


Evidence to Action



COVID-19 and the Deepening Learning Crisis—How Can We Build Forward Better?

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1. Introduction

COVID-19 is still wreaking havoc in much of the world. The persistent and evolving nature of the pandemic mean that we are yet to understand its true impact. Disruption in children's education caused by the pandemic is one of the most worrying issues, as it can have long-term adverse effects not just on children's future economic wellbeing but also on equality and the national economy.

The World Bank estimates over 1.6 billion young people have been affected by school closures in 2020, and that around 680,000 were still facing full school closures as of March 2021.¹ Schools in Bangladesh have been closed since March 2020 until now, July 2021. **More than a yearlong closure means severe disruptions to children's education in the country.** This puts children at risk of serious learning losses. The pandemic may also increase dropouts; in Sierra Leone, 13% of children did not get back to school when it reopened after the Ebola epidemic,² and in Liberia, the dropout rate is 25%.³

There is a strong correlation between human capital accumulation and economic growth—expanding the knowledge and skills of the population boosts an economy.⁴ Using data from household surveys conducted between 1985 and 2012 in 61 developing countries, a study finds that one additional year of education is associated with a 6.5% increase in children's future earnings.⁵ Based on previous studies, the Organisation for Economic Co-operation and Development (OECD) predicts that the loss of even a third of a year of schooling may lower a country's annual gross domestic product (GDP) by 1.5% on average over the rest of this century.⁶

The extended school closure means that the impact of the pandemic on Bangladesh's human capital may have far-reaching effects on its economic future as well as the future wellbeing of its children. The impact is the harshest on children from marginalized communities with limited resources; this may also exacerbate inequality in future.

Considering the grave situation, the BRAC Institute of Governance and Development (BIGD) conducted two separate studies on children's education during the pandemic:

Study 1: COVID-19, Schooling and Learning in Bangladesh: This study was done early into the pandemic, in May 2020, in collaboration with the University of Malaya. Professor Niaz Asadullah, Professor of Development Economics at the University of Malaya, was the lead researcher in the study.

Study 2: COVID-19 Impact on Education Life of Children: Conducted in March 2021, this study is a part of a larger study, in rural areas and urban slums, tracking the poverty impact of COVID-19 since it hit Bangladesh. BIGD has partnered with Power and Participation Research Centre (PPRC) in this study. So far three rounds of data have been collected and the data for this brief comes from the third round conducted in March 2021, in which a module on children's learning was added to the original modules on livelihoods.

The key results of the two studies are discussed in the following two sections. Section 4 discusses the implications of these findings in the Bangladesh context. Finally, Section 5 lists some possible interventions based on discussion during the webinar held on 1 July 2021.

2. Early Indications of Learning Loss: Evidence from Study 1

The survey for the study “COVID-19, Schooling, and Learning in Bangladesh”⁷ was done in May 2020 with 5,193 children in 4,672 households across rural Bangladesh and in urban slums in six divisions.^a

This survey focused on children’s time spent on learning and non-learning activities. It found a sharp reduction from the pre-COVID period in study time at coaching centres and with private tutors; this was not unexpected, because of the pandemic. What was more worrying, children were also spending less time in self-study, supervised and unsupervised studying combined. A simultaneous decrease in all forms of studies along with the school closure meant that overall time spent on studies decreased drastically.

Immediately after the school closure, the government started offering classes for primary and secondary students on a national television channel. Many non-government institutions took their own initiatives. For example, BRAC started broadcasting educational programs through its community radio. Many private schools started offering online classes. But around the world, the differences in students’ access to remote learning opportunities are becoming more profound with the crisis.⁸ Our study found that more than a third of rural and 18% of urban slum students did not have access to a television. Access to the internet was negligible. The children with no access to technology are automatically left out of remote learning opportunities. However, only a quarter of those who had access to a television reported watching distant classes, and a significant share of these children found these classes hard to follow. Overall, the adoption of remote classes on television to cope with the school closure was very low—only 16% and 21% of the rural and urban slum students reported watching the programs.

