

RESEARCH PARTNER



Did Technology Enable Inclusive Education in Rural India in a Year of Lockdown?

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Center for
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Partners and volunteers

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Preface

Since 2005, the Annual Status of Education Report (ASER) has been published every year (with the exception of 2015) and has provided estimates on learning outcomes and different facets of children's education in rural India. However, with the country shutting down in March, and the pandemic raging across the world, it became clear that it would not be possible to conduct ASER in the field. In 2020, for the first time, the ASER survey was administered on the phone. Although an assessment of children's learning outcomes was not possible, the survey focused on children's access to schooling and learning opportunities in rural India, during the period when schools were closed due to the pandemic.

This report, a complement to the main [ASER 2020 report](#), looks at the data from an equity lens. So, while some sections and tables have been repeated from the ASER 2020 report for the sake of completeness (for instance the sections on the ASER process and sampling and the enrolment tables), this report adds new analysis focussing on the digital divide based on unequal access to technology.

During 2020, while schools were closed, state governments as well as private schools tried to provide educational materials in a variety of ways, predominantly through remote mechanisms such as WhatsApp or text messages, TV, radio or online web classes. While remote instruction was the obvious solution to the problem, it also opened up new avenues to widen the digital divide. Although equity gaps existed in access to education prior to the pandemic, the switch to remote education, which is predominantly dependent on the availability of and access to different technology based educational inputs and aids such as smartphones, has caused widespread concern about the deepening of these equity gaps.

ASER 2020 gathered information on various indicators which can be used to explore this widening equity gap in education. These include differences based on children's sex, their school type, the level of their parents' education and the availability of smartphones at home. The 'ASER Digital Check 2020' report presents new evidence from the ASER 2020 data highlighting the differences across these dimensions. It also presents new state level tables that facilitate comparison across states underscoring the variation in state performance.

The report explores the following domains:

- Children currently enrolled in school
- Children currently not enrolled in school
- Household resources
- Learning support for children at home
- Access to learning materials
- Engagement with learning materials.

For each domain we present the findings by sex to examine whether boys fare differently from girls; by type of school children are enrolled in, to highlight government-private school differences; by parental education, as a proxy for household affluence; and by availability of smartphones to focus on the digital divide. In each section, first the All India results are presented followed by the state-wise findings.



About Annual Status of Education Report (ASER) 2020

About ASER

Every year from 2005 to 2014, the Annual Status of Education Report (ASER) has provided district, state, and national estimates of the status of children's schooling and foundational learning across rural India. Children in the age group 3 to 16 were surveyed to find out their enrollment status in pre-school or school. Children in the age group 5 to 16 were assessed one-on-one to understand their basic reading and arithmetic abilities.

Starting its second decade of existence in 2016, ASER switched to an alternate-year cycle, where the 'basic' ASER described above is conducted every other year (2016, 2018); and in alternate years, ASER focuses on a different aspect of children's schooling and learning. In 2017, ASER 'Beyond Basics' focused on the abilities, activities, awareness, and aspirations of youth in the 14 to 18 age group across 28 districts in the country. In 2019, ASER 'Early Years' reported on young children's (age 4 to 8) pre-school and school enrollment status and their abilities on a range of important developmental indicators across 26 districts in the country.

The COVID-19 crisis interrupted this alternate-year calendar, making it impossible to conduct the nationwide 'basic' ASER that was due to be repeated in 2020. However, the urgent need to systematically examine the effects of the pandemic on schooling and learning opportunities of children across the country was apparent.

Why ASER 2020?

Recent global estimates suggest that school closures, unequal access to technology-based educational inputs used for remote learning, and other related disruptions due to the pandemic are likely to result in 'learning loss' and higher dropout rates, aggravating existing equity gaps in education among other consequences. In India, numerous studies have been done on the impact of the COVID-19 pandemic in the country since the first lockdown was announced in March 2020, but very few cover children's education. Although a lot of digital content has been generated and transmitted to help children continue to learn while at home, there is limited evidence on the extent to which this content is in fact reaching children; whether they are engaging with it; and the impact it is having on their participation and learning.

In order to take the unprecedented pandemic-related constraints into account, but at the same time address the urgent need for large scale nationally representative data on children's education, the ASER 2020 survey was adapted to a phone survey format in order to capture the effects of the pandemic on different aspects of children's education.

What is ASER 2020?

The ASER 2020 survey was designed to be conducted at a time when schools have not yet reopened and governments and schools are reaching out to children through a variety of remote means with diverse educational content. It explores the provision of, and access to, remote education mechanisms and materials in rural parts of the country, and the ways in which children, families, and educators are engaging with these from their homes.

Objectives: The ASER 2020 survey focuses on the following key questions regarding provision of, access to, engagement with, and challenges concerning remote learning during school closures:

- What resources do families have to support children's learning at home?
- How are families and other community members helping children with learning activities?
- What learning materials and activities are children and families receiving from schools?
- How are families and children accessing learning materials and activities?
- Are children engaging with these learning materials and activities?



- What kind of contact do teachers and children/parents have with each other?
- What kinds of challenges are families and teachers facing with regard to remote learning?

Sample: The standard operating procedure for ASER survey includes recording a contact number from each household and school surveyed, where available. These phone numbers are used to monitor and cross-check the data collection effort in that survey year. The ASER 2020 household survey was therefore conducted with a random sample of households with mobile phones drawn from the ASER 2018 data set, selected to generate estimates that are representative at state and all-India levels. In addition, head teachers or teachers from all schools in the ASER 2018 sample were included in the ASER 2020 school survey. Extensive pilots and experiments were conducted to check the feasibility of the ASER 2018 data set as a sampling frame for ASER 2020. For more details on sampling, see the note on Sample design of rural ASER 2020. For more details on implementation, see section on ASER 2020 Process documents.

Design: To conduct the survey, phone calls were made to parents/caregivers of children aged 5-16 in 118,838 households as well as head teachers or teachers in 16,761 schools over a span of ten days in September 2020, the sixth month of continuous school closures across the country. Of these, the survey was completed with 52,227 households and 8,963 teachers (see section on Survey coverage for more details). Using standardised questionnaires, information was collected separately for each child in the 5-16 age group in each surveyed household. For schools, information was collected for the grade (between Std 1-8) that the teacher could provide the most information for.

This report uses the ASER 2020 survey data to explore the following areas:

- **Children's enrollment:** Explores patterns of enrollment and dropout among 6-16 year olds in rural India.
- **Children not currently enrolled:** Examines which children are currently not enrolled in school and the reasons behind this.
- **Household resources:** Explores whether households have key resources that can help support children's education. These include parents' own education levels; access to technology such as TV and smartphones; and availability of textbooks.
- **Learning support at home:** Examines whether and how households support children during school closures. This includes support from family members as well as other support such as paid private tuition.
- **Access to and availability of learning materials:** Reports whether families received learning materials or activities from schools, and the mediums through which they accessed these.
- **Children's engagement with learning materials and activities:** Analyses the extent to which children actually engaged with different kinds of materials and activities received from any source; as well as the nature of contact between families and schools during the lockdown.
- **School survey:** Explores teachers' preparation for and implementation of remote teaching-learning activities with their students, and whether they received any help from the community to support children's learning during school closures.



Commentary



Technology and Education

Madhav Chavan¹

There is no doubt that the future, which is already here, is going to be dominated by technology. Although it seems like the cost of devices is going to limit its use in education and create a deeper digital divide today, that may not be the main problem tomorrow. The global trend is towards reduction if not total eradication of poverty and most individuals will have access to digital devices and services in the not too distant a future. The main problem, according to me, is that the rigid age-grade education system tied to examinations will make a slave out of technology and will not allow full expression of its potential. This is already evident.

Every technological advance in the history of mankind has eventually led to easier and greater spread of knowledge. Although scripts were invented two thousand years ago, it was only in recent times that the idea of universal literacy has emerged. Although the printing press was invented in the mid-fifteenth century, literacy levels in Europe and USA needed a boost from changes in social, economic and political thinking eighteenth century onward to raise literacy levels faster and spread education to near universality. It took over four hundred years for Europe to reach significant literacy rates after the invention of the printing press. In India, the first press was installed in the mid-sixteenth century and four hundred years later the literacy rate was still under 30%. In other words, the potential impact of the printing press was there from day one but it took a lot of other efforts and changes before these impacts could be realized in terms of their contribution to literacy and education.

The case of digital technology is probably similar except that what has to be spread is not literacy but education-knowledge. By the definitions of the nineteenth century we have already reached a point of near 100% literacy all over the world, with the exception of some regions. Digital mobile technology is spreading on top of this but it has not yet begun to realize its potential to impact education. As the pandemic hit and schools closed down, school systems everywhere snatched up digital technology- or was it the other way round? Desperate attempts were made to keep education going using any means to remotely or virtually reach children and parents. But the tragedy is that the whole world was obsessed with teaching the curriculum and worried about how much of the syllabus learning would be lost while schools were closed - even though it is well-known that in most of the developing world, and in the underdeveloped parts of the developed world, children cannot read in spite of having gone to school. The equation of schooling = education and curriculum = knowledge is so unyielding that we lost a huge opportunity to informally or non-formally educate children and their parents.

However, the interesting thing is that most people on earth were locked into their homes and their only window to the world was their phone. Given that between 60 to 90% people in every country have cell phones and 40 to 80% have access to the internet, a lot of informal learning has happened globally which is being ignored. We know, for example, that mothers have learned a great deal about smartphones. Many people have learned cooking from YouTube. It is common experience that when children get to handle digital devices they learn a lot more than their parents expect them to. We have not systematically explored what else people have learned but it is worth investigating. The informal impact of digital technology needs to be paid attention to.

One of the core strengths of digital technology is that it allows non-linear access to information and knowledge. Printing of books and proliferation of newspapers and libraries enabled access to knowledge and information beyond classrooms. Digital technology does exactly that but a hundred thousand times more. Digital technology is nothing if not unlimited access to informal learning and the possibility of lifelong learning.

Human societies have, for thousands of years, learned through a very slow natural process of informal learning. The mechanism of schools and the engine of the industrial revolution created a dominant formal learning mechanism which undermined all informal learning although a huge majority of population acquired their basic skills, information and knowledge informally. Digital technology has created possibilities of fast informal learning individually or in small groups.

Informal learning has its weaknesses and problems. But it can be turned into local processes of non-formal and lifelong learning to give it some structure.

¹ President and member of the Board of Directors, Pratham Education Foundation



In a country such as India, most people learn on the job. Only half the population of India's 1.3 billion people forms the workforce. Out of this workforce 94% work in the unorganized sector. They are engaged in agriculture, are self-employed, work in small stores, handicrafts, trade and other unlicensed activities. Undoubtedly, they need to be educated but do they need the kind of 12 year curriculum that keeps them locked up without any serious gains? The National Education Policy 2020 has dealt with some issues of the rigidity of the curriculum and the system. Converting the on-the-job learning or learning while earning into non-formal certification needs to be done with some imagination.

The digital era can make information and knowledge freely available without barriers. But, over the last couple of hundred years, barriers around educational institutions have grown. This makes these old institutions outdated. Of course, primary education is cost-free and accessible to any child. But at higher ages, there is an increase in both the number and type of barriers that children and young people face. For instance, if a student has not attended a recognized institution, they cannot acquire a certificate. How does this make sense in a country where most people learn their skills and get their knowledge outside institutions?

The framework for India's vocational training program has a provision for "recognition of prior learning". A plumber who has learned on the job, can be assessed and certified for his skills without having attended an institution. This is possible for every skill and job barring a few. Digital technology makes it possible to create non-formal courses in different subjects, as well as robust local assessment mechanisms. Encouraging those who are left out of formal education to learn through non-formal mechanisms is a major strength of the new digital technology.

Digital technology will be grabbed by the formal education system for classroom teaching-learning, but its real utility and strength lies outside the system, whether in the informal sector or the business sector.



Equity in the time of COVID

Wilima Wadhwa¹

In India, school closures started as early as March 2020 and schools were yet to reopen in December 2020. ASER 2020 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 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

¹ Director, ASER Centre

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.

Overall, only about 35% children reported receiving any learning material from their school in the week prior to the survey.³ 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 Bank⁴ 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 study⁵ 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 study⁶ 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 Learning material here does not include textbooks.

⁴ 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.

⁵ Engzell, P., Frey, A., & Verhagen, M. D. (2020). Learning Inequality During the Covid-19 Pandemic. <https://doi.org/10.31235/osf.io/ve4z7>

⁶ 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.⁷

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 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 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.

⁷ 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>



Learning from ASER 2020: Connecting evidence and action

Rukmini Banerji¹

Context

By September 2020, schools had already been closed for nearly six months. The first three months of the 2020 lockdown could be thought of as if they were summer holidays. But through the monsoon months of July, August and September, the gates of the school were locked and rain fell disconsolately on empty school roofs. It was clear even then that the situation would be fluid for some time to come. Almost a year later, we are more or less in the same situation. After 18 months of school closure, only now in August 2021, are school systems slowly considering how and when they should open.

The initial lockdown period was marked by uncertainty, fear and economic disruptions to lives and livelihoods. With a complete lockdown in place, perhaps for the first time in living memory, all adults and children remained at home or close to home for a protracted period. For many families, this was a period of intense hardship. Staying at home meant no income. However, it is also perhaps the case that the prolonged proximity forced families to think about how to deal with discontinuity in their children's education.

It is well established that home factors are a major influence on student achievement. Research from India shows clearly that if family characteristics are controlled for, most differences in outcomes between private school children and government school children disappear. Family resources are strongly correlated with greater learning opportunities and support for children (choice of private school, enrollment in tuition classes, access to more learning materials, possible learning support at home). In India, these inequalities are deep and widespread, and over time have remained a chronic characteristic of the Indian social fabric. Given the prolonged period of school closure, have these inequalities across families led to even greater differences in terms of educational opportunities and outcomes?

Connecting the dots: Evidence and Action

ASER 2020 provides an insightful glimpse into family functioning during this time of crisis. The survey was conducted via phone and collected information from family members. ASER 2018 is the last nation-wide face to face household survey that was conducted in the ASER series, with coverage of close to 600 rural districts of India. For the 2020 survey, a representative sample of children was drawn from the ASER 2018 sampling frame. Hence, an all India picture emerges from the current study.

Digging deeper to understand how families coped with the crisis, we can turn to ASER 2020 data to tell us about which families were reached, what support children received, and whether learning material and content reached children? How were these patterns different for different kinds of families? This note aims to connect the dots between evidence and action. It highlights some of the key findings from the survey, describes some interventions that have been carried out in this period, and discusses possibilities for future action.

Reach

First, how were children reached? From the typical model of face-to-face instruction, education systems across the world moved to some form of technology assisted remote or distance education. In large parts of the global North, teachers quickly connected to students via online classes (synchronous and asynchronous). The urban elite schools in India were able to make this shift quite quickly. But for a major proportion of rural children and a sizeable chunk of the non-elite urban population, this was simply not possible. Lack of access to devices, issues with connectivity, inability to afford data were all common constraints. Large education systems were also not equipped for such a major change. While governments have succeeded in connecting their teachers to online portals and opportunities for remote training, connecting to the majority of children in any continuous way has been difficult, even in urban areas.

