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TIME OUT

The Impact of COVID-19 on Education

Time Out The Impact of COVID-19 on Education

Caribbean Policy Research Institute (CAPRI) Kingston, Jamaica

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Acronyms

CAPE	Caribbean Advanced Proficiency Exam
CAPRI	Caribbean Policy Research Institute
ССТ	Conditional Cash Transfer
CSEC	Caribbean Secondary Education Certificate
CXC	Caribbean Examinations Council
GOJ	Government of Jamaica
GSAT	Grade Six Achievement Test
ICT	Information and Communications Technology
JTA	Jamaica Teachers' Association
JTC	Jamaica Teaching Council
KMA	Kingston Metropolitan Area
MOEYI	Ministry of Education, Youth and Information
MOHW	Ministry of Health and Wellness
MLSS	Ministry of Labour and Social Security
MSET	Ministry of Science, Energy and Technology
NCEL	National College for Educational Leadership
NET	National Education Trust
NSC	National Standards Curriculum
PATH	Programme for Advancement Through Health and Education
PEP	Primary Exit Profile
SARS	Severe Acute Respiratory Syndrome
SBA	School Based Assessment
STEM	Science, Technology, Engineering, and Mathematics
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
WCJF	Women's Centre of Jamaica Foundation

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Executive Summary



The closure of all public and private schools given confirmation of the first case of COVID-19 would impact

600,000 students in Jamaica's education system. ducation plays a critical role in national development, at individual and societal levels. The disruption wrought by the pandemic ought to be reviewed, analysed, and understood so as to provide evidence-informed policy solutions to the resulting complex, critical problems that Jamaica faces.

This report provides an evidenceinformed account of what has happened to education, and to children, in the wave of the pandemic-induced school closures and the shift to remote teaching and learning. It does not seek to evaluate the education sector beyond what pertains directly to this unforeseen, singular, unpredictable, fluid event, the COVID-19 pandemic.

This study does the following in order to arrive at this evidence:

- Situates the COVID-19 school closures in the broader context of the Jamaican education system, with a focus on primary and secondary education.
- 2. Gives a chronology of events related

to COVID-19 school closures in Jamaica.

- Determines if and how students were disadvantaged by the closure of schools, accounting for the extent to which their pre-existing socioeconomic conditions exacerbated or ameliorated that disadvantage.
- 4. Describes the responses to the challenges faced, particularly by the state.
- 5. Estimates the extent to which learning losses can be expected, as well as what the effects of school closures have been on students' social and emotional development, and the fulfilment of their potential to selfactualize.

The goal is, having garnered an understanding of what has transpired, and what its effects are (whether these have been ascertained or which preexisting evidence and experience have suggested are likely to obtain), to propose measures to mitigate the losses, and maximize areas and opportunities where there are or could be benefits.

On March 13, 2020, Jamaica's Ministry of Education, Youth and Information (MOEYI) directed all public and private schools to close given the confirmation of the first case of COVID-19 in Jamaica. The closure would have an impact on 600,000 students in the education system. All of the factors that impact learning-school attendance. classroom engagement, and assessments-were affected, with the implication that children would not meet grade-relevant learning targets. Specifically, there was concern about learning losses and the exacerbation of previously existing inequities in the system.

The pandemic's impact on education is difficult to estimate, measure, or quantify, despite the certainty that such an impact has occurred and that it is likely to have farreaching consequences. When we speak of an impact on education, we are generally referring to educational outcomes such as performance on tests/exams and learning gains or losses. However, we may also consider other indicators, such as school attendance, students' social and

Since the closure of schools in March 2020, children have been adversely affected in several ways, as have teachers. The education sector has been plagued with uncertainty. The country's development prospects have been weakened. emotional development, and fulfillment or improvement of students' potential for self-actualization (which itself can span several dimensions, such as labour market participation, continuing education, and becoming contributing members of society). For each of these outcomes and indicators, however, the data is not only difficult to access, but the time lag between event and outcome is many years, and the effects may be ongoing and cumulative.

The study found that since the closure of schools in March 2020, children have been adversely affected in several ways, as have teachers. The education sector has been plagued with uncertainty. The country's development prospects have been weakened.

The primary impact on education, though the data does not exist to precisely measure it, is learning losses, or missed learning, the concepts, knowledge, and skills that were not acquired during remote schooling. The evidence—qualitative, speculative, and anecdotal—suggests that the learning deficit from the period of remote learning is significant, due to the inherent limitations of the medium, lack of connectivity, unavailability of devices, electricity outages, and unsupportive home environments.

In this pandemic "the haves and have nots of technology have become the haves and have nots of education." Lesswell-resourced schools were already at a disadvantage before the pandemic, which was made worse due to their (the schools' and the students') lack of access to the requisite technology and resources to effectively carry out remote teaching. Where the poor have been disproportionately affected by the economic impact of the pandemic, they are more likely to remove their children from school, thus further exacerbating the pandemic's effect on poorer children's



education.

Other effects of the pandemic are the mental health and psychosocial impacts on students with them being isolated in their homes for over a year, the absence of social interaction, the lack of involvement in physical and leisure activities, the increase in screen time, the increase in sexual abuse (especially of girls), and an increase in violence against children generally. Other effects of the pandemicinduced school closure and shift to remote teaching is that teachers are burnt out, and while they were not directly addressed in the study, parents are not as engaged as they ought to be, and they too are struggling,

As of September 2021, the pandemic is ongoing, and the education system has not returned to normalcy. Even without hard data, the ostensibly obvious takeaway is that the damage done to children, students, education, and the country must be stanched and measures taken to re-open schools so as to cauterize further damage. Prospects for reopening to inperson school were sparked by the arrival in Jamaica of the Pfizer vaccine on August 19, 2021, which is approved for children 12 years and older. On that occasion the Minister of Education announced that, in consideration of the vaccination timeline, face-to-face teaching and learning in high schools would be targeted for early to mid-October. The ministry subsequently announced that the school year will begin with remote teaching and learning, and that from September 20, 2021 onward, there will be ongoing assessments regarding the prospects of resuming face-to-face teaching for early childhood/ infant and primary school. Secondary schools would be allowed to return to face-to-face once their school achieves 65 percent vaccination rate or higher.

However, the new 2021-2 school year coincides with the country's worst surge ever, the third wave of COVID-19. The Delta variant of the virus is highly transmissible and the positivity rate hovers at 50 percent, there are recordbreaking and climbing numbers of daily cases, and the numbers of hospitalizations and deaths are higher than in the previous two waves. At the same time, vaccine hesitancy is forestalling an effective vaccination campaign. There is no guarantee that if/when the third wave does subside, allowing schools to open, there wouldn't be a fourth wave. While evidence from the US showed convincingly that the coronavirus did not spread widely inside schools, and though there were no COVID-19 cases reported in the schools that opened (in Jamaica) in the two trial/partial re-openings between waves one and two, there is thought to be an association between school reopening and increased transmission of the virus, given the increase in schoolbased contacts. The virus continues to mutate, and there is still a great deal that is unknown about its effects, particularly on children, who are more affected by the Delta variant than by the previous versions of the virus. The risks of the disease are still high, to children, and to the country as a whole.

Thus while the overarching conclusion of this study is that schools should reopen to in-person teaching and learning for the 2021-2022 school year, it is clear that this is not likely to happen. Thus what should obtain is to address the impacts as set out in the study, to ameliorate the negative effects as best as possible, and to build on what has been learned that can address some of the gaps identified, while simultaneously working towards even partial reopening as soon as possible.

Recommendations

The recommendations are many. necessarily so, given the wide-ranging impact of the pandemic, and the uncertainty that the education sector is confronted with. There are multiple scenarios that can be anticipated, as well as unanticipated developments that render completely new scenarios that we cannot yet envision. On the basis that remote schooling in some form is likely to continue at least through the next academic year, albeit with the hope that there will at least be scope for blended learning, the recommendations speak to this scenario.

Re-opening schools for in-person teaching and learning

- 1. Institute testing regimes for teachers and students.
- 2. Conduct surveys of infection and positivity rates in the communities in which schools are located.
- 3. Procure and utilize alternative locations in close proximity to schools, such as churches and community centres, to allow for more students to attend in person, while observing social distancing.
- 4. Encourage and facilitate vaccinations for all teachers and for children age 12 and older

better

- 5. Establish and support learning pods as a methodology for remote teaching
- 6. Continue to expand internet access across the island

Addressing learning losses

- 7. Obligate each grade's teachers to review the syllabus from the remote year.
- 8. Deploy trainee teachers and student teachers as tutors to students who have fallen behind.

Data needs

- 9. Introduce an island-wide survey with the purpose of identifying and providing the learning status of each student who should be in the education system.
- Develop and maintain a central repository of data collected on students and other stakeholders in the education system
- 11. Train teachers to collect data and to use the data they collect

Empowering schools and teachers

- 12. Increase schools' autonomy
- 13. Strengthen and promote Quality Education Circles Inter-school Collaboration

Teachers

- 14. Continue to upskill and enhance teachers' professional development
- 15. Provide more and better material support for teachers
- 16. Provide more and better psychosocial support for teachers

Children's safety, health, and well-being

- 17. Expand the cadre of social workers to mitigate the effect of the removal of the protection that school provided for child victims of sexual abuse.
- Mandate schools to have regular physical and non-screen activities throughout the remote school day
- Deliver modules on nutrition and healthy lifestyles, including promoting good mental health
- 20. Engage and deploy more guidance counselors to meet students' mental health needs
- 21. Meet the particular needs of boys at greatest risk of dropping out of school and becoming disengaged from formal education.
- 22. Target teenage girls at risk of unwanted pregnancy, and increase efforts to reintegrate teen mothers into the formal education system

Students with special needs

 Redesign the curriculum and delivery mechanisms for special needs students.

Medium to longer term recommendations

- 24. Review and update the Education in Emergencies Plan
- 25. Facilitate structured civil society engagement to support and monitor education sector recovery

While remote school continues, make it



Introduction



The COVID-19 pandemic triggered sudden wide-scale school closures in over

160 countries

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he COVID-19 pandemic triggered sudden wide-scale school closures in over 160 countries. More than 1.2 billion students at all levels of education worldwide stopped having face-to-face classes. Of these, more than 160 million were students in Latin America and the Caribbean.¹ On March 13, 2020, Jamaica's Ministry of Education, Youth and Information (MOEYI) directed all public and private schools to close given the confirmation of the first case of COVID-19 in Jamaica. This was consistent with the action taken in other countries where this virus was detected. The closure would have an impact on 600,000 students in the education system. All of the factors that impact learning-school attendance, classroom engagement, and assessments-were affected, with the implication that children would not meet grade-relevant learning targets. Specifically, there was concern about learning losses and the exacerbation of previously existing inequities in the system.

Children have, to varying extents, missed out on the academic growth facilitated through schooling, and the developmental growth that comes through interactions with teachers and fellow students outside of the home. When we speak of an impact on education, we are generally referring to educational outcomes such as performance on tests/exams and learning gains or losses. However, we may also consider other indicators, such as school attendance, students' social and emotional development, and fulfillment or improvement of students' potential for self-actualization (which itself can span several dimensions, such as labour market participation, continuing education, and becoming contributing members of society). For each of these outcomes and indicators, however, the data is not only difficult to access, but the time lag between event and outcome is many years, and the effects may be ongoing and cumulative.

1.1 Background

COVID-19 has had four main impacts on the Jamaican population, as it has in countries throughout the world: the mortality and morbidity brought by the virus itself; the economic impact of widespread economic downturn, for many countries the worst since the Great Depression of 1929; the psycho-social dislocation resulting from prolonged periods of confinement due to stay-athome and lockdown measures, and the dramatic changes in routines and daily life; and the impact on education.

The ability to estimate these impacts varies. The first two are easily measured: number of deaths, number of positively confirmed cases, and number of hospitalizations are data that are collected, collated, and disseminated daily. The indicators and outcomes that speak to economic performance - employment figures, tax revenues, consumer spending, remittances, business activity - while not instantly available, can be estimated and measured within a few months, are clearly

1 ECLAC and UNESCO, "Education in the Time of COVID-19," August 2020, www.cepal.org/sites/default/files/publication/files/45905/S2000509_en.pdf.

Children have, to varying extents, missed out on the academic growth facilitated through schooling, and the developmental growth that comes through interactions with teachers and fellow students outside of the home. delineated, and comparable from one time-period to the next. The third impact is likely to be based on observations of mental health and medical professionals, admissions to psychiatric care, and trends in visits to psychologists and other counsellors. The fourth and last impact, however, on education, is difficult to estimate, measure, or quantify, despite the certainty that such an impact has occurred and that it is likely to have farreaching consequences.

Empirical as well as anecdotal evidence assert that the cessation of face-to-face schooling and the transition to online (or other remote) teaching and learning from home will result in learning losses and other setbacks for students at all levels.² This is exacerbated by the logistical and resource challenges in a rapid transition to a brand new, resourceintensive form of pedagogy requiring specialist skills that few Jamaican teachers had pre-COVID-19. In the US, where the requisite data is available, a comprehensive study found that the impact of the pandemic on K-12 student learning left students on average five months behind in mathematics and four months behind in reading by the end of the school year. Vulnerable students were worse off: in math, students in majority Black schools ended the year with six months of unfinished learning, students in low-income schools with seven. High schoolers have become more likely to drop out of school, and high school seniors, especially those from lowincome families, are less likely to go on to postsecondary education.3

As of September 2021, the pandemic is

The inception of community spread, and the virus's first wave coincided with the start of the new school year in September 2020, and the intention to fully reopen schools was aborted.

ongoing, and the education system has not returned to normalcy. The inception of community spread, and the virus's first wave coincided with the start of the new school year in September 2020, and the intention to fully reopen schools was aborted. There was a notion that "things were returning to normal" in January (2021) at the beginning of the second term of the academic year 2020-21, with several schools returning to face-to-face/ in-person teaching, and the prospect that gradually more schools would do so, but this was short lived. On February 24 a surge in virus transmission was detected, and in-person school was only allowed for grades 6, 11, 12, and 13 students (those who would be doing high stakes exit/transitional examinations). One month later, in what is now considered the second wave, even those students were sent back to online/remote schooling, amidst the ongoing increase in the transmission of the virus.

For September 2021, the government has announced that all schools will begin classes on Monday, September 6, 2021, utilizing the remote teaching and learning modalities that were in operation in the last school year, such as online classes, audio-visual (television and radio), and printed learning packages or kits.⁴ It was also announced that from September 20, 2021 onward, there will be ongoing assessments regarding the prospects of reopening for in-person attendance. With the availability of the Pfizer vaccination in Jamaica as of late August 2021, the only vaccine approved for children 12 to 18, the government encouraged children to get vaccinated, and stated that secondary schools would be allowed to return to face-to-face once their school achieves 65 percent vaccination rate or higher.⁵

However, there can be little certainty that these proposed dates or events will occur. The new 2021-2 school year coincides with the country's worst surge ever, the third wave of COVID-19. The Delta variant of the virus is highly transmissible and the positivity rate hovers at 50 percent, there are record-breaking and climbing numbers of daily cases, and the numbers of hospitalizations and deaths are higher than in the previous two waves. At the same time, vaccine hesitancy is forestalling an effective vaccination campaign.

² See, for example, CAPRI, "Insult to Injury: The Impact of COVID-19 on Vulnerable Persons and Businesses," Kingston, Jamaica: Caribbean Policy Research Institute, April 2021, https://capricaribbean.org/documents/insult-injury-impact-c-19-vulnerable-persons-and-businesses.

³ Emma Dorn, Bryan Hancock, Jimmy Sarakatsannis, and Ellen Viruleg, "COVID-19 and Education: The Lingering Effects of Unfinished Learning," McKinsey and Company, July 27, 2021, www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-education-the-lingering-effects-of-unfinished-learning.

⁴ See appendix 3 for the MOEYI's bulletin detailing the teaching and learning modalities for AY 2021-2.

⁵ Ministry of Education, Youth and Information, "Minister Announces Plans for the Commencement of the New School Year," Press Release, August 27, 2021.



1.2 Historical Inequities in the Jamaican Education **System**

Pre-COVID-19, Jamaica struggled with correcting an inequitable education system, where historically, based on test scores, richer schools outperformed poorer ones. Jamaica's primary level exit examinations consistently show stronger performance by private primary schools (preparatory schools) as compared to public primary schools; similar observations are made at the secondary level.6 Rural, inner-city, and urban students in Jamaica fare differently from each other with regard to education, with rural and inner-city children having the disadvantage. The differential is based on poorer access to learning resources, higher levels of household deprivation, and greater difficulty accessing transportation to and from school, all directly affecting school attendance and participation.7 This is not unique to Jamaica, nor even to the developing world. In the US, the pandemic widened preexisting opportunity and achievement gaps, hitting historically disadvantaged students hardest.8

Less-well-resourced schools were thus already at a disadvantage before the pandemic, which was made worse due to their (the schools' and the students') lack of access to the requisite technology and resources to effectively carry out remote teaching. As was observed, "the haves and have nots of technology have become the haves and have nots of education."9 Where the poor have been disproportionately affected by the economic impact of the pandemic,¹⁰ they are more likely to remove their children from school, thus further exacerbating the pandemic's effect on poorer children's education. This has been corroborated by initial research on vulnerable groups in the Caribbean, which has thus far concluded that the poor were most adversely

CAPRI, "Prisms of Possibility: A Report Card on Education in Jamaica," Caribbean Policy Research Institute, January 2013, https://capricaribbean.org/ documents/2012-report-card-education-jamaica; Planning Institute of Jamaica (PIOJ), Economic and Social Survey of Jamaica, 2018. Kingston, 2018.

CAPRI and UNICEF, "Situation Analysis of Jamaican Children," 2018, www.unicef.org/jamaica/reports/situation-analysis-jamaican-children-2018. 7

[&]quot;COVID-19 and Education: The Lingering Effects of Unfinished Learning." 8

Jaime Saavedra, presentation delivered at "Online Event: The Costs of and Response to the Covid-19 Pandemic's Impact on the Education Sector in Latin America 9 and the Caribbean," April 15, 2021, Washington, DC.

¹⁰ CAPRI, "Locked Down, Locked Out: Vulnerable Communities in the Pandemic," Kingston, Jamaica: Caribbean Policy Research Institute, July 2021, https:// capricaribbean.org/documents/locked-down-locked-out-vulnerable-communities-during-pandemic-2021.

affected by school closures. In one survey conducted in Jamaica, 22 percent of the poorest households surveyed indicated that their children's education had been halted as a result of the pandemic, and that additional resources were required.¹¹

1.3 Objectives

Education plays a critical role in national development, at individual and societal levels. The disruption wrought by the pandemic ought to be reviewed, analysed, and understood so as to provide evidenceinformed policy solutions to the resulting complex, critical problems that Jamaica will undoubtedly face. This study does the following in order to arrive at this evidence.

- Situates the COVID-19 school closures in the broader context of the Jamaican education system, with a focus on primary and secondary education.
- Gives a chronology of events related to COVID-19 school closures in Jamaica.
- Determines if and how students were disadvantaged by the closure of schools, accounting for the extent to which their pre-existing socioeconomic conditions exacerbated or ameliorated that disadvantage.
- 4. Describes the responses to the challenges faced, particularly by the state.
- 5. Estimates the extent to which

learning losses can be expected, as well as what the effects of school closures have been on students' social and emotional development, and the fulfilment of their potential to selfactualize.

6. Makes recommendations regarding the resumption of the new academic year, 2021-2022.

Having done this we draw some preliminary, guarded conclusions about the effect COVID-19 has had on education and on children in Jamaica; what those effects might mean for Jamaica's development, particularly in its recovery from the pandemic; and what are the implications for policy measures to promote recovery and mitigate losses.

