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COVID-19 Crisis, Impacts on Catholic Schools, and Potential Responses

Part II: Developing Countries with Focus on Sub-Saharan Africa

Quentin Wodon¹

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In developing countries as in developed countries, the COVID-19 crisis has led to near universal school closures that will affect children's ability to learn, especially in countries with limited infrastructure for distance learning. While most children are likely to return to school when they reopen, quite a few may drop out. In addition, the economic recession generated by the crisis will affect livelihoods, leading to higher rates of poverty and food insecurity. This also may have negative impacts on both Catholic schools and their students. This paper, the second in a set of two, looks at likely impacts of the COVID-19 crisis on Catholic Schools in developing countries, with a focus on sub-Saharan Africa, a vulnerable region given the comparatively weak performance of its education systems and the limited availability of resources for governments to protect education budgets (acknowledging that many Catholic schools in the region are public schools). How Catholic schools will be able to respond to the twin challenges of school closures and the economic downturn may affect their comparative advantage for the medium term. A key aim of the paper is to make Catholic school teachers and leaders aware of some of the discussions on how to respond to the crisis, and provide links to resources online that may be useful.

Keywords: COVID-19 crisis, Catholic Schools, sub-Saharan Africa

1 The author is a Lead Economist at the World Bank, and as part of his volunteer work a Project Manager with OIEC (Office International de l'Enseignement Catholique) and a Distinguished Research Affiliate with the Kellogg Institute at the University of Notre Dame. The analysis and views expressed in this paper are those of the author only and may not reflect the views of the World Bank, its Executive Director, or the countries they represent. This two-part paper was written by the author purely in a personal capacity, but analysis for developing countries benefited from insights from World Bank colleagues, including teams working on EdTech (Mike Trucano Robert Hawkins, Iñaki Sanchez Ciarrusta, Alex Twinomugisha, Cristobal Cobo, and Sharon Zacharia), and broader policy responses (Halsey Rogers, Shwetlena Sabarwal, Ciro Avitabile, Jessica Lee, Koji Miyamoto, Soren Nellemann, and Sergio Venegas Marin). Suggestions from Timothy Uhl are also appreciated. Any errors or omissions are however the author's alone. At the Journal of Catholic Education, support from Rebecca Stephenson is much appreciated.

Introduction

This paper, the second in a set of two on the likely impacts of the COVID-19 crisis on Catholic schools and potential responses, focuses on developing countries, and especially on sub-Saharan Africa since this is the region in the developing world with the largest and fastest growing network of Catholic schools (Wodon, 2019a). A companion paper in this issue of the journal focuses on developed countries, including the United States (Wodon, 2020a). In the United States, Catholic school teachers and leaders probably already have access to a wide range of materials related to the crisis. But this is less the case in the developing world. This is a pity as a wide range of policy notes are being written about potential responses to the crisis by international organizations, think tanks, and civil society organizations. Few of those notes consider specifically impacts for Catholic schools and their students, but the materials are relevant. Much of this analytical effort is not reaching Catholic schools leaders, since the focus is typically on policy dialogue with governments. One of the aims of this paper is to provide a synthesis of some of those materials, so that they become more accessible to Catholic school teachers and leaders.

In both developing and developed countries, temporary school closures have been near universal. UNESCO suggests that as of mid-April, at least 1.6 billion students were affected by the closures. Even if some countries reopen schools before the end of the school year, there is a risk of back and forth, whereby after a reprieve, the pandemic surges again. Research for China suggests that children are less likely than adults to be infected by the coronavirus, but that they have more contacts with others when schools reopen, thus leading to potentially as much spreading of the virus than adults (Zhang et al. 2020; see also Jones, 2020, on infections among children in Germany). The risk of new surges in the spread of the virus may force schools to close once more, or adopt special operating procedures, for example using double shifts to reduce class size and the risk of transmission of the coronavirus among students and from them to the broader population. This points to the need for immediate responses to the crisis, but also for ensuring that education systems become resilient to the risk of future closures, among others through distance learning options.

School closures may lead to substantial losses in learning for children and some may never return to school when the schools reopen. These risks are especially salient for disadvantaged children, including girls who may be married as children or have children early. The risks will be exacerbated

by the fact that apart from school closures, the pandemic has led to a global recession. The April 2020 World Economic Outlook on *The Great Lockdown* (International Monetary Fund, 2020) suggests severe contractions in all regions of the world, and a decline in GDP of 3% globally. Many countries face multiple challenges — not only a health crisis, but also a collapse in tourism and commodity prices including for oil. In some countries with already high levels of debt and weak banking systems, the pandemic may lead to a financial crisis. China, India, and low income countries as a whole may still experience positive GDP growth in 2020, but at much lower rates than before, and for low income countries, at a rate lower than population growth, thus leading to lower GDP per capita and standards of livings. Advanced economies stand to lose the most in percentage terms, with an expected loss in GDP at 6.1% for 2020. But in emerging markets and developing economies, even if the magnitude of the recession is smaller, the ability to cope with its impacts is also lower, both in terms of already high poverty levels and in terms of lack of fiscal space for governments to implement policies to mitigate impacts. Globally, the Great Lockdown is likely to be the worst recession since the Great Depression.

For sub-Saharan Africa, the region of particular focus for this paper, the size of the contraction predicted by the International Monetary Fund is -1.6%, although the report mentions downside risks. A World Bank (2020a) report specifically for Africa suggests a larger negative shock, with GDP contracting by -2.1% to -5.1% depending on the scenarios used. The region would face its first recession in 25 years. Between \$37 billion and \$79 billion in output would be lost this year. In addition, a severe food security crisis could take hold, with agricultural production expected to contract by 2.6% to 7% (locust swarms in East Africa play a role). Impacts are being felt fairly quickly. A telephone survey implemented in Senegal by Le Nestour et al. (2020) suggests that as early as in April, up to 87% of the population had seen a reduction in income, leading over a third of the population to reduce food intake. Because of school closures, a third of children were not engaging in any learning activity. The ability of parents to support learning at home varied greatly, as did access to distance learning online or through television. The crisis also led to movements back to rural areas.

Global simulations relying on IMF growth projections by Vos et al. (2020) suggest that 84 to 132 million people might fall into poverty (using the \$1.9 per day threshold). Of those, half would be children. Households in developing countries are likely to also be affected by a drop in international

remittances. A World Bank (2020b) migration and development brief suggests that remittances to low and middle-income countries may decline by 20% to \$446 billion from a record high of \$554 billion in 2019. After Europe and Central Asia (drop of 27.5%), the sharpest decline may be observed in sub-Saharan Africa (23.1%). Remittance flows would only recover partially by 2021 to \$470 billion. The Food Security Information Network (2020) estimates that the crisis may almost double the number of people suffering from acute hunger in low and middle-income countries from 135 million people to 265 million by the end of 2020. Countries in Africa will be hardest hit, including in East Africa where locusts are threatening food supply. Some groups are especially at risk from both the health and economic consequences of the crisis. This includes refugees and internally displaced persons (IDPs), with sub-Saharan Africa again affected severely since it is home to the largest number of refugees and IDPs².

What may be the magnitude of the consequences of the crisis for children? Although health risks from the Ebola epidemic in West Africa a few years ago were much more severe in terms of death rates than those from the current pandemic, a review of the experience of West African countries during the Ebola outbreak in United Nations (2020) suggests that effects on children were both severe and widespread, which may again be the case with this crisis. In Sierra Leone, in areas affected by the outbreak, teenage pregnancies for adolescent girls increased while school enrolment dropped by a third (Bandiera et al., 2019). Antenatal care visits and hospital deliveries and C-sections dropped as some facilities closed (Ribacke et al., 2016). The rate of full immunization for children under one year of age dropped by half, leading to an increase in cases of measles (Wesseh et al., 2017). In one district, diagnoses of severe acute malnutrition among children more than doubled (Kamara et al., 2017), and a majority of children perceived an increase in violence against children in their community (Risso-Grill and Finnegan, 2015). Data from UNICEF suggest that the outbreak led to a drop in birth registrations in Liberia. Visits to hospitals and health facilities for children with acute respiratory infections and diarrhea dropped in Guinea (Bardon-O'Fallon et al., 2015). In all three countries, the number of orphans increased. Even young children, most of which are not in preschools in the developing world, may suffer from the crisis indirectly due to stress and parental attention at home diverted to taking care of siblings.

2 On refugees and IDPs, see the dedicated webpage from UNHCR at <http://reporting.unhcr.org/covid-19>.

How in particular may Catholic schools and their students fare during the crisis? In developed countries and especially the United States, Catholic schools may be able to respond to the immediate effects of school closing, at least to mitigate losses in learning through distance learning. However, given massive unemployment, the threat posed by the crisis to enrollment is more pointed. In developing countries, while many Catholic schools may suffer enrollment losses due to affordability constraints for parents brought about by the recession, in sub-Saharan Africa enrollment may still prove comparatively more resilient at least in the medium term given high levels of population growth and rising levels of educational attainment, both of which lead to higher demand over time for Catholic schools given their comparatively good reputation. Over the last several decades, enrollment in Catholic school has increased substantially in the region, and the schools have been able to maintain their market share (Wodon, 2018, 2019a). Data from a survey of national Catholic school association suggest that the challenges brought about by the crisis will be major, but down the road the schools may be resilient.

