started on April 20, 2020.

11 Charles Wyplosz, 2020. So far so good: And now don't be afraid of moral hazard in Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes. R. and di Mauro B.R., (Eds). CEPR Press.

long the lockdown persists and how innovative the recovery options are. There is no more room to do business as usual in the public education system without deepening inequality at all levels.

This is, in fact, a profound moment to shape the future of education in Uganda

The COVID-19 crisis has provided the long-desired opportunity to reform and restructure the education system. This is, in fact, a profound moment to shape the future of education in Uganda. Specifically, the education system must

bounce back after the crisis with clarity on:

- Providing equal opportunity access to alternative modes of education to the vulnerable population, including the poor, the disabled, and those without access. Data on internet usage shows that, even in the developed countries with better functioning school systems, there are still populations that lack access to innovative alternative modes of education.
- How the system will innovate and build resilience arising out of a crisis. The impending explosion of technology tools for the delivery of education services implies that those with a head start in tech-savviness, and incomes to afford new tools, etc., will have a head start. The not so savvy ones will have to be forced to learn new digital tools and adaptation skills.
- Clarity on how to minimize inequitable approaches to lift those at the bottom of the economic rung up. Children from less well-off families are less likely to have the technological know-how, connectivity, digital skills, and access to tools and devices, as opposed to children from more well-off families.
- How to minimize the digital divide, recognizing that the more popular alternative modes of education are digital platforms. WEF estimates that up to 60% of the globe's population¹² are using internet and, therefore, the digital divide could widen, further exacerbating inequality.
- How the sector will leverage public private partnerships with telecoms, education organizations, media, etc. to deliver digitalized learning platforms and technology for the poor.

12 <https://thenextweb.com/growth-quarters/2020/01/30/digital-trends-2020-every-single-stat-you-need-to-know-about-the-internet/>

BUILDING BLOCKS FOR A WORLD CLASS EDUCATION

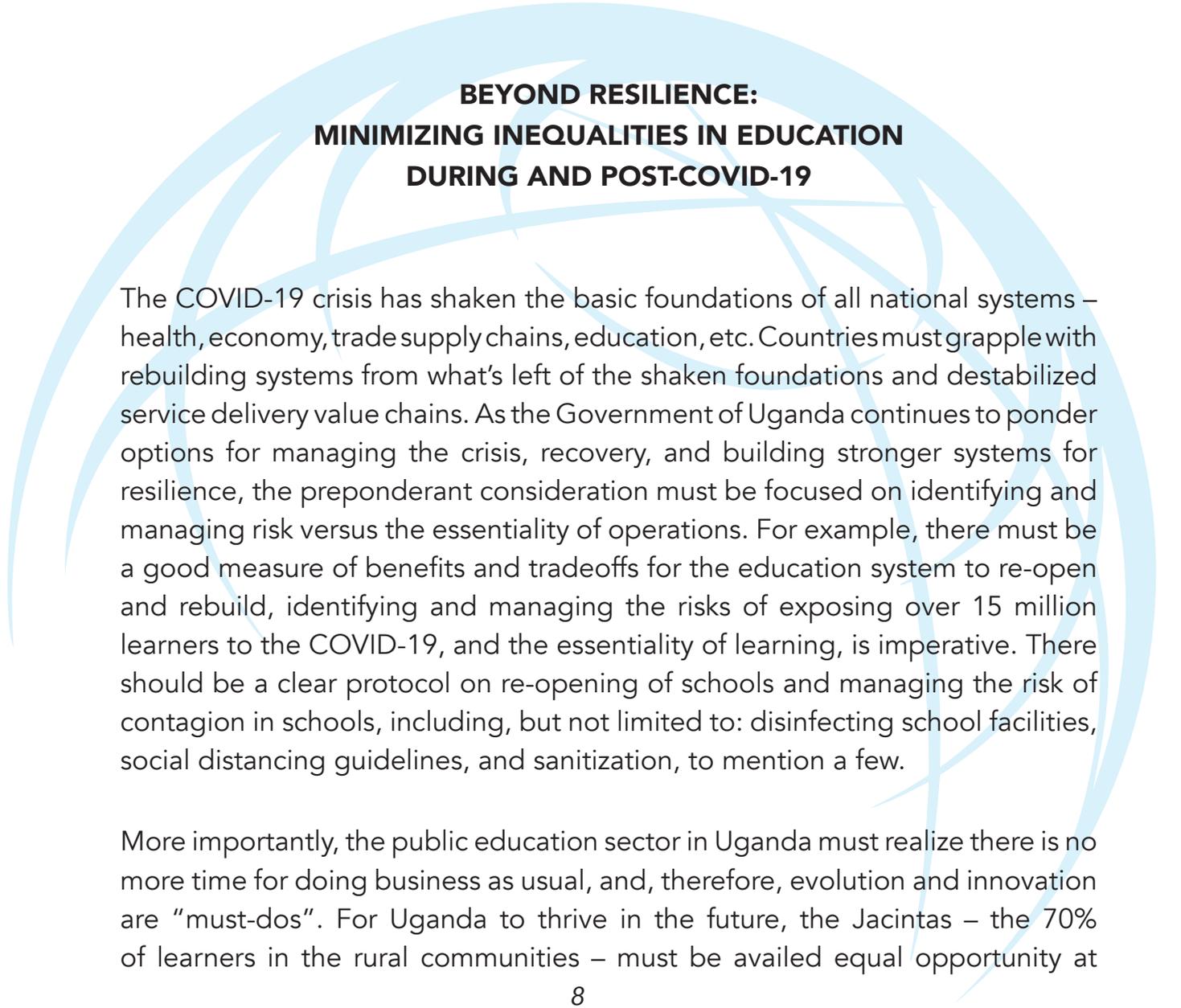
The education sector in Uganda aims to deliver quality and equitable education to all learners. The Vision 2040 and the National Development Plan have for years advocated for strategic investments in human capital development to build the stock of skill-sets that can make Uganda competitive in a continuously globalizing world. This requires building a world class education system that produces candidates with a competitive edge globally. Moreover, Uganda's industrialization strategy and the strategic direction of the third National Development Plan (NDP III) require high skill-sets to deliver cutting edge research and development as well as management of value chains in industrialization. Uganda must prioritize building a world class education system which can support Uganda's development agenda. Some of the building blocks which ought to be pursued and learned from high-performing education systems¹³ include the following:

- Standards and accountability – establishing ambitious, focused, and coherent education standards, and accountability requirements shared across the system. This necessitates adaptability to new ways of doing things in instruction, committing to a high quality of instructors/teachers, and high-stakes examinations and assessment systems.
- Increased investments in human capital development at different levels, including workplace training, to facilitate school-to-work transitions. In the current global education dynamics, use of technology tools and innovation must take center stage in the delivery of education, examinations, and building the capacities of those in charge of education services at the point of delivery.
- Management of education services to ensure there is coherence of policies and practices, aligning policies across all aspects of the system, and maintaining this coherence across time. For example, the use of real time

13 See for example, OECD, 2011. Strong Performers and Successful Reformers in Education: Lessons from PISA for the United States available at <http://www.oecd.org/pisa/46623978.pdf>

data (e.g. NIRA using NIN for individual learners) to enable targeting and managing where and which interventions are going, and to show how student flows are managed (including pupil teacher ratios, student classroom ratios, etc). The data systems would need to be verified annually. Management of education services also requires striking a delicate balance between local government and central government roles and responsibilities, as well as their authority and legitimacy to act.

- A continuous system evolution recognizing an outward focus to recognize both internal and external challenges, which are potential future threats to success. Continuous evolution will ensure that teachers use their potential for management, accountability, and knowledge management, and the interplay of external accountability stakeholders (professional and non-professional).



BEYOND RESILIENCE: MINIMIZING INEQUALITIES IN EDUCATION DURING AND POST-COVID-19

The COVID-19 crisis has shaken the basic foundations of all national systems – health, economy, trade supply chains, education, etc. Countries must grapple with rebuilding systems from what’s left of the shaken foundations and destabilized service delivery value chains. As the Government of Uganda continues to ponder options for managing the crisis, recovery, and building stronger systems for resilience, the preponderant consideration must be focused on identifying and managing risk versus the essentiality of operations. For example, there must be a good measure of benefits and tradeoffs for the education system to re-open and rebuild, identifying and managing the risks of exposing over 15 million learners to the COVID-19, and the essentiality of learning, is imperative. There should be a clear protocol on re-opening of schools and managing the risk of contagion in schools, including, but not limited to: disinfecting school facilities, social distancing guidelines, and sanitization, to mention a few.