1.4 Measuring thePandemic's ImpactMethodologicalChallenges

Where the primary impact on education is expected to be learning losses, measuring those is methodologically challenging, in any context. Any measure of loss or gain has to be compared to a baseline to have any relevance. Such baselines are the product of purposive systematic data collection and analysis, and the diagnostic tool to measure against that baseline informed by contextual and proof of concept evidence. This level of rigorous data collection and collation is not routinely or meaningfully done in Jamaica. Where learning losses or gains might be estimated by comparing exam performance year to year, the nature of this pandemic's effect on education, and the changes made to the curriculum and assessments, have made some of these measurements even more uncertain and indeterminate. With regard to students' social and emotional development, and to the fulfillment or improvement of students' potential for self-actualization, there are no standardized tests for these, and these outcomes occur over the medium to long term, thus measuring them with any degree of reliability is virtually impossible.

Given these constraints, any attempt to determine the effect of COVID-19 on education in Jamaica has to rely on qualitative data. As such we looked at the effect that other similar shocks have had on education in the past; here we considered the impact of Ebola and SARS on education in the places where those outbreaks occurred, as well as the impact of natural disasters in Jamaica and elsewhere. We gathered the views of those "on the ground" (i.e., teachers, principals, students, and parents), those making policy decisions, and other stakeholders involved in the education sector. We referred to data from other studies on COVID-19's impact in Jamaica, as well as from research that has been produced on the impact of COVID-19 on education in other countries. And we utilized references to the pandemic's educationrelated effects from the news media, and other open-source material. (See appendix 1 for detailed methodology.)

¹¹ CAPRI, "Locked Down, Locked Out."







School Closures in Covid-19



Between June and September 2009, the H1N1 PANDEMIC posed a threat to Jamaica, with

89 Cases BEING RECORDED

ountries have historically opted to close schools during the outbreak of contagious illnesses, largely because of the high level of mixing that takes place among children within a school setting and the ensuing ease of spread of infectious disease.12 In 2003, schools in Hong Kong and China closed due to SARS, as did schools in countries where there was a threat of SARS, such as in Canada. Schools were closed in 2009 during the H1N1 pandemic, and routinely across the USA to contain the seasonal spread of influenza. School closures were implemented in Sierra Leone, Guinea, and Liberia for six to eight months during the Ebola outbreak in 2014 to 2016.13

Jamaica has also closed schools due to viral infections. Between June and September



2009, the H1N1 pandemic posed a threat to Jamaica, with 89 cases being recorded. The government's response plan included consideration of the closure of schools (and restrictions on group gatherings, among other measures).¹⁴ When two

14 Michelle Edwards, et al., "Jamaica's Pandemic Influenza A H1N1 Preparedness and Response," PAHO, September 10, 2009, www.paho.org/

By the end of the academic year schools were still closed. For the academic year 2019-20, students did not attend school as usual for 13 weeks, amounting to in-excess-of an entire school term, representing nearly 40 percent of an entire academic year.

¹² The effectiveness of these measures vary, and there is an ongoing debate over the extent to which minimizing the risk of contracting and spreading the virus through school closures is worth the costs exacted on children and learning. Some studies suggested that school closures had little impact on the spread of SARS viruses, and that the risk of regression and learning losses for young students was worse than the risk of transmission of the virus. "Other Countries Show that Schools Need Not Be Pandemic Hotspots," *The Economist*, August 27, 2020, www.economist.com/united-states/2020/08/27/other-countries-show-that-schools-need-not-be-pandemic-hotspots.

¹³ Alexandra M. Stern, Martin S. Cetron, and Howard Markel, "Closing the Schools: Lessons from the 1918–19 US Influenza Pandemic," *Health Affairs* 28, no. Suppl1 (2009): w1066-w1078, https://doi.org/10.1377/hlthaff.28.6.w1066. See also, Sarah Pruitt, "At Height of the 1918 Pandemic, NYC and Chicago Schools Stayed Open. Here's Why," History, August 5, 2020, www.history.com/news/spanish-flu-schools-new-york-chicago. See also, UNDG, "Assessing the Socio-economic Impacts of Ebola Virus Disease in Guinea, Liberia and Sierra Leone: The Road to Recovery," December 2014, www.africa.undp.org/content/rba/en/home/library/reports/assessing-the-socio-economic-impact-of-ebola-in-west-africa/; Keith Meyers and Melissa A. Thomasson, "Paralyzed by Panic: Measuring the Effect of School Closures during the 1916 Polio Pandemic on Educational Attainment," No. w23890, National Bureau of Economic Research, 2017.

members of one school population were diagnosed with H1N1, all schools in the parish of Manchester were ordered closed, and scheduled graduation ceremonies were banned, despite much public criticism.15 One school was later closed in Westmoreland after another suspected case was identified.16 Both closures occurred near the end of the school year, and no impact on learning or the education system was recorded. Throughout the subsequent summer break, the spread of the virus slowed enough to no longer constitute a threat, and schools reopened in September as usual.

In this pandemic, Jamaica closed its schools on March 13, two days after the first COVID-19 case was discovered.

For the academic year 2019-20, students DID NOT ATTEND SCHOOL as usual for



Some children had already stopped attending school for fear of the virus, about which little was known at that time, except that it was highly contagious. The initial closure was for two weeks with the Ministry of Education, Youth and Information (MOEYI) directing all schools to deliver instruction via distance learning. By the end of the academic year schools were still closed. For the academic year 2019-20, students did not attend school as usual for 13 weeks, amounting to in-excess-of an entire school term, representing nearly 40 percent of an entire academic year. There was some inperson teaching in some public schools for a few weeks in November 2020, and again in January to February 2021, and a handful of private schools did reopen whether fully or partially. The academic year 2021-22 has thus, for the most part, been entirely done via remote learning.

 $disasters/index.php?option=com_docman&view=download&category_slug=pandemicinfluenza2009-carib&alias=935-jamaica-s-pandemic-influenza-a-h1n1-preparedness-and-response&Itemid=1179&lang=en.$

^{15 &}quot;Health Minister Responds to Criticism Over School Closures," *Radio Jamaica*, June 28, 2009, http://radiojamaicanewsonline.com/local/health-minister-responds-to-criticism-over-school-closures.

^{16 &}quot;Manchester Schools Closed after H1N1 Cases Detected," *Gleaner*, June 22, 2009, http://jamaica-gleaner.com/power/10188#:~:text=The%20education%20 ministry%20has%20directed, schools%20in%20Manchester%20be%20cancelled.

CLOSE

SCHOOL

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Bu /







60% of respondents continued to WORK FULL TIME away from home

ithin the context of the suspension of face-to-face classes, and the sudden home-based, remote transition to instruction and learning, there have been several challenges to maintaining educational continuity, ranging from the basics of curriculum delivery, to engagement with the learning material. Several schools have encountered difficulties transitioning to this new method of pedagogy, and many students were disconnected from their schools, and so were academically unstimulated for periods varying from a few days to an entire year. Almost without exception, these challenges have been filtered according to socio-economic demographic groupings, with the lowest quintiles being more disadvantaged than the better-off.

Empirical as well as anecdotal evidence assert that the cessation of face-to-face schooling and the transition to online (or other remote) teaching and learning from home will result in learning losses and other setbacks for students at all levels. This is exacerbated by the logistical and



resource challenges in a rapid transition to a brand new, resource-intensive form of pedagogy requiring specialist skills that few Jamaican teachers had pre-COVID-19.

These issues are not unique to Jamaica, and have been observed throughout the Caribbean region, and beyond. A survey administered to households with students from early childhood to secondary school level in four Caribbean countries found the main challenges were difficulty focusing on school work, not having a suitable learning environment at home, lack of access to internet and/or a suitable device, no supervision, and no adult able to assist.¹⁷ (See Figure 1.)

17 CAPRI, "Insult to Injury: The Impact of COVID-19 on Vulnerable Persons and Businesses."

A survey found the main challenges were difficulty focusing on school work, not having a suitable learning environment at home, lack of access to internet and/or a suitable device, no supervision, and no adult able to assist.



FIGURE 1: Challenges to School from Home During COVID-19

Source: CAPRI, "Insult to Injury: The Impact of COVID-19 on Vulnerable Persons and Businesses," 2021.

The data also shows that, across these four Caribbean countries, the challenges to learning from home were worse for students in poor households. Of the challenges reported, the students in poor households experienced greater difficulties than non-poor households. (See Table 1.)

	No Internet Access	No Access to Devices	Difficulty focusing on schoolwork	Home environment not conducive to learning	No Supervision of Children
Regional	21%	17%	34%	12%	6%
Poor	71%	71%	58%	65%	50%
Non-Poor	29%	29%	42%	35%	50%

TABLE 1: Challenges to Learning from Home: Poor and Non-Poor Households¹⁸

We will explore each of these challenges separately.

3.1 Home Environment

The environment that a student is required to learn in and the resources

at his or her disposal affect not only the ability to access remote learning, but also the extent to which they engage in the process.¹⁹ School-at-home requires a suitable learning environment. Such a space is ideally comfortable, quiet, and distraction-free, where a child can sit at a desk or table, with compatible devices and a reliable internet connection. The presence of all of these variables in one home, much less for multiple children, is only likely among the upper socioeconomic quintiles of the Jamaican population. Poorer families tend to

¹⁸ The "poor" includes respondents from households with a post-COVID-19 per capita income below the national poverty line, while "non-poor" includes respondents from households with a post-COVID-19 per capita income at or exceeding the national poverty line. The survey was administered in Antigua and Barbuda, Barbados, Jamaica, and Trinidad and Tobago. The table shows the proportion of poor and non-poor respondents across various areas where challenges were reported.

^{19 &}quot;2020: State of Engagement Report," Go Guardian, 2020, www.goguardian.com/research-and-insights/state-of-engagement-2020/.

comprise multi-person households, and more children is correlated with greater poverty;²⁰ a suitable learning environment in a poor home is thus less likely to be realised.

The other factor affecting the quality and success of school-at-home is parental (or parent-figure) presence and capability.²¹ Children whose parents are available, and who can perform the required roles, are at an advantage. The expectation that such a parent exists rests on several assumptions: that a parent is able to be at home, and that if they are working at home, their job allows them to attend to their children during the work day. One poll conducted early in the pandemic found that 60 percent of respondents continued to work full time away from home while 27 percent worked either full time or part time at home.²² For parents who don't have the flexibility of working from home, the physical closure of school presents additional challenges, and risks for the safety and wellbeing of children. Some parents would have opted to leave younger children with neighbours or relatives to avoid having to leave them alone at home while they are at work, and also to supervise them as they engage in remote learning.23 This has the potential, in worst cases, to expose students to the risk of unstable or crowded learning environments, and abuse by those in

whose care the students are left.

Even if there is a parent at home, the extent to which they are able to play any or all of those roles depends on their preexisting capacity. There is a relationship between parents' education level and the level of absenteeism of their children.²⁴ Schools with a large percentage of students from a lower socioeconomic background are likely to have higher levels of absenteeism.²⁵ The implication is that children from poorer families, whose parents/guardians are not well educated, are more likely to be disadvantaged by school-at-home, in comparison to children from wealthier backgrounds, whose parents tend to be better educated, and better able to provide necessary support to their children.²⁶ This implies that students from poorer backgrounds and rural areas are more likely to lack adequate support or guidance at home during remote learning, and would therefore be at higher risk of experiencing learning losses.

One teacher from a rural school with a large population of vulnerable students made a remark that suggests that this was indeed a problem:

Not only the children can't read but the parents can't read. If you put something in the group you have to send a voice note with it. The parents can't read and the children can't read. But you do have some who can read and they would read things for their parents.

Wealthier parents were at an advantage as they would have the resources to hire people to provide supervision to home-schoolers, and/or to procure additional instruction to compensate for any learning loss (real or perceived) occurring as a result of remote schooling. Even these privileges, however, would likely have been mitigated by the fear of introducing new persons into the home, with regard to concerns about the spread of the virus.²⁷

Aside from capability, there are sometimes inadequate levels of parental involvement and investment in their children. Teachers reported parents not collecting books and learning kits from schools and collection sites, parents being unresponsive in parent-teacher platforms, parents verbally and physically abusing children during online classes, and parents generally unwilling to supervise and assist students with school tasks.²⁸ There was a reported increase in violence against children, attributed to parental frustration at children being constantly at home, with schools closed, congesting the often small space and, even more, having the stress of not being adequately equipped to administer

28 Teacher focus groups.

²⁰ CAPRI, "Come Mek Wi Hol Yu Hand: The Components of an Effective Social Safety Net for Jamaica," Kingston, Jamaica: Caribbean Policy Research Institute, March 2021, https://capricaribbean.org/documents/come-mek-wi-hol-yuh-han-components-effective-social-safety-net-jamaica-revised.

²¹ In a survey conducted in deprived communities, it was found that for 20 percent of respondents, more time had to be dedicated to supervise their children, while for nearly 3 percent of households, children went elsewhere during the school day. (Only a marginal percentage of respondents [0.4 percent] left children at home unattended.) Approximately 6 percent of respondents indicated that they had to start teaching their children themselves. CAPRI, "Locked Down, Locked Out."

²² CAPRI-Bluedot Instapoll, May 2020.

²³ Judana Murphy, "Who Will Mind My Kids?' - Parents Mulling Back-to-Work Order Ponder Daycare Dilemma," *Gleaner*, May 22, 2020, http://jamaica-gleaner.com/article/lead-stories/20200522/who-will-mind-my-kids-parents-mulling-back-work-order-ponder-daycare.

²⁴ Zeki Pehlivan, "Absenteeism at State High Schools and Related School Management Policies in Turkey (Ankara Case)," *Procedia Social and Behavioural Sciences* 15, (2011): 3121-3126.

²⁵ Pehlivan, "Absenteeism at State High Schools."

²⁶ According to CAPRI, the wealthiest are eight times more likely to have tertiary education than the poor. "Prisms of Possibility"; Planning Institute of Jamaica and Statistical Institute of Jamaica Survey of Living Conditions (JSLC) 2017," 2017.

²⁷ Murphy, "Who Will Mind My Kids?"

classes at home.29

3.2 Access to a Device and to the Internet

Access to internet, and access to the requisite technology, namely tablets, computers, or other relevant electronic devices were two predominant barriers to remote learning during COVID-19. In some cases, students did not have access to electricity; in 2018 it was estimated that just over 1 percent of Jamaicans did not have access to electricity.³⁰

Most Jamaicans subscribe to or access some form of broadband service. In 2019 the majority of the population, 64 percent, subscribed to some form of broadband service.31 It was reported that 65-70 percent of students accessed virtual learning in the first three months after schools were physically closed.32 Both local major telecommunications providers reported increases in the number of broadband internet home subscriptions, as well as there was an exponential increase in prepaid and specially allocated data plans.33 This meant that 30-35 percent of students were not able to access online learning, presuming their schools offered it. Even where there was internet, an

unstable internet connection was often a shortcoming.³⁴

The second main barrier was access to compatible devices. Only 66 percent of children had exclusive access to a device for educational purposes in the first term of school-at-home.³⁵ In general, an insufficient number of appropriate devices affected poor families with several children. Nearly one-fifth of children in quarantined communities did not attend any remote schooling at all once schools closed. For the most part this was because they did not have a device on which to do online school, and/or lack of access to the internet.³⁶

Then there was the reality of remote instruction not being available on the part of the school or teachers, as shared by a secondary level student:

Overall, I can say I am not 100 percent confident going into an exam in short order, but on a scale of one to 10, I would say I am an eight. I have heard of some students having online classes, but I don't know what is happening to my teachers. I haven't had any online class really. It is basically self-learning. We have WhatsApp groups and when we converse in those groups either the teacher is having some Wi-Fi Internet

29 CAPRI, "Stress Test: The Impact of the Pandemic on Domestic and Community Violence," Kingston, Jamaica: Caribbean Policy Research Institute, April 2021, https://capricaribbean.org/documents/stress-test-impact-pandemic-domestic-and-community-violence

The lack of access to remote schooling was disproportionately worse among poorer children.

^{30 &}quot;Access to Electricity (% of Population)," World Bank, accessed December 1, 2020, https://data.worldbank. org/indicator/EG.ELC.ACCS.ZS; Corey Robinson, "Lost in A Gap - Electricity, Internet Issues to Continue Plaguing Remote Learning In COVID-era Classes," *Gleaner*, October 4, 2020,

http://jamaica-gleaner.com/article/lead-stories/20201004/lost-gap-electricity-internet-issues-continue-plaguing-remote-learning.

³¹ Office of Utilities Regulations, "Annual Report 2018-9, 19. Broadband internet services as specified here may include mobile devices and purchasing mobile data.

³² Hon. Karl Samuda, Minister of Education, Youth and Information, Statement to Parliament, June 2, 2020.

³³ Information requests from Flow and Digicel. Comparisons to previous periods, demographic and geographic data were not available for at least one network as this information was deemed to be "commercially sensitive".

³⁴ Student focus group.

³⁵ CAPRI and UNICEF, "The Effect of the COVID-19 Pandemic on Jamaican Children," September 2020, www.unicef.org/jamaica/reports/effect-covid-19-pandemic-jamaican-children-preliminary-results.

³⁶ Carl Gilchrist, "400,000 May Be in Cyber Limbo - Online Deficit Could Leave Students Behind," *Gleaner*, October 5, 2020, http://jamaica-gleaner.com/article/lead-stories/20201005/400000-may-be-cyber-limbo-online-deficit-could-leave-students-behind.



connection issues, or the class is scheduled and then something comes up on the teacher's end. However, I am ready if there should be an online class.³⁷

The lack of access to remote schooling was disproportionately worse among poorer children. During the initial period of school closures, 62 percent of students at the primary level and 60 percent of students at the secondary level considered to be from vulnerable groups reported that they had not been able to continue classes, for one or more reasons.³⁸ Vulnerable students were impacted by lack of device and access to internet, with 44 percent of households considered vulnerable being recorded as not having access to the internet.³⁹ While these students were therefore excluded from online remote learning options the ministry accommodated them by providing lessons broadcast on free-to air platforms and printed and distributed work kits. Of these vulnerable households surveyed in sections of Jamaica, 20 percent indicated having children in primary schools accessing education via televised lessons, while 7 percent followed lessons via radio. At the secondary level, 20 percent accessed lessons via television, with another 9 percent following lessons on radio.40

3.3 Schools and Teachers – Unprepared for the Unexpected

Schools and teachers in Jamaica had little to no experience with distance learning pre-pandemic, and, at the outset, were

not prepared-nor could they have been expected to be-for the abrupt switch from in-person to online/remote teaching. Across all schools there was a period of weeks, in some cases months, during which technology was acquired and installed, teachers were trained, and gaps and shortfalls recognized, and attempts made to address them. The resources available to do this determined the speed and effectiveness of the efforts (to equip and upskill), and so private schools tended to respond more quickly, many of them using the two-week Easter break (which began roughly one month after schools closed) to acquire necessary software and devices, bring in outside expertise, train teachers, and re-calibrate the teaching and learning goals for the remainder of the academic year. Public schools used a combination of their own resources, together with whatever technical and financial support was made available by the Ministry of Education.

The shortfalls in adapting quickly and smoothly to remote teaching resulted in confusion and disengagement in the initial period, March to June, before the MOEYI introduced a single learning management platform. Up until that point, schools and teachers attempted to use what was available to them. This confused both teachers and students:

Some students are not going to go on some of these platforms. You are struggling to get them on the Google Suite already and the Zoom. And now you're introducing this other website, and that other website. It's like you're confusing the students themselves, who already don't know how to

³⁷ Kimberley Hibbert, "Exam Headache! Students List Stress, Mental Health Challenges, in Handling CXC Obstacles," *Observer*, May 17, 2020, www.jamaicaobserver.com/front-page/exam-headache-students-list-stress-mental-health-challenges-in-handling-cxc-obstacles_194314?profile=1373.

³⁸ Survey - cross sectional sample of vulnerable groups including students living in poorer rural, urban, and inner-city communities. CAPRI, "Insult to Injury."

³⁹ CAPRI, "Locked Down, Locked Out."

⁴⁰ CAPRI "Insult to Injury."

operate these devices.⁴¹

Students in a focus group discussion expressed dissatisfaction with remote learning. One student described his online classes as "unprepared and unsettling," and lamented the poor organisation and preparation by most of his teachers. Some teachers, they said, suffered "technophobia" and were less willing to adapt to online learning methods, and there was a perceived reluctance among some teachers to let go of the "chalk and talk" techniques.42 Some subjects were more difficult to teach online, such as the sciences, where students required more applied learning than content delivery. At the same time, students in the focus group recognized the extraordinary situation that teachers were placed in, and many appreciated their efforts and innovation and resourcefulness in the midst of a crisis.