On the other hand, the risks for many students, whether in Catholic or other schools, are substantial in developing countries. The effects of school closures and the economic crisis on learning, nutrition, and well-being are likely to be severe. Many children may drop out of school, especially girls. In low income countries where levels of learning are already low (World Bank, 2018; UNESCO, 2019) and where most children aged 10 are not able to read and understand a simple text (World Bank, 2019), not being in school for several months may set students back a full year, again leading to a higher likelihood of dropping out as too many students already start school late and repeat grades – the older the students get, the more likely it is that they (or their parents) will decide in the absence of sufficient learning that the benefits of schooling are not worth the out-of-pocket and opportunity costs.

As to the global recession, while it may lead to smaller GDP contractions in developing than in developed countries (even in per capita terms after accounting for population growth), the ability of developing countries to respond is much weaker. Many low income countries are highly indebted and have limited budget space to mount aggressive policy responses. In a context of sustained population growth leading to ever larger cohorts of new students in many countries, the ability of education systems to properly fund schools will be tested. This will affect Catholic schools too, if only because in developing countries and especially in sub-Saharan Africa, a large share of Catholic schools are actually public schools. How the schools will be able to re-

spond to the immediate and medium term challenges posed by the pandemic may thereby again affect their future, as is the case in developed countries.

In order to discuss the likely impacts of the crisis for Catholic schools and their students, as was done in the companion paper on developed countries, this paper first considers the vulnerability of schools and their students in comparative perspective, with a focus on sub-Saharan Africa. Because the presence of Catholic schools is large in low income countries vulnerable to the crisis, their students will be particularly exposed. A key aim of the paper is to make Catholic school teachers and leaders aware of some of the discussions on how to respond to the crisis, and provide links to resources online that may be useful. The focus is on primary and secondary, even if colleges and universities will also suffer.

Apart from discussing risks, the paper discusses potential responses by schools and governments, not only for distance learning to reduce the impact of temporary school closures and other measures that schools may be able to adopt starting in the fall for the new school year, but also briefly in terms of social protection and other mechanisms that could mitigate the medium term effects of the crisis. For Catholic school responses, part of the analysis in the paper relies on a small online survey implemented with the International Office of Catholic Education (*Office International de l'Enseignement Catholique* in French or OIEC). The survey was sent at the end of April 2020 to national Catholic education associations that are members of OIEC. A total of 171 responses were received from 31 countries at the time of writing. The survey was used to inform three conference calls held in French, English, and Spanish in early May with participation from representatives of national associations. Apart from survey responses, discussions during these conference calls also helped inform the paper.

Immediate Impacts from the Crisis

Risks from the Crisis

As in the companion paper on developed countries, it is useful to distinguish three types of losses that can be felt by students almost immediately due to school closures. These are (1) losses in learning; (2) losses in well-being and mental health; and (3) losses of free or subsidized lunches provided in schools. The negative effects of those losses are likely to be more severe in developing countries than in developed countries not only because developing countries have fewer means to cope with the impacts of the crisis, but also because students in those countries start from a lower base.

Consider first losses in learning. Students temporarily out of school are at risk of losing what they learned while in school. In developing countries, and especially in Africa, this may wipe out gains from the school year given that to start with, learning levels are already very low. A year ago, the World Bank (2019) introduced a new learning poverty indicator that measures the share of 10 years old not able to read and understand a simple text. For children in school, the estimate is based for the most part on student performance on international student assessments. For children out of school by that age, the assumptions is that they are not functionally literate. Table 1 provides estimates of learning poverty globally, as well as by country income group and by region except for South Asia where insufficient data are available to compute the estimates. More than half (53%) of children in low- and middle-income countries suffer from learning poverty, but the figure would be much higher if China, with a learning poverty rate of 29%, were not included. In low-income countries, nine in ten children are unable to read and understand a simple text, and in sub-Saharan Africa, the proportions are almost as high. Girls tend to do slightly better than boys, except in low income countries where rates are similar, but girls tend to lag behind boys in those countries at the secondary level. Temporary school closures will exacerbate learning poverty, and even lead some children to drop out.

Table 1

Learning Poverty - Share of 10 Years Not Able to Read and Understand A Simple Text (%)

Countries by income level	Boys	Girls	Regions	Boys	Girls
High-income	8.4	6.6	East Asia and Pacific	29.6	21.1
Upper-middle-income	44.6	39.5	Europe and Central Asia	10	8.2
Lower-middle-income	55.1	45.9	Latin America and Caribbean	53	48.9
Low-income	93.3	93.5	Middle East and North Africa	66	56.8
Low- & middle-income	55.5	49.8	North America	8	7.1
World (all countries with data)	43.6	38.9	Sub-Saharan Africa	86.4	83.0

Note. Source: World Bank (2019). Data missing for South Asia due to lack of participation in international assessments.

Consider next losses in well-being and mental health. The World Health Organization estimates that up to one in five children and adolescents globally may experience mental disorders³. Data from school health surveys also suggest that a substantial share of students suffer from stress for their health and well-being. In developing countries, the main school health survey is the Global school-based student health survey (GSHS). Data in these surveys are available on perceived health (difficulty to sleep), risky behaviors (ever smoked, ever used alcohol, ever used drug, ever has sex), and psychological well-being (ever considered suicide, ever planned suicide, ever attempted suicide). On average, almost four in ten students declare having difficulties to sleep, with risky behaviors also common, especially with alcohol (used by a third of students). Quite a few students considered or planned suicide (Wodon et al., 2020). As conditions of stress are exacerbated by the crisis, the risk for adolescent health and well-being is substantial (the issue of pregnancies for girls is considered in the next section in conjunction with the risk for some students to drop out of school).

Consider finally losses of free or subsidized school lunches and other threats to nutrition. About a decade ago, 368 million children benefitted from school lunches according to a 2013 report from the World Food Programme. Today, the number may be higher. School lunch programs have been shown to matter for children's caloric and nutrient intake (Alderman and Bundy, 2012). The loss of these programs will deprive children of a key meal which they may not get at home if their household is in extreme poverty. More generally, food insecurity will be exacerbated by the crisis. As mentioned earlier, the number of people suffering from acute hunger in low and middle-income countries may double from 135 million people to 265 million (Food Security Information Network, 2020).

The above discussion of the three losses faced by children due to temporary school closures is not specific to Catholic schools, but there should be no doubt that students in Catholic schools will be affected as is the case for other students. There is sometimes a perception that students in Catholic schools may be less vulnerable than students in public schools because they may come from more privileged backgrounds since their parents must be able to afford tuition costs. By contrast, public schools are in principle tuition free, at least at the primary level, but also increasingly at the lower secondary level.

3 See https://www.who.int/mental_health/maternal-child/child_adolescent/en/

It is true that on average across countries, when the size of the Catholic networks in various countries is not taken into account, benefit incidence analysis on school enrollment by type of school suggests that Catholic schools are less pro-poor than public schools, although more pro-poor than other private schools (Wodon, 2019b, 2020a). This means that on average, across quintiles of consumption per capita, a smaller share of students from the bottom quintiles attend Catholic schools. However, this does not account for the size of enrollment in Catholic schools across countries. In sub-Saharan African countries with the largest number of students enrolled in Catholic schools, the socio-economic profile of students in Catholic schools is not very different from that of students in public schools, suggesting that many students in Catholic schools are vulnerable.

Specifically, according to Church statistics (Secretaria Status, 2018), the three countries with by far the largest enrollment in K12 Catholic schools in the region in 2016 were the Democratic Republic of Congo with 5.5 million students, Uganda with 5.4 million students and Kenya with 4.5 million students. Together, these countries account for 56% of total enrollment in K12 Catholic schools in the region that year. In all three countries, most Catholic schools benefit from government funding and are considered as part of the public education systems (even if they are technically owned by the Catholic Church). The number of students in “private” Catholic schools is typically much lower than the share in “public” Catholic schools. As a result, the socio-economic characteristics of students in Catholic schools overall tend to be similar to students in other public schools (see Wodon, 2017a and 2017b in the cases of the Democratic Republic of Congo and Uganda, respectively). In practice then, since the countries with the largest number of students in Catholic schools tend to be low income, and since many of the students in the schools are not privileged, the exposure of students to risks from the crisis is high.

To suggest more systematically how students in Catholic schools may be at high risk due to the crisis as is the case for students in public schools, assume for the sake of the argument that key priorities during temporary school closures and beyond are to (1) provide distance learning opportunities for students; and (2) reduce food insecurity risks among the poor associated with the loss of school meals and the concurrent loss of income for parents due to the economic crisis. Data in Table 2 suggest that the ability to protect students from those risks is limited in sub-Saharan African countries, with the countries with the largest number of students in Catholic schools among the most vulnerable.

Consider first the issue of lack of access to the internet which restricts the ability to implement quality distance learning solutions (alternatives to the internet for distance learning will be discussed in the next section). Data for the International Telecommunications Union (2019) on key information and communications technology (ICT) indicators suggest that the share of the population covered by a mobile cellular network is high globally, including in Africa (including North Africa) where 9 in 10 individuals live in geographic areas with coverage. Penetration of mobile cellular telephone subscriptions is also high in Africa with 80 subscriptions per 100 inhabitants, although many of those may not be smart phones. On the other hand, penetration rates for active mobile broadband subscriptions are lower, at 34 per 100 inhabitants, and only one in ten households have a computer at home. Finally, only slightly more than a quarter of adults use the internet at home or elsewhere. While these rates are increasing over time, it will take a long time for even half of households to have access to the internet at home.