Additionally, the study found an increase in child labour; the percentage of children working more than two hours a day to meet families’ economic needs jumped from four percent to 16%.

It is worth mentioning that the survey did not include better-off urban children, i.e., those who do not live in slums and are more likely to have better access to and use of alternative modes of education. The depressing scenario found in the survey, thus, indicates early signs of possible learning losses among the disadvantaged children of Bangladesh.

3. Children at Risk of Learning Loss a Year into the Pandemic: Evidence from Study 2

As mentioned in the introduction, the second survey was a part of the larger PPRC-BIGD survey. The survey on children’s education focused on a subset of the larger sample of 6,099 households interviewed in the third round of the larger study—4,940 households who had children of school-going age.⁹

This survey was also done across rural areas and urban slums, which exclude the better-off non-slum urban children. The major findings on children’s education from the survey are described below.

^a The findings from the study have not been officially published yet.

Even before the pandemic, 14% and 21% of the children of primary and secondary school-going age in the surveyed households, respectively, were not in school, indicating deficiencies in human capital from the outset. The deficit was more pronounced among children in urban slums and of secondary school age.

School closures affected students in many ways. Some children have completely stopped studying. Others have resorted to one or multiple alternative mediums to keep up with their education, including unsupervised self-studying, studying with the support of family members, distance learning over the internet or television, private tutoring, and shifting to *madrasas* (Islamic learning institutions that stayed open).

To capture the probable impact of the prolonged disruption of learning and education, the study created a framework which identified the students who had entirely stopped studying and those who depended on unreliable modes, e.g., self-studying and irregular studying, as **the group with the highest risk of incurring long-term learning losses**. The study finds that at least 19% of primary and 25% of secondary students are facing this risk. The risk is more pronounced among secondary school-going children and the highest among urban secondary-level children—26% for females and 30% for male children. The highest percentage (33%) of the secondary school-going male children from extreme poor families are in this category—possibly a result of the pandemic-induced economic shock.

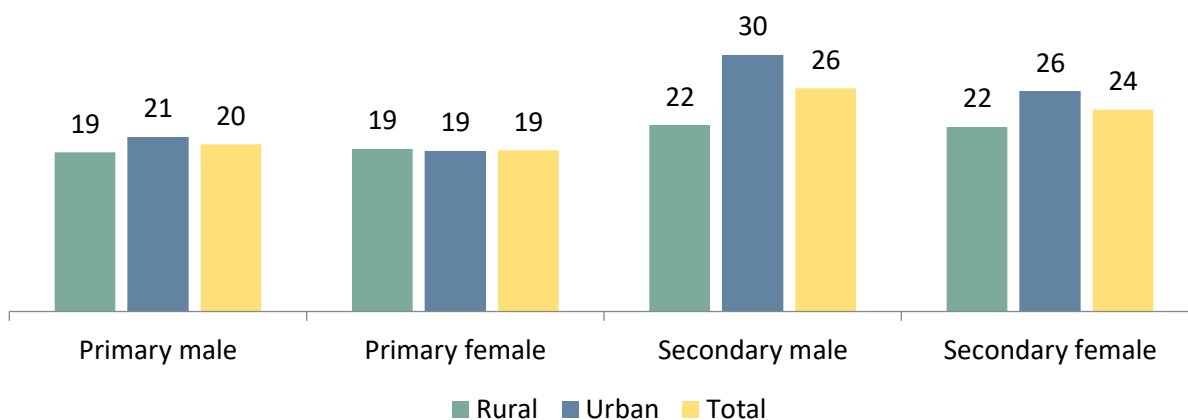


Figure 1: Percentage of Children with Higher Risks of Learning Losses Across Poverty Groups

Access to distance learning is very low, in both public and private channels, with only around 10% of students using distance learning opportunities to compensate for school closure. **Classes on government television channels were viewed by only two percent of the children**. These rates are even lower than they were in the first survey, which was conducted at an early stage of the pandemic.