3.4 Children with Special Needs

Students with special needs have been especially disadvantaged in the pandemic.⁴³ Many disabilities present as or with comorbidities, and thus these children are at a greater risk for contracting and being affected by the virus.⁴⁴ Children with disabilities are Prior to the pandemic, children with disabilities experienced sub-optimal education in the context of an education and cognitive health system which has a shortage of trained special education teachers, child psychiatrists, and developmental specialists.

more dependent on face-to-face learning, but they are also "least likely to benefit from distance learning solutions."⁴⁵ But face-to-face learning for such students would necessarily involve mask wearing, social distancing, and strict sanitation measures; these too would present challenges for most special needs children.

Prior to the pandemic, children with disabilities experienced sub-optimal education in the context of an education and cognitive health system which has a shortage of trained special education teachers, child psychiatrists, and developmental specialists.⁴⁶ School-

at-home is particularly challenging for special needs students. Parents of students with special needs are required to spend more time assisting children with online learning, than parents of students with special needs doing blended or other formats of learning.47 The situation is even more challenging for children and families in Jamaica from lower socioeconomic quintiles, who are unlikely to have resources to obtain additional support, and who likely do not have the capability to carry out the distance learning guides and recommendations sent for the children.48 Not only are many parents, guardians, or care-givers ill-equipped to deliver the

47 James Basham et al., "Equity Matters: Digital and Online Learning for Students with Disabilities," Center on Online Learning and Students with Disabilities, 2015, www.centerononlinelearning.res.ku.edu/wp-content/uploads/2017/04/2015_COLSD_Annual-Publication_FULL.pdf.

48 Charlotte McClain-Nhlapo, "An Inclusive Response to COVID-19: Education for Children with Disabilities," Global Partnerships for Education, May 11, 2020, www.globalpartnership.org/blog/inclusive-response-covid-19-education-children-disabilities; "Parents Battling Special Education Hurdle."

⁴¹ Teacher focus groups.

⁴² These are teacher-centred methods which are typically less interactive, and involve teacher presentations and minimal student engagement.

⁴³ There are 38 special education institutions and units currently operating in Jamaica; some are privately owned, some grant-aided, and others government-run. They serve 4,126 students of varying abilities. Another 5,711 students with special needs are enrolled in mainstream schools. Ministry of Education, Youth and Information, "Special education institutions in Jamaica," obtained through Access to Information request to MOEYI, 2020.

^{44 &}quot;People with Disabilities," Centers for Disease Control and Prevention, updated March 16, 2021, www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/ people-with-disabilities.html.

⁴⁵ United Nations, "Policy Brief: Impact of COVID-19 on Children," April 15, 2020, https://unsdg.un.org/sites/default/files/2020-04/160420_Covid_Children_Policy_ Brief.pdf. "Parents Battling Special Education Hurdle - Home Learning a Challenge for Children with Disabilities," *Gleaner*, April 26, 2020, https://jamaica-gleaner.com/ article/news/20200426/parents-battling-special-education-hurdl e-home-learning-challenge-children; Jerome Jackson, "Independent Schools Association and Education Ministry Set for Discussions," *Nationwide Radio*, October 2, 2020, https://nationwideradiojm.com/independent-schools-association-education-ministry-set-fordiscussions/; "Ministry Explains Why Some Private Schools Approved for Face-to-Face Classes," *Observer*, October 10, 2020, www.jamaicaobserver.com/news/ministryexplains-why-some-private-schools-approved-for-face-to-face-classes_205027.

⁴⁶ Kimberly Hibbert, "Autistic Children Facing Education Heartache," *Observer*, April 11, 2021, www.jamaicaobserver.com/news/autistic-children-facing-education-heartache_218883.

learning needs of children with special needs, but some are also unable to adequately respond to their differently-abled children's emotional and physical responses to their frustrations and emotional challenges, many of which will be exacerbated while trying to do school from home.⁴⁹ Limited internet access and a dearth of necessary and compatible devices intensify these disadvantages. (Special devices were later distributed to differently abled children, as part of the general provision of electronic devices to schoolchildren, which is detailed further along in the report.)

While for able-bodied students without internet or device access, schools were able to provide printed materials, ordinary printed materials are often inadequate for special needs students. The visually impaired, for example, usually require specially printed material, and sometimes audio materials.⁵⁰ Converting lessons to be delivered remotely required even more specialized applications than the communications and classroom apps used with non-special needs students. Relatively smaller class sizes pre-COVID-19 in some schools for students with disabilities however was an advantage for some instructors who were able to delegate more time to engaging each student on an individual level, albeit virtually.⁵¹

The concerns go beyond academics, as children with physical and learning disabilities often require therapy in addition to regular schooling in order to learn skills and progress to higher levels of social and cognitive development. Some children with disabilities or learning challenges were assigned shadows in schools to provide support for learning and semi-independent work. The pandemic disrupted these measures as well as much of the progress made by students by inhibiting or reducing contact hours with not only these shadows, trained special education instructors, and peers, but also therapists who assist in providing the necessary stimulation to track and catalyse their growth and advancement. The disruption of routines, structure, and level of stimulation received by these children is likely to have led to regression in many instances, as well as the emergence of new behavioural issues and new learning challenges for these students.52

^{49 &}quot;Parents Battling Special Education Hurdle." There was however one teacher from a special education institution participating in the focus group who expressed contentment and satisfaction with one autistic student who had "lit up" during the remote learning experience and was performing better than in the pre-covid physical learning era.

⁵⁰ Teachers also indicated that similar conversions had to be done for diagnostic assessments that were distributed by the MOEYI at the beginning of the 2020/2021 academic year; teacher focus groups.

⁵¹ Teacher focus groups.

⁵² MOEYI Senior Official, interview.







More than **20,000 TEACHERS**

were

TRAINED TO DELIVER ONLINE CLASSES by August 2020. here has been no "correct" response to the pandemic, in any sector, by any country. Governments were forced to react quickly to unprecedented, rapidly changing situations, without adequate information, and often times in a context of notenough resources. The damage that the pandemic could do to education and to children was well recognized from the outset, and the Jamaican government—as did governments the world over—sought to respond as best as they could.

An Education in Emergencies Plan began to be drafted in January 2020, in response to the growing threat of what was then the "novel coronavirus". Little was then known about the virus, and there was no indication that it would manifest in the way that it would. The pandemic thus presented an unprecedented challenge to the educational system, one which the system had not anticipated, and was not prepared for, as no country was, or could

have been.

There were four main areas of action in response to the impact of the pandemic on the education system: the deployment of distance learning modalities through a variety of formats and platforms (with or without the use of technology); the support and mobilization of education personnel and communities; and changes to the curriculum. There were also measures to address the concern for the health (especially nutrition in Jamaica) and overall well-being of students.

4.1 Teacher Preparation

On March 3, 2020, schools were advised to begin developing online materials, assessments, and spaces for virtual communication in the event that schools closed. Few Jamaican teachers had participated in or conducted online or remote teaching prior to the pandemic.

Principals and school administrators were expected to suddenly and immediately implement an entirely new modality of lesson delivery, adapt curricula, equip staff, and establish new standards,53 and teachers were expected to master these new forms of pedagogy just as quickly. The National College for Educational Leadership (NCEL), the public body charged with training and upskilling of principals and other leadership roles in schools, was mandated in May 2020 to equip school leaders to serve, represent, and lead school staff in the transition to distance learning.54 More than twenty thousand teachers out of a total of 31,656 teachers in Jamaica were trained to deliver online classes by August 2020.55

The NCEL introduced two pandemicresponse courses during the period June to September 2020, to address the gaps and needs that had been identified. The first, the Virtual Instructional Leadership course, was developed and delivered

The damage that the pandemic could do to education and to children was well recognized from the outset, and the Jamaican government—as did governments the world over—sought to respond as best as they could.

⁵³ NCEL Report 2020.

⁵⁴ MOEYI Bulletin 79/2020.

^{55 &}quot;Lack of Internet Access Poses Challenge to Online Learning," *Gleaner*, October 7, 2020, http://jamaica-gleaner.com/article/news/20201007/advertorial-lackinternet-access-poses-challenge-online-learning; UNESCO, "Teacher Development for Online and Blended Learning to Ensure Quality Education during COVID-19 in Jamaica," August 19, 2020, https://en.unesco.org/news/teacher-development-online-and-blended-learning-ensure-quality-education-during-covid-19.

in collaboration with UNICEF Jamaica and curated specifically to support the "management and supervision of teachers using e-learning platforms."56 It included elements of organisational behaviour and management as well as introductions online learning and learning to management tools. The second course covered by NCEL, "3R Framework for School Leaders: Regroup, Recondition, and Rebuild" was created and curated ahead of what should have been the October 2020 reopening of schools. It included specific resources for private schools, boarding schools, and special education institutions, as well as guidance for informal curriculum learning elements. A third course in partnership with UNICEF, "Child Friendly-Schools Leadership" was also delivered virtually by NCEL. Other development and empowerment webinars were streamed by the College via social media.57

The Jamaica Teaching Council (JTC), a body under MOEYI oversight, is responsible for the regulation of the teaching profession and upskilling of teachers. The JTC introduced courses shortly after the closure of schools. The priority for these courses was to provide remote/online learning delivery skills. The JTC reports that 21,840 teachers (over 85 percent of the population of teachers in public schools) enrolled in at least one course.58 The first course introduced in April 2020, entitled, "Navigating Online Like a Pro" had two installations. This course had the primary objective of equipping teachers to transition from the physical classroom to the physical space, including learning management software, platforms, and other online

The Jamaica Teaching Council introduced courses shortly after the closure of schools. The priority for these courses was to provide remote/online learning delivery skills.

tools. The second course introduced, "Virtual Planning Lessons," began in May 2020, and as the name suggests, exposed teachers to strategies for planning and conducting virtual and distance lessons. Requirements for gaining certification for the course included assignments, group work, and online tests.⁵⁹ Other programmes for teacher training were offered by other local and international entities, though there was poor sensitisation of the options available.⁶⁰

Teachers' response to the training was mixed. JTC training was standardised and not easily applicable to teachers in unique situations. Several teachers found that the strategies taught in the training sessions were incompatible with their low-tech environments, and the level of digital literacy exhibited by their students. While most teachers in the focus groups expressed dissatisfaction with the quality, speed, content, or organisation of the training, some did express satisfaction with the training, and reported being able to implement lessons learnt in the classroom. The focus group discussion also revealed that the teachers perceived that there were gender differences in how the training was received. According to the teachers, in most cases, women were more satisfied with the teacher training than men were. This can perhaps be explained by, according to some of the male teachers across the focus groups, they (the men) were already competent with the use of virtual platforms, many having previously taught themselves what was being delivered in the training sessions.

Nevertheless, there was a consensus that teachers developed greater capacity and skills, whether through official training, peer-to-peer training, self-help using YouTube or other learning platforms (which most teachers interviewed indicated having done during the period to diversify their online classes), or sharing of best practices among teachers, schools, and across educational regions. Teachers who were tech-savvy prior to the pandemic used the opportunity to be more innovative and experimental in ways that they may not have been able to do in the traditional classroom.⁶¹ Many teachers attempted creative ways to teach

- 60 Teacher focus groups.
- 61 Focus groups and key stakeholder interviews.

⁵⁶ Report from the National College for Educational Leadership, September 2020.

⁵⁷ National College for Educational Leadership. Brief Report. "NCEL's Programmes and Initiatives in Response to COVID-19". September 2020.

⁵⁸ Jamaica Teaching Council, "Report on Teacher Training Initiatives During COVID-19," September 2020.

^{59 &}quot;Report on Teacher Training Initiatives During COVID-19." No information was provided on how many teachers completed the training and gained certification.

and assess students, including designing, recording, voicing, and producing radio and televised lessons.

4.2 Device Provision

Very early into the pandemic and school closures, the MOEYI outlined its intention to increase students' access to virtual learning through the distribution of tablets and through the installation of internet in communities where challenges had been identified. What ensued was an unrealistic attempt to hastily meet the device needs of students on PATH, in rural areas, and in otherwise low-tech environments. Meeting such a mammoth need was next to impossible in the short term, despite private sector interest and offers of involvement. In November 2020, eight months after schools closed, and towards the end of the first semester of the 2020/2021 academic year, the government acknowledged that it would take at least another six months to meet the needs, roughly the end of the 2020/2021 academic year. This meant that some students without devices would miss an entire year or more of school.62

Over time, more students accessed and participated in remote learning. Tablets were procured by the GOJ in collaboration with the National Education Trust (NET), E-Learning Jamaica (both under the MOEYI), the Ministry of Science, Energy and Technology (MSET), and various other private sector and civil society organisations, and international donors. The MOEYI's attendance data shows that more students participated in remote learning at the start of the 2020/2021 academic year as compared to the end of the 2019/2020 academic



year when the pandemic had just started, largely corresponding to the distribution of tablets. (The distribution of tablets began in August 2020.) The focus groups' responses confirmed this observation. The distribution of tablets began in August 2020. By December, 52,164 had been distributed.⁶³

During the summer 2020 break, the MOEYI adopted the Google Suite learning management system for all public schools, in an attempt to streamline online teaching and learning across the system. Almost all students and teachers were provided with accounts, though not all used them. Some schools chose to use elements of Google Suite together with their own pre-existing web-based classroom management systems, such as Rediker, or did not use Google Suite at all, as they had already settled on applications that were serving them well.

Problems persisted: in some cases, teachers said that the devices purchased for students were incompatible with the platforms being used, or that students did not know how to navigate the devices or the platforms. One principal reported that just months after tablets were distributed to students, some were destroyed, lost, or stolen, and that despite being given tablets, some students only showed up at exams or for face-to-face classes, or did not show up at all.⁶⁴

4.3 Access to Internet

Available data indicates that approximately 35 percent of Jamaican students did not have access to the internet, and so were unable to participate in online learning. Various endeavours sought to bridge that gap. The MOEYI worked with private telecommunications providers to offer an Education Data Plan (Digicel) and the MOEYI Connectivity Plan (Flow), which gave discounted rates on data plans and broadband access. Both major telecommunications providers also negotiated with the government to introduce some zero-rated websites. These include websites for educational institutions, learning platforms, online libraries, and learning management systems. The MOEYI also partnered with Flow and One on One Educational Services to facilitate data-free access to live remote classes and free full syllabus coverage for grades 1 to 13 from March 23 to July 3, 2020, via a virtual learning platform. There were 44,025 student users (roughly 8 percent of the grade 1 -13 student population of 534,660), 3,233 teachers (approximately 10 percent of the current teacher population of 32,169), and 821 parents. Through this medium, 63 subjects were delivered over 50 classes per day. Data obtained from Flow indicate that nearly 60 percent of students accessing the platform did so using a mobile device (consistent with early studies showing that handheld devices are most commonly used).65 According

64 Teacher focus groups.

^{62 &}quot;PM Defends Government's Approach to Tablets for Students Programme," Gleaner, November 4, 2020

http://jamaica-gleaner.com/article/news/20201104/pm-defends-governments-approach-tablet-students-programme.

⁶³ Hon. Fayval Williams, Minister of Education, Youth and Information, Statement to Parliament, December 8, 2020.

⁶⁵ CAPRI and UNICEF, "The Effect of the COVID-19 Pandemic on Jamaican Children," September 2020, www.unicef.org/jamaica/reports/effect-covid-19-pandemic-

In some instances, lessons were delivered over the radio and/or television. The use of work kits and radio lessons was especially common in rural areas without access to internet or cable television.

to data from the telecommunications company, students at the primary level showed the highest level of consistency in attending classes, with averages ranging from 300-600 daily.⁶⁶

There were state-led infrastructural initiatives. MOEYI contracted a local internet provider, ReadyNet, to install internet in 238 communities, which was completed in January 2021.⁶⁷ A roaming internet service for rural communities was launched by MOEY in collaboration with the Jamaica Teaching Council and the Universal Access Fund.⁶⁸ This entailed the procurement of a router which was placed on a bus which travelled across the educational region and parked in communities based on a pre-determined schedule.

Telecommunications providers faced additional pressure to meet the connectivity needs of remote education delivery and expanded their networks in response. Digicel reported it expanded its LTE network to 500 mainly rural communities.⁶⁹ Four hundred and fifty schools were given free broadband access under the Internet in Schools Programme led by the other main telecommunications company Flow, through its foundation.70 Flow also introduced the Flow Study Educational platform, which was free to access from March 31 until July 31, 2020. Their available data shows a nearly tripling of the number of new registrants in March, jumping from 365 in February 2020 to 941 new registrants and recording the largest jump in new registrations in April, with 2,313 new

registrants accessing the platform.⁷¹ At the secondary school level, Flow provided workshops to prepare for the CSEC and CAPE exams. The Digicel Foundation also made donations of phone credit and data plans to childcare facilities housing wards of the state,⁷² in addition to 3,000 six-week data plans donated to students on PATH and to teachers.⁷³

4.4 Other Delivery Modalities

For students who were without internet, schools provided kits of printed materials that were delivered and collected at preestablished meeting points.⁷⁴ Where the packages were not collected, principals and teachers themselves went into remote

67 Report from ReadyTV and data from MOEYI.

- 71 Flow Jamaica.
- 72 Report from Digicel Jamaica, October 27, 2020.

jamaican-children-preliminary-results.

⁶⁶ Report from Flow Jamaica.

⁶⁸ The Universal Service Fund (USF) is a government agency, falling under the Ministry of Science, Energy, and Technology. The USF serves to improve the nation's access to information and communication technology, including through the donation of devices to schools and the less fortunate, and construction of community access points.

⁶⁹ Report from Digicel Jamaica.

⁷⁰ Report from Flow Jamaica.

⁷³ Report from Digicel Jamaica, October 27, 2020; Flow was unable to disclose this information as it was deemed to be commercially sensitive.

⁷⁴ These community congregation points were often churches or schools that served as central meeting and distribution points for members of a community to collect packages from schools or organisations distributing food and other care items.



and distant communities to deliver and collect work. In some instances, lessons were delivered over the radio and/or television. The use of work kits and radio lessons was especially common in rural areas without access to internet or cable television. The regional offices of the MOEYI were engaged to assist in printing kits for distribution to students and in the production of radio lessons.⁷⁵ Teachers and education officers from within the regions collaborated to develop scripts for radio show lessons in the form of drama. The MOEYI reported that feedback from the target recipients was positive.⁷⁶

4.5 Curriculum and Assessment Changes

The MOEYI directed changes to the national standards curriculum,

minimizing or eliminating areas that were covered in previous grades. Schools made decisions on which subjects would be prioritised in remote learning modality. In many instances this meant eliminating subjects such as guidance counselling, personal development, and physical education.⁷⁷

Most internal examinations were cancelled or postponed, especially in the case of public schools. The lack of assessments are likely to deepen learning losses, given that it is well established that failure to identify learning challenges or ensure that the components of the curriculum have been completed successfully, and that knowledge/skills have been gained and validated, could not only contribute to failure to learn but also hinder longer-term educational outcomes.⁷⁸ Where exams were held,

the outcomes were not satisfactory to all stakeholders. The results of the regional exit examinations for secondary school students (typically held in May/June but held in July and August, 2020),⁷⁹ were subsequently disputed by thousands of students across the Caribbean region, and several students signed online petitions requesting a review of results,⁸⁰ which CXC agreed to do.⁸¹

4.6 Health and Wellbeing

School closures have other effects on students, in addition to interrupting educational paths. Among these are the impact on the diet and nutrition of the student population, especially in the most vulnerable sectors. It has been in established in Jamaica (as elsewhere)

⁷⁵ MOEYI Senior Official, interview.

⁷⁶ Interview with MOEYI Senior Official, September 29, 2020.

⁷⁷ Teacher focus groups.

⁷⁸ World Bank and UNICEF, "Education Sector Analysis Methodological Guidelines 1," 2014, www.iiep.unesco.org/en/publication/education-sector-analysismethodological-guidelines-vol-1-sector-wide-analysis-emphasis.

