

Myths of Online Education

Field Studies in Education | September 2020



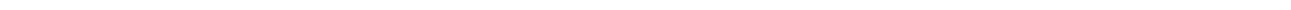


These papers present findings from Azim Premji Foundation's field engagements in trying to improve the quality and equity of school education in India. Our aim is to disseminate our studies to practitioners, academics and policy makers who wish to understand some of the key issues facing school education as observed by educators in the field. The findings of the paper are those of the Research Group and may not reflect the view of the Azim Premji Foundation including Azim Premji University.

Myths of Online Education

Research Group | Azim Premji Foundation

Contact : field.research@azimpremjifoundation.org



Executive Summary

The COVID-19 pandemic has led to disruptions in all walks of life. Schools, colleges and all other academic institutions have been forced to look for alternatives to ensure continuity in learning. In the past six months, across the world, various digital or ICT-based learning options have been explored. Most of these options have proved to be sub-optimal, pedagogically unsound and inadequate substitutes of face-to-face interactions. For school-going children, these have been particularly ineffective due to the deeply intimate nature of learning that is needed in the formative years of schooling. Not only that, the lack of access to devices and infrastructure has led to several children being left out from the process of learning. Emerging evidence also reveals that the endorsement of online learning solutions is often closely tied to the influence of market-based solutions, commercialisation of education, and a lack of belief and investment in the professional capacity of teachers.

With this backdrop, the Field Research Group at the Azim Premji Foundation undertook a study covering **1,522 teachers (in 1,522 schools) and 398 parents in the public school system across 26 districts in five states**.¹ These schools have more than 80,000 children from the most disadvantaged geographies across India. The objective of the study was to understand the challenges experienced by children and teachers in the implementation of online learning solutions within the public school system. The survey tools for teachers and parents were implemented primarily through telephonic discussions and were supplemented with a few open-ended questions for the teachers.

The survey of teachers and parents reveals the ineffectiveness of online learning solutions in providing meaningful learning opportunities, exclusion of majority of children due to poor access, and the professional frustration of teachers (see, Box 1). This resonates with the findings from a recent rapid survey report that underscores the exclusion of over 80% students in public schools due to dependence on technology and 'the complete lack of capacity building/support by state governments to deliver education digitally' (Vyas 2020). Our study also reveals that *contrary to popular beliefs, most parents are eager to send their children to schools with necessary health safeguards and do not think that health of their children would be affected in such an event.*

¹ Chhattisgarh, Madhya Pradesh and Rajasthan are the states that have been implementing different forms of online teaching in public schools while Karnataka and Uttarakhand have not implemented any state-level initiatives for online teaching. The categories 'implementing states' and 'non-implementing states' have been used for these two sets of states.

Box 1: Key Findings

Finding 1: Online learning opportunities are ineffective in providing any actual education.

Responses of overwhelming majority of the teachers show the complete inadequacy of delivering meaningful education through the online mode.

- 1.1 More than 80% teachers expressed the impossibility of maintaining an emotional connect with children in this mode.
- 1.2 More than 90% teachers responded that no meaningful assessment of children's learning was possible in online classes.
- 1.3 Almost 50% teachers reported that children were unable to complete assignments shared during online classes, which in turn led to serious gaps in learning.
- 1.4 The data collected on both the frequency and duration of online classes suggests inadequate time spent with children for their learning.
- 1.5 Parents have, likewise, echoed their own dissatisfaction with 70% being of the opinion that online classes are not effective for the learning of their children.

Finding 2: Almost 60% children cannot access online learning opportunities.

Reasons for this varied from absence of a smartphone, multiple siblings sharing a smartphone, difficulty in using the Apps for online learning, etc. The issue of access is further exacerbated for children with disabilities. Among teachers of children with disabilities in their regular classes, more than 90% found them unable to participate in online classes.

Finding 3. The study also aimed to understand parents' attitude and concerns towards interrupted learning caused due to the pandemic. Parents have overwhelmingly supported reopening of schools with the necessary safety protocols.

Almost 90% of the parents were willing to send their children to school with necessary health safeguards. Close to 65% were of the opinion that schools, when they reopen, would not pose a problem for their children's health.

The open-ended questions that were implemented with a sample of teachers, reinforced the quantitative findings from the survey. The analysis of these questions clearly underlines the professional frustration of the teachers with online modes of teaching. The responses of teachers also reveal the initiatives that are being taken by them to find alternative, meaningful ways to engage with their children as the regular public school system continues to remain closed and inaccessible for a vast majority of the country's school-going child population.

The inadequacy of the digital modes adopted by some of the states has also led state education departments backtracking on the online options and adopting more direct teaching-learning processes, with teachers visiting the families and school children, for example, *Padhai Tuhar Para* (education in your neighbourhood) scheme in Chhattisgarh; *Hamara Ghar - Hamara Vidyalaya* (our home - our school) in Madhya Pradesh and; *Vidyagama* in Karnataka.