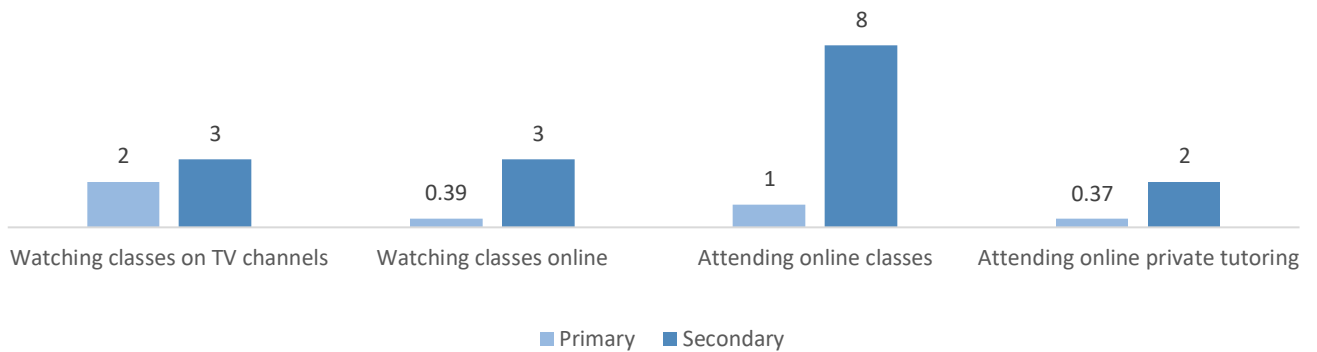


Figure 2: Distance Learning Adoption Rates Among Students

The dominant coping response to the prolonged school closure has been a recourse to market solutions. A year into the school closure, over 50% of the primary students and 60% of secondary students were availing private education services, e.g., coaching from tutors.

Studying with parents or siblings was another crucial coping mechanism, especially for primary school children. Mothers, in particular, played an important supporting role for primary students (28%).

While more than 95% of the guardians are eager to send their children to school when they reopen, it is evident that most students have learned little in the last 16 months. Whether and to what extent the students will be able to recover from the learning loss when schools reopen is the biggest question.

The crisis has also increased the opportunity cost of investing in education. Eight percent and three percent of the school-going boys and girls, respectively, are now engaged in some form of income-earning activity.

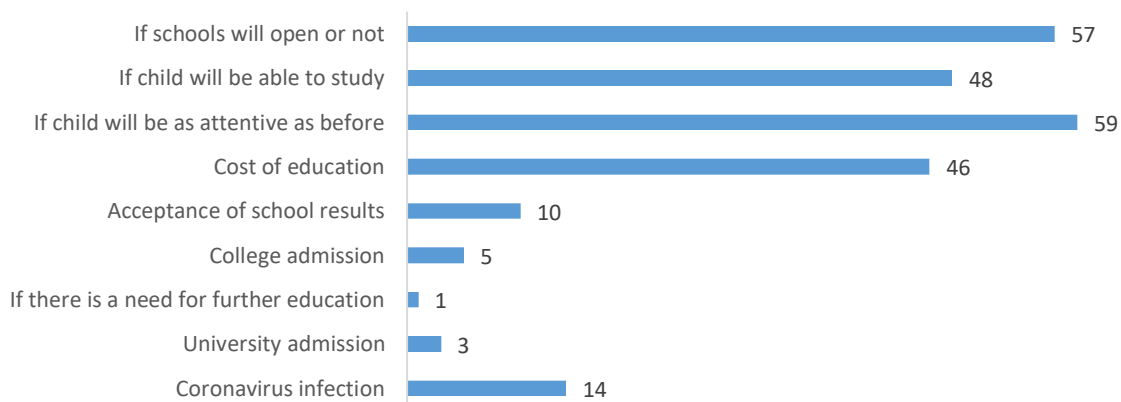


Figure 3: Parental Concerns Regarding School Closure (%)

Examining parental attitudes and concerns, the survey found that more guardians were concerned about learning loss (48%), motivation loss (59%), and the growing expense burden of education (46%) than about contracting the Coronavirus (14%). The psychological toll of the pandemic on the children has also been significant. The rate of children in urban slums who are stressed is twice as high (16%) as that of rural areas (8%).