In the early days, some government school systems tried to establish continuous online instruction especially for higher grades, as though children were in classrooms - only now these were virtual classrooms. Others aimed to replicate familiar school processes like sending out worksheets - only now this was via WhatsApp to parents' phones. However, these efforts were largely unsuccessful for most rural children. Even if one parent had a smart phone, the parent (and the smart phone) is

¹ Chief Executive Officer, Pratham Education Foundation

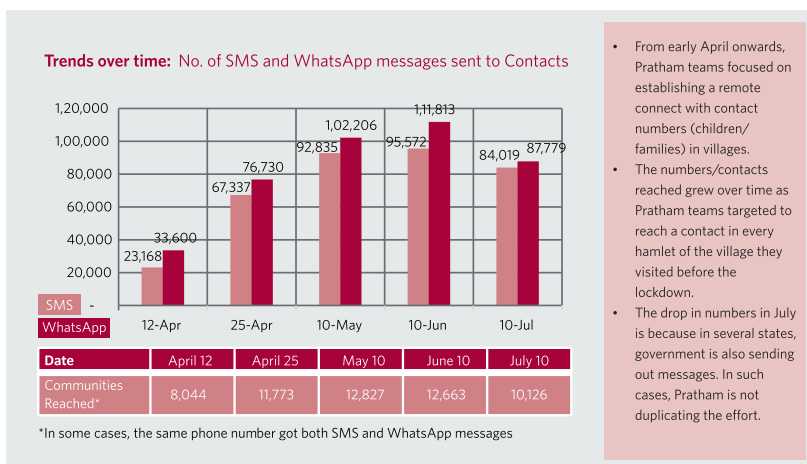


out at work during the day. Learning materials and assignments sent via WhatsApp are available to children only at night. If there were several children in the family, the parent’s phone would be clogged with a bewildering array of materials for children.

ASER 2020 data however points to some interesting facts. Comparing household assets across years, it is clear that while the proportion of families who had television sets or motorized vehicles remained more or less the same between 2018 and 2020, this was not the case with ownership of smartphones. For households whose children are enrolled in government schools, the proportion with smartphones increased from 29.6% in 2018 to 56.4% by September 2020. For families with children enrolled in private schools, this figure went from 49.9% in 2018 to 74.2% in 2020. Whether this rise is a linear rise over time or whether this increase has been precipitated by the pandemic (or even more specifically whether smartphones were bought for supporting children’s education) is not clear. What is evident is that more households now have the opportunity to access learning resources for their children than before.

One of the questions asked in the ASER 2020 survey was directly linked to reach. How did children receive learning materials? (The survey was conducted in September 2020 and the week prior to the survey was the reference period). Only one third of all children surveyed reported receiving learning materials in the reference week. WhatsApp was the most common medium; 67% for government school children families and 87.2% for private school children reported receiving learning materials via their smart phones. However, there were other ways in which learning materials/activities were distributed and communicated. Two other common options were via phone calls (on basic phones) or visits (family members to school or teachers to home, where actual physical materials could be shared). Table 1 suggests that for families with lower access to smartphones or lower education levels, “reach” was achieved via these other means. While more details are needed to understand the underlying behavior patterns or practices, this fact points to possible compensatory strategies on the part of families and schools to counter lack of access to digital devices.

An example from the ground: In Pratham programs, especially where there had been a prior direct presence in the community, a systematic exercise was carried out in April 2020 to maximize “reach” and to create and reinforce social network structures where small groups could share resources with each other. First, Pratham teams made phone contact with at least one person in each village. With the help of prior knowledge and some help from the village contact, hamlets were mapped for that village. Then, Pratham teams tried to establish phone contact with someone in each neighbourhood or hamlet.



Finally, working with the hamlet-contact, a big push was made to get phone numbers of as many families in the hamlet who had children in primary school. This is an example of how reach can be maximized even during lockdown conditions.

By end of May 2020, Pratham teams “reached” more than 12,000 rural and urban communities and were able to send daily messages to over 200,000 contacts. Regardless of whether the family had a smartphone or a basic phone, a phone call was made to every contact number (usually by a person whom the family knew) for feedback and follow up at least once every two weeks.

Support:

ASER 2020 probed whether and how families helped children to study at home. Available data from the survey on parental education was categorized in the following way. The “low” education category included children in families where both parents had education levels of Std V or less. At the other end were children in families with “high” education levels - both parents had completed at least nine years of schooling. All other children’s families fell into the “medium” category. Using these categories, in the ASER 2020 sample, 22% children fall into the “low” parental education category, about 50% in the “medium” category and 27.6% in the “high” category. While there are wide variations across states, in 10 major states, the proportion of children



with “low” parental education is between 20-30% (Rajasthan is the only state where the percentage is higher than 30%). For all other states, “low” parental education is an issue for less than 1 out of every 5 children. Broadly speaking, close to 80% children in contemporary rural India have parents who have had at least 5 years of schooling.

If parents are more educated, do children receive more help at home? The answer from ASER 2020 is “yes”. At least that was the case six months into the COVID crisis. Close to 70% families reported helping children. Approximately 50% children with “low education” parents get help at home as compared to 89% children with “high education” parents. Younger children get more help than older children. A slightly higher percentage of private school children get family support as compared to government school children. Apart from parents, a significant fraction of respondents reported getting help from siblings, especially in families with “low” parental education.

A small study done in Pratham programs in the early days of the lockdown shows interesting family dynamics. With a small sample of families, Pratham teams explored who does what within the family as far as children’s learning support is concerned.

The broad learning from that exercise was that while the message (smartphone or regular phone) may come on the father’s phone, mothers or siblings are more likely to help the child with the learning task.

Overall		Who regularly does the activity					Total
		Father	Mother	Other family members	Sibling	Village	
Who receives the message	Father	13	6	3	9	3	34
	Mother	1	12	2	3	1	19
	Sibling	1	0	2	16	0	19
	Other Family Members	0	1	8	1	1	11
	Village Youth	0	2	1	0	16	19
Total		15	21	16	29	21	102

Content and activities:

In the last year and a half, there have been extensive discussions about remote learning, digital content and the role of technology in school education. Much of this debate has centered on the potential and promise of what can be termed “high technology” (smartphones, apps, portals, online classes). The concern about the deepening of the digital divide is raised repeatedly in the media and among practitioners. While “edtech” may be the flavour of the moment, not enough has been done in the last eighteen months to look closely at how and to what end people are using the resources available to them, which are often “low tech”.

ASER 2020 investigated the availability of learning materials at home. A very important, yet rarely highlighted aspect of last year’s education experience in India was the fact that by September more than 80% children across rural India had textbooks for their current grade with them. State governments used different ways to get textbooks to children but overall 84% of government school children had their current grade textbooks as compared to 72% of private school children. Textbooks are familiar objects. They are portable and can be used by any children at any time. They can be taken to parents, older siblings or neighbours to ask for clarifications. In many cases, primary grade textbooks have sections like worksheets for children to use. In pre-COVID typical years, textbooks were often the only learning material that children had at home. It is also likely that family members may find it easier to help children with textbook tasks than with assignments or tasks received via WhatsApp.

ASER 2020 data on children’s engagement with activities points to two interesting trends. First, during the reference week (week prior to the survey in September 2020) about 30% of children did not do any learning activities. This figure is about the same for government school children and private school children. “No activity” children are also relatively more likely to be found in “low” education families (40% in these families, although surprisingly 30% children in “medium” education families and close to 20% in “high” education families also did no learning activity in the reference week). But across all types of families and schools, among those who did learning activities, a clear majority (60%) used textbooks.

In a one-time large scale phone survey with randomly sampled households, it is difficult to probe details of learning activities that are being sent via phone messages by schools. However, in Pratham programs some of these “deep dive” studies have been done.



Several lessons from the past year include the importance of on-going conversations and two-way communication (messages are sent and follow up phone calls are made for feedback). The continuous engagement leads to greater participation over time and more traction for learning activities in the family. The feedback calls have also proven to be very useful for modifying content (topic, task, language used, sequence, etc.) to make it more suitable for families to participate (“reaching at the right level”).

Looking ahead

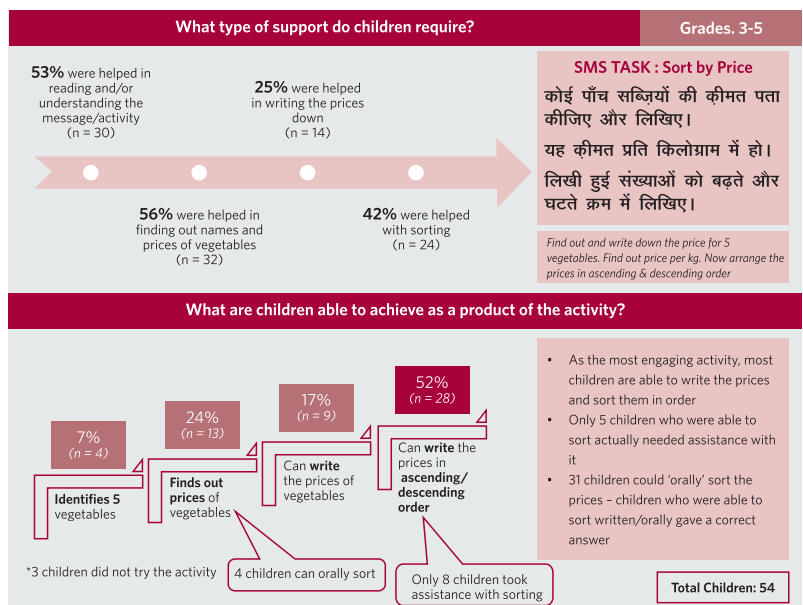
ASER 2021 will be in the field in September, which will help in tracking changes over time. We will know a lot more about what families and schools

are doing a year later to support children’s learning during school closure. We will hopefully see how these patterns have changed as families and schools have learned to cope with the crisis.

Whatever the path forward, there is no denying that parents and families will continue to play a central role. Family support must be leveraged by schools in a more systematic way. During the months of school closure, many educational activities have been done at home and in the neighbourhood. While effectiveness may be hard to measure, the effort has to be acknowledged, applauded and built on. In thinking ahead, home, neighbourhood and school has to be seen as a continuum in which each strand can supplement and strengthen the efforts of the other, keeping in mind that some families and children are more difficult to reach and to teach than others.

The pandemic has not gone away. There are threats of a third wave. But we now have well over a year of experience of what to do. Schools and families need to be ready to adapt to evolving contexts. Three contexts are possible: first, complete lockdown where no movement is allowed. In this scenario only remote connect is possible. Second, where restricted movement is feasible: teachers are coming to school but schools are not open for children. Third, when all movement restrictions are lifted and school are open for children. In any given location, the situation may move from one of these to another without notice. Locally, schools and families need to know what to do as the situation changes. “One size fits all” will not work. In any situation, alternative ways to reach the most disadvantaged have to be worked out.

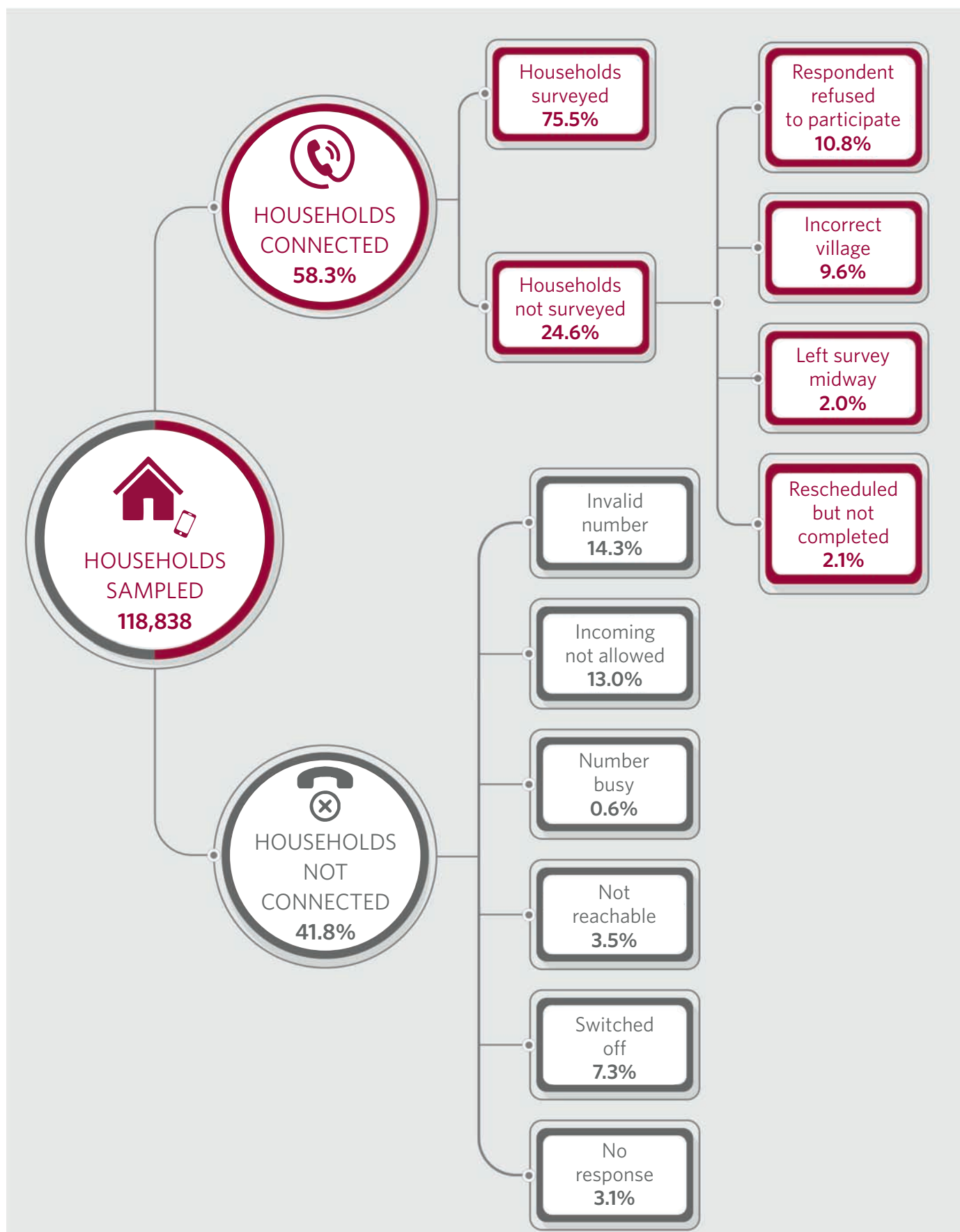
The full impact of a year and a half of school closures will be properly understood only with the passage of time. For school systems that are accustomed to continuous face-to-face instruction and year on year progress from one grade to the next, the pandemic has been a big shock. Effective strategies that ensure learning for all are yet to emerge. The fact that there was a “learning crisis” even before the pandemic was acknowledged, but often not dealt with in practice even in pre-COVID times. The long period of school closure will be layered onto the pre-existing condition of unsatisfactory and widely varying learning levels. State after state is talking about remedial education and “catch up” programs. But is remedial action needed or is a deeper structural reform the need of the day? The New Education Policy 2020 has stressed the need for strong foundations. Perhaps this is the time to re-think the “what” and “how” of schooling and learning.