In Table 2, one of those ICT indicators is provided for each country in sub-Saharan Africa, namely the share of the population using the internet (at home, at work, or elsewhere), which can be considered as an indicator of protection against school closures in terms of the ability, at least in principle, for children to access distance learning resources. In addition, the Table provides estimates of the share of the population not in poverty, which can be considered as a protection against economic downturns and food insecurity. Poverty estimates are from the World Bank, using the latest year for which a survey is available. In a few cases, the estimates seem a bit low, but for the most part they conform to expectations. Finally, the Table provides the number of children enrolled in primary and secondary Catholic schools in each of the countries.

Table 2*Indicators of Protection Against Immediate Risks from School Closures*

Country Name	Protection against nutrition risk: Share of population not in poverty (%)	Protection against learning loss: Share of population using internet (%)	Number of students enrolled in Catholic schools
Angola	52.4	14.3	688,426
Benin	50.5	20.0	89,420
Botswana	83.9	47.0	8,559
Burkina Faso	56.3	16.0	99,733
Burundi	28.2	2.7	641,845
Cabo Verde	96.8	57.2	7,712
Cameroon	76.2	23.2	419,038
Central African Rep.	33.7	4.3	83,032
Chad	61.6	6.5	57,024
Comoros	82.4	8.5	267
Congo, Dem. Rep.	23.4	8.6	5,529,470
Congo, Rep.	63.0	8.7	36,604
Cote d'Ivoire	71.8	43.8	127,207
Djibouti	82.9	55.7	2,209
Equatorial Guinea	-	26.2	43,831
Eritrea	-	1.3	35,519
Eswatini	71.6	47.0	40,400
Ethiopia	69.2	18.6	157,543
Gabon	96.6	62.0	315,542
Gambia, The	89.9	19.8	38,323
Ghana	86.7	39.0	933,394
Guinea	64.7	18.0	28,306
Guinea-Bissau	32.9	3.9	26,410
Kenya	63.2	17.8	4,297,642

Table 2 (Cont.)

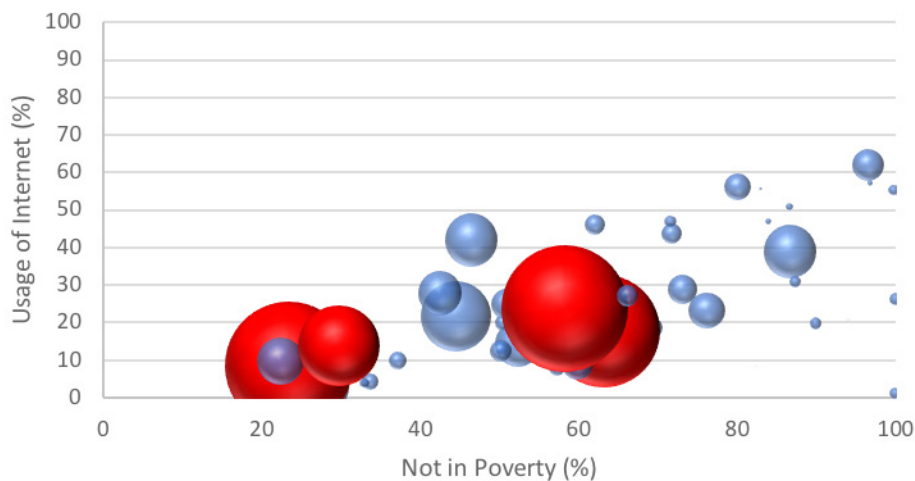
Country Name	Protection against nutrition risk: Share of population not in poverty (%)	Protection against learning loss: Share of population using internet (%)	Number of students enrolled in Catholic schools
Lesotho	73.1	29.0	274,066
Liberia	59.1	8.0	28,750
Madagascar	22.4	9.8	708,523
Malawi	29.7	13.8	2,195,450
Mali	50.3	13.0	41,131
Mauritania	94.0	20.8	365
Mauritius	99.8	55.4	32,717
Mozambique	37.1	10.0	93,206
Namibia	86.6	51.0	13,629
Niger	55.5	10.2	14,033
Nigeria	46.5	42.0	916,491
Rwanda	44.5	21.8	1,637,334
Sao Tome & Principe	65.5	29.9	2,445
Senegal	62.0	46.0	124,503
Seychelles	98.9	58.8	-
Sierra Leone	59.9	9.0	335,525
Somalia	-	2.0	-
South Africa	80.1	56.2	224,858
South Sudan	57.3	8.0	79,777
Sudan	87.3	30.9	39,593
Tanzania	50.9	25.0	295,676
Togo	50.2	12.4	147,325
Uganda	58.3	23.7	5,442,722
Zambia	42.5	27.9	633,540
Zimbabwe	66.1	27.1	145,849

Note. Source: Compiled by the author from World Bank, ITU, and Catholic Church data sources.

The data are visualized Figure 1, with the share of households not in poverty on the horizontal axis, and the share of the population using the internet on the vertical axis. The size of the bubbles in the scatter plot represent the total number of students enrolled in Catholic primary and secondary schools. In the Figure, students in countries towards the upper right tend to have more protection against the impact of school closures and the economic crisis, while those in the bottom left tend to have less protection. Many of the countries with large numbers of students in Catholic schools tend to be located towards the lower left quadrant. The four countries with the largest enrollment have been highlighted in red. They are again the Democratic Republic of Congo and Malawi near the bottom left, and Uganda and Kenya more towards the center of the Figure. Even countries with a comparatively smaller share of their population in poverty often have limited usage of the internet in their populations, suggesting challenges for learning through digital online resources. In short, many students in the region, including those in Catholic schools, are at high risk due to the pandemic. Within countries, children from rural areas and the bottom quintiles of wellbeing will probably suffer the most.

Figure 1

Protection from Risk Factors from School Closures (sub-Saharan African Countries)



Note. Source: Compiled by the author.

Potential Responses

As in the companion paper on developed countries, the focus in this section is on options for distance learning since Catholic and other schools have a limited ability to respond to risks related to nutrition and psychological wellbeing when children are not in school. The challenge in developing countries, and even more so in sub-Saharan Africa, is that options for distance learning are limited. School closures are forcing schools and education systems to transition to distance learning at scale very quickly. This is a difficult task even under the best circumstances. But when the existing digital infrastructure has limited coverage, the task is even more challenging. As a result, multi-modal approaches are required.

Multiple organizations have provided guidance on their website on how to scale up distance learning. While many of these resources are relevant mostly for developed countries, guidance for developing countries has been provided among others by the Commonwealth of Learning⁴, the EdTech Hub⁵, the Global Partnership for Education⁶, the Inter-Agency Network for Education in Emergencies⁷, Mobiles for Education Alliance⁸, UNESCO⁹, and the Education Global Practice at the World Bank¹⁰. For countries affected by fragility, conflict, and violence (FCV), many of which are located in sub-Saharan Africa, broader guidance beyond distance learning is also available from the Inter-agency Network for Education in Emergencies¹¹ whose guide includes many useful links to various resources (INEE, 2020). Useful general materials for FCV contexts are also available from the Global Education Cluster¹².

The guidance provided by these various organizations is necessarily somewhat general since it is meant to suggest principles applicable in various contexts, but it is still very useful as a starting point. Recognizing that schools and students in the developing world and especially in low income countries may not have access to the internet, most organizations suggest implementing multi-modal responses using a variety of media such as radio, television, and mobile

4 See <https://www.col.org/news/press-releases/keeping-doors-learning-open-covid-19>

5 See <https://edtechhub.org/coronavirus/>

6 See <https://www.globalpartnership.org/gpe-and-covid-19-pandemic>

7 See <https://inee.org/covid-19/resources/distance-learning>

8 See https://www.meducationalliance.org/?page_id=59

9 See <https://en.unesco.org/covid19/educationresponse/solutions>

10 See <https://www.worldbank.org/en/topic/edutech/brief/edtech-covid-19>

11 See <https://inee.org/covid-19/resources>

12 See <https://www.educationcluster.net/resources>

phones apart from the internet to reach all students, and especially those from disadvantaged backgrounds who may not have access to materials on-line (while mobile phone penetration is high in Africa, not all phones provide access to the internet).

As one example of guidance on distance learning, at the World Bank, based on a slightly more detailed discussion of options and principles (World Bank, 2020c), a short guidance note (World Bank, 2020d) suggests a dozen action steps for planning for a multi-faceted remote learning model which could apply to networks of Catholic schools as well as public schools. These steps include: (1) Developing short- and long-term remote learning plans in collaboration with stakeholders such as broadcast regulators and companies, and EdTech startups; (2) Creating an inventory of existing and ideally free content to be deployed via remote learning; (3) Organizing available content to align with existing curricula so that materials can be used by teachers and parents more easily; (4) Creating a virtual helpdesk possibly in partnership with a local call center or telecommunications company to support parents, teachers, and students; (5) Promoting offline learning, for example through distribution of printed material that students can use at home; (6) Using educational radio and television programs including through prerecorded lessons and edutainment; (7) Increasing access to digital resources through improved connectivity in partnership with mobile operators, telecom providers, and other providers; (8) Providing a consolidated, one-stop-shop to access online materials; (9) Making content available through a variety of devices when feasible; (10) Supporting the use of low bandwidth solutions; (11) Providing assistance to teachers, parents and students on how to use and access remote learning content; and finally (12) Using multimedia to share information about remote and online learning opportunities across platforms to achieve synergies.