4. Implications and Emerging Questions

The three major consequences of the year-long school closures are: (1) deepening of the already existing learning crisis in the country, (2) possible future worsening of socioeconomic inequality, and (3) growing economic burdens of out-of-pocket education costs and subsequent dropouts.

Even before the pandemic, the quality of education in Bangladesh was poor. According to the Multiple Indicator Cluster Survey (MICS) carried out in Bangladesh in 2019 found that 51% of Bangladeshi children aged 7–14 years do not demonstrate foundational reading skills and 72% do not demonstrate foundational numeracy skills.¹⁰ The pandemic has exacerbated the learning crisis in Bangladesh, a country where the majority of the population are young. The pandemic has put at least a fifth of the primary and a quarter of the secondary students at a high risk of learning loss. This translates to 3.41 million primary-level and 2.5 million secondary-level students. Thus, a total of 5.92 million schoolchildren in Bangladesh are at a risk of serious learning loss. Without targeted remedial measures, we cannot expect them to recover this learning loss, which may decrease the quality of future human capital.

Question 1: How to deliver catch-up education to help students recover what they lost, acquire grade-appropriate learning, and graduate each grade in time?

Technological solutions have played a limited role in compensating for school closures. Non-interactive classes through public television were utilized by very few students. Overall, only around 10% of the students reported distance learning as a medium of learning during the school closure.

As the sample in the study is poor-biased, compared to the national statistics, it is not unexpected that the rate of technology adoption for learning would be low. Children from non-poor families are more likely to have educated parents, greater access to technology, and support from well-endowed schools that offer online classes, supervision, and mentoring. But the findings in the study indicate a gulf between the privileged and underprivileged children in accessing and using technology for education during the pandemic. Scholars and policymakers had already been concerned about the emerging digital inequality. Now the pandemic has laid it bare and accelerated the process of technology-induced inequality.

Question 2: How to ensure quality last-mile delivery of education, one that does not exacerbate inequality?

As mentioned earlier, more than 50% of the guardians have resorted to private education for their children in an attempt to compensate for the learning loss due to school closures. On the one hand, this defeated the very purpose of school closures, containing the spread of the virus. On the other hand, it

has imposed a greater financial burden on families. The economic burden has been even greater for the poorer families.

According to our findings, per household average educational expenditure in March 2021 was BDT 856. To compare with normal times, according to a baseline survey conducted in 2016–17 among randomly selected urban slums in Bangladesh, the average educational expenditure per household was BDT 665, adjusted for inflation, which indicates an increase of 33% from normal times.

In the World Bank study after the Ebola epidemic, the primary reasons for dropouts mentioned by parents were economic, e.g., inability to pay school fees and the need for their children to work. School closures may potentially increase the dropout rate,¹¹ especially among students from marginalized households. A study of the 2013–2016 Ebola pandemic suggests that dropouts are higher among older (secondary-age) students from poorer households.¹²

In addition to the rising cost of education, another financial consideration for poorer families is the need for their children to work. As many children, predominantly boys, are working during the pandemic, once schools reopen, it may not be easy for many of them to go back to school.

Question 3: How to bring the children who are vulnerable to dropping out back to schools?

Question 4: How to provide life opportunities to dropped-out children who do not or cannot come back to the classroom?

5. Possible Interventions

Keeping in mind the possible impact of the second wave of the pandemic in Bangladesh, it is imperative that the government pay heed to the genuine concerns of parents of school-going children and reopen schools as soon as possible. Otherwise, repairing the damages will become increasingly difficult, and the growing burden of education costs will become unbearable for many disadvantaged families.

However, the learning loss problem cannot be overcome simply by reopening schools. It is an accumulated problem affecting a significant portion of both primary and secondary school students. We must explore all possible interventions outside and in school.