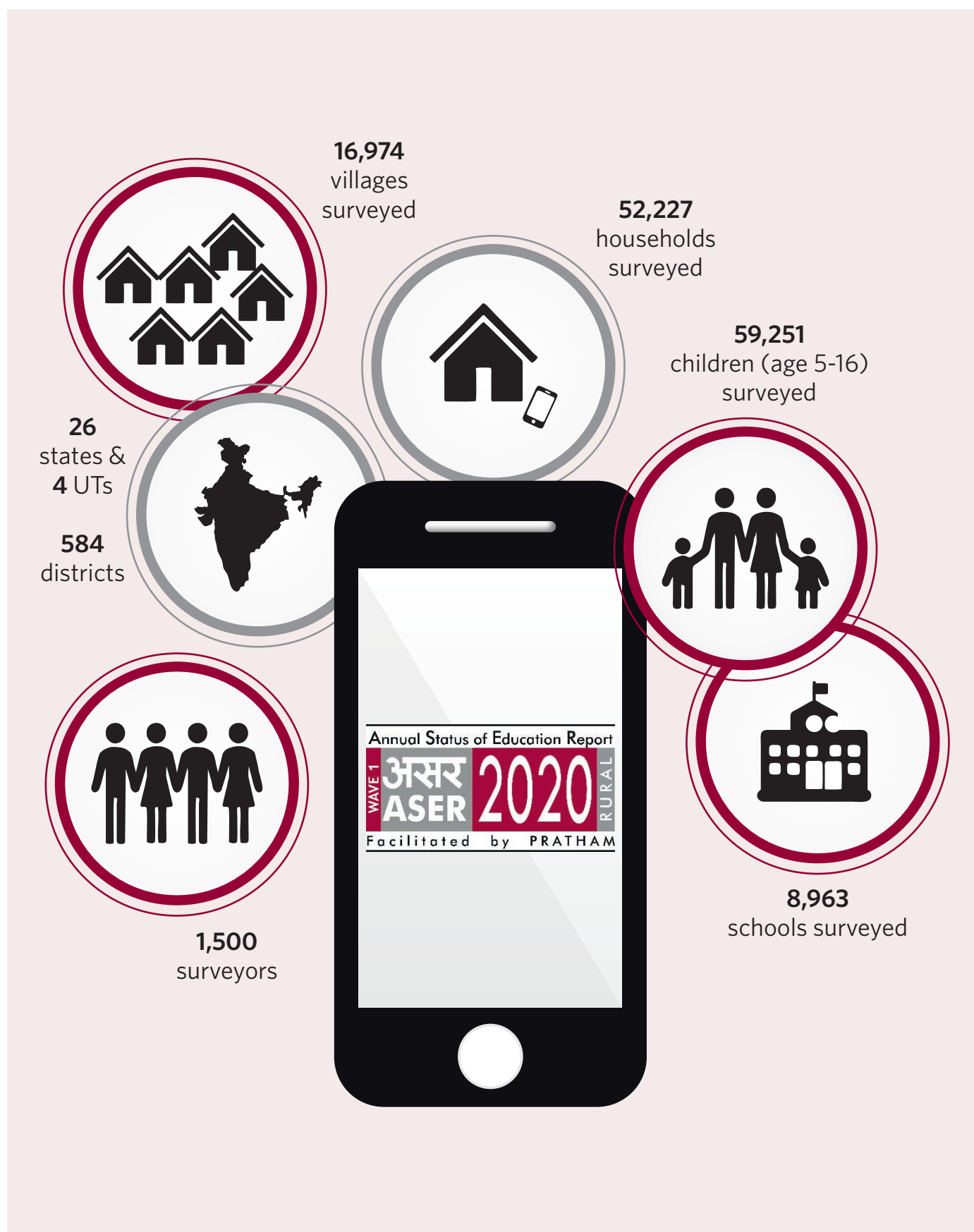
About ASER



Survey call summary



Survey coverage



Survey process summary

1. STARTING THE SURVEY

Surveyor keeps her mobile phone charged, and all printed formats (Call Log Sheet and Household & School Survey Sheet) handy; and then starts the calling process based on the list of sampled phone numbers provided.

2. MAINTAINING CALL RECORDS

While making the calls, surveyor records the Call Connection and Survey Completion status for each household and school in the Call Log Sheet. She also makes additional attempts to numbers that do not connect in the first attempt, at different time intervals.

3. TALKING TO THE RESPONDENTS

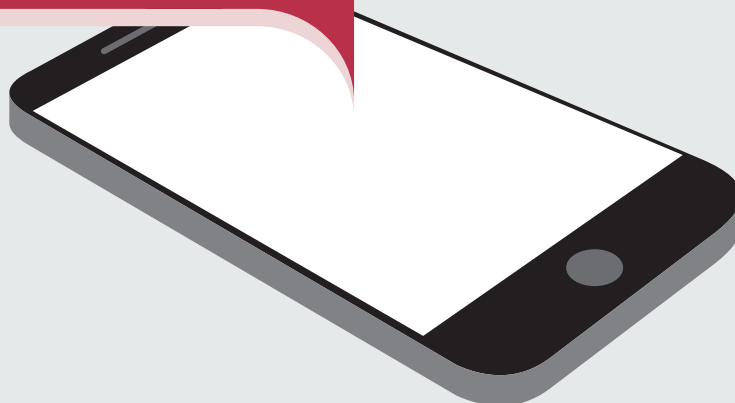
Surveyor introduces herself and the survey on the call. She explains the objectives of the survey clearly to the respondent using a standardised introductory script.

4. ADMINISTERING THE HOUSEHOLD AND SCHOOL QUESTIONNAIRES

Surveyor takes information about remote teaching & learning activities from school headmasters or teachers for grades 1-8, & from households for children age 5-16 years. She fills the data in the respective formats.

5. DATA ENTRY AND RECHECK

The surveyor enters the data from the Call Log Sheet and survey sheets into the mobile app for the survey. She then sends formats for recheck. The Pratham/ASER state and central teams perform various quality checks.



Sample design of rural ASER 2020

Since 2005, ASER has been providing comparable estimates of learning and schooling at the elementary stage. The 'basic' ASER, measuring foundational reading and arithmetic abilities of children in the school-going age group, was done annually from 2005 to 2014 and on a biennial basis from 2016 onwards. Therefore, it was scheduled to be conducted in 2020. While the design, training, monitoring and data analysis of ASER is done by ASER Centre and Pratham teams, the actual survey is done by volunteers in the field. The first lockdown due to the COVID-19 pandemic commenced on March 22, 2020 and was extended multiple times in a variety of ways. Given how fast the pandemic was spreading, it was soon clear that it would not be possible to conduct a field survey in 2020, especially not with volunteers.

The challenge of conducting a field survey during a pandemic was met by conducting a phone-based survey. However, if estimates representative at various geographic levels were to be obtained, a sampling frame of phone numbers was required at the all-India level. Unfortunately, no such frame exists in the public domain. A possible solution to the lack of a frame was suggested by the ASER methodology. As part of the ASER survey, phone numbers of sampled households are recorded for monitoring and recheck purposes. Since ASER is representative at the district level, its sample size is fairly large - about 350,000 households across 17,500 villages and almost 600 districts. The need for such a large sample is necessitated by representation at the district level - to get representative estimates at the state and national levels such large sample sizes are not necessary. For instance, NSS surveys that are representative at the state and national levels have a sample size about a third as large as ASER.

Therefore, the ASER 2018 sample was used as a frame to draw the ASER 2020 sample that would be representative at the state and national levels. Drawing the new sample would require adding a third stage to ASER's existing two-stage sample design, to exclude households without mobile phones. With 90% mobile coverage in rural India, the extent of the self-selection bias due to uncovered populations would be small. A larger problem was that the ASER 2018 sample was two years old. With people moving, changing their mobile numbers, etc., it was possible that a large percentage of households would not be reachable. However, pan-India pilots suggested a fairly good reach (of about 70%); extensive experiments were also conducted to validate the frame.

In normal years, including 2018, ASER has a two-stage sample design. In the first stage, for each rural district, 30 villages are randomly selected from the Census 2011 village directory. Villages are selected using the probability proportional to size (PPS) sampling method. This method allows villages with larger populations to have a higher chance of being selected in the sample. It is most useful when the first stage sampling units vary considerably in size, because it ensures that households in larger villages have the same probability of getting into the sample as those in smaller villages, and vice versa.^{1,2} In the second stage, 20 households are randomly selected in each of the 30 selected villages in the first stage - giving a total sample of 600 households per district. This sampling strategy generates a representative picture of each district. All rural districts are surveyed. The estimates obtained are then aggregated to the state and all-India levels.³

ASER 2020 sampled 7 households with a mobile phone from each of the sampled ASER 2018 villages, giving a sample size of 210 households in each rural district. While this may not be sufficient to generate precise district level estimates, it is large enough to get good state level and national estimates. Like the standard ASER, the coverage of ASER 2020 is the rural household population of India.

To summarize, ASER 2020 has a three-stage clustered design. In the first stage, 30 households are sampled from the Census 2011 village directory using PPS. In the second stage, 20 households are randomly selected from each of the sampled villages. And, in the third stage, 7 households with mobile phones are randomly sampled from the 20 selected households in each of

¹ Probability proportional to size (PPS) is a sampling technique in which the probability of selecting a sampling unit (village, in our case) is proportional to the size of its population. The method works as follows: First, the cumulative population by village calculated. Second, the total household population of the district is divided by the number of sampling units (villages) to get the sampling interval (SI). Third, a random number between 1 and the SI is chosen. This is referred to as the random start (RS). The RS denotes the site of the first village to be selected from the cumulative population. Fourth, the following series of numbers is formed: RS; RS+SI; RS+2SI; RS+3SI; The villages selected are those for which the cumulative population contains the numbers in the series.

² Most large household surveys in India, like the National Sample Survey and the National Family Health Survey also use this two-stage design and use PPS to select villages in the first stage.

³ See ASER 2018 Report for a detailed discussion of the sample design.



the 30 sampled villages in each rural district. All children in the age group of 5-16 years are surveyed in the households selected in the third stage.

In normal years, including 2018, ASER surveyors also visit a government primary or upper primary school in each sampled village, to record data on attendance and provision and usability of facilities. In each visited school, the phone number of the headteacher or a teacher is recorded for monitoring purposes. In ASER 2020, the entire ASER 2018 school sample was retained to explore whether schools shared learning materials during the period of school closures, how they shared these materials, and what contact they had with parents and the village community.

ASER 2020 provides estimates at the state and national levels. In order to aggregate estimates up from the district level households have to be assigned weights- also called inflation factors. The inflation factor corresponding to a particular household denotes the number of households that the sampled household represents in the population. Given that 210 households are sampled in each district regardless of the size of the district, a household in a larger district will represent many more households and, therefore, have a larger weight associated with it than one in a sparsely populated district.⁴

In ASER's two-stage design, the sample is self-weighting at the district level - weights are the same for all households within a district. However, since ASER 2020 adds another stage of sampling based on mobile phone coverage, the sample is no longer self-weighting; rather, weights will differ across villages.⁵ All estimates at the state and national levels are weighted, since states have a different number of districts and villages which vary by population.

⁴ The inflation factor or weight associated with a household is simply the inverse of the probability of it being selected into the sample.

⁵ The probability that household j gets selected in village i (p_{ij}) is the product of the probability that village i gets selected in the first stage (p_i) and the probability that household j gets selected in the second stage ($p_{j(i)}$) and the probability that household j has a mobile phone ($p_{j(i)m}$) and the probability that household j gets selected in the third stage ($p_{j(i)m3}$). This is given by:

$$p_{ij} = p_i \cdot p_{j(i)} \cdot p_{j(i)m} \cdot p_{j(i)m3} = \frac{nv}{dpop} \cdot \frac{1}{vpop_i} \cdot \frac{n_{hi}}{n_{hi}} \cdot \frac{n_{him}}{n_{him}} \cdot \frac{n_{hi3}}{n_{hi3}}$$

where nv is the number of villages sampled in the district in the first stage, $vpop_i$ is the household population of village i , $dpop$ is the number of households in the district, n_{hi} is the number of households sampled in the village in the second stage, n_{him} is the number of households who have a mobile phone in the second stage sample and n_{hi3} is the number of households with mobile phones sampled in the third stage. The weight associated with each sampled household within a village is the inverse of the probability of selection. Note that the sum of the weights of the households will give the district population of households and the sum of the weights for all children in the sample will approximate to the population of children in the 5-16 year age group in the district.



Sample description of ASER 2020

State	Census 2011 Actual Districts	ASER 2020									
		Surveyed Districts	Surveyed Villages	Sampled Households	Households connected	Surveyed Households	Children age 5-16	Std 1-2	Std 3-5	Std 6-8	Std 9-12
Andhra Pradesh	13	13	388	2715	1829	1442	1041	155	266	298	227
Arunachal Pradesh	16	8	202	1409	637	428	480	93	132	131	79
Assam	27	26	727	5079	2619	2099	2162	425	552	584	79
Bihar	38	38	1136	7947	4071	2913	4862	877	1202	1125	1001
Chhattisgarh	18	16	459	3206	1570	1068	1261	207	310	324	312
Dadra and Nagar Haveli	1	1	28	208	126	84	65	9	13	22	17
Daman and Diu	2	2	17	227	147	125	93	27	32	24	9
Goa	2	2	45	314	198	92	54	7	10	14	14
Gujarat	26	26	759	5303	3303	2605	1892	364	611	457	339
Haryana	21	21	627	4398	3064	2184	2442	400	638	680	496
Himachal Pradesh	12	12	357	2511	1669	1470	1697	263	460	442	456
Jammu and Kashmir	22	14	405	2819	1678	1174	1650	286	422	441	316
Jharkhand	24	24	662	4619	1962	1358	2078	379	526	555	388
Karnataka	30	30	900	6155	3922	3128	4008	567	1007	1167	808
Kerala	14	12	351	2505	1931	1264	742	113	188	197	176
Madhya Pradesh	50	50	1471	10289	5503	4218	4985	770	1301	1306	1134
Maharashtra	33	33	981	6863	4209	3409	3891	626	1068	1174	741
Manipur	9	9	239	1717	884	678	1048	169	274	278	166
Meghalaya	7	7	173	1200	497	336	584	116	169	131	58
Nagaland	11	11	312	2238	1163	883	1169	181	306	323	146
Odisha	30	30	817	5701	2966	2378	2661	410	687	740	552
Puducherry	2	2	55	409	269	171	90	8	18	15	20
Punjab	20	20	595	4142	2821	2434	2010	315	475	536	516
Rajasthan	33	33	984	6888	4466	3340	4292	697	1041	1131	954
Tamil Nadu	31	31	923	6472	4058	2928	2134	242	494	565	529
Telangana	9	9	268	1876	1383	1151	1050	161	286	250	193
Tripura	4	4	118	826	392	295	196	29	49	55	45
Uttar Pradesh	71	70	2096	14662	8299	5912	7882	1376	2009	1848	1307
Uttarakhand	13	13	374	2614	1501	1042	1163	165	281	337	261
West Bengal	18	17	505	3526	2088	1618	1569	273	412	400	302
All India	607	584	16974	118838	69225	52227	59251	9710	15239	15550	11940

*State/UT estimates for Dadra and Nagar Haveli and Daman and Diu, Puducherry, Goa and Tripura have not been presented in this report due to insufficient sample size.