⁷⁹ Katrina King, "CXC Not Changing July 2020 Timetable, Results in September," Loop News, May 14, 2020, www.loopnewsbarbados.com/content/cxc-not-changing-july-2020-timetable.

^{80 &}quot;Concerns Over CSEC/CAPE Results: Education Minister Speaks to CXC," Loop News, September 24, 2020, www.looptt.com/content/concerns-over-cseccape-results-education-minister-speaks-cxc.

^{81 &}quot;CXC Agrees to Reduce Exam Review Fees," Loop News, October 28, 2020, www.looptt.com/content/cxc-agrees-reduce-exam-review-fees.

that students from lower socio-economic backgrounds face a higher risk of food insecurity and poor nourishment which could affect their quality of learning.82 Initial studies found that approximately 45 percent of households experienced food shortages due to COVID-19 restrictions. This was felt more acutely in female-headed households (56 percent) and households with two or more children (57 percent).83 In most Latin American and Caribbean countries, school feeding programmes continued in various forms including the delivery of food kits to be prepared at home, provision of lunches, cash transfers, and food vouchers.84

There was especial concern about the health and nutrition of students on PATH, given the pre-existing poverty of these students' families, lack of access to the school feeding programme, and the inability to guarantee that increased cash transfers were being used for children's meals. PATH is the government social safety net programme that assists poor families through conditional cash transfers (CCTs) and subsidies for health and education. The programme covers over 40 percent of households in some parishes, and more than 90 percent of students in many rural schools.85 Students on PATH benefit from a school feeding programme of lunch and in some cases breakfast for each day that they attend school. They also receive other support such as free registration for regional



examinations, and financial assistance prior to each academic year, which would generally assist with purchasing books, uniforms, and other items needed to prepare for the school term.

A lot of our students, the only meal they consume for the day is the meal that we provide at school, and I'm very, very concerned that if we're not able to return to school come October 5, there are many students who are going to be left hungry.⁸⁶

In response, several schools organised alternative food programmes. The government, through Nutritional Products Limited (NPL) and with private sector entities, alumni organisations, church groups, and other benevolent entities, delivered meals to students to minimise this impact.⁸⁷ The MOEYI reported that lunch meals were delivered to over 175,000 students on PATH via this medium every day for three weeks, and breakfast was delivered to 70,000 students until March 27, when changes were made to the structure of the food relief programme, to add an allowance of \$150 per student per day of schooling to the regular PATH cash transfers.⁸⁸

4.7 Private Schools

There are 204 private education institutions operating in Jamaica across the primary and secondary levels, including special education institutions.⁸⁹ At the primary level (prep schools) there is a total enrolment of 22,837, compared to 213,322 in public schools, less than 10 percent of all primary level students.⁹⁰ At the secondary level, 2 percent of a total cohort of 214,043 are enrolled in a private institution.⁹¹

There has long been a disparity between private and public schools in terms of the quality of education and hence student achievement, particularly at the primary level. This difference is one of the sources of the inequities in the Jamaican education system. Private primary schools ("prep" schools) regularly outperform their public primary counterparts in national assessment tests including the Grade Six Achievement Test (GSAT) and its successor placement

^{82 &}quot;Proper Nourishment Key to Learning," Jamaica Information Service, May 30, 2008, https://jis.gov.jm/proper-nourishment-key-to-learning/.

⁸³ CAPRI and UNICEF, "Effect of the COVID-19 Pandemic on Jamaican Children."

⁸⁴ ECLAC and UNESCO, "Education in the Time of COVID-19."

^{85 &}quot;Rural PATH Students to Benefit From School Transportation," Gleaner, March 30, 2017, https://jamaica-gleaner.com/article/news/20170331/rural-path-studentsbenefit-school-transportation.

^{86 &}quot;'Yuh Cyah Learn If Yuh Hungry' - Stakeholders Mull Maintaining Critical Access to Meals for Welfare Students," *Gleaner*, September 22, 2020, http://jamaica-gleaner.com/article/lead-stories/20200922/yuh-cyah-learn-if-yuh-hungry-stakeholders-mull-maintaining-critical.

http://jamaica-greaner.com/article/read-stories/20200922/ yun-cyan-learn-in-yun-nungry-stakenoiders-mun-mantaming-critical.

⁸⁷ Nutrition Products Limited is an agency of the MOEYI that was created to coordinate the production and distribution of affordable meals to needy children in schools; Nutrition Products Limited, "Welcome to NPL," accessed December 1, 2020, https://npl.gov.jm/.

⁸⁸ MOEYI senior official, email communication with researcher, August 11, 2020.

⁸⁹ MOEYI, correspondence with researcher, October 9, 2020

⁹⁰ Planning Institute of Jamaica, "Economic and Social Survey Jamaica 2018," 2018.

⁹¹ PIOJ, "ESSJ 2018."

While they are often better resourced, independent schools also tend to be more vulnerable to economic shocks than public schools, given the nature of their income sources.

examination for secondary schools, the Primary Exit Profile (PEP). Generally also, the attendance rates at private institutions are better than that at their public counterparts.92 For the most part, Jamaica's private schools have more flexibility with resources than public schools, and students attending these schools tend to come from more privileged homes who are more likely to have more adequate resources to withstand a crisis such as this pandemic, and to provide supplementary options for teaching and learning such as extra classes, and subscriptions to online resources.

Private institutions closed physically on March 13, 2020, in keeping with the rest of the island's schools. Their reopening, however, was not subject to the MOEYI's policies (though there was some lack of clarity on this at various points). For the most part, those schools that demonstrated capacity to maintain student safety in face-to-face learning were given clearance by the Ministry of Health and Wellness to resume at various points throughout the year.⁹³

These schools responded relatively quickly to the teaching and learning exigencies of the pandemic, many within a two-week window, viz. the Easter vacation during which several schools trained, up-skilled, and equipped themselves to transition to online learning for the Summer term.⁹⁴ Larger private institutions, such as those with populations greater than 200, and specifically those in urban areas, had less difficulty transitioning to virtual learning than their smaller counterparts. Some private schools, for example, had already (pre-pandemic) begun their own independent transitions to online learning with online learning management system subscriptions, bring your own device (BYOD) policies, e-learning components in classes, and initiatives to bridge the digital divide for less fortunate students.95 Many of the smaller schools needed additional time to build out virtual learning systems, procure adequate internet service, and re-engage students. ⁹⁶ Several schools availed themselves of the MOEYI's training opportunities, utilized the ministry's learning management system, and accessed zero rated websites that the ministry had negotiated. Others opted to use resources garnered from tuition and savings from payment of utility bills at schools to provide or expand internet packages for teachers at home in order to deliver online learning programmes,97 and

92 Judana Murphy, "Top PEP Students Toasted with Scholarships," *Gleaner*, July 24, 2019, http://jamaica-gleaner.com/article/lead-stories/20190724/top-pep-students-toasted-scholarships.

- 93 Observer, "Ministry Explains Why Some Private Schools Approved for Face-to-Face Classes."
- 94 Interview with President of the JISA, Faithlyn Wilson.

95 This also applied to the more advantaged "traditional" high schools, interview with JISA President; Karen Mundy and Susannah Hares, "Equity-Focused Approaches to Learning Loss during COVID-19," Center for Global Development, April 16, 2020, www.cgdev.org/blog/equity-focused-approaches-learning-loss-during-covid-19.

96 The majority of independent schools are "small" schools, that is, they have populations of under 200 students.

subscriptions to learning management systems.⁹⁸ Nevertheless, private institutions also indicated challenges with internet connectivity among the teacher and student populations.

While they are often better resourced, independent schools also tend to be more vulnerable to economic shocks than public schools, given the nature of their income sources. About two weeks after schools were first closed, several independent schools reached out to the MOEYI for assistance, foreseeing a decline in enrolment and payment of fees for the upcoming summer term.99 Some private schools faced demands from parents to reduce tuition fees. In response, the government indicated it would provide some financial support.¹⁰⁰ Some private schools expected to lose students and face lower-than-usual enrolment in the new school year, as parents opted to send their children to public schools or school them at home. Some schools laid off or reduced the pay of teachers and other staff.101

The MOEYI did not have private school registration data for the 2020/2021 academic year available, but several private schools reported losses in revenue and enrolment stemming from the COVID 19 pandemic, with 76 percent of private schools sampled experiencing reductions in enrolment of up to 60 percent. Of these reductions, 63 percent recorded enrolment reductions of 20 percent and over. Within the sample, 4

percent of schools (one school) closed down completely.¹⁰² At least one Kingston private school closed their physical plant to operate remotely only. The reduction in enrolment at many of the schools is due largely to the reduction in enrolment of kindergarteners. Kindergarteners (children aged 3-6 years) don't always have the supervision of a guardian at home to facilitate online schooling for them. Many of the devices that would be used for online schooling belong to the parents, who are, in many cases, not home during the day.¹⁰³

Private schools that reopened for the 2020/2021 academic year mostly did so virtually, as with public schools, with only a few opening fully physically (with MOHW clearance), and others operating with a blended approach.¹⁰⁴ Of the independent schools sampled, 80 percent were operating fully online, while 20 percent used a combination of online and face-to-face schooling.

4.8 Students with Special Needs

The MOEYI Special Education Unit was responsible for the development of material and guidelines to facilitate the transition of students with special needs, and special education units and schools, to remote learning. Online learning was the primary mode of instruction after schools were closed, with material provided on the website. However, even where students with special needs were provided with an individualised education programme, replicating the programme in home was next to impossible for parents who (as was detailed earlier) were not trained to provide the services of trained instructors, therapists, and other professionals usually meeting their children's needs during weekdays.105 The MOEYI cited as the main barriers faced in delivering remote learning to students with disabilities: parents not understanding the learning needs of their child, and the appropriate instructional approaches to support learning; frustration faced by parents in trying to monitor online learning while working from home; parents not being able to utilise the technology themselves; challenges with change and structure for students with special needs; difficulties experienced by teachers in navigating online spaces; classroom management in a virtual space; schools unable to reach parents by telephone; and parents' frustration with constant messages from school.106

Having enumerated the various responses to the challenges presented by school closure and the transition to remote teaching and learning, we now ascertain how students were affected by the issues brought on by the pandemic-induced changes.

98 Interview with President of JISA- Faithlyn Wilson.

105 Murphy, "Who Will Mind My Kids?."

106 Access to Information Request, MOEYI, 2020.

⁹⁹ The Minister of Education indicated in a press conference.

¹⁰⁰ Chris Patterson, "Private School Teachers to Receive Salary Support," Jamaica Information Service, September 24, 2020, https://jis.gov.jm/private-school-teachersto-receive-salary-support/; Okoye Henry, "Minister Williams Pledges Support to Independent Schools," Jamaica Information Service, November 9, 2020, https://jis.gov. jm/minister-williams-pledges-support-to-independent-schools/.

¹⁰¹ Interview with President of JISA- Faithlyn Wilson.

¹⁰² Information gathered from a sample of 25 private schools across the island.

¹⁰³ Sample of Private schools.

¹⁰⁴ Nadine Wilson-Harris, "Private Schools Resume Classes with Online Sessions," *Gleaner*, September 11, 2020, http://jamaica-gleaner.com/article/news/20200911/ private-schools-resume-classes-online-sessions.
45

The MOEYI cited as the main barriers faced in delivering remote learning to students with disabilities: parents not understanding the learning needs of their child, and the appropriate instructional approaches to support learning



Effects of School Closures on Students and Learning



The results of the 2021 **PEPEXAM** indicate a DIP IN STUDENT PERFORMANCE, with a mean score of **52%**

hildren's lives across the world have been turned upside down: the way that they learn, socialize, play, eat, move and sleep has changed, with damaging repercussions on their physical and mental health. One year into the pandemic a statement from paediatricians expressed: Caribbean "We believe that we are on the cusp of a regional childhood obesity and mental health emergency."107 Almost all of the negative impacts on children stem from school closure, and they go beyond educational impacts, though these are critical concerns.

Many of the pandemic-response strategies put in place by governments and schools are universally referred to as emergency remote teaching.¹⁰⁸ Emergency remote teaching implies urgent and timesensitive solutions by educators to disruptions in learning. It includes the breadth of measures outlined above. Emergency remote teaching (ERT) is typically characterised by asynchronous learning (as opposed to synchronous learning that typically takes place in faceto-face learning), and flexibility and leniency in submitting class assignments. ERT mitigates against losses in learning of content and some skills, but is not structured or sufficient to substitute effectively for traditional face-to-face learning. Emergency remote teaching does not compare favourably to normal, face-to-face/in-person, in several respects.

In the context of inadequate data to undertake a comprehensive assessment of the impact of the pandemic as manifested in school closures and the shift to emergency remote teaching, this section attempts to explore what learning losses might be expected based on what obtained in previous periods of crisis such as natural disasters, and the available but limited quantitative and qualitative data. We also attempt to ascertain what the effects of school closures have been on students' social and emotional development, and the fulfilment of their potential to self-actualize.

5.1 Known Impact of Force Majeure Closures on Teaching and Learning

Force majeure incidents are those that are unforeseeable and typically unavoidable, such as natural or manmade disasters and pandemics, which disrupt an individual's capacity to fulfil a pre-determined commitment. The commitment in this case is for students to attend school or in the case of schools, to deliver quality in-person education to students. The disruption in the education system due to the coronavirus pandemic is comparable to emergencies such as natural disasters, where the occurrence of such disruptions inevitably impacts the education system.109

107 "Now More than Ever We Need to Act Now to Protect Caribbean Children and Young People: A Letter from Pediatricians from Across the Caribbean Region," Healthy Caribbean Coalition, March 4, 2021, www.healthycaribbean.org/we-need-to-act-now-to-protect-caribbean-children-and-young-people/.

Emergency remote teaching (ERT) is typically characterised by asynchronous learning (as opposed to synchronous learning that typically takes place in face-to-face learning), and flexibility and leniency in submitting class assignments.

¹⁰⁸ Charles Hodges et al., "The Difference Between Emergency Remote Teaching and Online Learning," Educause Review, March 27, 2020, https://er.educause.edu/ articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning.

¹⁰⁹ Nekeisha Spencer, Solomon Polachek and Eric Strobl, "How Do Hurricanes Impact Scholastic Achievement? A Caribbean Perspective," Natural Hazards 84, no. 2

Previous school closures in Jamaica have occurred, but have not been as prolonged as in this pandemic. These were a result of hurricanes or other adverse weather conditions, teacher strikes, and man-made disasters. Teacher strikes in 2010 and 2018, for example, affected teacher and student attendance, causing losses of one to two days of schooling. Disruptions such as these have usually prompted the MOEYI to extend the school term to make up for the lost hours of teaching and learning.¹¹⁰ Students in Kingston were similarly affected in May 2010 during the Tivoli joint military and police operation.111 Regular classes were suspended due to the threat of violence in the capital, and students sitting exams in centres near the epicentre of the threat were transferred to alternative, safer examination centres. Of those transferred, 98 percent turned up to sit exams during the affected days, suggesting that the change was not overly disruptive.112

A 2016 study compared the performance of students across several Caribbean countries during years where a hurricane occurred.¹¹³ It looked at performance in specific subject areas, and also distinguished between hurricanes that made landfall during the school term, and those that occurred prior to the start of school or during an extended holiday. The study found that there was a greater impact on performance when the



hurricane occurred during the academic year due to the impromptu closure of schools, the lost days of schooling, and the economic impact of the disaster (which itself presented further challenges to students).

Student performance across the sciences had overall declines in years when hurricanes occurred during the school year, showing a significant negative relationship between hurricanes (i.e. school closures, fewer contact hours, and student absenteeism) and student achievement in those areas. This decline was more significant in physics as compared to biology and chemistry. The humanities or more content-based subjects (geography, Spanish, and French) showed no significant impact attributable to the passage of a hurricane.¹¹⁴ Other observed impacts of natural disasters on education that are relevant to the COVID-19 pandemic are the loss of human capital accumulation or learning gains as a result of the disruption in productive hours, and the diminishing of student capacity to continue or reengage in the learning process.¹¹⁵

5.2 The COVID Slide

The concept of learning loss, which has been around for over a century, is defined as "any specific or general loss of knowledge and skills or to reversals in academic progress, most commonly due to extended gaps or discontinuities

⁽August 2016): 1437-1462; Karen K. Wong, et al., "Why is School Closed Today? Unplanned K-12 School Closures in the United States, 2011–2013," PLOS One 9, no. 12 (December 2014): e113755, https://doi.org/10.1371/journal.pone.0113755.

^{110 &}quot;Two Days to be Added to School Year," Jamaica Information Service, May 11, 2010, https://jis.gov.jm/two-days-to-be-added-to-school-year," *"JTA Raises Concerns as Education Ministry Extends School Year," Loop News, April 21, 2018, www.loopjamaica.com/content/jta-raises-concerns-education-ministry-extends-school-year-three.*

¹¹¹ The Tivoli operation during May/ June 2010 included an armed conflict between gang members and the Jamaican security forces, resulting in the death of nearly 80 persons, and the injury and arrest of several hundred others. CSEC and CAPE examinations were underway at the time of the unrest and several students from neighbouring communities and schools were affected.

^{112 &}quot;Schools Closed but CXC Exams On," Gleaner, May 24, 2010, http://jamaica-gleaner.com/power/19545.

^{113 &}quot;How do Hurricanes Impact Scholastic Achievement?"

^{114 &}quot;How Do Hurricanes Impact Scholastic Achievement?"

¹¹⁵ Tahir Andrabi, Benjamin Daniels and Jishnu Das, "Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005.," RISE Working Paper Series 20/039, RISE, May 25, 2020, https://doi.org/10.35489/BSG-RISE-WP_2020/039.

in a student's education."116 The concept has largely evolved to focus on the learning loss which takes place during the summer months when students are out of school.¹¹⁷ The summer learning loss, or the summer slide, is based on research done on standardised test scores in the US and looks at the estimated learning gains at the end of the school year and compares those gains to students' levels in reading and math after two (or more) months of being out of the classroom. The research shows that for the two months without schooling, there is a loss of roughly one month of learning, with noticeably worse performance in mathematics than in reading.118

The term "COVID slide" has been coined as a similar effect is anticipated as a result of the extended school closures and the deficiencies in remote learning, or, as has also happened in some cases, the complete cessation of schooling during the period. Other analysis uses the term "unfinished learning" to capture the reality that students did not have the opportunity to complete all the learning they would have completed in a typical year. Apart from those students who disengaged from school altogether and who may have may have lost knowledge or skills they once had, the majority of students would have learned less than they would have in a typical year. ¹¹⁹

In some instances, the loss is related to

the reduction in learning time, and the subsequent decrease or deceleration in teaching and learning of new content. It has been estimated that some students will be performing at an entire grade below their normal level as a result of the pandemic-induced deceleration and disruption in learning.¹²⁰ The COVID slide is likely to be worse for students from rural and poor socioeconomic backgrounds with lower levels of access to and engagement with remote learning.¹²¹ It is thus generally accepted that there have been learning losses due to COVID-19 in Jamaica.

The most widely used gauge to measure learning loss is a diagnostic tool, usually tests comparing student baseline performance with students' level after the interruption. Efforts to measure learning loss in Jamaica were attempted in the form of a multiple-choice assessment developed by the MOEYI to be completed by students in primary and secondary schools. This tool was intended to assess students' grasp of material that should have been covered in the 2019/2020 academic year.¹²²

However, the utility of the diagnostic assessments done by students at the start of the new school year (2020-2021) was affected by the unavailability of a pre-COVID-19 benchmark assessment against which to compare the results, and the unevenness in distribution given the different access to doing the tests across different schools and populations of students. Teachers reported a lack of differentiated modalities for undertaking the assessment for students of varying needs (including students with hearing, sight, or reading challenges, children whose learning style is auditory as compared to visual, etc). The decision to use a standardised tool limited the potential of the assessment to take into account different learning styles and abilities, and further limited the capacity to diagnose issues and propose individualised recommendations for students. Some teachers in focus groups explained that due to the format of the diagnostic assessment, it was impossible to diagnose learning challenges, and distinguish those from a lack of preparation for the multiplechoice exam to explain low performance.