To drill down further, more specific guidance is also available from various organizations for specific types of media. Again considering an example from the World Bank, the guidance note on television and COVID-19 (World Bank, 2020e) acknowledges that successful experiences of educational programs provided through television have been implemented for many years among others in Brazil, China, Ethiopia, Ghana, India, and Mexico. This includes for secondary education *Telesecundari*¹³ in Mexico, a program that has been shown to have positive impacts (e.g., Navarro-Sola, 2019; Fabregas,

13 See <https://telesecundaria.sep.gob.mx/>.

2019). Since the start of the COVID-19 crisis, some countries such as South Korea have also made inroads in using television for distance learning. The guidance note suggests among others to develop short and modular content that can more easily be reused in the future, keeping in mind the benefit of having this content accessible through mobile phones as well as the internet. Television programs can be live or pre-recorded, and can build on existing resources such as the Khan Academy¹⁴. Programs should be free of charge and can be supplemented with print material. Edutainment also shows promise. Leading examples include Sesame Street in the United States and Ubongo in Africa. More generally, a useful compilation of more than 30 experiences of distance learning as well as a description of national platforms has been compiled by the World Bank's EdTech team (World Bank, 2020f). The compilation also includes an assessment of selected software and other resources.

Catholic organizations have also provided guidance to their members. For example, for the Catholic Bishops' Conference of India, the country with the largest number of children enrolled in K12 schools, Charles (2020) outlines some of the challenges faced by schools and students, and lists platforms available from the Government of India for distance learning. These include ShaGun which provides access to all portals and websites of the Department of Education; DIKSHA which provides learning materials aligned with the curriculum for teachers, students, and parents; ePathshala which provides access to among others audios and videos; as well as SWAYAM and the National Digital Library portal.

Ideally, developing countries should develop their own distance learning materials progressively so that materials are adapted to local context. An alternative for cost effectiveness is to develop materials jointly for countries with similar contexts, for example in various parts of sub-Saharan Africa. In practice however, at least in the short term, this will not be easy and using materials already available from other countries, including developed countries, may serve as a stop-gap measure.

In a communication to national Catholic education associations in April 2020, OIEC pointed to resources curated by the French Ministry of Education. These resources could provide value for Francophone African countries, among others. Many of the resources are available under the Eduscol¹⁵ platform by subject and by level. The resources include Prim'abord¹⁶ for primary

14 See <https://www.khanacademy.org/>

15 See <https://eduscol.education.fr/>

16 See <https://primabord.eduscol.education.fr/>

education and websites by topic for secondary education¹⁷. In addition, the Canopé¹⁸ network provides more than 400 videos under its fundamentals for French, mathematics, science, technology, etc. Other useful resources include CLEMI¹⁹ for reading and critical thinking skills, and Mathador²⁰ for mathematics. More generally, France EduNum²¹ catalogues the French educational digital offer, both public and private, and responding to the COVID-19 crisis, the French Ministry of Education launched Learning Nation (Nation apprenante in French)²² with audiovisual materials among others from LUMNI²³ and Educ'Arte²⁴. Still another useful site with various resources is Eduthèque²⁵, where links are available to a wide range of resources, including from the BBC for resources in English.

To what extent have governments moved to various forms of distance learning since the COVID-19 crisis began? Not surprisingly, the answer depends on the type of country considered. Based on data collected by the Center for Global Development, Vegas (2020) suggests that as of early April 2020, less than one fourth of low-income countries had provided remote learning opportunities, typically through TV and radio, as compared to close to 90% of high-income countries. Countries in sub-Saharan Africa were much less likely than countries in other regions to do so, and also less likely to provide guidance to teachers on how to use various approaches to distance learning. These statistics for sub-Saharan Africa should improve over time as more countries put their distance learning response in place, but the challenges of reaching students through alternatives to digital resources will remain.

There are however examples of interventions in sub-Saharan Africa that can be built upon as alternatives to digital materials for distance learning. For radio, a prominent example is that of the Education Development Center which has implemented Interactive Radio Instruction in multiple countries

17 See <https://eduscol.education.fr/cid45856/ecoles-normales-superieures.html>

18 See <https://www.reseau-canope.fr/>

19 See <https://www.cleml.fr/>

20 See <https://france-edu-num.projets.app/projects/s7SKA5Vs/summary>

21 See <https://france-edu-num.projets.app/>

22 See <https://eduscol.education.fr/cid150496/operation-nation-apprenante.html>

23 See <https://www.lumni.fr/>

24 See <https://educarte.arte.tv/>

25 See <https://www.edutheque.fr/accueil.html>

through prerecorded interactive lessons²⁶. The organization has published a note on how to repurpose established radio and audio series to address the COVID-19 educational crises (Education Development Center, 2020). The ability to provide distance learning through radio depends on a range of factors including contents ideally aligned with the curriculum, and the willingness of radio stations to carry programs. Here, apart from using national programming supported by governments, Catholic school networks could perhaps benefit from collaboration with Catholic radio stations, since such stations operate in most sub-Saharan African countries. This could provide additional airtime for education materials. A list of Catholic stations operating in Africa is maintained by CAMECO²⁷.

To plan distance learning responses to the crisis, school networks, whether public or private, need data on household connectivity since the types of media that can be used for distance learning depend on access rates to the various media among households. For that purpose, simple household connectivity visualization tools can be used to provide connectivity measures nationally or by subsamples such as urban and rural areas or quintiles of well-being. These measures can be estimated using nationally representative surveys such as the latest available Demographic and Health Survey or Multiple Indicators Cluster Survey for a country, or alternatively income and expenditure surveys such as the recently implemented harmonized WAEMU survey for 11 countries in West Africa.

An example of such a visualization tool is shown in Figure 2 and is available from the author. A drop down menu enables users to select the country of interest as well as specific groups to display statistics (for all households, for children of primary or secondary education age, or for students enrolled at the time of the survey in primary, secondary, or tertiary education). Information is then provided for the selected country and group on household assets (radio, television, computer, and mobile phone) as well as whether the household has access to the internet. As shown for Benin and the Africa average in the Figure, connectivity to the internet is often fairly low, especially the poor, thus requiring multi-modal distance learning responses, including through mobile phones for which penetration is high.

26 A catalogue of EDC's radio programmes is available at <https://www.edc.org/sites/default/files/EDC-IAI-Catalog.pdf>. USAID is making publicly available EDC materials it helped fund among others for Kenya at <https://www.edu-links.org/resources/interactive-radio-and-audio-instruction-resources-kenya> and for Liberia at <https://www.edu-links.org/resources/interactive-radio-and-audio-instruction-resources-liberia>.

27 See <https://www.cameco.org/en/directories/catholic-radio-tv-stations-in-africa/>.

Figure 2

Household Connectivity Data Visualization Tool



Note. Source: Wodon et al. (2020g).

Finally, another issue that must be dealt with quickly is that of the school year's final examinations, which are often used in developing countries to manage transitions from one cycle to the next (for example from primary to secondary school). As discussed by Liberman et al. (2020), three main options are available. The first is to simply cancel examinations. The second is to postpone them. The third is to hold examinations, but using a different format, such as online testing, or if that is not feasible basing assessments on students results until schools were closed, but this is often problematic. The right approach depends on country context, and what the purpose of the evaluation is. In some settings and for some grades, it may be appropriate to promote all (or almost all) students, but this in turn may have implications for the capacity of schools to welcome potentially larger cohorts in higher grades.

Catholic School Responses

In the above discussion, the potential responses are not specific to Catholic schools, simply because many of these responses are indeed not specific to any type of schools. Good practices for education systems in general typically also apply to Catholic schools. But are Catholic schools implementing some of these potential responses? In order to find out, a short survey was implemented with the International Office of Catholic Education to inform a series of conference calls with representatives of national Catholic education associations that were held in early May 2020.

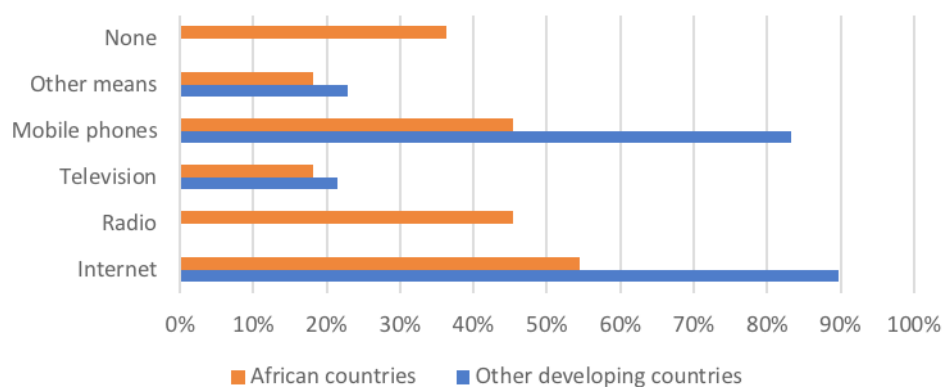
The survey was sent on April 28, 2020, and thus reflects information that was available to respondents at that time. At the time of writing, within a week, 171 responses were received from 31 countries. For some countries, multiple responses were received. In those cases, individual responses were weighted equally to obtain aggregate country-level responses. When multiple respondents from the same countries answered the survey, there was strong convergence in the responses provided, which is reassuring. Among the 31 countries, 11 are from Africa: Burkina Faso, the Democratic Republic of Congo, Djibouti, Mauritius, Kenya, Madagascar, Malawi, Niger, Rwanda, Senegal, and South Africa. Another ten are other developing countries or emerging economies: Albania, Bolivia, Brazil, India, Lebanon, Mexico, Nicaragua, Philippines, Sri Lanka, and Ukraine. The rest are developed countries or advanced economies.