**Andhra Pradesh was bifurcated into Telangana and Andhra Pradesh in 2014. As a result, the sample frames of Census 2011 do not have the new state divisions. Of the 22 districts in undivided Andhra Pradesh, 9 rural districts are located in Telangana and the remaining 13 districts are located in Andhra Pradesh. ASER estimates for the two states are based on this separation of districts.

***Estimates for the UTs of Ladakh and Jammu and Kashmir have been presented in a combined form for comparability with ASER estimates of previous years.

****ASER 2020 was not conducted in Sikkim and Mizoram.



Executive summary of ASER 2020 findings

ASER 2020 reached 584 districts across 26 states and 4 Union Territories in rural India. A total of 52,227 households were surveyed, covering 59,251 children in the age group 5-16. Designed as a companion volume to the main ASER 2020 report released in October 2020, the report 'ASER Digital Check 2020' explores the question – Did technology enable inclusive education in rural India in a year of lockdown?

School enrollment

Enrollment in school is a vital potential enabler of children's access to teaching-learning materials while schools were closed. Changes in school enrollment can only be measured accurately once schools reopen and children are able to return to their classrooms. As compared to 2018, this interim measurement in ASER 2020 shows that:

- **Overall enrollment (age 6-14):** The enrollment of children in the age group of 6 to 14 is above 95%, similar to recent years. The proportion of children (age 6-14) who are not enrolled has increased only slightly to 4.6%.
- **At the all India level, there is a small shift towards government schools.** As compared to data from ASER 2018, data from ASER 2020 (September 2020) show a small shift in enrollment from private to government schools, across all grades and among both girls and boys. The proportion of boys enrolled in government schools rose from 62.8% in 2018 to 66.4% in 2020. The proportion of girls enrolled in government schools rose from 70% to 73% during the same period.
- **Many young children yet to get admission in school.** ASER 2020 shows that while the proportion of children not currently enrolled for the 2020-21 school year is higher than the equivalent figures for 2018, for most age groups these differences are small. Higher proportions of children not enrolled are visible mostly among young children (age 6 to 10), possibly because they have not yet secured admission to school. This proportion is particularly large for 6 to 10-year-olds in Uttar Pradesh (11.1% not enrolled in 2020), Tamil Nadu (9.4%) and Meghalaya (7.8%).

Household resources

While schools were closed, children relied mainly on the resources available at home to help them learn. These resources consisted of people who could support their studies (for example, educated parents) and technology based educational inputs (TV, radio or smartphone).

We categorized parents' education as 'low' (families where both parents had completed Std V or less) or, at the other end of the spectrum, 'high' (families where both parents had completed at least Std IX). All other parents were in the 'medium' category where there were many possible combinations.

- **A relatively small proportion of students in school today are first generation school-goers.** More than three quarters have at least one parent who has completed primary school (Std V). More than a quarter have both parents who have studied beyond Std IX.
- **More educated parents usually have households with higher incomes.** As parents' education level increases, the likelihood that the household has a smartphone also increases; and the probability that the sampled child is studying in a government school decreases.
- **Among enrolled children, more than 60% live in families with at least one smartphone.** This proportion has increased enormously in the last two years, from 36.5% to 61.8%. Although the percentage point increase is similar in households of children enrolled in government and private schools, a significant gap remains - 56.4% children enrolled in government schools have a smartphone at home as compared to 74.2% private school going children.
- States that show an increase of more than 30 percentage points in the proportion of children whose families own a smartphone include Maharashtra, Manipur, Meghalaya, Nagaland, Gujarat, Madhya Pradesh and Himachal Pradesh. In Kerala, Himachal Pradesh and Punjab, more than 85% children have a smartphone at home. In Odisha and West Bengal, less than 50% children have a smartphone at home.



Support in learning at home

With learning materials being provided remotely if at all, children relied heavily on family support to engage with their studies during school closures. ASER 2020 data shows that regardless of parents' education level and the child's sex, families invested significant effort in supporting children's learning.

- Whether acquired before or after school closures in March 2020, **more than 80% children had textbooks for their current grade on the day of the survey.** This proportion is higher among students enrolled in government schools (84.1%) than in private schools (72.2%). Across states, the proportion of children with textbooks at home falls below 70% in only three states: Rajasthan (60.4%), Telangana (68.1%), and Andhra Pradesh (34.6%).
- **While schools were closed, almost three quarters of all children received help from family members in studying at home.** Notably, family members provided support even when neither parent had studied beyond primary school.
- **Children with more educated parents received more family support than those with less educated parents.** For example, 54.8% of children whose parents had completed Std V or less received some form of family support, as compared to 89.4% of children whose parents had studied beyond Std IX.
- **As children progress to higher grades, parents are able to provide less help.** For example, 33% of mothers of young children in Std I-II were able to help their children, as opposed to 15% of mothers of children in Std IX and above. But for children in higher grades, support from older siblings becomes steadily more important.

Access to learning materials and activities

Governments and others have used a variety of mechanisms to share learning materials with students during school closures. These include activities using traditional materials like textbooks or worksheets; online or recorded classes; and videos or other materials shared via phone or in person, among others. ASER 2020 asked whether households had accessed or received any such materials from children's schools in the week prior to the survey in September 2020.

- **Overall, about one third of all enrolled children had received some form of learning materials or activities apart from textbooks from their teachers during the reference week.** This proportion was higher in higher grades than in lower ones; higher among students in private schools than in government schools; and higher among children with parents in the 'high' education category than children with parents in the 'low' education category. There was no noticeable difference in receipt of learning materials and activities by sex.
- **The availability of a smartphone in the household made a big difference** to whether children received learning materials/activities in the reference week. While close to half the children who had a smartphone at home received materials, this proportion was only 17% for children who did not have smartphone at home.
- There are significant variations by state in children's receipt of learning materials or activities during the reference week. States where less than a quarter of all children received any materials include Rajasthan (21.5%), Uttar Pradesh (21%), West Bengal (20.5%) and Bihar (7.7%). States where more than 80% of all children received learning materials include Punjab (87.6%), Himachal Pradesh (87.2%), Kerala (82.9%) and Gujarat (82%).
- **Regardless of school type and parental education level, WhatsApp was the most common medium through which activities and materials were received.** This proportion was much higher among children in private schools (87.2%) than those in government schools (67.3%); and much higher among children with parents in the 'high' education category (85.3%) than among children with parents in the 'low' education category (55.9%).
- On the other hand, of children who had received some materials, those in government schools were much more likely to have received materials via personal contact with a teacher (31.8%) than those in private schools (11.5%), either when the teacher visited the household or else when a household member visited the school.
- Among the roughly two-thirds of all households that reported not having received learning materials during the reference week, the majority said that the school had not sent any materials.



Children's engagement with learning materials and activities

Regular engagement with learning materials and activities is key to avoiding 'learning loss' due to prolonged absences from school. ASER 2020 asked whether children had done any type of learning activity during the previous week, regardless of whether or not they had received learning materials during that week.

- Although only a third of children had received materials from their teachers during the week preceding the survey, **most children (70.2%) in both government and private schools did do some sort of learning activity during that week.** These activities were shared by diverse sources such as private tutors and family members themselves, in addition to or instead of what was received from schools.
- **Parents' education had a strong relationship with whether children did any learning activities in the reference week.** While close to 20% children with parents in the 'high' education category did not do any activity, this percentage is much higher for children with parents in the 'low' education category (40.8%).
- **While smartphone availability made a major difference in children's engagement with learning materials and activities, children's sex did not.**
- The major types of activities done involved textbooks (59.7%) and worksheets (35.3%). The proportion of children in government schools and private schools doing these activities was similar, but some difference was noticed by parental education levels. More children with parents in the 'high' education categories did three or more activities as compared to children in the 'low' education category – a difference of 21 percentage points.
- Children in private schools were much more likely to have accessed online resources than those in government schools. For example, 28.7% of children enrolled in private schools had watched videos or other pre-recorded content online, as compared to 18.3% of government school students. A similar trend is visible by parental education levels and smartphone availability.

Policy implications

While some information is available about the measures that governments and others have put in place to ensure minimum disruptions to children's education, no systematic, large-scale information has been available about whether children are able to access and use these mechanisms. ASER 2020 provides data on these issues at both state and national levels. A set of learnings from these findings suggest the following overarching policy implications for the country:

Mediating the "digital divide": Expectedly, children whose parents had low levels of education and who did not have resources like smartphones had less access to learning opportunities and support. But even among these households, there is evidence of effort: family members who try to help and schools who try to reach them. These children will need even more help than others as schools reopen.

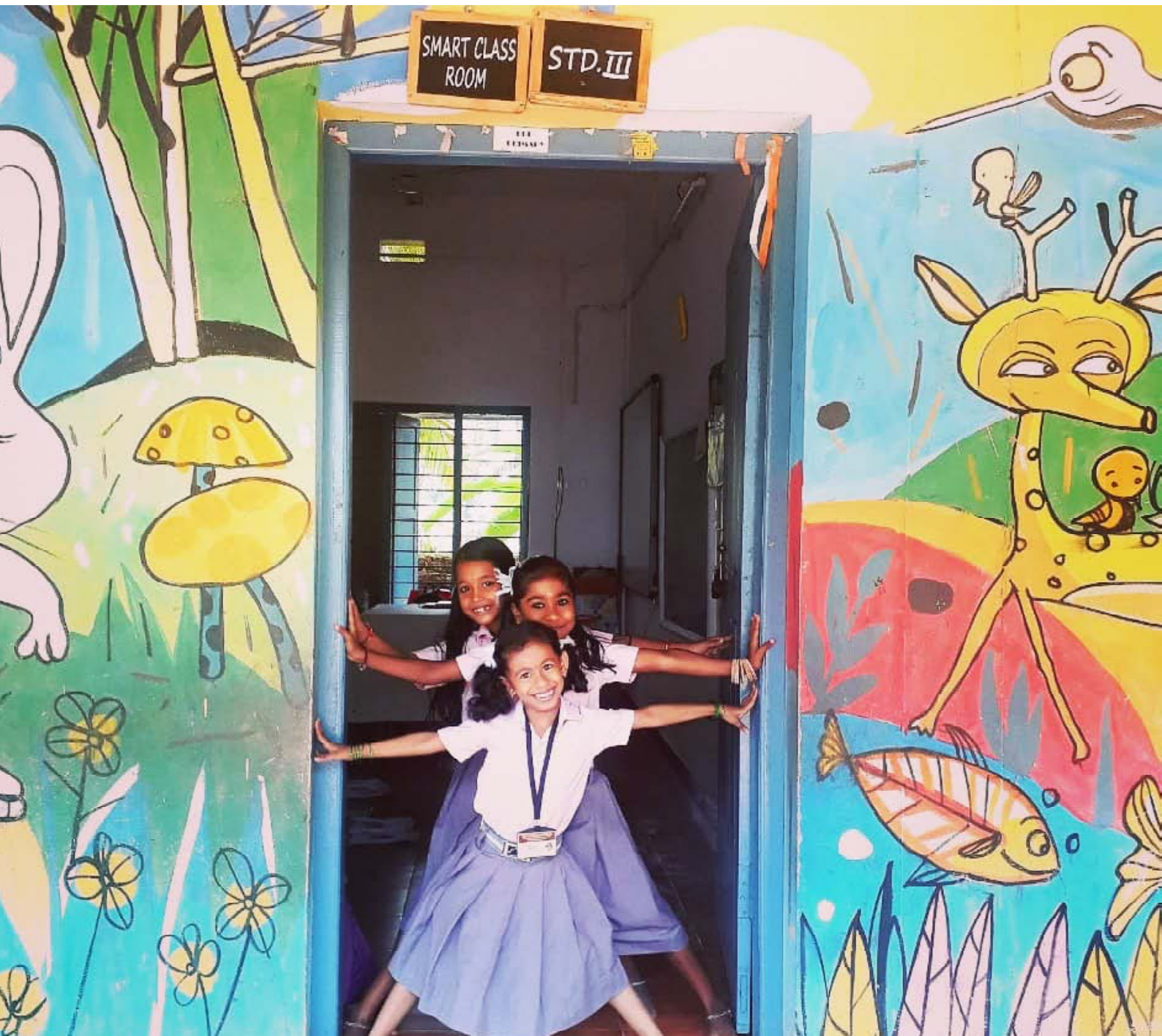
Building on and strengthening family support: Parents' increasing levels of education can be integrated into planning for learning improvement, as advocated by the National Education Policy. "Reaching parents at the right level" is essential to understand how they can help their children. Older siblings also play an important role.

"Hybrid" learning: Children are doing a variety of different activities at home. Effective ways of "hybrid" learning need to be developed, that combine traditional teaching-learning with newer ways of "reaching-learning".

Impact of digital modes and content: Many modes of providing digital content have been attempted. In order to improve digital content and delivery for the future, an in-depth assessment of what works, how well it works, who it reaches, and who it excludes is needed.



ASER 2020 (Rural) findings



India RURAL

Analysis based on data from households. 584 out of 619 districts

Data is not presented where sample size is insufficient.

Children's school enrollment

The ASER 2020 phone survey was conducted during late September 2020. This section explores patterns of enrollment among 6-16 year olds in rural India.

Have enrollment patterns changed as a result of the COVID-19 pandemic?

The COVID-19 pandemic has had enormous health and economic consequences across the country. With schools closed for much of the year, ASER 2020 explored the impact of the pandemic on equitable access to schooling, looking first at patterns of enrollment in rural India.

Table 1: % Children enrolled in school. By age group, sex and school type. 2020

Age group and sex	Govt	Pvt	Other	Not enrolled	Total
Age 6-14: All	65.8	28.8	0.8	4.6	100
Age 7-16: All	65.5	28.6	0.7	5.2	100
Age 7-10: All	64.3	30.5	0.8	4.4	100
Age 7-10: Boys	60.9	33.6	0.8	4.7	100
Age 7-10: Girls	68.1	27.0	0.8	4.1	100
Age 11-14: All	68.0	27.4	0.7	3.9	100
Age 11-14: Boys	64.5	30.9	0.7	3.9	100
Age 11-14: Girls	71.9	23.5	0.7	3.9	100
Age 15-16: All	62.1	27.3	0.6	9.9	100
Age 15-16: Boys	60.8	29.7	0.8	8.8	100
Age 15-16: Girls	63.6	24.8	0.5	11.1	100

'Other' includes children going to Madarsa and EGS.

'Not enrolled' includes children who never enrolled or are not currently enrolled.



Table 1 summarizes enrollment data for different age groups in the ASER 2020 sample. For children in the 6-14 age group, these data show that overall, more than 60% of all children are enrolled in government schools and close to 30% are enrolled in private schools.

This marks a change from two years ago, when the last comparable ASER survey was conducted (Table 2).

There has been a clear shift from private to government schools between 2018 and 2020, in all grades and among both boys and girls. Reasons may include financial distress in households and/or permanent school shutdowns among the private schools.

However, we also see that far more boys were enrolled in private schools as compared to girls in 2018. This trend continues in 2020.

