

Equity in the time of COVID

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In India, school closures started as early as March 2020 and schools are yet to reopen in December 2020. ASER 2020 Wave 1 focuses on this period, in an attempt to gauge the impact of the pandemic on children's enrollment and learning. According to UNESCO, in the beginning of April, schools had closed across 194 countries, affecting 1.6 billion learners, constituting 91% of all enrolled students in the world. Not only is the pandemic expected to affect learning levels adversely, but with family budgets getting squeezed, it might also result in higher dropout rates. And, most importantly, across sectors, the adverse impact of the pandemic has been much greater on already vulnerable and disadvantaged groups. In education too, equity gaps may increase based on unequal access to different forms of technology-based educational inputs.

ASER 2020 Wave 1 was conducted in September 2020, and focused on children's access to learning material during the period when schools were still closed. During this period, state governments as well as private schools tried to provide learning materials in a variety of ways. However, while there is a fair amount of information about the type of content and material being shared, not much is known about whether children are receiving this material and how they are engaging with it. Moving forward it becomes critical to understand what worked and for whom. Is it the case that this shift to remote learning will widen the digital divide and accentuate equity issues in learning?

The ASER 2020 data confirms that the brunt of the impact of the pandemic on educational outcomes will be borne by children who are vulnerable to start with. It is well established that children from economically weaker backgrounds typically have lower learning outcomes. There are a variety of channels that this effect operates through. For instance, children from poorer households tend to have less educated parents who are unable to provide learning support comparable to children in richer households. Parents support their children's learning in a variety of ways. They help their children with their homework; they understand the importance of education and encourage their children to focus on school work; if they can financially afford it, they send their children to private schools and/or provide supplementary resources like private tutors to help academically; they, especially mothers, spend more time with the child, providing inputs into the overall development of the child. Remote learning opens up another channel that widens the learning disadvantage of relatively poorer children. These children may not have access to devices like computers, tablets, smartphones, that are needed for remote instruction and therefore may not be able to access learning material provided remotely by the state during the pandemic.

Using parental education as a proxy for affluence, ASER 2020 finds that children with low parental education are less likely to have a smartphone - 45% as compared to 79% of children with high parental education.² They are also more likely to send their children to government schools - 84% compared to 54% for children with more educated parents. Parents with low education are also less likely to help their children with school work - only 55% of children with low parental education received any learning support at home compared to almost 90% of children with high parental education.

What about other learning resources, like availability of textbooks and access to private tuition? Here the gap is much smaller. 28% children with low parental education took private tuition compared to 33% of children with high parental education. What this seems to imply is that even if budgets are tight, parents try to supplement their children's education as and when possible. This is further evidenced by almost 5% children with low parental education starting a new tuition during the lockdown as compared to 6% children with high parental education.

Similarly, there was not much difference in access to textbooks - 79% vs 83%. This is understandable, as most state governments made a big push to get textbooks to children during the lockdown. Government schools performed much better here as compared to private schools with 84% children in government schools reporting that they received the textbooks for their current grade as compared to 72% children in private schools.

To summarize, while children at the lower end of the SES spectrum may be disadvantaged in terms of the type of learning support they get in school and home or their access to digital devices, their parents tried to make up the disadvantage in other ways and the state also made sure that almost all children had access to textbooks. What about other learning materials shared

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² 'Low' parental education is defined as both parents having completed Std 5 or below and 'high' parental education is both parents having completed at least Std 9; medium parental education is a residual category containing all other combinations of mother's and father's schooling. 22.5% of children, in rural India, have parents with low education compared to 27.6% with high parental education. The remaining 50% are in the middle.

by states? Other than textbooks, states shared a variety of learning materials during the pandemic. These included traditional materials like worksheets as well as educational content broadcast on television and radio and online platforms like recorded and live video classes.³

Overall, only about 35% children reported receiving any learning material from their school in the week prior to the survey.⁴ However, only 23% children with low parental education received any material as compared to 49% of children with high parental education. There could be a variety of reasons for this large gap in access. First, as noted earlier, a majority of children at the lower end of the income distribution are enrolled in government schools and these schools were slightly less successful at distributing learning materials as compared to private schools - 33% children in government schools reported receiving learning materials as compared to 40% in private schools.

Second, while schools used a variety of ways to share material and activities such as WhatsApp, other messenger apps, in person visits and phone calls, by and large they relied on one medium - 87% of children received learning material only via one medium. Among these children, the predominant source was WhatsApp (72%), though there was some compensation for lack of a smartphone with about 20% children getting the material through personal visits with either teachers visiting homes or parents visiting schools. As a result, among children without a smartphone, only 17% reported receiving any learning material in the reference week. Again, with a majority (55%) of children in relatively poorer households not having a smartphone, their access to whatever learning material was being distributed would be limited.

Therefore, during the period when schools were closed due to the pandemic, the predominant learning resource available to children with low parental education was their textbooks, with some limited support from parents and tutors. Is having a textbook, with no formal instruction and limited access to resources (human or digital) that can help explain the material in the textbook, sufficient for the child to learn new material or even retain the concepts learnt before schools closed? In theory, it is possible to learn new content or review concepts with well-designed textbooks. However, it is much harder, and certainly not ideal, especially for younger children.