While only a minority of all countries with Catholic schools are represented in the survey, many of the countries with a large enrollment are included in the survey responses. As a result, the survey is illustrative of condi-

tions for countries that account for 58.3% of all students in Catholic schools globally in 2017 according to data from the latest statistical yearbook of the Church (Secretaria Status, 2019), and 58.0% of all Catholic schools globally. Those percentages are slightly higher for secondary schools than primary schools and preschools, but all estimates are very similar to each other. For Africa the shares are broadly similar, as countries with respondents in the survey account for 59.6% of all Catholic schools and 55.6% of all students in Catholic schools in the continent. Apart from identifying information for respondents, in order for the survey to not represent a time burden for respondents at a time of stress, only six questions were asked – four closed form questions and two open ended questions. The analysis focuses in this paper on developing countries and especially Africa. A similar analysis is provided for developed countries in the companion paper (Wodon, 2020a).

Respondents in the survey were asked whether they had been able to implement distance learning solutions for students in their schools while the schools were closed. If so, respondents were asked to indicate the medium used, with the following options: Internet, Radio, Television, Mobile phones, Other means, or None. As shown in Figure 3, only slightly more than half (54.5%) of Catholic school networks in Africa have implemented internet-based distance learning, versus 89.8% in other developing or emerging countries.

Figure 3



Note. Source: Author, based on OIEC survey.

Given limitations in access to the internet, the proportion of Catholic school networks that implemented radio is substantial in Africa at 45.5%, while it is at zero in other developing countries. For television, about a fifth of countries have implemented television solutions in both Africa (18.2%) and other developing and emerging countries (21.5%). Mobile phone solutions have been implemented in just under half of school networks in Africa (45.5%) versus four in five networks in other developing countries (83.2%). These differences again reflect gaps in access to the internet in Africa. What is concerning is that almost two in four Catholic school networks (36.4%) in Africa had not implemented any distance learning solutions by the time of the survey, versus none in other developing countries.

Another question of interest – not asked in the survey, is whether beyond Catholic schools, other Catholic institutions including parishes may help in responding to the crisis. There is no doubt that Catholic and other religious institutions play an important role and are trusted by the population in times of crisis. Apart from parishes, the Catholic Church manages in sub-Saharan Africa a wide array of service providers in the areas of health and social protection, among others (on healthcare, see for example Olivier and Wodon, 2012a, 2012b, 2012c, and 2014). During the Ebola crisis in West Africa, faith leaders and organizations played a key role (Christian Aid et al., 2015; Greyling et al., 2016). More generally, faith leaders may help in protecting vulnerable groups against some of the likely by-products of the crisis, including increases in violence, and especially gender-based violence in all its forms.

For education specifically, one of the areas where faith leaders may play an important role is through campaigns to promote continued learning while schools are closed, and ensure that children go back to school when the schools reopen. Communications campaigns during school closures may help inform parents about available distance learning options and the role that they can play to facilitate learning by their children when they are at home. Longer term, such parental engagement can itself contribute to improved student learning. While Catholic schools may have limited means to implement broad campaigns using national print, radio, or television media (although there are Catholic radio and television programs in many countries), the same messages can also be conveyed to communities through other means, including through local parishes. Relying on parishes to share information with the population has been done successfully in sub-Saharan Africa for various health campaigns, not only for epidemics such as Ebola, but also for immunization campaigns and for malaria, among others. Communication campaigns may

also be helpful at the end of a crisis to encourage students to return to school, again as done in West Africa when the Ebola epidemic had ended. This relates to the short and medium term impacts of the current crisis, the topic of the next section.

Short and Medium Term Impacts from the Crisis

Risks from the Crisis

While students and schools face many risks, only two main risks are highlighted in this section. The first risk is that some children may drop out of school because of affordability constraints related to income losses. In other words, the demand for schooling may be affected. The second risk is that on the supply side, schools may not have the resources they need to educate children well when they reopen because of budget constraints for public schools, and lower tuition revenues for private schools.

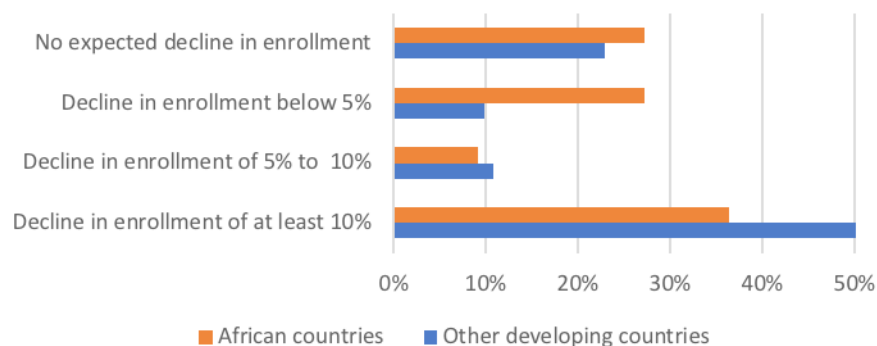
Consider first the risk that some students may drop out of school. Although the crisis may affect boys and girls alike, adolescent girls may be especially at risk. During the Ebola outbreak, as schools closed, unwanted pregnancies as well as fertility rates increased among adolescent girls, which made it harder for girls to go back to school (United Nations Development Programme, 2015; Onyango et al., 2019; Bandiera et al., 2019). Apart from Sierra Leone, as noted in World Bank (2020g), the negative effects of economic crises on enrollment in school especially in the case of girls have been observed in other settings including rural Ethiopia (Asfaw, 2018), Brazil (Dureya et al., 2007; Cerutti et al., 2019), and the Philippines (Lim, 2000). As girls drop out of school, they are not only more likely to have children early, but they may also marry early (Wodon et al., 2016, 2017; see also Kassa et al., 2019, on early pregnancies). This in turn can have a wide array of negative consequences, not only for the girls' health and that of their young children, but also for their future labor market earnings, the risk of suffering from intimate partner violence, and their ability to make decisions within their households (Wodon et al., 2018). A parental death may further exacerbate these risks (Case and Ardington, 2006).

Consider next the risk that schools, both public and private, may not be adequately funded. For private schools, the main risk is a reduction in tuition revenues. In low- and middle-income countries, private schools as a whole have an especially large market share at the secondary level, estimated at 28% according to the World Bank's World Development Indicators. This is the education level where school enrollment may drop the most, with low-cost private schools likely to be suffering the most from the loss in tuition revenues. For

public schools, the threat comes instead from potential cuts in national education budgets. Even before the crisis, many developing countries were highly indebted, especially in sub-Saharan Africa. The crisis will require governments to fund measures to protect their population at a time when their tax base will be reduced, thus requiring loans that may further exacerbate their indebtedness. This is why at the G20 meeting and at the annual meetings of the World Bank and the International Monetary Fund, a key focus was on implementing a moratorium on debt service payments for poor countries. Yet even with such a moratorium, pressure to cut education budgets may remain.

How will Catholic schools fare? This is difficult to assess as it depends on local circumstances, but the survey implemented with OIEC again provides insights. Respondents were asked if they believed that the COVID-19 and related economic crisis would affect enrollment of students in the next school year. Potential responses were: Yes, with a large decline in enrollment of at least 10%; Yes, with a decline in enrollment of 5% to 10%; Yes, but with a small decline in enrollment below 5%; and No, no decline in enrollment is expected. As shown in Figure 4, more than a third of Catholic school networks in Africa (36.4%) and more than half (56.3%) in other developing and emerging countries expect a drop in enrollment of at least 10%. One in 10 expect enrollment to drop by 5% to 10% (9.1% in Africa and 10.9% in other developing countries), with others expecting a decline between 0 and 5% (27.3% in Africa and 9.9% in other developing countries). Only 1 in 4 networks (27.3% in Africa and 23.0% in other developing countries) expect no decline in enrollment due to the crisis. This suggests that the crisis may have a major negative effect on enrollment in Catholic schools in many countries.

Figure 4



Note. Source: Author, based on OIEC survey.

In many countries, enrollment losses in Catholic schools may be substantial in the near future, but the decline may be less severe in Africa. In several African countries, many Catholic schools are public schools, which could help prevent school closures. Even private Catholic schools in the region may turn out to be resilient given high demand for their services thanks not only to their perceived quality, but also thanks to high population growth in many of the countries and long term gains in educational attainment, both of which help in ensuring sustainability in enrollment, perhaps not in the short term, but hopefully at least in the medium term. Also important is the fact that at the aggregate level, in comparison to other private schools that are often more active at the secondary level, Catholic schools in sub-Saharan Africa have a larger market share at the primary level (Wodon, 2018). This could help protect some schools against sharp enrollment losses. Still, the statistics in Figure 4 should not be downplayed. Even if in many countries Catholic schools may be resilient during the crisis, negative effects will be felt by schools, and especially by the students enrolled in the schools.