Following are some possible ideas that could be considered for helping children overcome the learning loss from the year-long school closure:

a) Using Appropriate Technologies to Deliver Distance Learning

Appropriate use of technology is one of the key principles endorsed by the World Bank's Platform for Successful Teachers. This is especially relevant for Bangladesh as the adoption rates of distance learning mediums is found to be very low among the school children. Technology interventions should enhance teacher engagement with students through improved access to content, data, and networks.¹⁴

In Bangladesh, the digital and socio-economic divide are the major challenges to promote distance learning. According to BIGD's digital literacy and access to public services survey, in 2019, only 39% of rural Bangladeshis had access to smartphones¹⁵. Our survey also finds that participation in online classes

is higher among non-poor students. Thus, a hybrid model—combining high-tech (Zoom, Google Classroom, etc.), low-tech (television, radio, SMS messages, etc.), and no-tech (community-based learning, school assignments, parental monitoring, home tutoring, etc.) interventions—is necessary to recover from the learning losses, not only during COVID-19 but also after. We need a blend of the above to have a meaningful and sustainable ed-tech paradigm.

The nationwide school closure has led to parents taking on the role of teachers with at-home learning. Interventions could be designed to support their efforts by providing information and guidance through phone calls, texts, and other low-technology methods. Research suggests these efforts help engage parents in their children’s education and enable them to contribute to their children’s learning even after schools reopen. The non-governmental organization (NGO) “Young 1ove,” in collaboration with the Ministry of Education in Botswana, has devised a number of strategies.¹⁶ One was to send a series of text messages with numeracy “problems of the week” to the households. Another involved text messages, combined with 20-minute calls with the NGO staff, who walked parents and students through math problems. In both cases, the number of children who could not do basic mathematical operations within a month.

b) Involving the Local Community in the Learning Process

The pandemic has underlined the critical need to involve families and communities as an integral part of any education strategy, be it local or global. There are many resources outside school that can be leveraged to help children learn better. Learning opportunities in the home–neighbourhood–community continuum should be maintained and strengthened as a long-term goal. Renowned education non-profit Pratham has always worked simultaneously with both the schools and communities in India, which proved invaluable during the pandemic¹⁷. For example, the communities supported students by using loudspeakers to broadcast radio programs and recruiting youth volunteers to teach the students. Community engagement is an important entry-point in delinking school and educational life of the children. Community-based mechanisms can be more successful in providing language and mathematics-based classes as a general skill for all for addressing the learning loss from school closures.

c) Improving Educational Content and Material Design and Delivery

Student engagement also depends upon the quality of the study content, and evidence-based practices should be implemented to improve nationwide educational outcomes. Apart from designing more engaging educational content, the delivery of the materials should simulate an environment conducive to learning. Research shows “high dosage” tutoring—one that happens in a one-on-one relationship or in small groups at least three times a week—generates positive gains for students in reading and math.¹⁸ A study by the Annenberg Institute at Brown University describes design principles for effective tutoring, where factors like tutor-to-student ratios, tutoring frequency, focus, and curriculum were found to be key to improving learning outcomes among young students.

d) Identifying Learning Gaps and Focusing on Building Foundational Skills When Schools Reopen

Low learning levels and learning loss due to prolonged disruption of education is unavoidable. It is important to concretely identify these learning gaps among the students. Rather than focusing on high-

stakes examinations (upon which promotions may depend), the assessment should be based on simple tools, like the one used in Annual Status of Education Report (ASER), where four components of a student's acumen are tested: single-digit number recognition, double-digit number recognition, two-digit subtraction, and simple division. Similar tools can be used for assessing reading skill. Such tests will help clearly evaluate students' learning levels, ultimately helping schools devise better strategies for learning recovery. Research from around the world shows that tailoring instruction to children's learning levels improves learning outcomes. For example, the Teaching at the Right Level (TaRL) approach, pioneered by Pratham, focuses on foundational literacy and numeracy skills through interactive activities for a portion of the day rather than solely on the curriculum.