Nevertheless, the MOEYI concluded from its diagnostic assessment that there were "gaps across all levels," an indication that students were performing below their expected level.¹²³ Poor performance was recorded in all areas of the diagnostic assessment, with a marginally stronger performance being recorded in Language Arts across all levels, and extremely weak performance being recorded in Mathematics. This is also consistent with research on the summer learning loss, and performance by Caribbean students

122 Jamaica Information Service, "Get the Facts – Coronavirus and the New Academic Year," October 2, 2020, https://jis.gov.jm/information/get-the-facts/get-the-facts-coronavirus-and-the-new-academic-year/.

123 Hon. Fayval Williams, Minister of Education, Youth and Information, Statement to Parliament, December 8, 2020.

^{116 &}quot;Learning Loss," Education Reform Glossary, last updated August 29, 2013, www.edglossary.org/learning-loss/.

¹¹⁷ Megan Kuhfeld, "Summer Learning Loss: What We Know and What We're Learning,"

NWEA, July 16, 2018, www.nwea.org/blog/2018/summer-learning-loss-what-we-know-what-were-learning/.

¹¹⁸ Megan Kuhfeld and Beth Tarasawa, "The COVID-19 Slide: What Summer Learning Loss Can Tell Us About the Potential Impact of School Closures on Student Academic Achievement," April 2020,

www.nwea.org/research/publication/the-covid-19-slide-what-summer-learning-loss-can-tell-us-about-the-potential-impact-of-school-closures-on-student-academic-achievement/.

^{119 &}quot;COVID-19 and Education: The Lingering Effects of Unfinished Learning."

¹²⁰ Kuhfeld and Tarasawa, "The COVID-19 Slide."

¹²¹ Doug Irving, "The COVID Slide: How to Help Students Recover Learning Losses," Rand Review, July 9, 2020, www.rand.org/blog/rand-review/2020/07/the-covidslide-how-to-help-students-recover-learning.html; Dian Schaffhauser, "Research: Coronavirus Learning Loss Could Put Some Students Behind a Full Year," The Journal, April 21, 2020, https://thejournal.com/articles/2020/04/21/research-coronavirus-learning-loss-could-put-some-students-behind-a-full-year.aspx.

in exams when a hurricane has passed, which show greater losses in STEM areas.¹²⁴

Where assessment might provide a means to measure learning loss, in 2020, all public schools were directed to cancel end of term and other assessments, so there was nothing to measure there. While individual schools may have done internal analyses using other data, there has been no publicly released data comparing student or school performance in 2020 to previous years. A comparison of results of national and regional standardised examinations might also have been useful in assessing the extent of the impact of the pandemic on students and student performance. COVID-19 however became a concern to Jamaica immediately prior to the highest weighted primary level exit exams, and just months before the regional secondary exit exams.

The 2020 and 2021 PEP exam results, sat by grade 6 students in public and private primary schools, could be used to measure learning loss. These primary level exams were reduced for both academic years. In both 2020 and 2021, only one component, the Ability Test, was sat, as opposed to four components in 2019, the first sitting of PEP. In 2020 the Ability Test had been done in February, a few weeks before schools were closed. The results of the 2021 test indicate a dip in student performance, with a mean score of 52 percent recorded for the 2021 academic year, compared to 60 percent for the 2020 sitting. The MOEYI, however concluded that the 2021 distribution of scores was "normal," and showed that "students were performing at expected levels."¹²⁵

Summer schools were initially mandated at the end of the 2020/2021 academic year for those students who were deemed to have suffered learning gaps, or who were absent from remote or other learning for extended periods of time because of the pandemic. This decision was later reversed. following disagreements from teachers.126 Data on the impact of those remedial programmes (that were held) is not yet available. The decision taken at the end of the 2019-2020 school year, to promote all students to the next grade and allow teachers to follow the National Standards Curriculum (NSC) as normal, may have caused some students to fall even further behind, though the extent to which this occurred is unknowable.

students Many and teachers reported difficulties transitioning into the new term September 2020, as a result of the gaps in learning from the previous academic year. Most teachers participating in focus groups expressed that students were not performing at the level expected of them in the new grade, with students also sharing that they found it hard to begin a new school year and new syllabus without having completed or retained what should have been learnt during the previous year.

What the limited available data does point to is that all students were disadvantaged by the pandemic, and we can assume that there were learning losses. We do not have the data to determine the specific areas in which different groups of students need remedial help, thus targeted remedies would be difficult to apply with any precision.

5.3 Assessments

The shifts in pedagogy, teaching modalities, and the structure of the learning process were accompanied by shifts in forms of assessments done. Assessments are vital to the learning process. Learning outcomes should be measured, and assessments are used as an indicator of the level of progress that has been made by students, whether in comparison to a prior assessment or in comparison to the start of the academic year. Assessments act as a measure of the quality of education being delivered by schools and can be considered appraisals of teacher performance as much as they are of student performance. They also serve to reinforce content that was taught and learnt. Lastly, assessments allow teachers and parents to indicate and potentially pull out for intervention advanced students and those with learning challenges or disabilities.127 Especially in the period of COVID-19 and extended distance learning, the need for formative and summative assessments has been reaffirmed.128

The MOEYI indicated that under normal circumstances, assessments are used to determine which "pathways" students are placed on within high schools (Pathways I-III, with the strongest students placed

¹²⁴ Kuhfeld and Tarasawa, "The COVID-19 Slide."

¹²⁵ Hon. Fayval Williams, Minister of Education, Youth and Information, Press Conference to Announce PEP Results, July 16, 2021, www.youtube.com/watch?v=hdE3ifXX8WE&t=1334s.

^{126 &}quot;Teachers firm against summer schools; No need for PEP students to attend," *Observer*, July 1, 2021, https://www.jamaicaobserver.com/news/teachers-firm-against-summer-schools-no-need-for-pep-students-to-attend_224982.

¹²⁷ Laura Jimenez, "Student Assessment During COVID-19," Center for American Progress, September 10, 2020, www.americanprogress.org/issues/education-k-12/ reports/2020/09/10/490209/student-assessment-covid-19/.

on Pathway I). From there, students are to be assigned a Pathway Coach where necessary, and an Individual Intervention Plan is to be prepared for each student on Pathway III to create additional support for students falling behind of the cohort.¹²⁹ As a result of the pandemic, however, most summative assessments scheduled for the 2019/2020 academic year were cancelled, and schools relied heavily on formative assessments where possible determine student achievement to levels. Without these assessments and the assignment of students to pathways and pathway coaches, COVID-19 stands to intensify learning gaps among the student population.

For the Caribbean Secondary Education Certificate (CSEC), and the Caribbean Advanced Proficiency Examination (CAPE), the principal exit exams/ assessments for Jamaican secondary school students, the examinations were postponed, a modified approach was employed, School-Based Assessment (SBA) grades were moderated, and the grading model adjusted. There has been dissatisfaction with the results issued, primarily by the region's elite high schools, with schools and parents contesting the grading and subsequent review process.130

The integrity of remotelyconducted assessments was disputed. Some teachers attempted to send assessments via WhatsApp and email or use platforms such as Google forms or other online software to distribute tests to students, but expressed doubts and concerns that students were completing assessments independently, if at all.¹³¹ Both teachers and students acknowledged Students who attend school regularly tend to perform better academically than students who are chronically absent, and students who have poor academic performance have a higher rate of school absence.

the many ways in which students could seek (and sought) external assistance (i.e. consulting with other persons in the household, digital sources on the computer or the internet, school books, or other content), while completing tests online and registering higher than normal scores. In justifying his decision to use external assistance to complete tests online, one student in a focus group said, "[We were] basically too lazy to study so we use Google. We study yes but use Google to make sure it's correct."132 Thus, the validity of the assessments and grades allocated based on virtual/remote/ online tests and exams is called into question. The larger implication of this is teachers' inability to identify weaknesses of students, especially those preparing for external regional exams. Teachers are also required to submit estimated grades for students to the regional examining body, CXC, ahead of exams, a requirement which is compromised when there is no true reflection of students' aptitude.

Schools and teachers implemented various strategies in attempting to mitigate

against these factors compromising student assessments. Some teachers in focus groups indicated that timers for online tests were used to limit the time students would have to consult with external help, and that questions requiring application of content, rather than assessing content alone were also used; assuming that these would be more challenging for students, and less open to outside input. In other schools, students at some levels were required to attend schools physically to sit tests, such as mock exams for students in grades 11 to 13, thereby eliminating the risk of the students cheating on assessments.

5.4 Attendance and Engagement

School attendance has been referred to as "the best public policy tool available to raise skills."¹³³ Students who attend school regularly tend to perform better academically than students who are chronically absent, and students who have poor academic performance have

¹²⁹ Grace McLean, Presentation to PAAC + other source on Pathways / APSE.

^{130 &}quot;Petitions of protest over CXC results," Gleaner, September 25, 2020, https://jamaica-gleaner.com/article/lead-stories/20200925/petitions-protest-over-cxc-results.

¹³¹ Teacher focus groups.

¹³² Student focus group.

¹³³ Simon Burgess and Hans Henrik Sievertsen, "Schools, Skills, and Learning: The Impact of COVID-19 on Education," VoxEU/CEPR, April 1, 2020, https://voxeu.org/ article/impact-covid-19-education.

a higher rate of school absence.¹³⁴ The evidence also supports a correlation between absenteeism and dropping out of school. Long term absences imply more than loss of potential learning time; students miss valuable social time, time engaging in physical activity, as well as continuous assessments that students would normally be subject to throughout the school year.¹³⁵

Attendance is difficult to consistently measure in the context of remote learning, particularly as it has occurred in Jamaica in this pandemic. First there are multiple modes of remote learning, ranging from physically delivering learning materials to students, to synchronous online teaching. These multiple modes not only exist among different schools, but also may be occurring simultaneously in one school. It is difficult to measure attendance when, in some cases, attendance comprises signing in or logging on to online classes or the virtual platform, and in other cases instruction is being delivered by a weekly packet of readings, assignments, and assessments.

Overall, the level of attendance reported since the closure of schools was low, with gradual improvements, as device and internet access gaps were addressed, and as teachers and school administrators became more comfortable with virtual learning platforms.¹³⁶ Some teachers expressed dismal attendance rates of 10-50 percent in cases.¹³⁷ A high school student said that for the sole virtual class that he had immediately after schools closed, he was the only attendee, and the teacher,



frustrated with the meagre attendance level, eventually cancelled live classes and resorted to distributing work to students who would complete it.¹³⁸ While 90 percent and 83 percent of students at the primary and secondary levels respectively indicated having had some communication with teachers since school closures, the quality, duration, and structure of teaching and learning, at least for the first few months of the pandemic, fell more within the category of emergency response teaching.¹³⁹

Attendance is related to engagement. Engagement is typically understood as the number of contact hours between teacher and student, being the time spent in supervised curricular and extracurricular activities. Five contact hours per day is the standard requirement under the 1980 Education Regulations. Depending on the grade level, students could have anticipated, prior to the pandemic, between five and six hours of continuous teaching and learning from schools while face-to-face schooling was in session. The pandemic brought about a reduction in contact hours. According to MOEYI data, during the last semester of the 2019/2020 academic year, 50 percent of schools offered three hours of learning, or the equivalent of three classes per day to students, and another 32 percent delivered one hour of teaching.¹⁴⁰

5.5 Engagement vis-àvis Participation

Emergency remote teaching measures, while they ostensibly mitigate against losses in learning of content and some skills, do not effectively substitute for traditional face-to-face learning, student particularly as regards engagement with the curriculum content, concepts, and learning objectives. This is best reflected in the acknowledgement that attendance is just one component of engagement, and refers to the act of being physically present, or showing up to class. When a student logs on to an online class and is marked as present, if the student is not actually paying attention, or is doing something else, then that attendance is moot. Another approach to engagement considers "the extent to which students identify with and value schooling outcomes, and participate in academic and non-academic school activities." It goes beyond attendance records, and takes on a psychological and behavioural component, and implies

137 Teacher focus group.

139 Ozge Misirli and Funda Ergulec. "Emergency Remote Teaching During the COVID-19 Pandemic: Parents' Experiences and Perspectives," *Education and Information Technologies*, March 2021.

140 Hon. Karl Samuda, Minister of Education, Youth and Information, Sectoral Presentation, July 28, 2020.

¹³⁴ Robert Balfanz and Vaughan Byrnes, "The Importance of Being in School," Johns Hopkins University School of Education, May 2012, https://new.every1graduates. org/wp-content/uploads/2012/05/FINALChronicAbsenteeismReport_May16.pdf.

¹³⁵ Ricarda Steinmayr and Birgit Spinath, "The Importance of Motivation as a Predictor of School Achievement," *Learning and Individual Differences* 19, no. 1 (March 2009): 80-90, DOI: 10.1016/j.lindif.2008.05.004.

¹³⁶ Ministry of Education, Youth and Information. Learning Management Data.

¹³⁸ Student focus group.

a student's active participation in the learning process. Actions such as asking and responding to questions, and taking part in class and extra-curricular activities are cues that suggest that a student is actively engaged in the learning process.¹⁴¹ Students who are not engaged are considered to be disaffected or alienated.

Even where schools distributed work kits and tablets, and teachers took special efforts to hold students' attention, teachers considered that not all students took the transition seriously, and so did not reciprocate the desired and expected interest. Many teachers reported that they were unable to establish and maintain a connection with students in the online learning environment. They had difficulty maintaining discipline, focus, and participation in virtual classes. This was due to multiple reasons, including the absence of non-verbal communication in remote classes, students with cameras off in online classes, disinterest from students, distractions at home students' affecting focus. poor internet connection, and incompatible devices for both teachers and learners. As class sizes increased, controlling the quality of the learning environment became increasingly constrained.142

Older students at both the primary and secondary levels were observed to be more engaged than those at lower grade levels. According to one high school teacher, I think one of the challenges I faced was participation, especially with the sixth form students. So even though as teaching, when it was time to question, I felt like I was hearing crickets, I felt like pulling teeth, getting them to have two-way communication. So, they're just there and at times I feel like I'm just talking to myself.

Another teacher, visibly frustrated shared,

At one point I had stopped teaching because I didn't have anybody and I had to tell my principal that for the past week I'm sending work, nobody is responding, so I had to stop. I'm having that same challenge now with about seven students each day, giving me work or coming in... two most of

141 R.A. Thayer-Smith, "Student Attendance and its Relationship to Achievement and Student Engagement in Primary Classrooms," Ed.D. dissertation, College of William &Mary, 2007, https://scholarworks.wm.edu/etd/1539618718/.

142 Teacher focus groups.

Many teachers reported that they were unable to establish and maintain a connection with students in the online learning environment.

Research has shown that webbased e-learning systems bring about technophobia and computer anxiety for teachers, though they do promote internet self-efficacy. the time coming in online. But when I send the work on WhatsApp I'll get about seven or eight.

Students also reported challenges in engaging remotely. Just over 43 percent of students in one survey reported having difficulties focusing; students across all focus groups also reported challenges staying focused since the switch to remote learning.143 Students in focus groups shared that students slept while online, were distracted by smartphones, were unable focus in class. did not to complete assignments, and disrupted teaching activities. Some students added that they found difficulty taking notes from classes online, and felt that for some areas, they needed to be guided and walked through the lessons, which was more difficult in online learning. Even in larger, more developed countries, research has shown where some students received little to no instruction during school closures, and that despite higher internet and device penetration, students spent significantly less time learning and more time with "passive activities" as compared to before the pandemic.144 A study on the 2003 SARS outbreak in Hong Kong quoted a student on their learning experience:

Teaching's a two-way thing. Without students' immediate responses, it's like talking to yourself! ...and eventually when students did respond to my calls, it was always the



*same small group. The majority were silent lurkers or absent!*145

Several students in focus groups shared that their teachers expressed their frustration and disappointment with students in and out of class.

Such observations of student (dis) engagement prompted some teachers and schools to find creative measures to address issues such as pandemic fatigue, laziness, lethargy, and boredom in classes. These measures included "no screen day", frequent breaks, physical exercises, appropriate games, and inviting guidance counsellors to attend and intervene in classes, especially in cases where overall student attendance to guidance or similar classes was low.

5.6 Teacher Burnout

Teachers have also been affected by the closure of schools and the switch to remote teaching. The quality of teacher satisfaction and well-being has implications for their students,146 the teachers as individuals, and for the overall morale of teachers who are faced with having to adapt to emergency remote teaching. Teachers were expected to learn and implement new teaching modalities, new methods and standards for planning lessons, managing classrooms virtually, and conducting assessments, all while grappling with new technology and software, in a short space of time. Research has shown that web-based e-learning systems bring about technophobia and computer anxiety for teachers, though they do promote internet self-efficacy.147 Teachers who did not have access to the internet or a comfortable working environment at home would have opted to teach from schools;¹⁴⁸ data from the Ministry of Education shows that 14,000 teachers taught classes from home while another 4,000 taught from schools.149

Additional remote-teaching related responsibilities were added to some teachers' roles. Schools were required by the MOEYI to select teachers to serve as Information Communication Technology Resource Teachers, and school IT Lab Technicians and System Administrators to support the needs of students and teachers as schools transitioned to new

143 CAPRI, "Insult to Injury."

147 Hong-Ren Chen and Hsiao-Fen Tseng, "Factors That Influence Acceptance of Web-based E-learning Systems for the In-service Education of Junior High School Teachers in Taiwan," *Evaluation and Program Planning* 35, no. 3 (August 2012): 398-406, doi:10.1016/j.evalprogplan.2011.11.007.

148 MOEYI Senior Official, interview.

149 Hon. Fayval Williams, Minister of Education, Youth and Information, press conference, October 28, 2020.

¹⁴⁴ Passive activities refer to the time spent doing non-school related activities, including time spent with TV, computer games, and mobile phones; Eric Hanushek and Ludger Woessmann, "The Economic Impacts of Learning Losses," OECD, September 2020, www.oecd.org/education/The-economic-impacts-of-coronavirus-covid-19-learning-losses.pdf.

¹⁴⁵ Robert Fox, "SARS Epidemic: Teachers' Experiences using ICTs," In "Beyond the Comfort Zone: Proceedings of the 21st ASCILITE Conference," 319-327, Australasian Society for Computers in Learning in Tertiary Education, 2004.

¹⁴⁶ Jantine L. Split, Helma M. Koomen and Jochem T. Thijs, "Teacher Wellbeing: The Importance of Teacher–Student Relationships," *Educational Psychology Review* 23, no. 4 (July 2011): 457-477; Guy Roth et al, "Autonomous Motivation for Teaching: How Self-determined Teaching May Lead to Self-determined Learning," *Journal of Educational Psychology* 99, no. 4 (2007): 761–774, https://psycnet.apa.org/doi/10.1037/0022-0663.99.4.761.

learning management systems. This created more work for those teachers who were already themselves under pressure to keep up with the new structure of teaching and learning.¹⁵⁰

Expectations of teachers changed. Working hours, for instance, extended from the prior 8am to 3pm to an erratic and often longer-hours (than prepandemic) work schedule for teachers. Across all focus groups, teachers expressed frustration with the barrage of phone calls and other correspondences from parents, students, and school leaders during odd hours and on weekends. In response, some teachers established boundaries, such as purchasing new phones to be used exclusively for work, and establishing set hours to turn the phone on and off. One principal indicated that a consensus was agreed among her teachers to discontinue all posting (i.e. uploading content to education platforms) at 5pm each day. These boundaries were often unfavourably viewed by parents.

Several teachers reported being overwhelmed, exasperated, and mentally drained.¹⁵¹ They remarked on mounting stress from additional responsibilities, anxiety brought on by the pandemic, uncertainty regarding effectiveness of their remote instruction, and fear for their students' safety, especially those who they had not been able to reach.¹⁵²



One teacher reported having to play close to two hundred WhatsApp voice notes as he attempted to explain a concept to students in a group chat and address students' questions seeking clarity. Other teachers expressed frustration with the management of virtual classrooms, including challenges with student discipline, parent interference, indecent exposure, and sub-optimal audio quality. Many teachers are also parents, and so they encountered challenges managing their own children's remote schooling, at the same time as they were required to be providing education for their students.