Indeed, even if most Catholic schools are able to weather the downturn, the impact of the crisis will be severe, with hundreds of millions of children at risk of being affected, including by dropping out of school completely (i.e., not shifting to public schools). This in turn has implications not only for the children's own future given the wide-ranging costs of a lack of good education, but also for their countries. Conceptually, wealth is the assets base that enables countries to generate future income. Estimates suggest that human capital wealth, defined as the present value of the future earnings of the labor force, accounts for about two thirds of global wealth, a much larger proportion than natural capital such as oil, minerals, land, or forests, and produced capital, such as infrastructure or factories (Lange et al., 2020). In turn, educational attainment accounts for a substantial share of human capital wealth (Wodon, 2020c). Therefore, by curtailing schooling and learning, the crisis may affect the development path of countries, apart from the large costs that will be borne by children themselves.

Potential Responses

Because the crisis is having so many different types of impacts for households and firms, as well as communities and societies, a wide range of policy responses are being put in place by governments with the support of the international community, as well as by private actors. The first wave of responses focused on health. As noted by the World Health Organization (2020),

strategies include mobilizing communities for ownership of responses and prevention; controlling sporadic cases and clusters and suppressing transmission through prevention and control (including distancing measures); reducing mortality through appropriate clinical care; and developing vaccines and therapeutics that can be delivered at scale. Virtually all countries in the world have engaged in at least some of these strategies.

The second wave of responses has focused on social protection and labor market policies to reduce the negative impacts of the crisis on household incomes and livelihoods. According to Gentilini et al. (2020), at the time of writing this paper, 133 countries had adopted such measures. Social assistance through cash transfers were most common (which makes sense in an immediate context of social distancing), but occasionally public works are being used as well, followed by social insurance programs and supply-side labor market programs, for example to help firms keep workers on their payroll.

Apart from measures already adopted for distance learning under school closures, education programs and policies should be part of a third wave of responses to the crisis. The challenge will be to ensure that these responses are well designed and well-funded. There is no space to provide a complete overview of these policies here, but they are discussed in World Bank (2020g). Re-enrollment campaigns may be needed to bring students back to school in some areas. These campaigns should be participatory. They should involve not only local schools, but also local leaders, including traditional and faith leaders who are often trusted by communities. There are experiences of such campaigns, both after the Ebola outbreak in West Africa and the genocide in Rwanda (UNICEF, 2013). Incentives may be needed to facilitate the return of students, whether this is done by waiving fees, providing cash transfers, or ensuring that students receive school lunches or free school uniforms. Under budget constraints, targeting the most vulnerable children, including girls, may bring the greatest benefits from these programs. In order to prevent drop-outs, early warning systems may be used (Adelman et al., 2017). This may be done again in a participatory way through community-based monitoring where attention is given to children in the community that may be especially disadvantaged and may not return to school, in order to identify those children and provide extra support as needed.

A major concern is to ensure that schools are safe when the children return to school, so that school reopening does not contribute to spread the virus anew. Guidance has been provided in a joint document from UNESCO, UNICEF, the World Bank, and the World Food Programme (UNESCO et

al., 2020). The decision to reopen school is complex as multiple considerations must be balanced in terms of maintaining safety but also protecting livelihoods (it is more difficult for parents to go back to work when children are at home). Protocols will need to be put in place. They may include phased reopening for different grades at different dates, using classrooms at different times of the day for different groups so that adequate space can be maintained between students, and ensuring that water, sanitation and hygiene facilities are adequate, including for hand washing. These protocols may in turn have implications for teachers and other staff. Finally, the risk that schools may need to be closed once more if the pandemic surges again must also be taken into account, with adequate planning for distance learning. These are just some of the questions to be concerned about, but the note also discusses other aspects, including how to make sure that marginalized students are not left behind²⁸. One of the countries that has already been implementing protocols when reopening its schools is China, with some useful lessons learned in terms of the options that were chosen to do this as safely as possible²⁹.

Once students are back in school, given the likelihood of trauma related to the crisis, schools might consider investing in counselling services for students and social and emotional learning programs, which would also help improve academic outcomes. Even more importantly, schools should implement remedial programs to ensure that disadvantaged children are able to catch up, given that many may have suffered larger learning losses than more privileged children. Curricula may need to be adapted to account for materials that were not taught during school closures. The school calendar may also need to be adapted to account for the possibility of new surges in the spread of the coronavirus.

Changes necessary to teach at the level of students, which has been shown in the literature to improve learning outcomes, may not be minor. But the response to the crisis can also help education systems become more resilient to future emergencies. And it could even lead to improvements in practice that deliver better learning. Strengthening the capacity of school networks to deliver distance learning solutions may lead to gains in learning through some future combination of in-person and distance learning. For example, independently of the current crisis, interactive radio instructions can help improve teacher pedagogy in contexts where teacher qualifications are low. Distance learning may also result in improved digital skills for both teachers and students. National

28 See <https://www.unicef.org/documents/framework-reopening-schools>

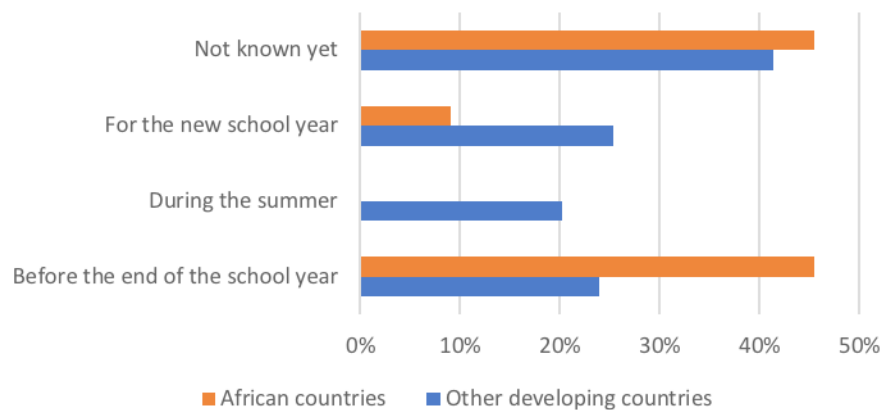
29 See <http://documents.worldbank.org/curated/en/743891587996521873/pdf/Response-to-COVID-19-Preparing-for-School-Re-Opening-The-Case-of-China.pdf>

repositories of resources for distance learning accessible to all school networks, whether public or private, could help enrich materials used to teach the curriculum. Professional development programs training teachers to adapt their pedagogy to the post-COVID level of students may also help, since teaching at the level of students is known to bring learning gains. The crisis may even change regulations that hindered the development of EdTech solutions and partnerships with the private sector.

Catholic School Responses

How are Catholic schools responding to these challenges? Let's turn once again to results from the survey implemented with OIEC. First in terms of context, respondents were asked when they thought Catholic schools may reopen. The potential responses were: Before the end of the school year; Over the summer (for summer school); For the next school year; and Not known yet. As shown in Figure 5, almost half (45.5%) of the Catholic school networks in Africa expect to reopen before the end of the school year, versus just one fourth (23.9%) of the networks in other developing and emerging economies. Correspondingly, a higher share of networks will reopen only during the summer or for the next school year in other developing countries than is the case in Africa.

Figure 5



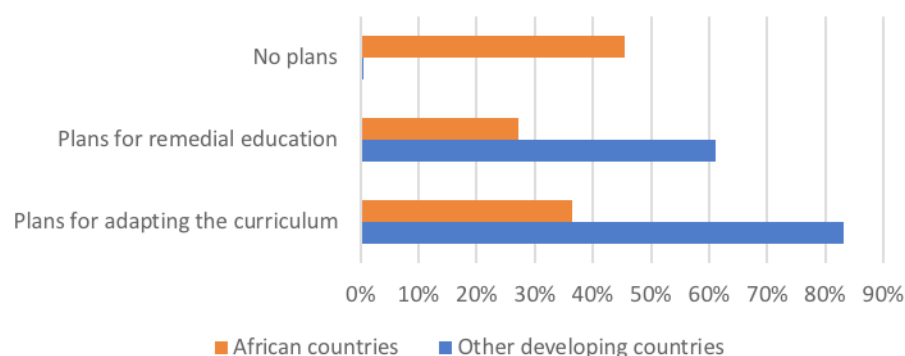
Note. Source: Author, based on OIEC survey.

This finding is somewhat concerning given that many African countries were affected by the virus later than other countries, so that the surge in the pandemic may also take place in those countries later. In addition, due to crowded classrooms and lack of sufficient water, sanitation, and hygiene facilities in many schools, many African countries also have a limited capacity to ensure that the schools will be safe for the children and their families when they reopen. Finally, for more than 4 in 10 countries, the timing for reopening is not known yet (45.5% in Africa and 41.4% in other developing countries).

How are Catholic school networks planning to respond to the challenges represented by loss of learning for children when they return to school? Respondents in the survey could indicate whether their school network is planning to adapt the curriculum and/or provide remedial education, or whether none of these actions were being considered at the time of the survey. As shown in Figure 6, in African countries, only one in three networks (36.4%) were planning to adapt the curriculum, while one in four (27.3%) were planning remedial education. Almost half of the networks (45.5%) were not planning either. In other developing and emerging economies, the situation is better as very few networks were not planning any action, 83.1% were planning to adapt the curriculum and 61.1% were planning to offer remedial education. In Africa, the ability to help students catch up with their learning seems fairly limited. In other developing countries, the situation seems more promising.

Figure 6

Curriculum Adaptation and Remedial Education, Multiple Countries (% of Countries)



Note. Source: Author, based on OIEC survey.