To cope with the learning loss, catch-up education is going to be a crucial initiative, as after-school classes and using a variety of blended solution. These catch-up classes should be out of school time so that normal schooling is not hampered. There is a scope of using community space to initiate these catch-up classes with playful activities so that the children are not overwhelmed.

e) Strengthening Peer Networks to Facilitate Pro-learning Behaviour and Reduce Dropouts

Apart from the role of the family in the development and academic achievement of schoolchildren, peer social capital has a positive effect on children and adolescents. Resources related to academic achievement that are embedded in peer networks are the major source of direct peer influence.¹⁹ Through help-seeking behaviour among their network of friends, students get access to valuable resources—advice, information, and support.²⁰ Social networks also indirectly influence learning by shaping an individual's values and behaviours to affect outcomes.

Children belonging to a strong peer network find more value in their education and, thus, are less likely to drop out of their education stream. Interventions, even if based on distance learning tools, should emphasize the communal aspect of learning and promote cooperation and help-seeking behaviour among schoolchildren.

It is crucial to bringing adolescents who have dropped out back into education. But for those who permanently drop out, we should find focused interventions to ensure their productive participation in the society. Skills Training for Advancing Resources (STAR) is one such apprenticeship program by BRAC, proven effective to equip school dropouts with technical, vocational, and soft skills for finding productive employment.²¹

f) Interventions that Minimize Dropouts

The pandemic can drastically increase dropouts through two channels: worsening socio-economic conditions and worsening ability to catch up. Together, they can lead to dropouts that may not be realized immediately but in the medium and longer term. Introducing a school meal / nutrition program may improve the quality of education, reduce the difference between urban and rural areas, and between the rich and the poor. School meals for mitigating hunger and providing nutritional assistance to schoolchildren is always necessary for equity and quality education, but it is an urgency now, when countless families are struggling financially.

Furthermore, fiscal interventions are a necessary tool to reduce dropouts. Widening the size of student stipends and increasing the amount of the existing one will help the poor households to continue sending their children to school.

To redress the burden of out-of-pocket education costs and incentivize coming back to school, existing primary and secondary school stipend programs in Bangladesh can be used as an immediate leakage-effective cash transfer to families. According to calculations from a previous PPRC report, allocating BDT 2,960 crores in the 2021-22 national budget to increase the primary stipend from BDT 100 to BDT 500 per month will be a substantial contribution towards struggling families.¹³

Another immediate mechanism to ease the financial burden on the poor families in Bangladesh—so that they do not struggle to pay for alternative learning methods and face the hard choice between sending children to work or school—is to channel cash through the Employment Generation Program for the Poorest (EGPP) of the government.

6. Conclusion

Educating children during COVID-19 has not been a policy priority in most countries, including Bangladesh. The pandemic-induced disruption in education, nevertheless, is going to have one of the most consequential negative impacts on the future of a country.

The limited efforts made by authorities to provide alternative education to children during school closures have seen little success. Non-interactive classes on public television have failed to engage students, and digital solutions of distance learning have remained unavailable to most, particularly the poor. We must act together to find practical innovative solutions to repair the damage and ensure equity in the process.

This is a massive challenge. We suggest two guiding principles:

- 1) As discussed, the state of education and learning was already in a deplorable state before the pandemic. This is why we are advocating for building forward, not building back, better. However, the scope of improving the general state of learning is massive. We should not lose focus of the specific impact of the pandemic on the education lives of children and thus, we have to ensure that the agenda is firmly established in COVID-related policies and programs.
- 2) While it is imperative that schools reopen as soon as possible while also improving the quality of school-based education, we cannot wait for schools to reopen for delivering catch-up education. We must delink learning from schooling by being resourceful and finding solutions involving the entire ecosystem—parents, peers, and communities—and exploring all possible channels—internet, mobile phone, radio, and in-person tutoring.

We hope our efforts—bringing together insights from our research and around the world on the pandemic's impact on education and its implications for society and highlighting possible effective interventions and their mechanisms—will draw the attention of policymakers and practitioners to the gravity of the issue of learning losses during COVID-19 and help them find useful interventions for building forward better.

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