Overall, the study is in alignment with other recent studies that have underscored the fallacy of resorting to online learning solutions for school-going children, especially in disadvantaged contexts. The study, thus, endorses the urgent need to reopen schools in a phased manner with due preparations for the health and well-being of both children and teachers while at the same time encouraging and facilitating teachers to pursue more community-based solutions for direct interactions with children in the interim period.



1. Introduction

The COVID-19 pandemic and the ensuing closure of school systems has led to a heightened interest in online learning alternatives for the mainstream school system. A number of recent studies and reports, both globally (e.g. Vegas 2020; UNICEF 2020) and in the Indian context² have, however, underlined how digital, online learning solutions are a pipedream in contexts that lack adequate digital infrastructure and access (especially for underprivileged groups), and as far as teacher preparedness is concerned. There is also enough evidence to show that digital solutions should not be regarded as a replacement for regular teaching (Mukunda 2019, pp. 301-355). In addition, the turn towards digital and ICT-based online learning models can be seen to be enmeshed in commercial interests and a preference for market-based solutions.³

In this context, the objective of the current study was to understand the difficulties faced by public school children and teachers when confronted with online learning solutions that a number of state education departments had hurriedly adopted since April 2020. The study primarily used survey tools that were implemented through telephonic discussions with teachers and parents across a large number of public schools in five states (Table 1). Three of these five states – Chhattisgarh, Madhya Pradesh, and Rajasthan – have been implementing different forms of online teaching in public schools over the past few months, while Karnataka and Uttarakhand have not implemented any state-level initiatives for online teaching.

Table 1: Teachers and parents surveyed

States	No. of districts	Teachers Survey	Parents Survey
<i>Implementing states: Chhattisgarh; Madhya Pradesh; Rajasthan</i>	12	634	179
<i>Non-implementing states: Karnataka; Uttarakhand</i>	14	888	219
<i>Total</i>	26	1522	398

² For example, see 'Status Report- Government and Private Schools During COVID-19' by Oxfam, India; 'Are schools in Karnataka ready for a post-COVID 19 world?' by the NGO, Dream a Dream and; 'Scenario Amidst Covid-19: On-ground Situations and Possible Solutions' by the NGO, Smile Foundation.

³ For example, see 'Online Education in India: 2021', a study by KPMG and Google in May 2017; URL: <https://assets.kpmg/content/dam/kpmg/in/pdf/2017/05/Online-Education-in-India-2021.pdf>. Also see, <https://www.india-briefing.com/news/investing-indias-education-market-after-covid-19-new-growth-drivers-20330.html/>.

A number of critical concerns related to online learning models emerge from the study. These include poor digital access for children and families, minimalist and inadequate teaching-learning processes, and insufficient knowledge of digital platforms or their use among teachers, compounded by the lack of training and support.

Possibly, state education departments have also realised the folly of their initial misadventures with online teaching-learning models as they have now started shifting to more direct interactions with public school children through teacher visits and community-based classes. This, along with the findings of the study that show the willingness of parents to send their children to schools under proper norms of safety and health, clearly indicate the need to open public schools as early as possible.

The study, in general, highlights the compounded nature of challenges associated with and the fundamental ineffectiveness of online learning solutions in the public school system. The findings from the study endorse the more recent initiatives by the state education departments to encourage and facilitate teachers in reaching children directly through conventional modes that encourage active teacher-student interaction in physical settings. It simultaneously suggests that a phased reopening of schools, with due provisions for the health and well-being of both children and teachers, should be the most immediate step to bring children in public schools back on the road to learning.



2. Findings

2.1 Most children cannot access online learning opportunities

Teachers in the implementing states reported that out of 30,511 children who attended regular classes, only 11,474 were actually attending online classes. On an average, 42 percent of children were attending online classes across the schools surveyed. This means that around 60 percent of children cannot access online learning opportunities.

Out of 110 teachers in implementing states who had children with disabilities in their regular classes, only 8 (7%) confirmed that these children were attending online classes.

In the Teachers Survey, teachers were asked how many of their regular students had easy access to smartphones for attending online classes. Table 2 shows that on an average, 31 percent children had easy access to smartphones for online classes. Similarly, data from the Parents Survey shows that, overall, though around 87 percent of the parents have smartphones, proportion of parents who have more than one smartphone is only 22 percent. This has implications for access, as was evident from the discussions with teachers that shows that most of the parents needed to carry their smartphones to work and these devices were not available for the children to use at home.