5.7 Screen Time and Physical Activity

There are several negative outcomes of too much time spent on screens or devices. School at home coupled with online learning has led to increases in the amount of time that children spend on screens. A survey conducted just three months into the pandemic (June 2020) showed that the number of hours spent by students looking at a screen (whether mobile device or computer) had more than doubled from an average of 3.1 hours daily to an average of 6.8 hours daily.¹⁵³ Parents report their children spending "all day" on screens, morning until afternoon in class, and afternoon into evening playing games and chatting online as they have nothing else to do, and a sense of guilt helplessness as they feel incapable of adequately monitoring and managing this.154

The increase in screen time has been documented to cause eye-related health issues such as dry eyes, blurred vision, headaches, and myopia among students and teachers who now spend most of their day looking at a screen.¹⁵⁵ Aside from the intrinsic health risks and damage, the knock-on effects may have further impacts on teachers' and students' capacity to optimally participate in teaching and learning, as well as students'

153 CAPRI and UNICEF, "Effect of the COVID-19 Pandemic on Jamaican Children."

155 Ashley Roberts, "Caring for Your Kids' Eyes: How Screen Time & Virtual Learning Are Taking a Toll," Johns Hopkins All Children Hospital, August 19, 2020, www. hopkinsallchildrens.org/ACH-News/General-News/Caring-for-Your-Kids-Eyes-How-Screen-Time-Virt; WHO, "Public Health Implications of Excessive Use of the Internet, Computers and Smartphones and Similar Electronic Devices," Geneva, Switzerland: World Health Organization, 2014.

¹⁵⁰ MOEYI Bulletin 48, 2020.

¹⁵¹ Teachers in focus groups spoke of the mental health challenges that they had experienced since the start of the pandemic; "We Were not Trained for This' - Inequity Bedevils Online Classes as Teachers Battle Assessment and Matriculation Concerns as Low Turnout Marks First Week," *Gleaner*, October 11, 2020, https://jamaicagleaner.com/article/lead-stories/20201011/we-were-not-trained-inequity-bedevils-online-classes-teachers-battle.

¹⁵² Teacher focus groups.

¹⁵⁴ This is documented in several local periodicals, with parents bemoaning their lack of preparation for supporting their child's school at home needs; their challenges constantly monitoring children while using devices and the internet; and learning to manipulate new software that their children were required to use. Steve Annear. *Boston Globe*, ⁶⁰The Kids Will Be All Right': As Screen Time Rules Relax, Parents Shouldn't Feel Too Guilty." April 15, 2020, www.bostonglobe.com/2020/04/15/nation/ kids-will-be-alright-screen-time-rules-relax-parents-shouldn-tfeel-too-guilty/; "Youth Officer Advises Students How to Pivot in Online School," *Observer*, October 25, 2020, www.jamaicaobserver.com/news/youth-officer-advises-students-how-to-pivot-in-online-school_206159; "School Porn - Teachers Jolted as Students Bend Lewd Photos; Online Classes Tear Down Authority Roles," *Gleaner*, May 17, 2020, https://jamaica-gleaner.com/article/lead-stories/20200506/school-porn-teachers-jolted-students-send-lewd-photos-online-classes; "Poor Parenting Contributing to Low Online Schooling Attendance," *Gleaner*, July 17, 2021, https://jamaica-gleaner.com/article/leat-stories/20210717/poor-parenting-contributing-low-online-schooling-attendance.

ability to socialise beyond the screen.156

More time online means greater risk of exposure to inappropriate online content, increased possibility of falling victim to online predators, and cyber-bullying. This in a context where monitoring of the content consumed by students during remote learning was not a priority in some homes, with 12 percent of one survey's respondents indicating that they either seldom or never supervised their children's use of the devices.¹⁵⁷ Teachers expressed frustration about students sharing inappropriate content during online classes, or sending inappropriate content in submitting class assignments. Some teachers also reported embarrassing incidents of students sharing lewd photos with them via WhatsApp or other platforms, further lamenting the limited parental supervision provided to students while using devices and engaging in student learning.¹⁵⁸ Further to this is the lack of guidance for some students in online class etiquette.

School at home means that some children are eating more. Many children are consuming excessive empty calories while attending online school from home where their eating is unstructured and they oftentimes have unrestricted access to food. This can and has already been observed to lead to overconsumption of foods high in salt, sugar, and fat. These behaviours will likely worsen the childhood overweight and obesity crisis,



as has been observed anecdotally, and in previous research.¹⁵⁹ Since the pandemic, more children and young people are presenting with overweight and obesity, and have been diagnosed with type 2 diabetes, hypertension, musculoskeletal issues, and other endocrine conditions.¹⁶⁰

School at home also meant decreases in physical movement, especially the regular moving about the classroom and school premises during the school day, and physical education classes.

Physical movement was also reduced as the pandemic brought about a cessation of almost all recreational and competitive sports, whether school-based or extracurricular.

Longer screen times have been shown to have impacts on mental health, including diagnoses of depression and anxiety in children and young adults.¹⁶¹ Other observations related to increased screen time in children include: higher distractibility or reduced focus, less emotional stability, and generally low psychological well-being, all of which were also corroborated by key informant interviews and focus group discussions conducted throughout this research.¹⁶²

Some government and individual schools stated that they ensure that students do eye exercises, take frequent breaks from electronic devices, or put limits on screen usage, and do physical exercise to compensate for the overly sedentary conditions of online learning.¹⁶³ The extent to which they actually do these activities, much less do them consistently, is undetermined, and there was no indication that any such evaluation of these activities was done. When schools reopened (the two short-lived episodes), no policy was announced regarding safe

¹⁵⁶ Chee Wai Wong, et al., "Digital Screen Time During the COVID-19 Pandemic: Risk for a Further Myopia Boom?," *American Journal Ophthalmology* 223 (March 2021): 333-337, https://dx.doi.org/10.1016%2Fj.ajo.2020.07.034.

¹⁵⁷ CAPRI and UNICEF. "Impact of the COVID-19 Pandemic on Children."

^{158 &}quot;School Porn - Teachers Jolted as Students Send Lewd Photos; Online Classes Tear Down Authority Roles," *Gleaner*, May 17, 2020, https://jamaica-gleaner.com/article/lead-stories/20200506/school-porn-teachers-jolted-students-send-lewd-photos-online-classes.

¹⁵⁹ Sonia Chaabane, Sathyanarayanan Doraiswamy, Karima Chaabna, Ravinder Mamtani, and Sohaila Cheema, "The Impact of COVID-19 School Closure on Child and Adolescent Health: A Rapid Systematic Review," *Children* 8, no. 5 (2021): 415.

¹⁶⁰ Healthy Caribbean Coalition, "We Need to Act Now."

¹⁶¹ Jean M. Twenge and W. Keith Campbell, "Associations between Screen Time and Lower Psychological Well-being Among Children and Adolescents: Evidence from a Population-based Study," *Preventive Medicine Reports* 12 (2018): 271-283.

¹⁶² Twenge and Campbell, "Associations between Screen Time and Lower Psychological Well-being."

¹⁶³ Wai Wong, et al., "Digital Screen Time." Some Jamaican schools have continued to engage students in classes such as Physical Education and Music to break from the excessive screen usage. (Urban teacher focus group).

Without the physical safeguard that school provides, generally the environment that a child is in is more accessible to predators, particularly where the latter are already in the child's household.

resumption of extra-curricular activities, as the public entity responsible for sports itself also struggled to create guidelines.¹⁶⁴

5.8 Mental Health and Social and Emotional Development

The closure of schools has been followed by a rise in mental health issues such as anxiety, depression, tic disorders, disrupted sleeping, and disordered eating behaviours heralding potential eating disorders among children and young people.¹⁶⁵ The suspension of face-to-face classes removed the social component of the teaching and learning process. Students will also have missed out on learning the social skills, behaviours, and mindsets to function in society, and to succeed once they leave school and enter adulthood.¹⁶⁶ Several teachers participating in focus groups also noted how the lack of socialisation within the online learning space affected levels of motivation, inter-class competition, and focus among students. One primary level teacher who participated in one of the focus groups remarked:

Socialisation is a big part of their learning. And then what we've been finding is that they're saying: Miss my eye is hurting me. Even though we don't go more than half day. They're struggling to keep focusing online. The children are struggling, the young ones who must socialise to learn, they are struggling.¹⁶⁷

Local and international research has shown how school closures are linked to new diagnoses or exacerbation of pre-existing mental health disorders in children and young adults. Mental health challenges affecting children following school closures tend to manifest in child stress, hyperactivity, indiscipline, sadness, loneliness, frustration, and anxiety.168 Limiting students' access to resources such as guidance and peer counselling, or other services that are best suited to face-to-face delivery, compromised daily routines and regular coping mechanisms, causing several students to undergo mental, psychological, and/or psychic crises, or adopt negative strategies, like overeating.¹⁶⁹ In Jamaica, as mental health services and facilities were limited even prior to the pandemic, challenges were only worsened, and hardly alleviated by the efforts of public bodies and locallybased international organisations to increase the availability of requisite resources.170

5.9 Violence against Children

The closure of schools and children at home is correlated with increased child abuse. "For Jamaica's poorest children,

¹⁶⁴ Hon. Fayval Williams, Minister of Education, Youth and Information, statement to Parliament, December 8, 2020.

¹⁶⁵ Healthy Caribbean Coalition, "We Need to Act Now."

^{166 &}quot;COVID-19 and Education: The Lingering Effects of Unfinished Learning."

¹⁶⁷ Students in a focus group, however, initially disagreed with this notion, asserting that their classmates distracted them in face-to-face classes, later conceding that interactions among teachers and students made face to face classes more fun, a contrast to "boring" online classes.

¹⁶⁸ Chaabane et al "The Impact of COVID-19 School Closure on Child and Adolescent Health."

¹⁶⁹ Joyce Lee, "Mental Health Effects of School Closures During COVID-19," The Lancet Child & Adolescent Health 4, no. 6 (2020): 421; UNICEF/ CAPRI, "Impact of Covid-19 on Children."



schools are oases of solace from chaotic lives teeming with abuse, disenchantment, and need. It's much more than academics."171 As household tensions rise with the economic and other stresses brought on by pandemic-related job loss the propensity for violence increases. School serves as a primary shelter for boys and girls in several respects: for children experiencing domestic violence, whether physical or verbal/emotional/ psychological abuse, school is a safe and protective space. Children suffering from abuse have access to reporting, counselling, comfort, and other forms of help when they are in school. Without the physical safeguard that school provides, generally the environment that a child is in is more accessible to predators, particularly where the latter are already in the child's household. Only if the mother or a truly trustworthy relative or friend is at home are young children protected.

There are indications that fears of increased abuse due to school closures have been borne out. One study found that, because of the pandemic, "violence in some forms of domestic abuse has increased, and children have been its major victims. Violent discipline of children overall has increased, in that more families are using it, especially the psychological demeaning and intimidation of children through shouting and name-calling."172 Although the increase has not been as high in violent physical discipline or beating, it has increased, and in some instances has become more regular and harsher.¹⁷³ While preliminary reports of child abuse to Jamaica's National Children's Registry in March 2020 fell by 28 percent compared to the previous month (March 13 being the date that schools across the island were closed),¹⁷⁴ some experts suggest that this may be because the detection of abuse and neglect by teachers or friends has been weakened given that the children are not at school to be directly observed.

There are other instances where children's wellbeing and their prospects are threatened by pandemic-related school closures, which warrant more attention and are thus treated in their own sections.

5.10 Gender Considerations

Unplanned school closures and the transition to remote learning have affected girls' and boys' education differently. While at home, girls are more likely to be given increased unpaid care work, in the form of looking after younger siblings in the household, and other domestic chores, which limit the time available for remote learning and schoolwork.¹⁷⁵

¹⁷¹ Robinson, "We Were Not Trained for This." -

¹⁷² Verbal abuse of children can affect brain development and have harmful, lasting effects on emotional functioning. Children who are maltreated can develop attachment difficulties, including poor emotional regulation, lack of trust and fear of getting close to other people. They can also form negative self-images, lack self-worth, and suffer feelings of incompetence, all of which can be retained into adulthood. Abuse, including verbal abuse, is correlated with poor educational attainment and the development of health-damaging behaviours, increasing risk factors for poor mental well-being in adulthood, poor health, low employment, and social deprivation. These effects can contribute to cycles of adversity and poor mental well-being whereby individuals that grew up in adverse conditions are less able to provide optimum childhood environments for their own offspring. K. Hughes et al., "Relationships Between Adverse Childhood Experiences and Adult Mental Well-being: Results from an English National Household Survey," BMC Public Health 16, 222 (2016), https://doi.org/10.1186/s12889-016-2906-3; CAPRI, "Stress Test."

¹⁷³ CAPRI, "Stress Test."

¹⁷⁴ Ytske Van Winden, "Violence Against Children in Emergencies and Pandemics," May 17, 2020, conference, UWI, Mona.

¹⁷⁵ UNESCO, "UNESCO Covid-19 Education Response: Education Sector Issue Notes. Issue Note no. 3.1. Addressing the gender dimensions of school closures," May 2020.

There is a digital gender gap which favours boys, and has been widening. The concern here is that this digital gender gap leaves girls at a disadvantage, when remote/online teaching and learning are more suited to students who show higher levels of digital literacy and are more technologically savvy.¹⁷⁶ However, teachers' observations are that girls continue to outperform boys in the new remote/online learning situation, even with this purported gap, which they say, is as a result of the differences in learning styles between boys and girls.¹⁷⁷

Gender differences in education existed pre-COVID-19. For example, attendance rates and test scores are different for boys and girls in Jamaica. At the primary level, boys account for 51 percent of the student population; their attendance rate is marginally lower than girls' (82 percent boys and 84 percent girls).¹⁷⁸ Girls outperform boys in national assessments, as well as in some CSEC subject areas, where they typically make up nearly 60 percent of CSEC candidates.¹⁷⁹ In 2020, for example, of the candidates entered to sit CSEC exams, 18,595 (56 percent) were girls and 14,544 (44 percent) boys.¹⁸⁰ However, the CSEC entry passes were 78 percent and 75 percent for girls and boys respectively, which is an improvement on previous years, suggesting that boys are steadily bridging the CSEC performance gap, coming from a difference of 7 percent in 2017, to 3 percent in the last sitting in 2020.¹⁸¹ The extent to which this is COVID-19 related is, however, undeterminable.

There are other, more specific genderrelated concerns about school closures. In poor and vulnerable communities school can rescue boys from gang recruitment and protect girls from early pregnancy.¹⁸²

5.11 Teenage Girls

School shelters girls from sexual predation.¹⁸³ From the outset of the pandemic, it was expected that school closure could lead to a less safe environment for girls, which would in turn lead to more unplanned pregnancies, unsafe abortions, and increased HIV/

AIDS rates: "Outside of the protective environment provided by schools, many girls are more susceptible to adolescent pregnancy and gender-based violence."184 disasters have shown Past that "adolescent girls are disproportionally affected by these emergencies."185 A 65 percent increase in teenage pregnancy was observed in Sierra Leone after the Ebola epidemic.186 A study of violent communities in Jamaica in the pandemic found that sexual abuse of young teenage girls had increased, though the girls themselves and the people in their community did not consider it abuse, as they considered it was consensual, transactional, or both.187

The closure of schools has brought an increased risk of girls getting pregnant, with the accompanying detrimental effects on their education, and on their life prospects. Qualitative data from several sources suggests that, since school stopped, teenage pregnancy has increased.¹⁸⁸ (Data on births to teenagers for 2020-1 is not yet available.)¹⁸⁹ Globally teenage pregnancy is among the leading

178 PIOJ, "ESSJ, 2018"; CAPRI and UNICEF, "Situation Analysis of Jamaican Children."

179 Spencer 2016; "Literacy, Numeracy Results Show Girls Outmastering Boys," Ministry of Education Youth and Information, accessed December 1, 2020, https://moey.gov.jm/literacy-numeracy-results-show-girls-outmastering-boys; 2019 PEP Results, PEP Conference; "Prisms of Possibility."

180 Data from the MOEYI.

- 181 Ministry of Education, Youth & Information, 2020.
- 182 Herbert Gayle, "Social Violence in Montego Bay, St. James: A Preliminary Examination," unpublished study, 2018.
- 183 Gayle, "Social Violence in Montego Bay."
- 184 Dr. Denise Chevannes, HIV/AIDS officer at the United Nations Population Fund Subregional Office for the Caribbean, quoted in Nadine Wilson-Harris, "Teen Pregnancy Warning - Expert Warns That Prolonged School Closure Could Lead to More Adolescent Moms, Unsafe Abortions," *Gleaner*, November 28, 2020, http:// jamaica-gleaner.com/article/lead-stories/20201128/teen-pregnancy-warning-expert-warns-prolonged-school-closure-could.

185 UNICEF, "Technical Note on COVID-19 and Harmful Practices," April 2020.

186 UNESCO, "COVID-19 Education Response," Issue note no. 8.1, April 2020; UNDP, "Assessing the Socio-economic Impacts of Ebola Virus Disease in Guinea, Liberia and Sierra Leone: The Road to Recovery," December 2014.

187 CAPRI, "Stress Test."

188 Focus group conducted for this study; CAPRI, "Locked Down, Locked Out"; CAPRI, "Stress Test."

¹⁷⁶ UNESCO. "UNESCO Covid-19 Education Response: Education Sector Issue Notes. Issue Note N 3.1. "Addressing the Gender Dimensions of School Closures". May 2020; Christopher Clarke, "Socialization and Teacher Expectations of Jamaican Boys in Schools: The Need for a Responsive Teacher Preparation Program," *International Journal of Educational Policy, Research, and Practice: Reconceptualizing Childhood Studies* 5, no. 4 (2005): 3-34.

¹⁷⁷ Focus group with teachers from urban schools, November 22, 2020, Kingston.

¹⁸⁹ This will be updated as soon as the data is available. Note that early reports of a significant pandemic-related spike in teenage pregnancies may be unreliable. For example, a widely reported 40 percent increase in teenage pregnancies in Kenya in the first three months of the country's national lockdown appears not to be borne out by the available data. www.who.int/bulletin/volumes/99/1/21-020121/en/. Also noting that an estimated 10 to 37 percent of all pregnancies are terminated, the number of pregnancies and births recorded in official statistics may not be an accurate reflection of numbers of pregnancies. The estimates for termination of adolescent pregnancies is even higher, at 20 to 50 percent of all teen pregnancies. CAPRI, "Coming to Terms: The Social Costs of Unequal Access to Safe Abortion," Kingston, Jamaica: Caribbean Policy Research Institute, 2021.

From the outset of the pandemic, it was expected that school closure could lead to a less safe environment for girls.

> reasons for girls not completing secondary education. In Jamaica, pregnancy is the highest risk factor for girls to drop out from school.¹⁹⁰ Fifty-one out of every 1000 girls in Jamaica between the ages of 15 and 19 gets pregnant, and teenage pregnancy accounts for 49 percent of female drop outs before grade 11.¹⁹¹ In 2019, 13 percent of all births occurred to mothers under 20 years.¹⁹² Early childbearing can have detrimental effects on girls' educational achievements.

> Educational attainment itself can be a protective factor against adolescent

pregnancy. Studies have found that adolescents with low levels of education or who are not enrolled in school are more likely to become pregnant.¹⁹³ A 2001 study found that 60 percent of the girls who had a baby and did not continue their education had a subsequent pregnancy while still in their adolescence.¹⁹⁴ Many of these girls never continue their education.¹⁹⁵ The majority of adolescent mothers in Jamaica come from the lower socioeconomic brackets. Therefore, dropping out from school as a result of unintended pregnancy can lead to a repeat cycle of teenage pregnancies and further hamper young women's educational achievements and future prospects.¹⁹⁶

The Women's Centre of Jamaica Foundation (WCJF) serves roughly 48 percent of the adolescent mothers in Jamaica and offers a programme facilitating their continued education, counselling, and job training and placement services.¹⁹⁷ Pregnant teens can attend school there, and then return to their original school after the baby is born, without a break in their education. A 2017 study found that nearly seven out

190 Women's Center Jamaica Foundation, "Reintegration Policy," accessed November 9, 2020, https://womenscentreja.com/policy/.