Table 2: % Children enrolled in school. By grade, sex and school type. 2018 and 2020*

Std	ASER 2018						ASER 2020					
	Boys			Girls			Boys			Girls		
	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total	Govt	Pvt	Total
Std I-II	57.9	42.1	100	65.1	34.9	100	61.1	38.9	100	66.7	33.4	100
Std III-V	62.7	37.3	100	71.2	28.8	100	65.6	34.4	100	73.3	26.7	100
Std VI-VIII	65.8	34.3	100	73.3	26.7	100	68.3	31.7	100	77.0	23.0	100
Std IX & above	64.6	35.4	100	68.9	31.2	100	69.7	30.4	100	72.7	27.3	100
All	62.8	37.2	100	70.0	30.0	100	66.4	33.6	100	73.0	27.0	100

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



State variations

Table 3: % Children aged 6-14 enrolled in private school. By state and sex. 2018 and 2020*

State	ASER 2018			ASER 2020		
	Boys	Girls	All	Boys	Girls	All
Andhra Pradesh	39.7	33.2	36.3	29.0	24.1	26.6
Arunachal Pradesh	43.2	37.5	40.3	44.4	52.3	48.1
Assam	30.9	25.3	28.1	36.9	29.5	33.4
Bihar	21.8	13.4	17.7	22.2	13.4	18.0
Chhattisgarh	23.4	19.5	21.4	32.9	27.5	30.1
Gujarat	15.2	11.1	13.2	14.8	12.6	13.8
Haryana	61.8	49.8	56.2	51.8	45.6	48.9
Himachal Pradesh	44.1	37.7	41.0	49.6	38.2	44.3
Jammu & Kashmir	45.0	37.1	41.1	49.5	39.7	45.1
Jharkhand	24.6	18.2	21.5	25.6	19.1	22.5
Karnataka	34.1	25.2	29.6	27.0	22.7	25.0
Kerala	49.7	44.5	47.0	42.0	31.4	36.7
Madhya Pradesh	33.1	24.3	28.8	34.1	26.0	30.2
Maharashtra	41.5	35.8	38.8	31.3	28.6	30.0
Manipur	73.1	70.5	71.8	82.4	84.3	83.4
Meghalaya	59.7	62.3	61.0	49.3	51.4	50.5
Nagaland	53.1	50.9	52.0	65.0	61.1	63.1
Odisha	13.9	10.5	12.3	20.0	13.0	16.5
Punjab	55.9	49.9	53.1	54.9	48.7	52.1
Rajasthan	43.0	30.5	37.2	41.4	30.7	36.6
Tamil Nadu	36.2	29.6	32.9	31.4	23.3	27.5
Telangana	46.7	39.0	42.9	43.5	36.1	40.1
Uttarakhand	47.0	40.4	43.9	50.1	36.1	43.9
Uttar Pradesh	55.0	47.0	51.2	41.9	36.4	39.4
West Bengal	8.8	8.1	8.4	11.5	8.8	10.2
All India	36.3	28.7	32.6	32.0	25.3	28.8

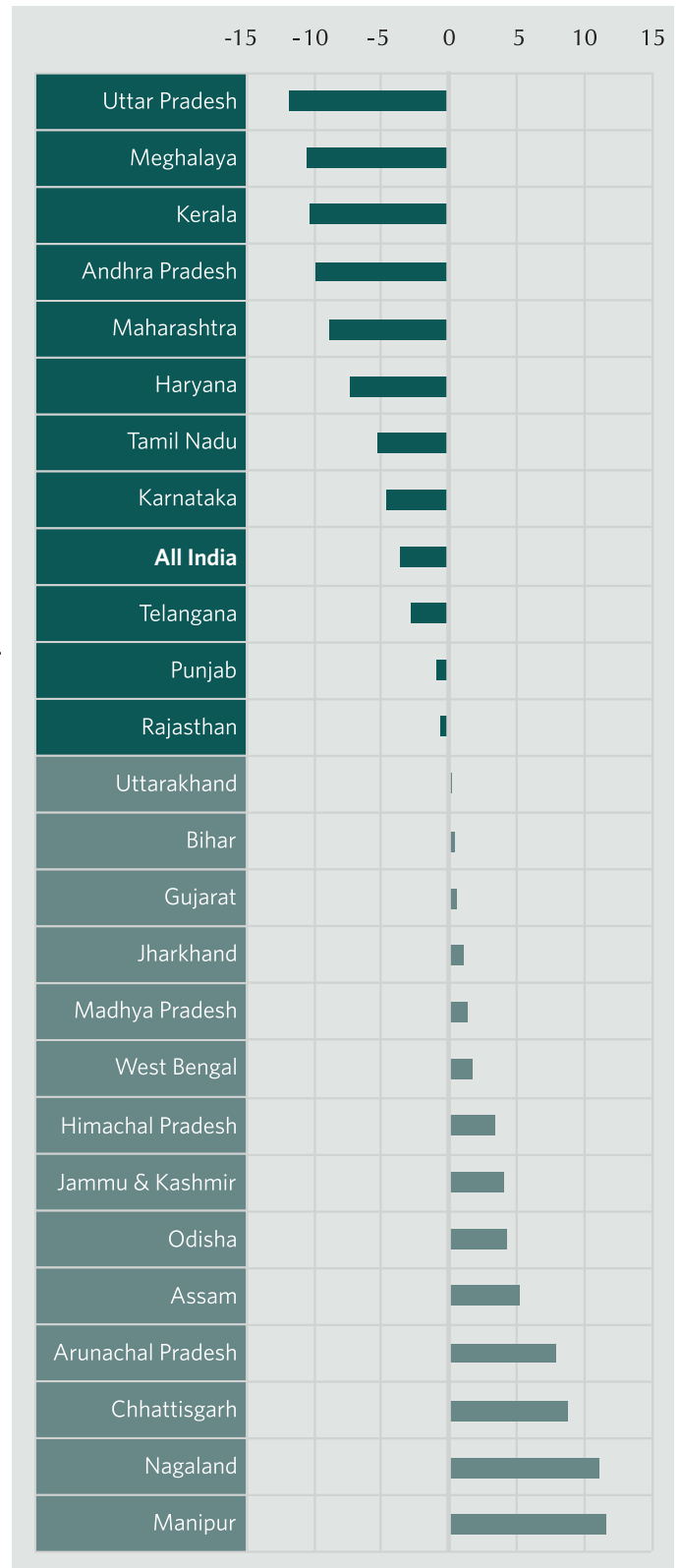
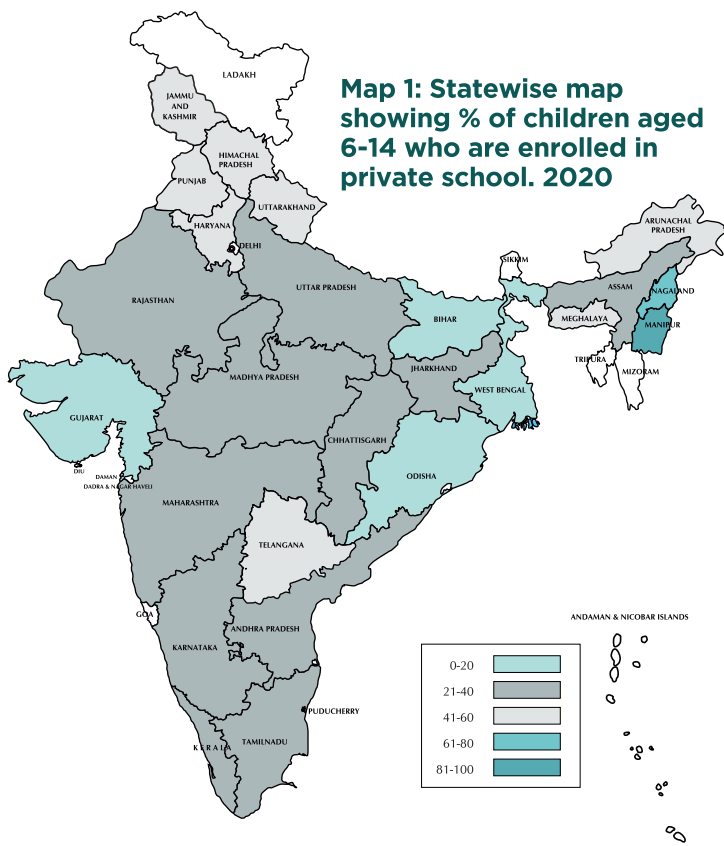
Changes in enrollment patterns since 2018 show considerable variation across states. On the one hand, enrollment in private schools has seen a decline of close to 10 percentage points among both boys and girls in states such as Uttar Pradesh, Andhra Pradesh, Kerala, Meghalaya and Maharashtra.

On the other hand, private school enrollment has increased substantially in Chhattisgarh, Manipur and Nagaland among both boys and girls.

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Chart 1: Statewise chart showing percentage point change in children aged 6-14 who are enrolled in private school. 2018 and 2020*



*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Children not enrolled in school

One widely anticipated consequence of the COVID-19 pandemic was that many more children, especially girls, would drop out of school. Although the true picture will only be known once schools reopen, ASER 2020 explored which children were not enrolled for the school year 2020-21 at the time of the survey.

Are fewer children enrolled in 2020 than before?

Table 4: % Children not enrolled in school. By age group and sex. 2018 and 2020*

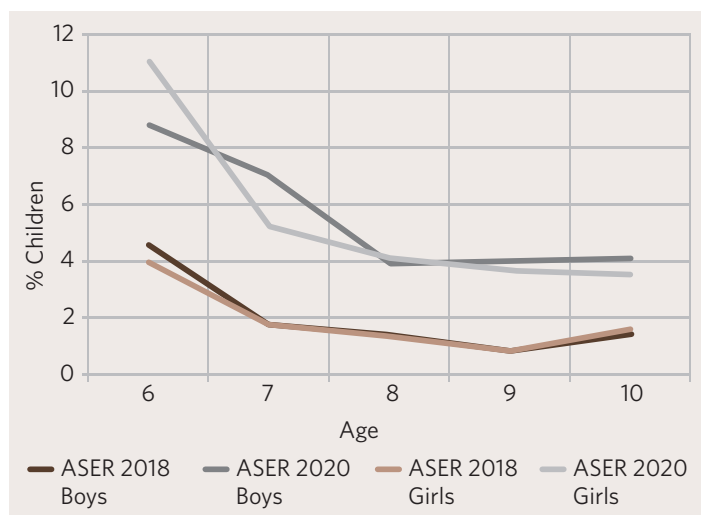
Age group	% Children					
	ASER 2018			ASER 2020		
	Boys	Girls	All	Boys	Girls	All
Age 6-10	1.8	1.8	1.8	5.3	5.2	5.3
Age 11-14	2.9	3.6	3.2	3.9	3.9	3.9
Age 15-16	11.4	12.6	12.0	8.8	11.1	9.9
All	3.7	4.2	4.0	5.3	5.7	5.5

Table 4 compares the proportion of girls and boys not enrolled in school in 2018 and 2020, separately for different age groups. These data show that while there have indeed been changes in children's enrollment status, these vary across age groups:

- Among both boys and girls in the 6-10 age group, for example, there has been a sharp increase in the proportion of children not currently enrolled, from 1.8% in 2018 to 5.3% in 2020.
- However, this increase is much smaller among boys and girls in the 11-14 age group.
- The proportion of children not currently enrolled has decreased over 2018 levels in the 15-16 year old age group.

Why the spike in young children who are not enrolled in school?

Chart 2: % Children not enrolled in school. By age and sex. 2018 and 2020*



With schools closed, in a sense all children are currently out of school, and the true proportion of out of school children is difficult to measure. However, the age-wise breakdown of children in the 6-10 age group who are not currently enrolled shows that while the increase in this proportion over 2018 is visible at each of these ages, the biggest spike is visible for the youngest children - those who are 6 years old, especially girls (Chart 2).

To understand these patterns better, parents of children who are not currently enrolled were asked which year the child had dropped out and why this was the case. Their responses show that across the entire 6-16 age group surveyed, more than half of the children not currently enrolled had 'dropped out' in 2020. However, the vast majority of these children are not 'dropouts' in the usual sense of the term: they are awaiting admission to school. This is particularly true for children in the 6-10 age group, and explains the spike visible among the 6 year olds in particular.

Because schools are closed, many young children have not yet secured admission to Std I. The increase in children in the 6-10 age group who are not enrolled is therefore likely to be more a reflection of children waiting to enroll in school rather than of children who have indeed dropped out.

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



State variations

Table 5: % Children aged 6-14 not enrolled in school. By state and sex. 2018 and 2020*

State	ASER 2018			ASER 2020		
	Boys	Girls	All	Boys	Girls	All
Andhra Pradesh	1.0	1.4	1.2	6.6	6.3	6.5
Arunachal Pradesh	2.1	2.6	2.3	6.1	2.5	4.5
Assam	2.5	1.4	1.9	1.2	1.3	1.2
Bihar	3.7	3.6	3.6	3.5	4.3	3.9
Chhattisgarh	3.2	2.7	2.9	2.9	2.6	2.8
Gujarat	1.5	2.0	1.7	1.4	1.7	1.5
Haryana	1.5	1.8	1.6	3.5	3.8	3.6
Himachal Pradesh	0.4	0.4	0.4	0.9	1.0	1.0
Jammu & Kashmir	1.0	1.5	1.2	1.9	3.0	2.4
Jharkhand	2.3	1.9	2.1	3.2	2.6	2.9
Karnataka	0.7	0.7	0.7	6.4	5.9	6.2
Kerala	0.0	0.2	0.1	0.0	0.0	0.0
Madhya Pradesh	3.1	4.4	3.7	4.1	3.4	3.7
Maharashtra	0.5	0.7	0.6	1.4	1.3	1.4
Manipur	1.4	0.9	1.1	5.1	3.2	4.1
Meghalaya	6.3	2.6	4.5	9.9	13.0	11.6
Nagaland	2.1	1.6	1.8	4.4	7.3	5.9
Odisha	0.9	1.0	1.0	1.5	2.3	1.9
Punjab	1.0	0.8	0.9	1.5	1.5	1.5
Rajasthan	2.3	4.8	3.4	6.3	7.1	6.6
Tamil Nadu	0.4	0.1	0.3	7.9	4.4	6.2
Telangana	0.6	0.6	0.6	4.8	3.9	4.4
Uttarakhand	1.4	1.5	1.4	5.0	2.4	3.8
Uttar Pradesh	4.0	5.0	4.5	9.6	10.9	10.2
West Bengal	2.3	1.0	1.6	1.1	0.0	0.6
All India	2.3	2.6	2.5	4.6	4.6	4.6

The proportion of children aged 6-14 not enrolled in school shows an increase in most states since 2018 regardless of sex.

Table 5 shows an increase of more than 5 percentage points in the proportion of out of school children in the states of Andhra Pradesh, Meghalaya, Karnataka, Tamil Nadu and Uttar Pradesh.