More importantly, the public education sector in Uganda must realize there is no more time for doing business as usual, and, therefore, evolution and innovation are “must-dos”. For Uganda to thrive in the future, the Jacintas – the 70% of learners in the rural communities – must be availed equal opportunity at

learning, and must not be left behind at the expense of the 30%. Recovery from COVID-19 crisis, and building resilience for sustainability, are critical for Uganda's achievement of SDG 4 and, generally, the Agenda 2030 for Sustainable Development Principle of Leave No One Behind.

What is needed now is a long-term policy that will make it easier to handle future crises in the education sector, including public investment in the standards and quality of our school infrastructure, research and development, and better streamlined human capital development¹⁴. While acknowledging that this investment capital required can't be marshaled in the very short run, especially where prudence calls for life saving approaches and investments in the battered health system, for example, there must be recognition for the emergency in dealing with systemic inequities in education in a timely, appropriate, and robust manner.

To ensure that none of Uganda's children is left behind after this crisis, the MoES can turn this crisis into an opportunity – a blessing in disguise of sorts – to build stronger systems and infrastructure for equitable education delivery. The following are options for consideration by the MoES:

1. Government can make smart investments to address the existing bottlenecks in education services. The MoES can repurpose existing resources and development partners' support and resources to address the immediate needs once the schools re-open, and to build resilience for the future. These smart investments should be geared to being the building blocks for the world class education system aforementioned – standards and accountability, human capital development, management of education services, and continuous system evolution.
2. Government should prioritize investments in technology tools to extend innovative alternative modes of education services delivery to the rural poor, who are at risk of being left behind. At the heart of technological investments are public private partnerships, which can deliver communal technology labs (CTLs). These CTLs would be publicly managed technology facilities that provide free or low-cost access to computers, tablets, internet, virtual learning spaces, and training in digital literacy and use of innovative technology, among others, to people lacking resources. The targeting for placement of these labs should be based on the population of the school-

14 See Krugman 2020. The Case for Permanent Stimulus in Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes. Baldwin R. and di Mauro B.R., (Eds). CEPR Press.

going population in the community¹⁵. The CTLs across the country would be connected on the same network. CTLs could be made possible through partnerships between Government/MoES, with national telecoms of nationwide coverage, education organizations with experience in managing virtual learning, community-based organizations in education, and a regulatory body, such as Uganda Communications Commission (UCC).

3. MoES should strengthen education management, and prioritize use of real-time data in designing policies and interventions for proper and effective targeting. There have been attempts by the MoES, with support from development partners, to determine the number of education institutions, and the actual numbers of enrolment in each institution¹⁶. A few years ago, NIRA undertook a verification exercise for all primary and secondary school going children, who should have been given an individual national identification number (NIN). With the outcry of inflation of enrolment numbers, tracking and tracing learners using their NIN should have started happening. There should be a presidential directive to this effect, to enable MoES manage student flows and target interventions. The NIN should be required for registration of services not only in education but also in health and beyond. That way, it would be easier to determine the depth of access and reach of social services, and leave no one behind.

15 A community can be defined as a sub-county or a constituency. A district would perhaps be a huge geographical space, again, depending on the population.

16 This activity was undertaken by UBOS and I do not believe the final results are available yet.

ANNEX

Presented in the below are the likely effects of the COVID-19 school closures on learners at the different levels. The arrows used in the likely effects' column estimate the potential benefit or loss to the learner.

- ↑ - a green upward facing arrow signifies beneficial effects to the learner.
- ↓ - a red downward facing arrow signifies adverse effects to the learner – in other words, the learner is worse off than before.
- <> - brown bi-directional arrows signify the ambiguous effects that are not easily determined as to whether they are beneficial or adverse.