Table 2: Access of parents and children to smartphones

	Implementing states	Non-implementing states	Total
Teachers Survey			
<i>Children in regular classes</i>	30,511	49,577	80,088
<i>Children for whom smartphone easily available for online classes</i>	8,650	13,595	22,245
<i>Average no. of children for whom smartphone easily available for online classes (%)</i>	32	29	31
Parents Survey			
<i>Parents have smartphone (%)</i>	91	85	87
<i>Parents have more than one smartphone (%)</i>	20	24	22

The responses of the teachers in the implementing states to the open-ended questions around the issue of access reveal the same concerns as the survey (Box 2).

Box 2: Response of teachers on the issue of access to online classes

'In a 45-minute class, half the time goes in saying "hello-hello" as the network is bad and girls cannot hear properly and keep saying, "Madam, theek se sunai nahi de raha hai" (madam, we cannot hear properly). It is very difficult to teach even with these four girls; I do not know how it would be if all the students connected to the class.' (Teacher, Raipur, Chhattisgarh)

'Attendance is a very big issue. It is quite unusual for us to conduct classes with 2-3 children. Out of 14 children, only 4 have been able to join the class. Network issues also affect the classes.' (Teacher, Dhamtari, Chhattisgarh)

'Only 20% parents have smartphones. Majority of them are labourers. It is difficult for children to access the content as parents go for work in the morning and come back in the evening. Half of them [who have smartphones] do not give phone to children as they think it is not good for children and can hamper values. The connectivity is very poor; I had to come outside of school to talk to you. Most of the families are economically weak and are not able to afford smartphones.' (Teacher, Tonk, Rajasthan)

2.2 Online learning opportunities are ineffective in providing any actual education

Teachers in both the implementing and non-implementing states shared their concerns about maintaining the emotional connect with children during the online classes (Table 3). While 84 percent teachers in the implementing states said it was difficult or impossible to maintain an emotional connect with children during online classes, 89 percent teachers in non-implementing states shared the same concern in the eventuality of online classes in their states.

Table 3: Emotional connect with children during online classes

	Implementing states		Non-implementing states		Total	
	Number	%	Number	%	Number	%
<i>Easy to maintain emotional connect with children</i>	102	16	102	11	204	13
<i>Difficult or impossible to maintain emotional connect with children</i>	532	84	786	89	1,318	87

Similar concerns are seen in the responses of teachers in the implementing states to the open-ended questions around the issue of online teaching-learning (Box 3).

Box 3: Responses of teachers on the issue of effectiveness of online teaching-learning

'It is mostly one-way communication; we make PPTs and share pictures and videos. But it is difficult to know how much children can follow. It also feels bad that majority of the students are not able to participate in the class. We do not know what will happen to those children. We also share some readings on WhatsApp and some homework which some children do and send back. Now textbooks are also not available with most children; only some have taken textbooks from their siblings or neighbours.' (Teacher, Raipur, Chhattisgarh)

'I am sending material related to maths. In maths, watching a video on any concept is fine but this subject requires exercises. Children are watching the videos but not doing any exercises. For practice and exercise, there should be someone with them.' (Teacher, Tonk, Rajasthan)

'Every child is different. If I have three children who have three different interests, then I motivate them according to their interest. We have to teach through activities. How can I do it on phone? Language used in the videos and the language a teacher uses is very different. They [the children and parents] cannot understand such language. We get the content from the centre [state office] and then, we have to send it to the children. We do not create material for our children. How can somebody sitting far away make content for my children? It [the online material] is very different from my children's context.' (Teacher, Barmer, Rajasthan)

90 percent of the teachers (base=634) in the implementing states responded that they were not able to do any meaningful assessment of children's learning during the online classes. Even out of the remaining 10 percent, half of them maintained that it was very difficult to do any meaningful assessment.

Teachers were asked whether assignments were given to the children during the online classes. In the implementing states, around 17 percent of the teachers (base=548) had not given any assignments. From among the teachers who had given assignments (base=456), 44 percent reported that children were not able to complete those.

The Parents Survey revealed concerns that could possibly explain some of the above observations by the teachers. 36 percent of the parents (base=124) in the implementing states shared that their children were not able to use the Apps for online classes on their own.

Parents were also asked about the suitability of online classes for their children. In the implementing states, around 70 percent parents expressed that they did not find online classes suitable for their children and in the non-implementing states, more than 50 percent of parents shared that they felt that online classes would not be suitable for their children (Table 4).

Table 4: Suitability of online classes

	Implementing states		Non-implementing states		Total	
	Number	%	Number	%	Number	%
<i>Online classes suitable for children</i>	42	31	78	46	120	39
<i>Online classes not suitable for children</i>	93	69	93	54	186	61

2.3 Teachers are ill-prepared for online learning platforms

Online learning platforms and modes of online teaching are not a regular feature of the public school system, or for that matter, the school system at large, in India. More than half the teachers (overall, 54%), shared that their knowledge and user-experience of such platforms and modes of teaching were inadequate (Table 5).