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Table 6: % Children aged 6-10 not enrolled in school. By state and sex. 2018 and 2020*

State	ASER 2018			ASER 2020		
	Boys	Girls	All	Boys	Girls	All
Andhra Pradesh	0.4	0.4	0.4	5.2	8.3	6.6
Arunachal Pradesh	2.4	3.1	2.7	10.7	4.1	7.5
Assam	0.9	0.7	0.8	0.6	1.3	0.9
Bihar	3.8	3.5	3.6	5.0	5.8	5.4
Chhattisgarh	1.9	1.2	1.5	2.5	3.7	3.1
Gujarat	0.8	0.6	0.7	1.5	0.9	1.2
Haryana	1.1	1.4	1.3	3.1	2.6	2.9
Himachal Pradesh	0.2	0.3	0.3	0.2	1.7	0.9
Jammu & Kashmir	0.8	0.9	0.9	3.0	2.4	2.8
Jharkhand	1.5	1.3	1.4	2.6	1.7	2.2
Karnataka	0.3	0.2	0.2	6.7	6.1	6.4
Kerala	0.0	0.0	0.0	0.0	0.0	0.0
Madhya Pradesh	1.6	2.2	1.9	3.0	3.8	3.4
Maharashtra	0.4	0.3	0.4	2.5	1.9	2.2
Manipur	1.2	0.4	0.8	4.5	2.7	3.6
Meghalaya	5.9	4.6	5.3	7.4	8.1	7.8
Nagaland	2.0	1.2	1.6	3.1	6.2	4.6
Odisha	0.6	0.5	0.6	2.0	2.7	2.4
Punjab	0.5	0.3	0.4	1.3	2.0	1.6
Rajasthan	1.5	2.9	2.2	7.6	7.4	7.5
Tamil Nadu	0.1	0.1	0.1	12.9	5.5	9.4
Telangana	0.3	0.2	0.3	6.8	4.1	5.5
Uttarakhand	0.9	0.9	0.9	5.6	0.1	3.2
Uttar Pradesh	3.4	3.4	3.4	10.6	11.8	11.1
West Bengal	1.7	1.0	1.3	0.3	0.0	0.2
All India	1.8	1.8	1.8	5.3	5.2	5.3

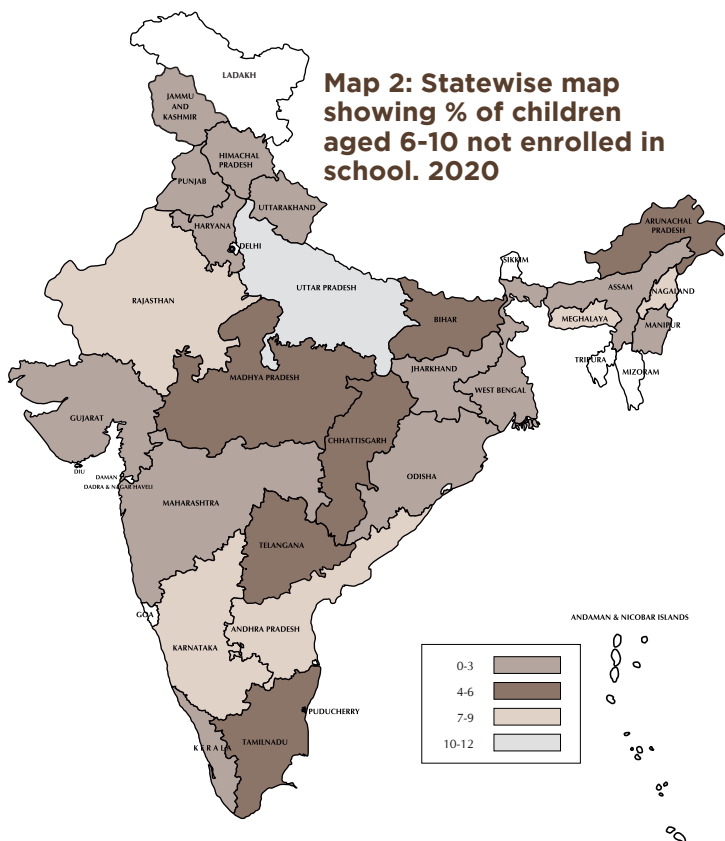
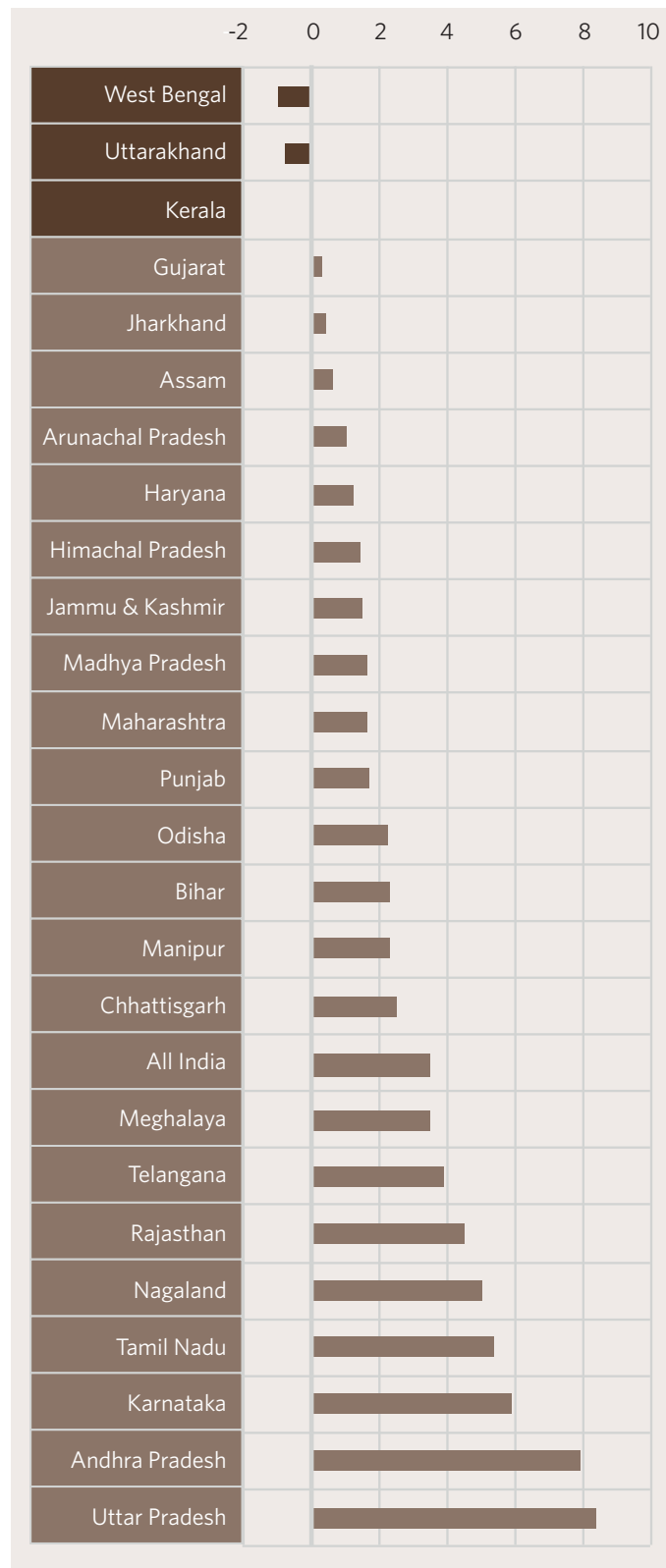
Across states as well, the rise in the proportion of children not enrolled in school as seen in the 6-14 age group is mostly reflected in the 6-10 age group.

Across all states, more young children are now out of school than in 2018. As discussed previously, this is most likely because these young children are yet to be enrolled in school. Here too, states that stand out are Tamil Nadu, Uttar Pradesh, Karnataka and Andhra Pradesh (Table 6).

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Chart 3: Statewise chart showing percentage point change in girls aged 6-10 who are not enrolled in school. 2018 and 2020*



*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.

Household resources

A family's resources influence the type and amount of support they can provide for children's learning, not only in terms of choosing a school to send their child to but in many other ways as well. ASER 2020 asked questions about selected household resources, such as parents' own education levels and children's access to technology such as TV and smartphones.

How much schooling do parents of children in the ASER 2020 sample have?

Table 7: Distribution of enrolled children. By school type, mother's and father's education level. 2020

Parents' education level	Mother			Father		
	% Children in			% Children in		
	Govt	Pvt	Govt & Pvt	Govt	Pvt	Govt & Pvt
No schooling	35.0	22.7	31.3	18.9	9.5	16.1
Std I-V	17.7	11.1	15.7	15.6	7.3	13.1
Std VI-VIII	19.2	17.9	18.8	20.9	15.4	19.2
Std IX-X	18.8	23.6	20.3	26.3	29.9	27.4
Std XI & above	9.4	24.7	14.0	18.2	37.9	24.2
Total	100	100	100	100	100	100

Increasingly, parents of children currently enrolled in school have been to school themselves.

In ASER 2020, for example, Table 7 shows that under a third of children's mothers (31.3%) and even fewer children's fathers (16.1%) have no schooling.

More than half of all children's mothers (53.1%) and an even higher proportion of children's fathers (70.8%) have completed more than 5 years of school.

ASER does not collect information on household income, but parents' education levels can be used as a proxy for the household's socio-economic status. Overall, parents' education level has increased from 2018 to 2020. This is reflected in the fall in proportion of children who have parents in the 'low' education category from 30.8% to 22.5% (Table 8).

More educated parents usually have households with higher incomes. Table 8 shows, for example, that as parents' education level increases, the likelihood that the household has a smartphone also increases; and the probability that the sampled child is studying in a government school decreases:

- Among the children whose parents are in the 'low' education category, the vast majority study in government schools (84%); and less than half of their families have a smartphone (45.1%). This proportion was far lower in 2018, when only 22.5% of such families had a smartphone.
- A similar proportion of children have parents in the 'high' education category as in the 'low' education category. But a far smaller proportion of children with parents in the 'high' education category are in government schools (53.9%), and most have families with a smartphone (78.7%).
- Across all categories, the proportion of children enrolled in government schools has increased from 2018 to 2020.

Table 8: Distribution of enrolled children. By parents' education and household resources. 2018 and 2020*

Parents' education	ASER 2018			ASER 2020		
	% Children	Of these children,		% Children	Of these children,	
		% Who are enrolled in Govt school	% Whose households have smartphones		% Who are enrolled in Govt school	% Whose households have smartphones
Low	30.8	80.6	22.5	22.5	84.0	45.1
Medium	48.8	66.3	36.1	49.9	71.6	60.2
High	20.4	44.4	58.7	27.6	53.9	78.7
All	100	66.2	36.6	100	69.5	61.9

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Do children have a smartphone and other assets at home?

Table 9: % Enrolled children with selected assets available at home. By school type and asset type. 2018 and 2020*

Household resource	% Children					
	ASER 2018			ASER 2020		
	Govt	Pvt	Govt & Pvt	Govt	Pvt	Govt & Pvt
Smartphone	29.6	49.9	36.5	56.4	74.2	61.8
TV	54.8	72.5	60.7	56.0	71.9	60.8
Motorized vehicle	39.1	62.5	46.9	43.5	64.7	49.9

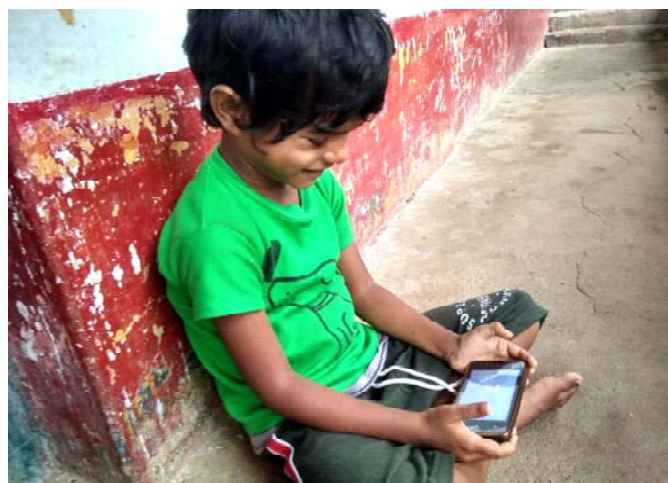
A comparison between ASER 2018 and 2020 shows that a much higher proportion of children now come from households with a smartphone as compared to two years ago (Table 9).

Although the proportion of children from households with assets like TV and motorized vehicles changed only slightly over the last two years, the proportion owning a smartphone increased enormously - from 36.5% to 61.8%.

Smartphone ownership increased by similar amounts for children enrolled in government and private schools, between 2018 and 2020 (Table 9). Regardless of school type, among enrolled children about 1 in every 10 households bought a new phone to support their children's education after schools closed in March 2020 (Table 10). Most often parents purchased a smartphone. Even among children who did not have a smartphone at home, about 1 in every 10 was able to access a smartphone elsewhere, for example from a neighbour.

Table 10: % Enrolled children with access to smartphones. By school type. 2020

School type	% Children								If no smartphone in the household, then % children who have access to any other smartphone
	Number of smartphones in the household					Bought a new phone for children's education since the lockdown began	If bought a new phone, then type of phone purchased		
	No smartphone	1	2	3 or more	Total		Regular phone	Smartphone	
Govt	43.6	43.6	9.7	3.1	100	7.2	20.1	80.6	12.6
Pvt	25.8	50.3	16.7	7.2	100	14.2	15.7	83.8	13.1
Govt & Pvt	38.2	45.6	11.8	4.3	100	11.1	18.5	81.7	12.7



*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.

State variations

Table 11: Distribution of enrolled children. By state and parents' education. 2020

State	Low	Medium	High
Andhra Pradesh	26.8	50.1	23.2
Arunachal Pradesh	22.7	45.5	31.9
Assam	19.7	44.2	36.2
Bihar	27.9	48.7	23.5
Chhattisgarh	21.6	52.0	26.5
Gujarat	16.4	50.2	33.4
Haryana	15.1	49.4	35.6
Himachal Pradesh	6.5	29.0	64.5
Jammu & Kashmir	23.5	52.8	23.8
Jharkhand	29.6	47.1	23.3
Karnataka	22.2	49.3	28.6
Kerala	0.8	20.2	78.9
Madhya Pradesh	25.9	58.3	15.8
Maharashtra	6.9	46.4	46.7
Manipur	10.6	34.9	54.5
Meghalaya	40.6	47.4	12.0
Nagaland	20.8	51.8	27.4
Odisha	17.4	44.5	38.2
Punjab	18.1	45.6	36.3
Rajasthan	32.3	57.5	10.2
Tamil Nadu	14.6	48.5	36.9
Telangana	25.6	43.2	31.2
Uttarakhand	15.1	48.9	36.0
Uttar Pradesh	26.1	53.2	20.7
West Bengal	23.6	51.4	25.0
All India	22.5	49.9	27.6

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Nationally, the proportion of children with parents in the 'low' and 'high' education category is similar. However, Table 11 reveals that there is a substantial variation in the education level of parents across states.

While more than half of all enrolled children in Kerala, Himachal Pradesh, Manipur and Maharashtra have parents in the 'high' education category, more than a quarter of the children in Meghalaya, Rajasthan, Jharkhand and Bihar have parents in the 'low' education category.