191 World Bank, "Adolescent Fertility Rate (births per 1,000 women ages 15-19) - Jamaica," accessed December 1, 2020, https://data.worldbank.org/indicator/SP.ADO. TFRT?locations=JM.; Hon. Fayval Williams, Minister of Education, Youth and Information, Contribution to the Sectoral Debate, April 28, 2021.

192 Statistical Institute of Jamaica, "Births to Teenage Mothers," health statistics, accessed November 9, 2020, https://statinja.gov.jm/Demo_SocialStats/Health.aspx.

193 CAPRI, "Coming to Terms."

195 Dasmine Kennedy, "Jamaica's Policy for the School Reintegration of School-Age Mothers: How Are We Doing and Where Do We Need to Go?" Center for Universal Education at Brookings. Echidna Global Scholars Program, Policy Brief, November 2017, www.brookings.edu/wp-content/uploads/2017/11/dasmine-kennedy_final_20171101_web.pdf.

196 CAPRI, "Coming to Terms."

197 "Programme for Adolescent Mothers," Women's Centre of Jamaica Foundation, accessed December 1, 2020, https://womenscentreja.com/.

¹⁹⁴ Vonna L. Caleb-Drayton, et al., "The Impact of the Women's Centre of Jamaica Foundation Programme for Adolescent Mothers on Repeat Pregnancies," *The West Indian Medical Journal* 49, no. 4 (January 2001): 316-26.

of ten pregnant teenagers enrolled in the Women's Centre of Jamaica Foundation (WCJF) were predominantly from poor rural and inner-city communities characterized by crime, gang warfare, single-parenthood, and extendedfamily households with low earning capacity and multiple mouths to feed.¹⁹⁸ The exclusion from education further increases their vulnerabilities and puts them at risk of exploitation and repeated teenage pregnancy, thus the Centre serves an important need.

The Centre recorded a 22 percent decline in registration as at October 2020 over the same period for the previous year. That is, there are fewer girls applying to the school programme. Adolescent mothers would normally be recruited through schools and the health care system via clinics and hospitals. Due to the pandemic, the recruitment shifted entirely online, and fewer applications were received. The reduction can be attributed to a number of factors, including challenges with access to internet resources, lack of awareness of the new online modalities, and pandemic-induced disinterest and absenteeism.199 The MOEYI indicated that some such students were identified and referred to the WCFJ upon visits by guidance counsellors to students' homes.200

Pregnant girls already in the programme were affected as were all other students by unavailability of internet, lack of access to devices, distraction and lack of classroom engagement, and home environment not conducive to learning and studying. Student engagement in remote learning was inconsistent: while 79 percent of girls enrolled at the time of the pandemic had access to the internet, and 84 percent had access to a device or a shared device, engagement in the sessions was infrequent for most girls. Girls also faced emotional and social challenges during the period, including anxiety, stress, loneliness, and depression, instances of cyber bullying, relationships issues, phone addictions, and problems focusing, as also reported by other students in the formal education system.²⁰¹

For the Foundation's students who have already given birth, the closure of the on-site day care centre would have meant those students had the added responsibility of caring for their babies themselves, or would have had to solicit other support to care for baby while mother attended classes and studied. Under non-pandemic circumstances, all these factors contribute to the low rate of completion of secondary studies for teenage mothers.²⁰²

Despite these challenges to pregnant teens, WCFJ dropout rates for the 2019/2020 academic year were consistent with previous years, and did not appear to be impacted by COVID-19. Between April to June 2020, 25 students dropped out of the programme (2.4 percent of the student population), compared to 28 students during the period April to June of 2019 (also 2.4 percent of the student population). During the entire academic year 2019/2020, 84 of 1016 students dropped out with the majority of students having left from the Kingston, Savanna-La-Mar, and Port Antonio centres. The dropout rate was 8 percent. In the 2017/2018 118 girls of a total

202 Kennedy, "The Jamaican Reintegration Policy for School-aged Mothers: A Step in the Right Direction?" Education Plus Development, August 8, 2017, www.brookings.edu/blog/education-plus-development/2017/08/08/how-can-jamaica-get-school-aged-mothers-back-in-school/.

Aside from actual learning of the content and material on the school curriculum, i.e. the direct educational impact, the pandemicinduced school closures could inflict educationrelated negative impacts on teenage boys.

¹⁹⁸ Kennedy, "Jamaica's Policy for the School Reintegration."

¹⁹⁹ Women's Centre Foundation of Jamaica (WCFJ), Information Request, October 2020.

²⁰⁰ MOEYI senior official, personal interview, October 28, 2020.

²⁰¹ WCFJ, Information Request.





enrolment of 1198 girls dropped out of the programme, with a dropout rate of 10 percent. In the 2018/2019 academic year, 95 students of a total enrolment of 1,173 girls dropped out, yielding a dropout rate of 8 percent.²⁰³ Of 28 girls registered at the institution to sit the CSEC in June/July 2020, only one student withdrew, whereas in years prior, the institution recorded 100 percent exam attendance for girls who registered for the exam.

In addition to the general disadvantages observed to have impacted almost all Jamaican children in school as a result of pandemic-related school closures, adolescent girls are at particular risk from a specific aspect of school closures: sexual predation and early, unplanned pregnancy. By increasing their exposure to sexual abuse, and amplifying their opportunity and need to engage in transactional sex, school closures have the potential to lead to a higher incidence of teenage pregnancies, which diminish Jamaican girls' prospects for continuing their education, more beneficial labour market participation, upward social mobility, and self-actualization.

5.12 Teenage Boys

Aside from actual learning of the content and material on the school curriculum, i.e. the direct educational impact, the pandemic-induced school closures could inflict education-related negative impacts on teenage boys. The disruption in social institutions such as schools, youth groups, and after school activities has increased the possibility of more boys becoming unattached from positive social institutions, and puts them at greater risk of becoming youths who are not in education, employed, or in training institutions than boys who remain in school.²⁰⁴ As such they are more likely to engage in risky criminogenic behaviour if they drop out of school.205 The closure of schools is observed to have had the effect on boys of their being disengaged from education. This disengagement was manifested in boys reportedly being more easily distracted than girls in the remote/online classroom, perhaps due to the lack of structure and the absence of a teacher monitoring or directly interacting with them. Teachers reported that boys were frequently distracted by the television, games, and other features of mobile devices, while it was easier to get girls to focus on lessons and complete assignments.206

This lack of engagement leaves boys more open to negative influences and to deviance. When the Clarendon police reported an 8 percent increase in sexual assault cases in the period January to April, 2020, they speculated that, in many situations, the assaulter was an adolescent or pre-teen boy who, left unsupervised during lockdown, may have engaged with unhealthy pornographic material, and become influenced to attempt the practices he has observed on young girls within his community.²⁰⁷ The commanding officer for the Westmoreland police revealed that a number of the 40 rapes committed

204 Gayle, "Social Violence in Montego Bay."

206 Teacher focus group.

207 "Authorities Alarmed by 'Decreasing Age' of Sexual Assault Victims in Clarendon, Pre-Teen Boys Among Top Reported Offenders," *Nationwide News*, June 25, 2020, https://nationwideradiojm.com/authoritiesalarmed-by-decreasing-age-of-sexual-assault-victims-in-clarendon-pre-teen-boys-among-top-reportedoffenders/.

²⁰³ Information Request from Women's Centre Foundation of Jamaica. October 2020.; Enrolment includes students who were carried over from the previous academic year and new enrollees.

²⁰⁵ Alva May Graham, Chanday Nelson, and Simone Smith-Parkin, "Preventing Youth Violence: Evidence from the Citizen Security and Justice Programme III Case Management Approach," Ministry of National Security (Jamaica), Department for International Development, Inter-American Development Bank, Global Affairs Canada, 2020.

020, a 29 percent tly perpetrated by the clandestine males spend m

At all levels recorded, **DROPOUT RATES** were **HIGHER FOR MALES** than for females

in Westmoreland in 2020, a 29 percent increase, were apparently perpetrated by school boys: "When you look at who the perpetrators were in a number of those cases, they were young boys, students who are 16 and under who should be in school. Because of COVID-19, it is easy to deduce that a number of these youths were left alone at home while their parents and guardians go to work when they got involved in sexual activities."²⁰⁸

The disconnect from learning also makes boys more likely to drop out of school. Some may seek work, most likely in the informal sector, given the high youth unemployment rates (which have climbed because of the pandemic).²⁰⁹ The more detrimental outcome is their engaging in criminality and/or joining a gang. Among a purposive sample of youth in Montego Bay, almost a half of those who dropped out of school entered

the clandestine world. Out-of-school males spend more time on the streets, and are most likely to form close bonds with organised criminals and/or gang members.²¹⁰ One media report noted that male high school students, in particular, who may or may not have devices but are otherwise demotivated, are standing on corners or, out of personal and family need, looking for whatever work is available.²¹¹ By increasing their exposure to negative influences, expanding their opportunities for deviant behaviour, and amplifying the possibility of dropping out of school, school closures have the potential to diminish Jamaican boys' prospects for further education, more beneficial labour market participation, upward social mobility, and selfactualization.

Qualitative data from a study of violent communities in Jamaica indicated that,

during the period of pandemic-induced school closures, pre-teen and teenage boys who had no device were dropping out of school, forming cliques, carrying knives, smoking, gambling, and getting into fights.²¹² Despite these observations, this supposed disadvantage has not so far been borne out by the available data, as boys' performance in CSEC and CAPE for the June 2020 sitting shows no meaningful difference as compared to previous years. There were however declines in the number of students registering to sit external examinations in June 2021. The MOEYI reported 14,645 students registering to sit the National Council on Technical and Vocational Education and Training (NCTVET) exams in 2021, compared to 16,000 registrants for 2020. A similar decline was observed for the exams administered by the CXC, as students were given

208 Albert Ferguson, "High Schoolers Among Westmoreland Rapists Last Year," *Gleaner*, January 23, 2021, http://jamaica-gleaner.com/article/news/20210123/high-schoolers-among-westmoreland-rapists-last-year.

209 Boys enter the labour market earlier and in larger numbers than girls and are more likely to work outside of their homes. Amina Mendez Acosta and David Evans, "COVID-19 and Girls' Education: What We Know So Far and What We Expect," Center for Global Development, October 2, 2020, www.cgdev.org/blog/covid-19-andgirls-education-what-we-know-so-far-and-what-we-expect-happen.

210 Gayle, "Social Violence in Montego Bay."

211 Shanna Monteith, "Students Skip Classes to Work on St Thomas Highway - Nearly A Fifth of Pupils Missing Since March, Principals Say," *Gleaner*, January 11, 2021, http://jamaica-gleaner.com/article/lead-stories/20210111/students-skip-classes-work-st-thomas-highway-nearly-fifth-pupils.

the opportunity to defer sitting to the following year.

5.13 Financial Hardship and Early Dropout

The higher up one goes in the education system, the larger the number of students who are absent, and who exit the system.²¹³ During the 2018/2019 academic year, public schools recorded dropout rates of 1 percent and 4 percent in the transitions from grades 7 to 8 and 8 to 9 respectively, compared to rates of 15 percent and 38 percent respectively for students transitioning from grades 10 to 11 and 12 to 13 respectively. At all levels recorded, dropout rates were higher for males than for females.²¹⁴

While comparable data for the 2019/2020 academic year when COVID-19 hit is not yet available, it is established that the pandemic has increased the opportunity cost for parents to send older children to school, as well as increased school expenses for students at higher levels of the system.215 Financial stress, joblessness, and reduced employment opportunities for family members who may have supported a child's education have all increased. The initial observations from students and parents in this regard are that more students, especially at higher grades in secondary schools, have opted to exit the formal school system to seek employment and contribute to the household, as compared to previous years.²¹⁶ Some students admitted having found jobs to complement the household income, which caused them to miss some morning classes. One student in a focus

group, when asked about returning to school, indicated that she would rather that her school continue operating virtually as she had been juggling lessons with a part-time job. One former student who should have participated in a focus group also indicated having dropped out of school at the end of the 2019/2020 academic year to seek employment. Teachers reported that they were aware that some students had found jobs due to the economic difficulties and flexibility of remote schooling, and spoke of difficulties reaching students who had stopped participating in remote lessons to engage in paid work.217 The pandemic is thus likely to exacerbate drop-out and absenteeism trends.

216 Focus group with rural teachers conducted in October 2020; focus groups with students.

²¹³ Chen, Shiyuan, and Sally Wallace. Determinants of Education Duration in Jamaica. No. paper0803. International Center for Public Policy, Andrew Young School of Policy Studies, Georgia State University, 2008.

²¹⁴ Information Request, MOEYI. September 15, 2020.

²¹⁵ A Critical Review of the Literature on School Dropout; Jeremy Burrus and Richard D. Roberts, "Dropping Out of High School: Prevalence, Risk Factors, and Remediation Strategies," ETS, February 2012, www.ets.org/research/policy_research_reports/publications/periodical/2012/jeav.

²¹⁷ Rural teacher focus group and urban student focus group.







Today's students may earn US\$49,000

^{to} US\$61,000

LESS OVER THEIR LIFETIME owing to the impact of the pandemic on their schooling.

his report provides an evidenceinformed account of what has happened to education, and to children, in the wave of the pandemicinduced school closures and the shift to remote teaching and learning. It does not seek to evaluate the education sector beyond what pertains directly to this unforeseen, singular, unpredictable, fluid event, the COVID-19 pandemic. The goal is, having garnered an understanding of what has transpired, and what its effects are (whether these have been ascertained or which pre-existing evidence and experience have suggested are likely to obtain), to propose measures to mitigate the losses, and maximize areas and opportunities where there are or could be benefits.

Since the closure of schools in March 2020, children have been adversely affected in several ways, as have their parents/guardians, and teachers. The education sector has been plagued with uncertainty. The country's development prospects have been weakened. The concerns about the impact of school

closures on children in Jamaica were similar to those of other countries. These included the anticipated learning loss and the worsening of pre-existing inequalities, where socio-economic and educational achievements are two of the most significant variables that influence student performance, and ultimately, selfactualization and fulfillment of potential. For the US it has been estimated that, without remedial action to address unfinished learning, "today's students may earn US\$49,000 to US\$61,000 less over their lifetime owing to the impact of the pandemic on their schooling. The impact on the US economy could amount to US\$128 billion to US\$188 billion every year as this cohort enters the workforce." 218

Additionally, there were concerns about the mental health and psychosocial impacts on students with them being isolated in their homes for over a year, the absence of social interaction, the lack of involvement in physical and leisure activities, the increase in screen time, the anticipated increase in sexual abuse (especially of girls), and an increase in violence against children generally. Some of these fears have been borne out by initial studies on the pandemic's impact,²¹⁹ and initial and qualitative data suggest that the other predictions are also coming true. Other effects of the pandemic-induced school closure and shift to remote teaching is that teachers are burnt out, and while they were not directly addressed in the study, parents are not as engaged as they ought to be, and they too are struggling,

There is a point to be made about data: the difficulty in obtaining current and accurate information on the state of student performance and other critical aspects of the education sector as a consequence of the pandemic has posed a challenge to arriving at definitive and empirically verified conclusions in this study. No doubt it must provide a similar challenge to public policy decisionmaking. The lack of data is not a function of the pandemic; it is a pre-existing and systematic weakness of the education system (and a failing of most state

218 "COVID-19 and Education: The Lingering Effects of Unfinished Learning." 219 CAPRI, "Locked Down, Locked Out"; CAPRI, "Stress Test."

The education sector has been plagued with uncertainty. The country's development prospects have been weakened. The concerns about the impact of school closures on children in Jamaica were similar to those of other countries. sectors in Jamaica and other developing countries). But it will be difficult if not impossible to create and implement meaningful and workable solutions to the problems wrought by the pandemic, without current, reliable, and relevant data.

Even without hard data, the ostensibly obvious take-away is that the damage done to children, students, education, and the country must be stanched and measures taken to re-open schools so as to cauterize further damage.

Other studies have arrived at similar conclusions:

The National Council on Education COVID-19 Study of 2020 concluded that the return to face-to-face teaching and learning is critical, especially for students at the early childhood and primary levels of the system. Based on the results of the study, up to 50 percent of the students in some schools did not participate in any form of remote learning. Further, a major effect of the pandemic on the education sector is learning loss. Therefore, every effort must be made to stem the loss and get our children and students back on the path to pursuing their formal education.²²⁰

Prospects for reopening were sparked by the arrival in Jamaica of the Pfizer vaccine on August 19, 2021, which is approved for children 12 years and older. On that occasion the Minister of Education announced that, in consideration of the vaccination timeline,

face-to-face teaching and learning in high schools would be targeted for early to mid-October. The ministry has since announced that the school year will begin with remote teaching and learning, and that from September 20, 2021 onward, there will be ongoing assessments regarding the prospects of resuming face-to-face teaching for early childhood/ infant and primary school. Secondary schools would be allowed to return to face-to-face once their school achieves 65 percent vaccination rate or higher.²²¹ As at August 31, 2021, 38,000 students, or 17 percent of all students 12 and over, had received one dose of the Pfizer vaccine.222

As has obtained previously, however, such announcements have not been fulfilled, or where schools did re-open, that reopening has been short-lived. Further, the third wave that has afflicted Jamaica in August 2021 is the worst yet, with the Delta variant extremely contagious, and hospitalizations and deaths higher than in either of the previous two waves. There is no guarantee that if/when the third wave does subside, allowing schools to open, there wouldn't be a fourth wave. While evidence from the US showed convincingly that the coronavirus did not spread widely inside schools,²²³ and though there were no COVID-19 cases reported in the schools that opened (in Jamaica) in the two trial/partial reopenings between waves one and two, there is thought to be an association between school reopening and increased transmission of the virus, given the increase in school-based contacts.²²⁴ The virus continues to mutate, and there is

224 "Modeling the Transmission of SARS-CoV-2 in Jamaica," presentation to the Ministry of Health and

In the US and other countries, schools that are re-opening for in person teaching and learning are instituting testing regimes, where students and teachers are regularly tested for the virus.

^{220 &}quot;NCE Supports All-out Vaccination Efforts for Students to Safely Return to Face-to-face Schooling," Jamaica Information Service, August 21, 2021, https://jis.gov.jm/nce-supports-all-out-vaccination-efforts-for-students-to-safely-return-to-face-to-face-schooling/.

²²¹ Ministry of Education, Youth and Information, "Minister Announces Plans for the Commencement of the New School Year," Press Release, August 27, 2021.

²²² RJR news, August 31, 2021.

^{223 &}quot;Transmission of SARS-CoV-2 in K-12 Schools," July 9, 2021, Centers for Disease Control and Prevention (USA), www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission_k_12_schools. html#schools-cov2-transmission.



still a great deal that is unknown about its effects, particularly on children, who are more affected by the Delta variant than by the previous versions of the virus. The risks of the disease are still high, to children, and to the country as a whole.

Thus while the overarching conclusion of this study is that schools should reopen to in-person teaching and learning for the 2021-2022 school year, it is clear that this is not likely to happen. Thus what should obtain is to address the impacts as set out in the study, to ameliorate the negative effects as best as possible, and to build on what has been learned that can address some of the gaps identified, while simultaneously working towards even partial reopening as soon as possible.

Recommendations

The recommendations are many, necessarily so, given the wide-ranging impact of the pandemic, and the uncertainty that the education sector is confronted with. There are multiple scenarios that can be anticipated, as well as unanticipated developments that render completely new scenarios that we cannot yet envision. On the basis that remote schooling in some form is likely to continue at least through the next academic year, albeit with the hope that there will at least be scope for blended learning, the recommendations speak to this scenario.

Re-opening Schools for In-Person Teaching and Learning

1. Institute testing regimes for teachers and students.

In the US and other countries, schools that are re-opening for in person teaching and learning are instituting testing regimes, where students and teachers are regularly tested for the virus. Given the availability and affordability of rapid antigen tests, this should be considered in Jamaica, at no cost to teacher or student.