It is too early (at the time of writing) to assess how adequate Catholic school responses as well as broader national policy responses will be to mitigate the effects of the crisis – not only in education, but also in health and nutrition, and in social protection and labor markets. There is still a bit of time to think about the best options. A very useful review of options for education systems is provided in World Bank (2020g), with the analysis being also relevant for Catholic school networks (for a broader policy assessment of potential responses across sectors, see World Bank, 2020i). Other assets of the Catholic Church for healthcare and social protection may also play an important role in the response to the crisis apart from Catholic schools, but discussing this role is beyond the scope of this paper. In this paper, a stronger emphasis has been placed on the immediate impacts of the crisis and potential responses, because this is where the immediate challenges are for Catholic and other schools. But many of the principles that apply for the immediate responses and the lessons to be learned especially for distance learning hold promise for improving the education being provided when the schools reopen.

Conclusion

School closures are likely to have a wide array of negative impacts on students, including for learning, nutrition, and wellbeing/mental health. For school networks, whether public or Catholic, a distance learning strategy based on digital materials will be difficult to implement broadly in sub-Saharan Africa given lack of broad-based access to the internet. However, to cope with the immediate impacts of school closures on learning, multi-modal strategies combining digital resources with radio, television, and even text messaging may be an alternative. These strategies are being implemented by governments, but they can also be implemented by Catholic schools. According to a survey of national Catholic education associations implemented with OIEC, many Catholic school networks have already engaged in providing multi-modal distance learning options for students, but some have not yet been able to, especially in some African countries. This is the immediate priority.

Beyond dealing with temporary school closures, education systems, both public and private, will need to adapt to protect students from the short and medium term impacts of the economic crisis. In developing countries and especially in sub-Saharan Africa, these impacts are likely to be severe in part because countries, communities, and students as well as their parents have

a limited ability to cope. Many households already live in poverty, and most children in school already start from a low base in terms of their academic achievement. Girls may be at high risk dropping out of school, with consequently risks of marrying early or having a child early, before they are ready physically and emotionally to do so. For Catholic schools themselves, there is also a risk of a drop in enrollment in the next school year. The OIEC survey suggests that in a third of countries, enrollment may drop by more than 10%.

There is still a bit of time for Catholic schools to think about the best options to meet their current challenges before the start of the new school year. In this paper, a unique asset that Catholic schools may be able to rely upon, namely a shared faith with their community, has not been discussed in the context of the current crisis – but this could be a topic of focus for future important work. But how Catholic schools will respond to current challenges will affect the future of millions of children.

A wide range of policy notes are being written about potential responses to the crisis by international organizations, think tanks, and civil society organizations. Few of those consider specifically impacts for Catholic schools and their students. It is likely that much of this analytical effort is not reaching Catholic schools leaders, as the focus is typically on policy dialogue with governments. One of the aims of this paper was to suggest that the impacts of the crisis on Catholic schools and their students may be large, since Catholic schools tend to be concentrated in sub-Saharan Africa in low income countries that are highly vulnerable. But the more important aim of the paper was to share some of the ideas being discussed for policy responses to readers of this journal in an accessible way.

The crisis, for all its negative impacts in the short and medium term, may be an opportunity to implement changes that will result in better and more resilient education systems. This has been mentioned above in terms of blended learning mixing in-person teaching with online materials as an example. More generally, the need for school networks to work in partnership with other organizations including health clinics to respond to the crisis may also open opportunities, for example for stronger WASH (water, sanitation, and hygiene) in school programs, or a stronger emphasis on school health interventions. Geographic targeting and monitoring mechanisms used during the crisis to reach vulnerable groups may also help lay the foundation for better support to those groups in the future.

As mentioned in the companion paper for developed countries, the analysis in this paper is at best preliminary and tentative. It was conducted under

tight deadlines to be shared quickly. Therefore important resources or insights may have been overlooked, especially in terms of innovative approaches that Catholic schools may be implementing in various countries. We also don't know how the crisis and its implications will evolve. Still, it is hoped that the analysis shared here will be useful for Catholic school teachers and leaders when thinking about responses to mitigate the impact of the crisis.

References

- Adelman, M., F. Haimovich, A. Ham, and E. Vazquez. 2017. Predicting School Dropout with Administrative Data: New Evidence from Guatemala and Honduras. Policy Research Working Paper Series 8142. Washington, DC: The World Bank.
- Alderman, H., and D. Bundy. 2012. School Feeding Programs and Development: Are We Framing the Question Correctly?, *The World Bank Research Observer*, 27(2): 204-21.
- Bandiera, O., N. Buehren, M. Goldstein, I. Rasul, and A. Smurra. 2019. The Economic Lives of Young Women in the Time of Ebola: Lessons from an Empowerment Program. The World Bank.
- Barden-O'Fallon, J., M. A. Barry, P. Brodish, and J. Hazerjian. 2015. Rapid Assessment of Ebola-Related Implications for Reproductive, Maternal, Newborn and Child Health Service Delivery and Utilization in Guinea. *PLoS Currents*, 4: 7.
- Asfaw, A. A. 2018. The Effect of Coffee Price Shock on School Dropout: New Evidence from the 2008 Global Financial Crisis, *Applied Economics Letters*, 25(7): 482-86.
- Case, A. and C. Ardington. 2006. The Impact of Parental Death on School Outcomes: Longitudinal Evidence from South Africa, *Demography*, 43(3): 401-20.
- Cerutti, P., E. Crivellaro, G. Reyes, and L. D. Sousa. 2019. Hit and Run? Income Shocks and School Dropouts in Latin America, *Labour* 33(4): 533-66.
- Christian Aid, CAFOD, Tearfund, and Islamic Relief. 2015. Keeping the Faith The Role of Faith Leaders in the Ebola Response. Christian Aid. London: Christian Aid, CAFOD, Tearfund, and Islamic Relief.
- David, R., A. Pellini, K. Jordan, and T. Phillips. 2020. Education During the COVID-19 Crisis: Opportunities and Constraints of Using EdTech in Low-income Countries. Policy Brief. London: EdTech Hub.
- Duryea, S., D. Lam, and D. Levison. 2007. Effects of Economic Shocks on Children's Employment and Schooling in Brazil, *Journal of Development Economics*, 84(1): 188-214.
- Fabregas, R.. 2019. Broadcasting Human Capital? The Long-Term Effects of Mexico's Telesecundarias. Mimeo, LBJ School of Public Affairs, University of Texas at Austin.
- Education Development Center. 2020. Repurposing Established Radio and Audio Series to Address the COVID-19 Educational Crises. Waltham, MA: Education Development Center.
- Food Security Information Network. 2020. *Global Report on Food Crisis 2020*. Rome: Food Security Information Network.

- Gentilini, U., M. Almenfi, I. Orton, and P. Dale. 2020. Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures (“Living paper”). Mimeo. Washington, DC: International Labor Office, UNICEF, and World Bank.
- Greyling, C., J. A. Maulit, S. Parry, D. Robinson, S. Smith, A. Street, and R. Vitillo. 2016. Lessons from the Faith-Driven Response to the West Africa Ebola Epidemic, *Review of Faith & International Affairs*, 14(3): 118-23.
- HundrED. 2020. *Spotlight: Quality Education for All During Covid-19 Crisis*. Helsinki: Hundred.
- Inter-agency Network for Education in Emergencies (INEE). 2020. Technical Note: Education During the COVID-19 Pandemic. New York: Inter-agency Network for Education in Emergencies.
- International Monetary Fund. 2020. *World Economic Outlook: April 2020*. Washington, DC: International Monetary Fund.
- Jalloh, M. F., W. Li, R. E. Bunnell, K. A. Ethier, A. O’Leary, K. M. Hageman, P. Sengeh, M. B. Jalloh, O. Morgan, S. Hersey, B. J. Marston, F. Dafaie, and J. T. Redd. 2018. Impact of Ebola Experiences and Risk Perceptions on Mental Health in Sierra Leone, July 2015. *BMJ Global Health*, 17:3(2):e000471.
- Jones, T. C., B. Mühlemann, T. Veith, M. Zuchowski, J. Hofmann, A. Stein, A. Edelmann, V. M. Corman, and C. Drosten. 2020. An Analysis of SARS-CoV-2 Viral Load by Patient Age. Mimeo. Berlin: Charité - Universitätsmedizin Berlin.
- Kamara, M. H., R. Najjemba, J. van Griensven, D. Yorpoi, A. S. Jimissa, A. K. Chan, and S. Mishra. 2017. Increase in Acute Malnutrition in Children Following the 2014-2015 Ebola Outbreak in Rural Sierra Leone. *Public Health Action*, 7(Suppl 1): S27–S33.
- Kassa, G. M., A. O. Arowojolu, A. A. Odukogbe, and A. W. Yalew. 2019. Prevalence and Determinants of Adolescent Pregnancy in Africa: A Systematic Review and Meta-analysis. *Reproductive Health*, 15(1):195.
- Lange, G. M., Q. Wodon, and K. Carey. 2018, Editors. *The Changing Wealth of Nations 2018: Sustainability into the 21st Century*. Washington, DC: The World Bank.
- Le Nestour, A., S. Mbaye, J. Sandefur, and L. Moscoviz. 2020. Covid19 Phone Survey Senegal. Washington, DC: Center for Global Development.
- Liberman, J., V. Levin, D. Luna-Bazaldua, and M. Harnisch. 2020. High-stakes school exams during COVID-19 (Coronavirus): What is the best approach? Education for Development Blog. Washington, DC: The World Bank.
- Lim, J. Y. 2000. The Effects of the East Asian Crisis on the Employment of Women and Men: The Philippine Case. *World Development*, 28(7): 1285-06.
- Charles, M. 2020. Re-thinking Education Ministry Through and Post COVID-19 Days! A Reflection for the Catholic Educators! Office of Education and Culture. Dehli: Catholic Bishops’ Conference of India.
- Moreno, J. M. and L. Gortazar. 2020. Schools’ Readiness for Digital Learning in the Eyes of Principals: An analysis from PISA 2018 and its implications for the COVID19 (Coronavirus) crisis response, Education for Development Blog, Washington, DC: The World Bank.
- Navarro-Sola, L. 2019. Secondary School Expansion through Televised Lessons: The Labor Market Returns of the Mexican Telesecundaria. Mimeo, Department of Economics, Northwestern University.