Table 1: Likely Effects of COVI-19 on the Levels and Functions of Uganda's Education System

Level/Function	Likely Effects	What to Do
Pre-Primary Education	<p>↑Children more likely to have increased play time and parental interaction, especially those from schools which load pre-primary children with homework. This is essential to their development.</p>	Do nothing.
Primary Education	<p>↑Children in lower primary more likely to have increased play time which is essential for their development.</p> <p>↑Children who have access to alternative modes of learning such as TV, radio, online, parent-dedicated time, etc, are more likely to gain mastery of content and advance on coverage of the syllabus.</p> <p>↓Children in higher primary (P4-P7) more likely to lose time in covering the school year syllabus.</p> <p>↓Children in P.7 the candidate class more likely to miss out on exams such as mock exams (not sure if these exams have any positive effects on PLE results).</p> <p>↓Children without access to alternative modes of learning more likely to fall behind in mastery of content, worsening the divide in learning outcomes.</p>	<ul style="list-style-type: none"> • Compact the syllabus and allow some of the content to be covered in the subsequent school year so as not to overload children with class work and homework. • Prepare for remedial instruction for children who might fall behind in mastery of content, especially those without access to alternative modes of learning. • Apply automatic promotion for all non-candidate classes with intent to finish previous year syllabus, and test on mastery of content. • For P.7 candidates, allow for completion of compacted syllabus, and allow PLE application after a short Christmas break to ensure that there is a continued transition to secondary. • Secondary schools should relax S.1 intake requirements.

Level/Function	Likely Effects	What to Do
Secondary Education	<p>↑ S.1 students of the 2020 cohort with alternative modes of learning are likely to benefit since the new curriculum emphasizes 'self-learning'.</p> <p>↑ Children who have access to alternative modes of learning such as TV, radio, online, parent-dedicated time, etc, are more likely to gain mastery of content and advance on coverage of the syllabus.</p> <p>↓ Children without access to alternative modes of learning more likely to fall behind in mastery of content, worsening the divide in learning outcomes</p> <p>↓ S.4 and S.6 candidate classes more likely to lose instructional time in syllabus coverage, thereby affecting mastery of content.</p>	<ul style="list-style-type: none"> • Compact the syllabus and allow some of the content to be covered in the subsequent school year so as not to overload children with class work and homework. • Prepare for remedial instruction for children who might fall behind in mastery of content, especially those without access to alternative modes of learning. • Apply automatic promotion for all non-candidate classes with intent to finish previous year syllabus, and test on mastery of content. • For S.4 and S.6 candidates, allow for completion of compacted syllabus, and allow for end of level exams (UCE and UACE) after a short Christmas break to ensure that there is a continued transition to higher secondary and university/tertiary institutions.
Tertiary Education (Limited to TTIs and BVET institutions)	<p>↑ Those enrolled in online programs will benefit from extended time of study and online examinations.</p> <p>↓ Those enrolled in courses which require practical lessons e.g. welding, carpentry, etc., will lose valuable instruction time.</p> <p><> Delayed entry into the skills and labor markets for the candidates of 2020.</p>	<ul style="list-style-type: none"> • Consider extending the tenure time for these courses by six months to a year, depending on how long the lockdown will persist to allow catch up on instructional time and examinations/assessments. • Desist from automatic promotion at this level since mastery of content is important.
Higher Education	<p>↑ Those enrolled in or with access to online programs and tools, will benefit from extended time of study and options for online examination</p> <p>↓ Those without access to online programs and tools will fall behind in content mastery and syllabus coverage.</p> <p>↓ Those enrolled in courses which require practical lessons in sophisticated lab settings e.g. medicine, engineering, etc, will lose valuable instruction time.</p> <p><> Delayed entry into the skills and labor markets for the candidates of 2020.</p>	<ul style="list-style-type: none"> • Consider adoption of technology tools at this level that allow for continuity of instruction during such crises. This should include virtual simulations for sophisticated labs for disciplines such as engineering and medicine. • Consider relaxation of year one entry requirements, with rigorous assessment at the end of year one. • Desist from automatic promotion between levels. • Consider extension of instruction to allow for syllabus catch-up.

Level/Function	Likely Effects	What to Do
Examinations (for all national examination bodies and institution-based exams)	↓ Disruption of examinations calendar.	<ul style="list-style-type: none"> • Consider restructuring of UNEB and national examinations at P.7, S.4, and S.6, to allow for continuous assessment¹⁸, so that candidates are not entirely dependent on the one-off end of level exams. • Consider pauses, and possible extensions of institution-based examinations to allow more time for instruction and catch up.
Standards	↓ The Directorate of Education Standards and local governments in charge of inspection and monitoring will have more parameters to consider in an already constrained system, including monitoring of health standards and requirement for management of COVID19 risks following school re-opening.	<ul style="list-style-type: none"> • Develop and popularize school re-opening protocols.

18 A similar argument was advanced in the 2019 World Bank Economic Update, focusing on education



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