2. Conduct surveys of infection and positivity rates in the communities in which schools are located.

The objective is to identify communityrelated risk factors and the vulnerabilities of each school, and any cluster of infections in close proximity to the schools, infection rates and positivity levels in adjoining communities, and transportation patterns of students, staff, and the wider community. These surveys are outlined in both the Manual for the Reopening of Educational Institutions and advisories from the World Health Organisation, which provide guidance as to the type of analysis that should inform school reopening.

3. Procure and utilize alternative locations in close proximity to schools, such as churches and community centres, to allow for more students to attend in person, while observing social distancing.

Many schools are not "fit for purpose" in terms of being COVID-19 protocol compliant. Classrooms are too small and/ or poorly ventilated, and capacity is a challenge. Other venues such as church halls should be used to augment the capacity for pandemic-suitable classroom spaces.

4. Encourage and facilitate vaccinations for all teachers and for children age 12 and older

In the context of widespread vaccine hesitancy, and a national vaccination rate (at least one dose) of 13 percent at August 29, 2021, it has been reported that 60 percent of teachers represented

Wellness by United Nations Economic Commission for Latin America and the Caribbean (UNECLAC), April, 2021.

by the Jamaica Teachers' Association (JTA) have received at least one vaccine dose.²²⁵ Teachers were one of the first priority groups to receive the vaccine when the vaccine supply was limited. The remaining unvaccinated teachers should be assiduously targeted and facilitated so that all teachers are vaccinated.

Given the availability of a vaccine for children age 12 and older, special effort should be made to get children vaccinated, such as (a) administering the vaccination at the school, perhaps through mobile units, (b) bussing students to the vaccinations sites if not being administered at the school, and (c) providing targeted information to the schools.

While Remote School Continues, Make it Better

5. Establish and support learning pods as a methodology for remote teaching

A learning pod is where a small group of students gather in person to do classes together, whether delivered online or by a teacher who is physically present. Learning pods avail children of the social interaction that the closure of physical school has eliminated, with detrimental effects on their psycho-social development and mental health. Learning pods can take the form of children who are not registered in school being taught by a teacher or teachers in a co-operative type arrangement, often utilizing the MOEYI's or other accredited curriculum. These already exist in Jamaica and there is an organization that offers consulting services to interested parents of preschoolers to establish these pods and register them at the MOEYI.²²⁶ They could also take the form of small groups of students, even as few as two, who are registered in a traditional school, doing online or other virtual/remote classes while in the same physical space, with some level of adult supervision by a parent, private tutor, retired teacher, or other such competent person.

6. Continue to expand internet access across the island

Continue to build out internet infrastructure and access, and expand internet reach to all those areas that do not have it. Where internet access (and/or devices) remains a challenge, the MOEYI should support continued "low technology" or innovation on other appropriate technology solutions. This would entail the adapting of some of the innovations used by teachers eg. personally delivering lesson packets and community blackboards. As is further elaborated below, schools should be given the autonomy to decide on the modality that they use for curriculum delivery. Expanded and more systematic delivery of knowledge and educational content via newspapers, television, and radio will provide additional learning opportunities for children, particularly those who are facing examinations imminently, and so should be supported with resources.

Addressing Learning Losses

Though the data does not exist to precisely measure it, it is certain that learning losses have occurred. The evidence—qualitative, speculative, and anecdotal—suggests that the learning deficit from the period of remote learning is significant, due to the inherent limitations of the medium, lack

of connectivity, unavailability of devices, electricity outages, and unsupportive home environments. Students who move on to the next grade unprepared are missing key building blocks of knowledge that are necessary for success.227 The blanket solution would be to re-set all students, i.e. do not advance any student to the next year, and have all students repeat the last academic year (at least). Such a proposal would surely meet with large resistance across the society, would not be equitable to those students who have managed to satisfactorily cover the curriculum, and would entail several logistical and other challenges that would forestall it being effectively implemented. Research shows that students who repeat a year are much less likely to complete high school and move on to tertiary education.228 The idea here is to proceed with promoting each cohort to the next grade level as would have been expected is the appropriate action at this time, with the following recommendations:

7. Obligate each grade's teachers to review the syllabus from the remote year.

The pace of the current year's curriculum will then have to be recalibrated. In the likely event that the current year's syllabus is incomplete at the end of the academic year, the school year should be extended to allow for its completion.

Deploy trainee teachers and student teachers as tutors to students who have fallen behind.

Research shows targeted intensive tutoring can help underserved and/or fallen-behind students to catch-up to meet curriculum targets.²²⁹ Allow for

^{225 &}quot;NCE Supports All-out Vaccination Efforts for Students."

²²⁶ Learning Pods JA, www.learningpodsja.com/about.

^{227 &}quot;COVID-19 and Education: The Lingering Effects of Unfinished Learning."

^{228 &}quot;COVID-19 and Education: The Lingering Effects of Unfinished Learning."

²²⁹ Ed Trust and MDRC, "Targeted Intensive Tutoring," The Education Trust, March 17, 2021, https://edtrust.org/resource/targeted-intensive-tutoring/.

this tutoring to serve towards student teachers' practicum requirements.

Other measures to address learning losses require current and reliable data.

Data Needs

Any targeted attempt to address learning losses requires data, that is properly collected and that matches the objective of what is to be measured. Given the absence of baseline data and pre-existing purposive systematic data collection and analysis, data collection towards assessing learning losses will have to be customized not only to the Jamaican situation, but to different student populations within the Jamaican education system.

9. Introduce an island-wide survey with the purpose of identifying and providing the learning status of each student who should be in the education system.

Among the data to be gathered from this exercise would include:

- Students who attended summer school – projected and actual rates of attendance
- ii. Assessment of the impact of remediation on each student who attended based on a summative assessment of each student
- iii. Individual plans of further remediation for those students who continue to perform below their requisite grade levels

Education officers and schools would need additional resources and support to conduct this census in this broadened and expedited initiative. A structured volunteer programme should be created to assist in the exercise, which would have the added benefit of enfranchising civil society and individual citizens in the national education project. Another option is to outsource to a competent entity outside of the Ministry as a discrete project.

10. Establish and maintain a student management system that captures data on student attendance, participation, grades, and all relevant developmental data.

A student management system has been in incubation for over two decades,²³⁰ and the rudiments exist with the school assessments currently done by the Ministry of Education for diagnostic tests at various grade levels. While several other data collection mechanisms do exist and are conducted through various divisions of the MoEYI they are uncoordinated, and data is rarely shared across units or centrally stored. There is a new initiative to provide students with unique number identifiers through the National Student Registration System (NSRS).

These are the foundations on which a more functional data management system can be built. Such a system should capture information on each student at the school (micro) level, their performance on standardized tests, attendance, academic performance, social indicators, and comparative performance information over time. One of the purposes of this proposed, robust student management system is to begin to develop comparative data of student performance and to enable trend analyses. The latter would include attainment outcomes along with attendance, absenteeism, and dropout. The data would be the tool for remedial interventions with targeted focus on the requirements of each student. This is a task for the MOEYI in collaboration with the Planning Institute of Jamaica (PIOJ) and STATIN. It should result in aggregating and sharing data to obtain a more comprehensive picture of social economic developments as they affect the education system.

11. Train teachers to collect data and to use the data they collect

Empowering teachers to collect and use data promotes their ownership of the process, and increases the value of their contribution to decisions regarding what the data shows. Data collected by teachers on themes such as learning styles, student performance and behaviour are critical, and should be used in decision making at both the class, and school administration levels. Training should include skills in social research, observation, surveys, and the creation and administration of other suitable diagnostic tools. This is also a valuable upskilling for teachers, for their own human capital development. Their data collection efforts will feed into the central database system as set out above.

Empowering schools and teachers

12. Increase schools' autonomy

The pandemic has upended many of the accepted practices of educational delivery. Principals, teachers, and administrators have had to meet novel situations and have done so with innovation, creativity, and initiative, largely attributable innovations in technology and teacher upskilling. New modes of behaviour, management, and pedagogy are being invented and tried on the (school) ground. This trove of natural experiments can and ought to be harnessed in order for the school system to shift as rapidly as possible to newly discovered best practices. Such experimentation should be encouraged. Schools need to be allowed to determine what is working and what isn't in their own schools, and to be able to switch strategies and tactics as they learn

230 See: "Final Report - Task Force on Educational Reform, Jamaica, 2004: A Transformed Education System," Ministry of Education, 2004, https://planipolis.iiep. unesco.org/en/2004/task-force-educational-reform-jamaica-2004-transformed-education-system-final-report-5891.

from their own experience and that of neighbouring schools. Particularly as schools continue in the non-traditional face-to-face mode, schools should be granted more autonomy to make and effect decisions regarding curriculum delivery, flexible teaching modalities, and use of resources. And they should be encouraged and supported to document what they are doing. One concrete way in which their experience should be immediately included is in the revision/ update of the Education in Emergencies Plan to integrate experiential information from this pandemic.

13. Strengthen and promote Quality Education Circles Inter-school Collaboration

Teacher support groups spoke about learning from each other as they encountered the new learning environment and its concomitant challenges and opportunities. There has been increased communication between school principals and administrators at the informal level as they share their common issues and seek each other's support and guidance, amounting to organic team learning. A formal mapping of schools already exists in the assignments to education officers and through the recent innovation of Quality Education Circles (QECs), which are geographically defined clusters of institutions which engender co-operation between institutions in terms of professional development and reciprocal institutional supports.

Without interfering with what has naturally emerged, and by reinforcing the capacity and responsibilities of QECs, encourage, facilitate, and support collaboration amongst schools (with similar demographics or other characteristics, and/or in the same geographic areas), in order to promote the sharing of information, ideas, resources, and practices. In tandem with greater autonomy, effective collaboration will facilitate the rapid spread of newly discovered best practices. QECs can be used as a starting point for clustering schools for collaboration on issues such as transportation plans, accommodation of students in appropriate spaces, teaching modalities, remote curriculum delivery, and even customizing curriculum design.

Teachers need attention

The discourse on the impact of the pandemic on education has been dominated by how students have been affected, as the bulk of this report reflects. The impact on teachers has been far less considered, though we know from this study and other evidence that teachers have also been subject to tremendous pressure and strain throughout this rapid transition to remote teaching.

14. Continue to upskill and enhance teachers' professional development

Regular professional development for the start of the school year should be used to further develop and enhance the education in technology competency and skills of the teachers. This should include competency in use of various methods to diversify the delivery of the curriculum and should continue at designated intervals throughout the school year. Areas to be added or built on include improving their capability of manipulating online teaching delivery, improving their competency and skills for virtual teaching, and data collection and analysis (as detailed in the earlier recommendation). These can and should be undertaken under the rubric of the Jamaica Teaching Council (JTC) and the National College for Educational Leadership (NCEL).

15. Provide more and better material support for teachers

Where teachers are not able to deliver remote teaching from school using the school's equipment, routinely provide them with internet access and the required hardware, both electronic (devices) and non-electronic (furniture). Teachers have received some support through tablet provision, but more support for device upgrades should be provided regularly, given the current dynamic and future demands for flexible learning. Teachers should not have to fund these essential teaching supports out of their own pockets.

16. Provide more and better psychosocial support for teachers

Recognizing that teachers are also undergoing a stressful and demanding period with the shift to remote teaching, ascertain and meet their most pressing psycho-social needs, to mitigate against burnout, increase motivation, and facilitate overall wellness. Establish online exercise programmes, make counseling available, and deliver mental wellness modules in areas such as mindfulness or spirituality (including religious-related).

Children's Safety, Health, and Well-Being

The report detailed several instances in which children's health, wellbeing, and potential for self-actualization are being damaged by the circumstances of the pandemic and the changes it has wrought in their lives, beyond the already deleterious impact on their education.

17. Expand the cadre of social workers to mitigate the effect of the removal of the protection that school provided for child victims of sexual abuse.

Send more social workers into communities and provide additional training for police and medical officials / teachers so that they are more attuned to signs if and when interacting with women and children, including non-verbal cues for teachers during virtual classes.

18. Mandate schools to have regular physical and non-screen activities throughout the remote school day

Physical education classes should resume, albeit in online/virtual mode.

19. Deliver modules on nutrition and healthy lifestyles, including promoting good mental health

Children at all levels of the education system should be receiving structured information on mental and physical health and wellness, particularly in the context of school-from-home, reduced physical activity, and the exponential increase in screen time for those children doing online school. Modules should include healthy meal preparation (akin to the "home economics" curriculum), exercise, good sleep hygiene, and mental health wellness.

20. Engage and deploy more guidance counselors to meet students' mental health needs

Since the onset of the COVID-19 pandemic, experts have grown increasingly concerned about children's mental health. Preliminary data from several countries has demonstrated that COVID-19 is affecting the mental health of children and adolescents, and that depression and anxiety are prevalent.²³¹ In Jamaica, these trends have been observed to have borne out.²³²

21. Meet the particular needs of boys at greatest risk of dropping out of school and becoming disengaged from formal education.

The challenge of mitigating risks to teenage boys of not completing school and becoming engaged in informality and criminality goes beyond the pandemic, but the pandemic has exacerbated them. Focus group discussions highlighted the challenges faced by some older students from disadvantaged communities, especially boys, with regard to staying focused in remote learning, and some are confronted with demands to financially support themselves and their families. Schools should recognize the especial challenges of keeping them engaged and address those challenges, and use their database to identify the boys who have dropped out or who display low attendance and offer them more flexible learning options, that allow them to work and continue their education.

22. Target teenage girls at risk of unwanted pregnancy, and increase efforts to reintegrate teen mothers into the formal education system

Identify those teenage girls who have not returned to remote schooling, or who are chronically absent or disengaged, since the pandemic, and address their needs, particularly with regard to their reproductive health, and their risk for unwanted pregnancy. Those teens who have fallen pregnant should be introduced to and facilitated to join the Women's Centre of Jamaica Foundation Programme for Adolescent Mothers (PAM) or, if available, to continue their schooling through their original school.

Medium to longer term recommendations

23. Review and update the Education in Emergencies Plan

The current crisis has taught everyone a great deal about what a true emergency is. Take a systematic approach to reviewing the Plan and integrating those areas that were omitted, based on the lessons learned over the past year and a half. The revised content must include but not be confined to a virus such as COVID-19, and should include other natural or manmade disasters/events.

²³¹ Karen Dineen Wagner, "New Findings About Children's Mental Health During COVID-19," Psychiatric Times, October 7, 2020, www.psychiatrictimes.com/view/ new-findings-children-mental-health-covid-19.

²³² Caribbean Policy Research Institute (CAPRI), "Mind the Gap: The Inadequacy of Mental Health Services for Children," Kingston: CAPRI, June 2021, https://capricaribbean.org/documents/mind-gap-inadequacy-mental-health-services-children.

Appendix 1: Methodology

The following data collection methods were used:

- Three teacher focus groups were held in person and were organised with the assistance of representatives from the Jamaica Teachers' Association (JTA). Teachers were selected, and organised through the JTA, as it is the largest union of teachers in Jamaica, and is representative of educators and school leaders at all levels of the education system. Using purposive teachers sampling, from high schools, primary schools, and special education institutions in urban, rural, and inner-city areas were selected to participate in each of three focus groups, organised based on locale.
- Students were invited to participate in three focus groups through an open call to students shared via social media and through student body networks. Purposive and snowball sampling were used to recruit students for this focus group and to increase the numbers of students participating in each discussion, as response rates were initially low. The decision was made to hold virtual focus groups for students (via zoom and via WhatsApp), given concerns regarding disease spread. Consent was granted from parents using a google form.

- A total of eight key informant semi-structured interviews were conducted, though 12 were targeted. The individuals targeted for these interviews consisted of senior officials of the MOEYI, the President of the Jamaica Teachers' Association, and the President of the Jamaica Independent Schools Association. All interviews were conducted virtually.
- Twenty-five administrators in private education institutions across the primary and secondary levels were interviewed via phone. Schools were selected via random selection of a list of all independent schools registered with the Ministry of Education, Youth and Information
- Results from focus group discussions and interviews were cross examined with each other to identify common themes or relationships between themes emerging.
- Examination results data was obtained from the Ministry of Education, Youth & Information for regional exit exams sat in July & August, 2020 to assess the impact of forced absences on students; though this data was not used to assess academic impacts or learning losses of high school students
- A desk review that considered documentation of previous extended

disruptions to the education system in Jamaica, and in other jurisdictions, and probed the responses of governments and effects on students thereafter. This includes previous research on disruptions to the system due to natural disasters and research on student absence-related learning losses. It also included a review of the strategy communicated by the MOEYI, the commitments made to respond to the needs of the education system during the pandemic and its fulfilment of same. Content relational analysis was used to examine accounts of previous occurrences, as well as the reporting of events and responses during the covid-19 pandemic in Jamaica.

 Data on attendance in online platforms and resource distribution from the Ministry of Education, private online learning providers and telecommunications companies was accessed and analysed and compared to first-hand accounts from primary data collected through focus groups and interviews. This yielded valuable information barriers and measures to address barriers to access the remote learning modalities, as well as identify other challenges students and parents faced in actively engaging in remote learning.

Appendix 2: List of Interviews and Focus Groups

The schedule of interviews and focus group discussions conducted as part of this research is as follows:

- Focus group with teachers from rural schools October 20, 2020
- Focus group with teachers from urban schools October 30, 2020
- Focus group with teachers from inner-city schools February 18, 2021
- Focus group with students from urban schools November 22, 2021
- Focus group with students from inner-city schools November 29, 2021
- Focus group with students (mixed group, via WhatsApp) February 9 10, 2021
- Interview with Director, Region 1 October 16, 2020
- Interview with former Director, Region 1 October 28, 2020
- Interview with Director, Region 5, September 29, 2020
- Interview with Director, Region 6 September 9, 2020
- Interview with President of the Jamaica Teachers' Association September 15, 2020
- Interview with President of the Independent Schools' Association September 3, 2020
- Interview with Acting Chief Education Officer, September 21, 2020

Appendix 3: MOEYI Bulletin on Teaching Modalities AY 2021-2

			Bulletin 137/2021
MINISTRY	of EDUCATION		
YOUTH &	INFORMATION		
	Gen	eral	
	"Every Child Can Learn	Every Child	Must Learn"
ATTENTION	: REGIONAL DIRECTORS, SCHO OF ALL PUBLIC EDUCATIONAL		IAIRMEN AND PRINCIPALS
SUBJECT:	MODALITIES FOR SAFE ACCESS TO EDUCATION IN THE PUBLIC EDUCATION SYSTEM		
Dear Colle	agues,		
	y of Education, Youth & Inform		

2021. This new school year will commence remotely with the utilization of all or any of the following three approaches:
1. Online/computer-aided learning – under this approach, learning should be supported using the national Learning Management System and or the

 Online/computer-aided learning – Under this approach, learning should be supported using the national Learning Management System and or the Google Classroom, making use of both synchronous and asynchronous interactive teaching and learning experiences.

The MoEYI eResources App and other platforms and applications are also available which can be accessed through the Learning Hub Online Limited and CHEETAH Purrrrr Limited (using the Book Fusion platform) at the primary level. At the secondary level, ebooks are available through Bookfusion for English at Grades 7-11, Separate Sciences Grade 9, Principles of Business Grades 10 & 11 and Principles of Accounts Grades 10 & 11.

JamLearning Resources are available on the educate.gov.jm website providing Learning Kits aligned to the National Standards Curriculum and the PEP assessments.

2. Audio-visual Learning – lessons will be provided guided by a National Timetable using our eHomeSchool Network, PBCJ, MoEYI YouTube Channel and Digicel GoLoud App. A monthly schedule will be shared with our schools and in the media. Schools will integrate these lessons in the learning plan for each student depending on their modes of access to the learning and will ensure that adequate feedback is provided.

eHomeSchool Network will offer both the primary and secondary level TV channels and PBCJ will focus on the early childhood as well as the secondary level. The MoEYI's Youtube Channel will carry content for all levels. Lessons will be aired on Monday – Friday from 7:30 am to 5:30 p.m. each day.

GoLoud App provided through Digicel will facilitate the Ministry's audio lessons under an initiative called eduGo. Students will be able to access pre-recorded lessons at any time via the GoLoud App. Students are able to download these lessons on their devices and used in offline mode as per their learning plans or for enrichment and reinforcement of concepts.

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Notes

Time Out The Impact of COVID-19 on Education

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