- Olivier, J., and Q. Wodon. 2012a. Editors. *The Role of Faith-inspired Health Care Providers in sub-Saharan Africa and Public-private Partnerships, Strengthening the Evidence for Faith-inspired Engagement in Africa (Volume 1)*, HNP Discussion Paper, Washington, DC: The World Bank.
- Olivier, J., and Q. Wodon. 2012b. Editors. *The Comparative Nature of Faith-inspired Health Care Providers in sub-Saharan Africa, Strengthening the Evidence for Faith-inspired Engagement in Africa (Volume 2)*, HNP Discussion Paper, Washington, DC: The World Bank.
- Olivier, J., and Q. Wodon. 2012c. Editors. *Mapping, Cost, and Reach to the Poor of Faith-inspired Health Care Providers in sub-Saharan Africa, Strengthening the Evidence for Faith-inspired Engagement in Africa (Volume 3)*, HNP Discussion Paper, Washington, DC: The World Bank.
- Olivier, J., and Q. Wodon. 2014. Faith-inspired Health Care in Africa: An Introduction to the Spring 2014 Issue, *Review of Faith & International Affairs*, 12(1): 1-7.
- Olivier, J., and Q. Wodon. 2017. Network Development for Non-state Health Providers: African Christian Health Associations, *Development in Practice*, 2017, 27:5, 580-98
- Onyango, M. A., K. Resnick, A. Davis, and R. R. Shah. 2019. Gender-Based Violence Among Adolescent Girls and Young Women: A Neglected Consequence of the West African Ebola Outbreak, in D. A. Schwartz, J. N. Anoko, and S. A. Abramowitz, Editors, *Pregnant in the Time of Ebola*. Cham.: Springer.
- Ribacke, B., D. D. Saulnier, A. Eriksson, and J. von Schreeb. 2016. Effects of the West Africa Ebola Virus Disease on Health-Care Utilization - A Systematic Review. *Frontiers in Public Health*, 4: 222.
- Risso-Gill, I. and L. Finnegan. 2015. *Children's Ebola Recovery Assessment: Sierra Leone*. Freetown: Save the Children, Plan, UNICEF, and World Vision.
- Secretaria Status, 2018. *Statistical Yearbook of the Church 2016*, Rome: Libreria Editrice Vaticana.
- United Nations. 2020. *Policy Brief: The Impact of COVID-19 on Children*. New York: United Nations.
- UNDP. 2015. *Recovering from the Ebola Crisis*. New York: United Nations Development Programme.
- UNICEF. 2013. *Back-to-School Guide Evidence-Based Strategies to Resume Education in Emergencies and Post-Crisis Transition*. New York: UNICEF
- UNESCO, UNICEF, World Bank, and World Food Programme. 2020. *Framework for Reopening Schools*. New York, Washington, DC, and Rome: UNESCO, UNICEF, World Bank, and World Food Programme.
- Vegas, E. 2020. *School Closures, Government Responses, and Learning Inequality around the World During COVID-19*. Washington, DC: Brookings Institution.
- Vos, R., W. Martin, and D. Laborde. 2020. *How Much Will Global Poverty Increase Because of COVID-19?* IFPRI Blog Research Post. Washington, DC: IFPRI.
- Wesseh, C. S., R. Najjemba, J.K. Edwards, P. Owiti, H. Tweya, and P. Bhat. 2017. Did the Ebola Outbreak Disrupt Immunisation Services? A Case Study from Liberia. *Public Health Action*, 7(Suppl 1): S82-S87.
- Wodon, Q. 2017a. Catholic Schools in the Democratic Republic of Congo: Trends, Achievements, and Challenges, *International Journal of Education Law and Policy*, 13: 55-66.

- Wodon, Q. 2017b. Benefits from Secondary Education, Public-Private Partnerships, and Implications for Catholic Schools: A Case Study for Uganda, *International Journal of Education Law and Policy*, 13: 67-78.
- Wodon, Q. 2018. Enrollment in K12 Catholic Schools: Global and Regional Trends, *Educatio Catholica*, IV(3): 189-210.
- Wodon, Q. 2019a. Implications of Demographic, Religious, and Enrollment Trends for the Footprint of Faith-Based Schools Globally, *Review of Faith & International Affairs*, 2019, 17(4): 52-62.
- Wodon, Q. 2019b. How Well Do Catholic and Other Faith-based Schools Serve the Poor? A Study with Special Reference to Africa, Part I: Schooling, *International Studies on Catholic Education*, 2019, 11(1): 4-23.
- Wodon, Q. 2019c. Measuring the Contribution of Faith-based Schools to Human Capital Wealth: Estimates for the Catholic Church, *Review of Faith & International Affairs*, 17(4): 94-102.
- Wodon, Q. 2020a. Covid-19 Crisis, Impacts on Catholic Schools, and Potential Responses, Part I: Developed Countries with Focus on the United States, *Journal of Catholic Education*, this issue.
- Wodon, Q. 2020b. How Well Do Catholic and Other Faith-based Schools Serve the Poor? A Study with Special Reference to Africa, Part II: Learning, *International Studies on Catholic Education*, 2020, 12(1): 3-20.
- Wodon, Q., 2020c. Measuring the Contributions of Education and Experience to Human Capital Wealth Across Countries. Mimeo. Washington, DC: The World Bank.
- Wodon, Q., C. Nguyen and C. Tsimpo. 2016. Child Marriage, Education, and Agency in Uganda, *Feminist Economist*, 22(1): 54-79.
- Wodon, Q., C. Male, A. Nayihouba, A. Onagoruwa, A. Savadogo, A. Yedan, J. Edmeades, A. Kes, N. John, L. Murithi, M. Steinhaus, and S. Petroni. 2017. *Economic Impacts of Child Marriage: Global Synthesis Report*. Washington, DC: The World Bank and ICRW.
- Wodon, Q., C. Montenegro, H. Nguyen, and A. Onagoruwa. 2018. Missed Opportunities: The High Cost of Not Educating Girls. *The Cost of Not Educating Girls Notes Series*. Washington, DC: The World Bank.
- Wodon, Q., C. Fèvre, C. Malé, A. Nayihouba, and H. Nguyen. 2020. *Ending Violence In and Around Schools: Potential Benefits and Promising Interventions*. Washington, DC: The World Bank.
- Wodon, Q., C. Male, and A. Nayihouba. 2020. Household Connectivity in Africa and Implications for Distance Learning During the COVID-19 Crisis. Mimeo. Washington, DC: The World Bank.
- World Bank. 2018. *World Development Report 2018: Learning to Realize Education's Promise*. Washington, DC: The World Bank.
- World Bank. 2019. *Ending Learning Poverty: What Will It Take?* Washington, DC: The World Bank.
- World Bank, 2020a. *Africa's Pulse, No. 21, Spring 2020 : An Analysis of Issues Shaping Africa's Economic Future*. Washington, DC: The World Bank.
- World Bank, 2020b. COVID-19 Crisis Through a Migration Lens. Migration and Development Brief 32. Washington, DC: The World Bank.

- World Bank, 2020c. Remote Learning and COVID-19: The use of educational technologies at scale across an education system as a result of massive school closings in response to the COVID-19 pandemic to enable distance education and online learning. Washington, DC: The World Bank.
- World Bank, 2020d. Guidance Note: Remote Learning & COVID-19. Washington, DC: The World Bank.
- World Bank, 2020e. Rapid Response Guidance Note: Educational Television & COVID-19. Washington, DC: The World Bank.
- World Bank, 2020f. Remote Learning, Distance Education and Online Learning During the COVID-19 Pandemic : A Resource List by the World Bank's EdTech Team. Washington, DC: The World Bank.
- World Bank, 2020g. The COVID-19 Pandemic: Shocks to Education and Policy Responses. Washington, DC: The World Bank.
- World Bank, 2020h. Response to COVID-19: Preparing for School Re-Opening, The Case of China. East Asia and Pacific Education Briefing Note. Washington, DC: The World Bank.
- World Bank, 2020i. Protecting People and Economies: Integrated Policy responses to COVID-19. Washington, DC: The World Bank.
- World Food Programme. 2013. *The State of School Feeding*. Rome: World Food Programme.
- World Health Organization. 2020. COVID-19 Strategy Update. Geneva: World Health Organization.
- Zhang, J., M. Litvinova, Y. Liang, Y. Wang, W. Wang, S. Zhao, Q. Wu, S. Merler, C. Viboud, A. Vespignani, M. Ajelli, and H. Yu. 2020. Changes in Contact Patterns Shape the Dynamics of the COVID-19 Outbreak in China. *Science*, 10.1126/science.abb8001.