Table 5: Teachers' knowledge of online teaching-learning platforms

	Implementing states		Non-implementing states		Total	
	Number	%	Number	%	Number	%
<i>Inadequate knowledge of online learning platforms</i>	334	53	493	56	827	54
<i>Adequate knowledge of online learning platforms</i>	300	47	395	44	695	46

2.4 Processes of online teaching

The Teachers Survey revealed the minimalist nature of engagement in online classes. Only around 50 percent of the teachers were found to engage with children daily, while the rest engaged with online classes at a much lesser frequency (Table 6).

Table 6: Frequency of online classes

	Teachers (%)	Parents (%)
<i>Daily</i>	49	49
<i>Alternate days</i>	17	17
<i>Twice a week</i>	14	6
<i>Once a week</i>	12	0
<i>Once every fortnight</i>	2	4
<i>No fixed frequency</i>	7	25

Also, the Teachers Survey shows that around 75 percent of the teachers spent, on an average, less than an hour per day on online classes for any grade (Table 7). Responses of both teachers and parents suggest that, on an average, in at least 80 percent of the instances, only an hour or less per day is spent by the teachers per grade on online classes.

Table 7: Average teaching time spent per grade on online classes

	Teachers (%)	Parents (%)
<i>Less than one hour a day</i>	74	20
<i>One hour a day</i>	24	64
<i>More than one hour a day</i>	2	16

In some implementing states, a significant proportion of the teachers (24%) responded that they did not share any teaching-learning materials for the online classes while another 24 percent teachers responded that any such material was shared during the class. Consequently, for most online classes, children did not have access to online teaching-learning materials prior to the class.

In the implementing states, the main mode for sharing online materials was found to be WhatsApp with 71 percent teachers using this mode. Around 14 percent of teachers also used other Apps, such as MS Teams, Zoom and WebEx.

2.5 Parents are willing to send their children to school when schools reopen

In the Parents Survey, we asked whether parents were willing to send their children to school when schools reopen with necessary safety precautions. Contrary to popular perception, a majority of parents (90% overall) were willing to do so (Table 8).

Table 8: Parents willing to send children to school when schools reopen

	Implementing states		Non-implementing states		Total	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
<i>No</i>	2	1	30	18	32	10
<i>Yes</i>	133	99	141	82	274	90

Reinforcing the above opinion, overall 66 percent parents also shared that they did not think schools would be a cause of any problem for their children's health after they reopen (Table 9).

Table 9: Parents' opinion about safety of schools when they reopen

	Implementing states		Non-implementing states		Total	
	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>
<i>No</i>	44	38	42	30	86	34
<i>Yes</i>	71	62	98	70	169	66

3. Conclusion

Studies in the context of the COVID-19 pandemic, both in India and globally, have emphasised the sharpening of inequalities that could result from the indiscriminate adoption of ICT in school education to address the current challenges. It is hardly surprising that in a context of existing inequalities of access in terms of provisioning for basic school education, and the socio-economic differences that underlie such inequalities, online teaching-learning solutions would lead to furthering of such inequalities in school education.

This study, overall, is in alignment with other such recent studies and underscores the severe problems that online learning solutions generate for the public school children across states. These are in terms of abysmal access of poor families and children to online learning options, the ineffectiveness of online teaching-learning to provide substantive learning opportunities, and inadequate preparedness of teachers for online teaching. The study also makes evident the minimalist nature of the online solutions that had been adopted by some state governments in the early stages of the pandemic. Fortunately, many of these initiatives have since then been rolled back and state education departments have begun to endorse more context-based, direct teaching-learning solutions. This also resonates with the finding of the study that indicates that parents are both dissatisfied with online learning solutions and eager to have their children back in school with necessary safeguards for their health and well-being.

The study, therefore, points to the urgent need to reopen schools in a phased manner with adequate provisions for the health and safety of both children and teachers in the public school system. It also suggests the need to adopt context-based, direct teaching-learning solutions with the physical presence of teachers during the transition period of the reopening of public schools.

References

Mukunda, K, V. 2019. *What did you ask at school today?* Noida: HarperCollins.

UNICEF. 2020. *Covid-19: Are children able to continue learning during school closures?* New York: UNICEF.

Vegas, Emilian. 2020. *School closures, government responses, and learning inequality around the world during COVID-19*. URL: <https://www.brookings.edu/research/school-closures-government-responses-and-learning-inequality-around-the-world-during-covid-19/>

Vyas, A. 2020. *Status Report - Government and Private Schools During COVID-19*. Oxfam, India.





Azim Premji University

Pixel Park, PES Campus, Electronic City, Hosur Road
Bangalore 560100

080-6614 5136

www.azimpremjiuniversity.edu.in

Facebook: /azimpremjiuniversity

Instagram: @azimpremjiuniv

Twitter: @azimpremjiuniv