Table 12: % Enrolled children with specific household resources. By state and parents' education. 2020

State	Low		Medium		High	
	% Children					
	% Who are enrolled in Govt school	% Whose households have smartphones	% Who are enrolled in Govt school	% Whose households have smartphones	% Who are enrolled in Govt school	% Whose households have smartphones
Andhra Pradesh	90.9	42.6	70.0	65.4	56.5	80.7
Arunachal Pradesh			47.9	82.9	50.4	98.6
Assam	83.9	47.4	75.1	58.3	50.9	71.6
Bihar	90.1	40.0	85.2	50.3	69.9	66.8
Chhattisgarh	95.6	64.0	76.4	71.1	35.7	93.4
Gujarat	93.2	69.6	87.6	81.9	75.1	94.5
Haryana	82.9	62.6	59.9	82.1	23.9	91.9
Himachal Pradesh			81.4	86.1	42.0	94.4
Jammu & Kashmir	79.4	57.5	58.9	80.5	32.5	90.1
Jharkhand	88.4	43.7	77.0	46.8	54.7	68.8
Karnataka	88.4	50.7	77.5	68.9	53.8	82.9
Kerala			68.9	90.9	64.5	96.4
Madhya Pradesh	83.3	51.0	70.1	64.1	45.5	78.3
Maharashtra	74.8	56.4	66.2	72.0	60.6	83.5
Manipur			16.7	83.1	10.6	88.4
Meghalaya	55.2	61.9	39.0	70.1		
Nagaland	55.1	61.8	31.0	80.1	23.9	98.1
Odisha	98.4	45.3	88.5	35.9	71.5	66.1
Punjab	79.5	75.8	59.1	86.4	24.7	97.3
Rajasthan	77.8	48.7	58.2	67.6	36.2	85.2
Tamil Nadu	92.9	39.6	78.1	60.6	50.0	79.4
Telangana	78.4	59.7	65.8	73.0	31.4	86.1
Uttarakhand	53.8	57.4	64.8	70.7	39.4	89.7
Uttar Pradesh	71.8	36.8	54.2	54.2	31.7	73.8
West Bengal	96.3	29.7	92.3	45.4	81.9	68.3
All India	84.0	45.1	71.6	60.2	53.9	78.7

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

In line with the national trend, across most states, children with parents in the 'low' education category are more likely to be enrolled in government schools and are less likely to have smartphones as compared to their counterparts with parents in the 'high' education category (Table 12):

- The difference among children enrolled in government schools based on parental education is particularly stark in the states of Chhattisgarh, Haryana and Punjab (50 percentage points).
- Although overall less than half of all children with parents in the 'low' education category have smartphones, the state of Gujarat stands out, where over two-thirds of all such children have smartphones.



Table 13: % Enrolled children with selected assets available at home. By state and asset type. 2018 and 2020*

State	Smartphone		TV	
	ASER 2018	ASER 2020	ASER 2018	ASER 2020
Andhra Pradesh	42.1	61.5	91.8	92.9
Arunachal Pradesh	57.3	81.1	74.8	65.0
Assam	36.1	60.7	44.6	46.2
Bihar	27.2	51.7	31.9	34.7
Chhattisgarh	72.7	75.7	73.5	75.8
Gujarat	44.7	84.0	80.3	82.9
Haryana	57.3	82.3	84.5	77.5
Himachal Pradesh	58.0	90.0	92.6	86.0
Jammu & Kashmir	50.9	77.1	52.8	48.4
Jharkhand	20.6	50.2	33.6	31.6
Karnataka	43.1	68.6	86.1	82.8
Kerala	80.9	94.3	89.3	86.6
Madhya Pradesh	23.3	62.7	57.0	62.7
Maharashtra	42.3	76.3	81.8	78.1
Manipur	53.4	84.3	69.5	61.4
Meghalaya	41.3	72.0	59.1	50.4
Nagaland	50.0	81.8	63.1	60.1
Odisha	26.1	49.3	62.0	67.7
Punjab	64.3	88.5	95.7	89.0
Rajasthan	39.7	62.9	54.3	54.5
Tamil Nadu	40.2	64.1	95.3	92.6
Telangana	45.8	74.0	90.3	90.5
Uttarakhand	47.9	74.7	80.3	81.3
Uttar Pradesh	30.4	53.7	45.2	48.5
West Bengal	26.8	47.4	57.3	50.5
All India	36.5	61.8	60.7	60.8

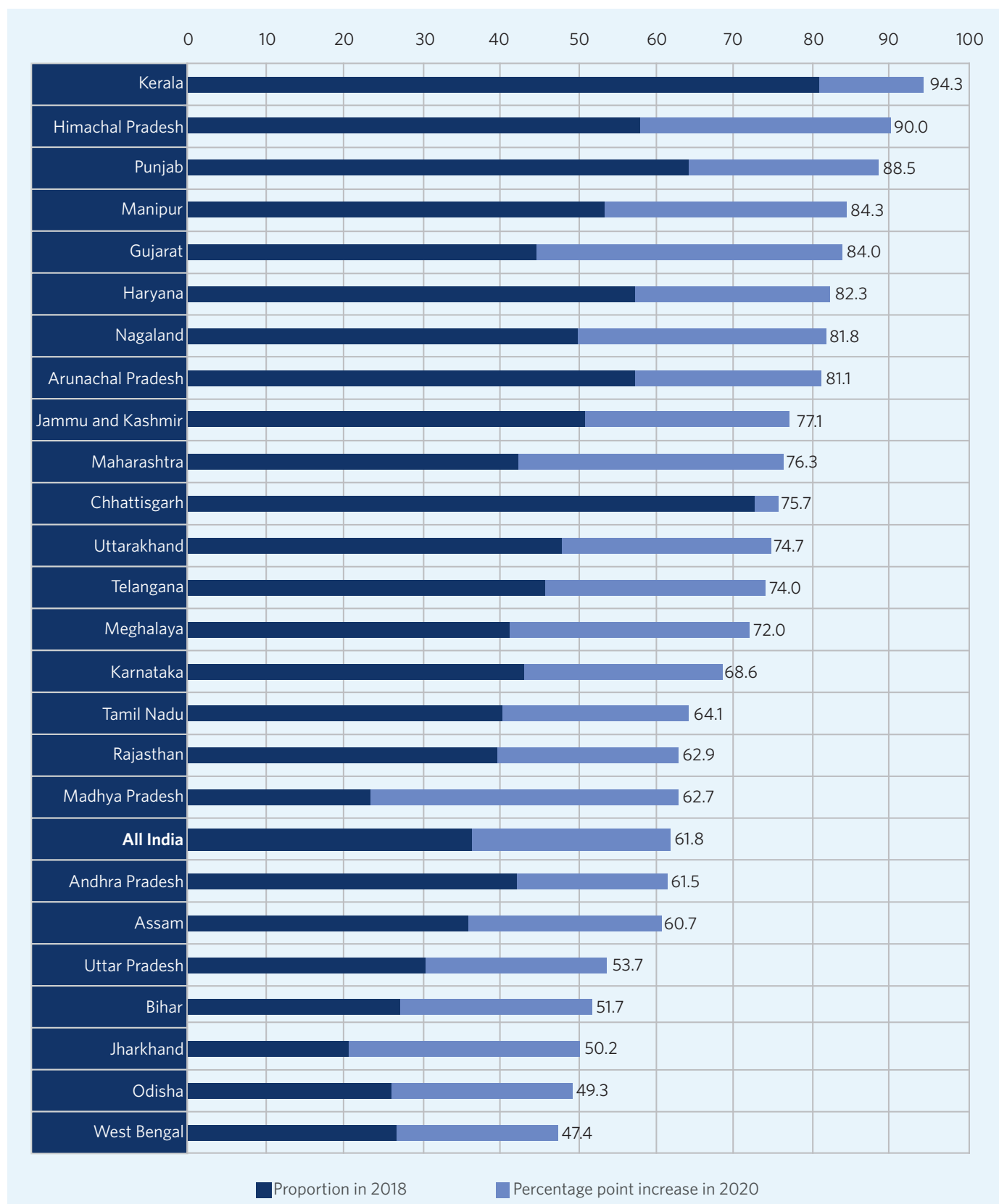
The striking jump in smartphone availability at home at the national level since 2018 is reflected in the rise in smartphone availability at the state level. For instance, a close to 40 percentage point jump is seen in the proportion of children who have a smartphone at home in Madhya Pradesh, Gujarat and Maharashtra (Table 13).

In contrast, the proportion of students who have a television at home has either remained stagnant or has shown a decline, for example in Arunachal Pradesh, Meghalaya, Manipur and Haryana.

*All estimates from ASER 2018 reported here were generated after excluding households without a mobile phone, in order to make these comparable with the ASER 2020 estimates.



Chart 4: Statewise chart showing proportion of children who have a smartphone available at home. 2018 and 2020*



Learning support for children at home

The previous section summarized what households have, in terms of the availability of some key resources that they can use to support children's learning. This section examines how households provide learning support to children during the period of school closures. This includes availability of textbooks for the current grade, support from family members, as well as other support such as paid private tuition. Other than the availability of textbooks, ASER 2020 did not explore whether households had other learning materials like other books, instructional games, etc.

Do children have textbooks at home?

Table 14: % Enrolled children who have textbooks for their current grade. By grade and school type. 2020

Std	Govt	Pvt	Govt & Pvt
Std I-II	79.8	69.7	76.2
Std III-V	85.5	72.0	81.4
Std VI-VIII	86.3	73.7	82.8
Std IX & above	82.7	73.5	80.0
All	84.1	72.2	80.5

Table 14 indicates that across all grades, a very high proportion of children have textbooks for their current grade.

For every grade, the percentage of children in government schools who have textbooks is higher than their counterparts in private schools.

Parents' socio-economic status, as reflected in their education level, also plays a role in whether children have textbooks. In each grade, more children with parents in the 'high' education category have textbooks than those with parents in the 'low' education category (Table 15).

There is almost no difference in textbook availability by sex. Almost 80% of both boys and girls have textbooks for their current grade (Table 16).

Table 15: % Enrolled children who have textbooks for their current grade. By grade and parents' education. 2020

Std	Low	Medium	High
Std I-II	73.6	76.3	78.4
Std III-V	80.3	80.6	84.1
Std VI-VIII	80.8	82.5	85.9
Std IX & above	79.2	79.0	83.5
All	79.1	80.0	83.1

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Table 16: % Enrolled children who have textbooks for their current grade. By grade and sex. 2020

Std	Boys	Girls	All
Std I-II	75.9	76.4	76.1
Std III-V	80.5	82.4	81.4
Std VI-VIII	82.0	83.7	82.8
Std IX & above	79.1	81.0	80.0
All	79.7	81.4	80.5



Do families help children to study at home?

Table 17: % Enrolled children who receive help from family members while studying at home. By grade and school type. 2020

Std	Govt	Pvt	Govt & Pvt
Std I-II	78.6	86.7	81.5
Std III-V	75.3	81.7	77.3
Std VI-VIII	70.8	79.1	73.1
Std IX & above	66.9	71.7	68.3
All	72.6	80.0	74.9

Table 18: % Enrolled children who receive help from family members while studying at home. By grade and sex. 2020

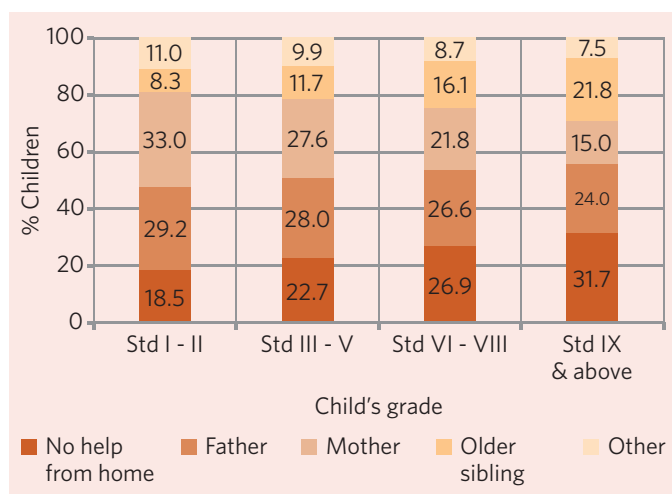
Std	Boys	Girls	All
Std I-II	81.7	81.4	81.5
Std III-V	76.8	77.8	77.3
Std VI-VIII	72.4	73.8	73.1
Std IX & above	67.2	69.4	68.3
All	74.4	75.3	74.8

Tables 17 and 18 show the proportion of children who receive help at home for learning activities:

- Close to three quarters of all enrolled children receive help from family members.
- For both types of schools and both sexes, more younger children receive help from families than older children. Overall, 81.5% children in Std I-II receive help from family members as compared to 68.3% children in Std IX and above.
- For each grade level, private school children get more help than government school children. For example, for children in Std III-V, 75.3% government school children receive help as compared to 81.7% of children enrolled in private schools (Table 18).
- There is no noticeable difference in the help that children receive based on their sex.

Which family members help children to study at home?

Chart 5: % Enrolled children who receive help at home. By grade and family member. 2020



'Other' includes uncle, aunt, cousin or any other family member.

The surveyed household was asked about who helps children most often with studying at home. Options included mother, father, older siblings and others.

Data indicate that as children move into higher grades, fewer get help from family members, especially mothers. For example, 33% of Std I-II children receive help from their mothers but only 15% of Std IX & above children are helped by their mothers.

However, help from older siblings increases as children move to higher grades.

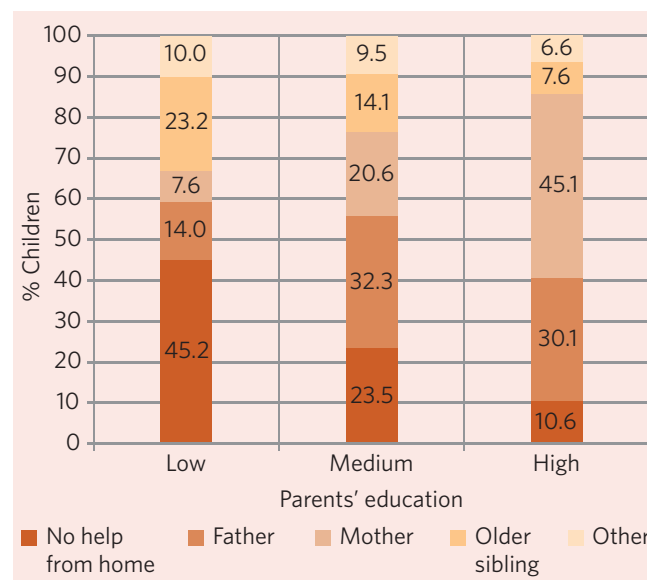


Does parents' education level influence whether children get learning support at home?

Table 19: % Enrolled children who receive help from family members while studying at home. By grade and parents' education. 2020

Std	Low	Medium	High
Std I-II	57.9	82.7	93.6
Std III-V	56.4	79.0	91.6
Std VI-VIII	52.8	75.8	89.1
Std IX & above	53.5	69.4	81.4
All	54.8	76.5	89.4

Chart 6: % Enrolled children who receive help at home. By parents' education and family member. 2020



We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

The more educated the parents, the more help their children receive. Among families where both parents have completed Std IX or more (the 'high' category), for example, close to 90% children receive help at home - 45% children receive help from their mothers and over 30% from their fathers (Table 19 and Chart 6).