A study by the World Bank⁵ simulates the learning loss due to school closures. In their most pessimistic scenario - school closures of 7 months - which we have already crossed, globally children will lose almost a year of learning adjusted years of schooling, with long lasting effects on lifelong earnings. The study suggests that the effects on learning are likely to be exacerbated for children from weaker economic backgrounds who are unable to access remote learning resources and also do not have adequate learning support from home. This is confirmed by a recent study⁶ on the effect of school closures on learning outcomes of primary school children in the Netherlands which estimates that the learning loss would be 55% larger for children from less educated households. Interestingly, they find no difference across sex, grade or subject. Evidence from a study⁷ conducted after the 2005 earthquake in Pakistan also points to the importance of parental education in mitigating the effects of school closures. The study finds that while children living close to the earthquake fault line scored significantly worse on academic tests, even three years after the quake, these effects were completely mitigated for children of better educated parents.

So, not only are school closures going to result in a significant learning loss; these losses are likely to be much greater for already disadvantaged children, resulting in an even greater learning gap between the rich and the poor. This increasing inequality is a result not just of unequal access to learning material but also the quality of material accessed by different groups. Among the learning materials/resources shared by the state, the closest thing to 'instruction' were online videos/classes. With limited access to digital devices it is not surprising that less than 5% children with low parental education attended online classes as compared to 20% children with high parental education. In other words, apart from having a textbook, children whose parents had little or no education, who most likely had learning deficits to start with, were pretty much left to their own devices. In fact, 40% of these children did not engage in any kind of learning activity in the reference week, as compared to 20% of the children with more educated parents.

³ See Annexure 2 for a list of materials shared by different states during September 2020.

⁴ Learning material here does not include textbooks.

⁵ Azevedo, J. P., Hasan, A., Goldemberg, D., Iqbal, S. A., and Geven, K. (2020). Simulating the potential impacts of covid-19 school closures on schooling and learning outcomes: A set of global estimates. World Bank Policy Research Working Paper.

⁶ Engzell, P., Frey, A., & Verhagen, M. D. (2020). Learning Inequality During the Covid-19 Pandemic. <https://doi.org/10.31235/osf.io/ve4z7>

⁷ Andrabi, T., Daniels, B., Das, J. 2020. Human Capital Accumulation and Disasters: Evidence from the Pakistan Earthquake of 2005. RISE Working Paper Series. 20/039. https://doi.org/10.35489/BSG-RISE-WP_2020/039

It is clear that all children will need some remediation, as and when schools open. However, children from disadvantaged backgrounds, typically studying in government schools, will need more help. According to ASER 2018, the proportion of children in Std 5, with low parental education, who could read a Std 2 level text was 35% as compared to 70% of children with high parental education. So, not only did these children have limited access to learning materials during the school closures, they also started with a much larger learning deficit.

Similarly, younger children, who are just beginning to read and work with numbers, and children who were just acquiring minimum proficiency in reading and math, may slip more easily and require more attention when they return to school. According to the World Bank study, the proportion of children below minimum proficiency in early secondary, could rise by as much as 13 percentage points. If learning levels could drop by so much for older children, the situation could be much worse among younger children who are just learning to read and write.

SDG 4.1.1(a) requires minimum proficiency in reading and math for Std 2/3. UIS defines minimum proficiency in reading as being able to read at Std 2 level. According to ASER 2018, nationally the proportion of children in Std 3 of government schools, who were below minimum proficiency was a whopping 79%. However, there are large variations across states. For instance, in the better performing states like Himachal Pradesh, Maharashtra, Kerala and Punjab, as many as 36-47% children in Std 3 of government schools had acquired minimum proficiency in reading. On the other end of the spectrum are states like Rajasthan, Uttar Pradesh and Bihar where only around 10-12% children in Std 3 of government schools had acquired minimum proficiency in reading. Interestingly, the states where learning outcomes are low are also the states where the distribution of learning material lagged behind. For instance, while 87% children in Himachal Pradesh said that they received learning material in the reference week, just under 8% had received any material in Bihar. Barring some smaller and north-eastern states, there seems to be a positive correlation between learning outcomes and access to materials during school closures.⁸

What this means is that the adverse impact of school closures on learning outcomes will not only affect economically weaker children disproportionately, but will also result in greater educational inequality across states. States and children who had lower learning levels to start with, will experience greater learning losses due to limited access to learning resources during this period. This in turn will lead to a widening gap between children from poorer backgrounds as compared to more well-off children; and between better performing states and states that are lagging behind. This in some sense is the worst-case scenario, since greater effort will be required in low-performing states.

However, if states use this opportunity as a call to action, there are many other stakeholders who will step up to the task of helping children learn. One key finding of ASER 2020 Wave 1 was around the big role played by families and communities. Parents are more educated than ever before - more than 75% children had at least one parent with more than primary school education. The role of parents and how they can help their children can and should be integrated into planning for learning improvement of children. Similarly, elder siblings also play an important role in children's education and can be roped in to help. As ASER 2020 Wave 1 shows 75% children receive some kind of help from a family member in studying at home. For younger children, this is typically the mother and for older children fathers and elder siblings step in. And, finally the community can also play a larger role. During the school closures, almost 70% of school respondents (head teachers and teachers) reported getting help from a variety of community members to reach out and support children. This narrowing of distance between school, home and community is something that needs to continue once schools re-open so that all resources can be leveraged to help children regain lost ground.

⁸ Tanay Sukumar finds a similar correlation for learning outcomes in Std 8.
<https://www.livemint.com/education/news/lost-school-time-might-lower-lifetime-earnings-for-lockdown-hit-children-11605076717454.html>