However, these data reveal significant family support for children's education even among children whose parents have only studied up to Std V or less (the 'low' category of education).

For example, among children whose parents have completed Std V or less:

- A little more than half of these children get help at home (Table 19).
- 14% receive help from their fathers and almost 8% from their mothers (Chart 6).
- Further, if parents have low levels of education, older siblings and others play a more significant role (Chart 6).

Are children taking tuition classes while schools are closed?

Table 20: % Enrolled children taking tuition. By school type and tuition category. 2020

School type	% Children currently taking tuition		% Children currently not taking tuition	
	Started before the lockdown	Started after the lockdown	Not taking tuition even before the lockdown	Discontinued tuition after the lockdown
Govt	26.9	4.8	57.1	11.2
Pvt	21.8	8.1	58.7	11.4
Govt & Pvt	25.4	5.8	57.6	11.3

Table 21: % Enrolled children taking tuition. By sex and tuition category. 2020

Sex	% Children currently taking tuition		% Children currently not taking tuition	
	Started before the lockdown	Started after the lockdown	Not taking tuition even before the lockdown	Discontinued tuition after the lockdown
Boys	26.0	6.4	56.2	11.4
Girls	24.6	5.2	59.1	11.2
All	25.4	5.8	57.6	11.3

School closures had relatively little impact on children's tuitions, irrespective of children's school type or sex (Table 20 and Table 21).



State variations

Table 22 and 23: % Enrolled children who have textbooks for their current grade. By state, school type and sex. 2020

State	By school type			By sex		
	Govt	Pvt	Govt & Pvt	Boys	Girls	All
Andhra Pradesh	38.5	24.7	34.6	32.1	37.2	34.6
Arunachal Pradesh	75.1	80.3	77.6	73.6	81.7	77.5
Assam	98.2	98.9	98.4	97.8	99.1	98.4
Bihar	74.2	83.8	75.8	74.7	77.1	75.8
Chhattisgarh	87.4	64.9	80.7	79.7	81.7	80.7
Gujarat	95.2	94.0	95.0	95.1	95.0	95.0
Haryana	85.9	89.6	87.7	87.4	88.2	87.7
Himachal Pradesh	96.4	96.2	96.3	96.7	95.9	96.3
Jammu & Kashmir	95.7	97.3	96.4	97.3	95.3	96.4
Jharkhand	78.9	71.6	77.1	78.3	75.7	77.1
Karnataka	93.9	76.0	89.1	89.1	89.1	89.1
Kerala	92.9	90.0	91.9	93.2	90.6	91.9
Madhya Pradesh	89.3	57.2	79.6	76.7	82.6	79.6
Maharashtra	86.0	71.4	80.8	79.4	82.3	80.8
Manipur	99.6	97.2	97.5	98.0	97.1	97.5
Meghalaya	97.5	97.9	97.8	98.4	97.3	97.8
Nagaland	98.0	99.8	99.2	98.9	99.5	99.2
Odisha	88.7	88.0	88.6	89.4	87.7	88.5
Punjab	96.1	95.9	96.0	95.2	96.9	96.0
Rajasthan	70.6	43.0	60.4	58.2	63.0	60.3
Tamil Nadu	93.7	68.1	86.4	84.9	87.9	86.4
Telangana	89.3	37.1	68.1	63.5	73.4	68.1
Uttarakhand	75.6	85.9	80.3	80.0	80.7	80.3
Uttar Pradesh	83.5	74.9	79.6	80.9	78.0	79.6
West Bengal	99.6	100.0	99.7	99.7	99.6	99.7
All India	84.1	72.2	80.5	79.7	81.4	80.5

Reflecting the national findings, in most states, students in government schools are more likely to have textbooks for their current grade as compared to their private school counterparts (Table 22).

States in the northeast fare particularly well in this regard. In West Bengal, Nagaland, Assam, Manipur and Meghalaya, almost all children have textbooks available.

In most states, children's sex makes no difference in whether they have their current grade textbooks (Table 23).



Table 24 and 25: % Enrolled children who receive help from family members while studying at home. By state, school type and parents' education. 2020

State	By school type			By parents' education		
	Govt	Pvt	Govt & Pvt	Low	Medium	High
Andhra Pradesh	60.2	73.6	63.9	44.3	67.0	83.2
Arunachal Pradesh	67.4	81.4	73.9		76.6	94.7
Assam	75.8	88.3	79.8	55.6	80.8	91.5
Bihar	73.4	84.8	75.3	58.7	78.9	89.0
Chhattisgarh	82.5	94.1	86.0	69.0	86.2	98.2
Gujarat	84.9	81.0	84.3	72.7	86.1	86.9
Haryana	72.2	79.6	75.8	58.4	74.9	85.4
Himachal Pradesh	78.4	91.8	84.1		75.1	91.1
Jammu & Kashmir	59.9	67.0	63.0	40.7	65.8	79.5
Jharkhand	68.1	78.4	70.6	48.9	75.0	91.1
Karnataka	71.0	80.2	73.5	48.6	74.5	90.7
Kerala	85.6	80.9	83.9		83.3	88.0
Madhya Pradesh	79.9	83.4	81.0	65.6	84.9	93.7
Maharashtra	86.7	81.2	84.7	59.7	82.7	90.8
Manipur	84.3	85.2	85.0		82.0	93.2
Meghalaya	59.1	58.0	58.4	35.7	73.8	
Nagaland	69.3	79.8	76.3	62.4	78.8	86.1
Odisha	69.7	85.3	72.3	56.7	65.8	87.4
Punjab	67.8	79.9	73.8	51.6	69.2	91.0
Rajasthan	59.0	68.1	62.4	45.0	67.9	87.2
Tamil Nadu	62.2	76.9	66.4	37.3	65.3	83.5
Telangana	65.7	79.2	71.2	40.3	74.4	93.8
Uttarakhand	67.7	79.5	73.1	73.3	63.2	87.5
Uttar Pradesh	71.8	79.6	75.3	58.6	78.4	88.6
West Bengal	70.4	81.6	71.5	49.1	73.9	91.6
All India	72.6	80.0	74.9	54.8	76.5	89.4

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Across states most children receive help in studying at home. States where the support from home is strong, and more than 85% children receive help at home are Chhattisgarh, Manipur, Maharashtra and Gujarat (Table 24).

Almost everywhere as in the national findings, private school children receive more help at home than government school children.

As is the trend in national findings, in most states a much higher proportion of children with parents in the 'high' education category receive help at home as compared to children with parents in the 'low' education category. This disparity is the highest, at over 40 percentage points, in Telangana, Tamil Nadu, Karnataka and Jharkhand (Table 25).

However, states like Gujarat and Uttarakhand fare well in this regard, with the highest proportion of children with parents in the 'low' education category who receive help at home.



Table 26 and 27: % Enrolled children who receive help from family members while studying at home. By state, sex and smartphone availability. 2020

State	By sex			By smartphone availability	
	Boys	Girls	All	Available	Not available
Andhra Pradesh	61.7	66.2	63.9	72.1	50.8
Arunachal Pradesh	63.6	85.0	73.9	80.1	
Assam	80.7	78.8	79.8	82.6	75.4
Bihar	75.1	75.5	75.3	79.7	70.9
Chhattisgarh	84.8	87.0	86.0	88.7	76.5
Gujarat	83.7	84.9	84.3	84.7	82.2
Haryana	75.8	75.8	75.8	81.1	51.6
Himachal Pradesh	83.9	84.3	84.1	85.3	72.8
Jammu & Kashmir	61.3	64.9	62.9	69.7	40.1
Jharkhand	70.6	70.6	70.6	78.3	62.8
Karnataka	72.2	74.9	73.5	79.6	60.0
Kerala	83.9	84.0	83.9	84.5	
Madhya Pradesh	80.7	81.2	80.9	85.1	74.0
Maharashtra	85.1	84.3	84.7	86.7	78.5
Manipur	86.9	83.2	85.0	86.5	77.4
Meghalaya	65.5	53.1	58.5	64.9	41.8
Nagaland	75.5	76.9	76.3	80.8	56.0
Odisha	71.9	72.5	72.2	79.0	66.2
Punjab	73.9	73.7	73.8	77.3	46.5
Rajasthan	61.0	64.1	62.4	68.3	52.1
Tamil Nadu	67.4	65.4	66.4	70.9	58.5
Telangana	69.8	72.7	71.2	75.5	58.4
Uttarakhand	75.7	69.9	73.1	74.4	69.0
Uttar Pradesh	74.3	76.6	75.3	82.3	67.5
West Bengal	71.9	71.0	71.5	78.7	65.0
All India	74.4	75.3	74.8	80.1	66.4

Table 26 compares the help that boys and girls receive at home and shows that the help at home is not dependent on children's sex.

Table 27 compares the help that children with smartphones and children without smartphones receive while studying at home. The percentage of enrolled children with smartphones who received help from family members while studying exceeded those who did not have smartphones in every state.

This difference was the starkest in Punjab, Haryana and Jammu & Kashmir.



Access to and availability of learning materials and activities

The ASER 2020 survey asked households whether schools had sent learning materials or activities for children during the week prior to the survey (the reference week), which was carried out in September 2020 when schools across the country were closed. Learning materials and activities could take the form of traditional materials like worksheets in print or virtual form; online or recorded classes; and videos or other activities sent via phone or received in person.

Did children receive any learning materials or activities during the reference week?

Table 28: % Enrolled children who received learning materials/activities in the reference week. By grade and school type. 2020

Std	Govt	Pvt	Govt & Pvt
Std I-II	27.9	35.8	30.8
Std III-V	33.7	40.4	35.8
Std VI-VIII	35.4	42.7	37.4
Std IX & above	34.8	43.4	37.3
All	33.5	40.6	35.6

Table 29: % Enrolled children who received learning materials/activities in the reference week. By grade and parents' education. 2020

Std	Low	Medium	High
Std I-II	16.2	27.3	43.7
Std III-V	22.0	33.8	49.7
Std VI-VIII	25.3	36.3	52.5
Std IX & above	27.8	35.7	49.3
All	23.5	33.8	48.9

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Table 30: % Enrolled children who received learning materials/activities in the reference week. By grade and sex. 2020.

Std	Boys	Girls	All
Std I-II	30.3	31.3	30.7
Std III-V	36.7	34.6	35.7
Std VI-VIII	36.6	38.3	37.4
Std IX & above	36.9	37.6	37.3
All	35.5	35.8	35.6

Overall, approximately one third of all enrolled children received some kind of learning materials or activities, other than textbooks, from their teachers during the reference week (Table 28).

A slightly larger proportion of students in higher classes received materials as compared to lower classes. For example, close to 38% of high school students received materials as compared to 30.8% of children in Std I-II.

A higher percentage of private school children received learning materials/activities as compared to government school children in the same grades.

Disparities in receipt of learning materials/activities are also visible based on parents' education levels. More children with parents in the 'high' education category received learning materials/activities as compared to children in the same grades with parents in the 'low' education category (Table 29).

There is no difference by sex in receipt of learning materials (Table 30).



How did children receive learning materials or activities?

Table 31: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By school type and medium. 2020

School type	WhatsApp	Phone call	Personal visit	Other
Govt	67.3	12.3	31.8	5.6
Pvt	87.2	9.9	11.5	5.8
Govt & Pvt	74.2	11.5	24.8	5.7

Table 32: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By parents' education and medium. 2020

Parents' education	WhatsApp	Phone call	Personal visit	Other
Low	55.9	11.7	39.9	6.7
Medium	70.8	12.0	27.7	5.7
High	85.3	10.6	15.7	5.2

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Among both children enrolled in government schools as well as children whose parents are in the 'low' education category, accessing materials/opportunities via personal visits was more common, suggesting that an effort was made to reach out to the children with the least access to resources.

Children's sex had no bearing on how they received learning materials (Table 33).

Table 34: Of enrolled children who received learning materials/activities in the reference week, % children who got these through one or more mediums. By school type and number of mediums. 2020

School type	Number of mediums				Total
	1	2	3	4	
Govt	85.8	11.5	2.6	0.1	100
Pvt	88.3	9.2	2.3	0.2	100
Govt & Pvt	86.7	10.7	2.5	0.2	100

Despite the variety of ways in which children could have accessed learning materials and activities, during the reference week most children who received these materials – more than 86% – did so in just one way (Table 34).

Among children who received learning materials, if a smartphone was available in the family, it is very likely that the child's access to available material was via WhatsApp (Table 35). Interestingly, even among children whose families had no smartphones, almost a fourth (23.4%) were able to access WhatsApp using someone else's smartphone. In families without smartphones, more than half of all children who accessed learning materials did so through physical visits (either going to the school or the teacher coming to the home).

As noted above, only a third of all children received materials or activities, other than textbooks, during the reference week. Tables 31 and 32 show that those who did receive materials, received it in a variety of ways.

Regardless of school type and parents' education level, WhatsApp was by far the most common medium used for sharing learning materials and activities, followed by personal visits and phone calls.

However, a higher proportion of students enrolled in private schools received materials through WhatsApp than their counterparts in government schools (Table 31). Similarly, children whose parents have completed Std IX or more were much more likely to receive materials via WhatsApp than children whose parents have 'low' education levels (Table 32).

Table 33: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By sex and medium. 2020

Sex	WhatsApp	Phone call	Personal visit	Other
Boys	74.5	11.2	24.8	5.6
Girls	73.7	11.8	24.8	5.8
All	74.2	11.5	24.8	5.7

Table 35: % Enrolled children who received learning materials/activities from only one medium. By smartphone availability and medium. 2020

Smartphone availability	WhatsApp	Phone call	Personal visit	Other	Total
Yes	83.9	2.8	11.8	1.5	100
No	23.4	11.8	57.1	7.8	100
All	72.2	4.6	20.5	2.7	100



If children did not access learning materials or activities during the reference week, what did parents say was the reason?

Table 36: Reasons given by parents of enrolled children who did not receive learning materials/ activities during the reference week. By school type and reason. 2020

School type	School not sending	No internet	No smartphone	Connectivity issues	Other
Govt	68.5	10.7	25.8	5.1	4.3
Pvt	66.9	11.6	20.4	5.2	6.0
Govt & Pvt	68.1	11.0	24.3	5.1	4.8

Table 37: Reasons given by parents of enrolled children who did not receive learning materials/ activities during the reference week. By parents' education and reason. 2020

Parents' education	School not sending	No internet	No smartphone	Connectivity issues	Other
Low	67.6	12.6	30.0	4.7	2.8
Medium	68.4	10.3	24.2	5.4	4.3
High	70.2	10.0	17.3	5.6	6.9

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Table 38: Reasons given by parents of enrolled children who did not receive learning materials/ activities during the reference week. By sex and reason. 2020

Sex	School not sending	No internet	No smartphone	Connectivity issues	Other
Boys	68.4	11.5	23.9	5.0	4.7
Girls	67.7	10.3	24.7	5.3	4.9
All	68.1	11.0	24.3	5.1	4.8

Families cited different reasons for why their children did not receive learning materials or activities during the reference week.

Regardless of school type or parental education category, most parents cited the school not sending anything as the main reason for not receiving materials (Tables 36 and 37).

Overall, almost a quarter of sampled children's parents mentioned not having a smartphone as a reason (24.3%), with more parents of children enrolled in government school highlighting this reason (25.8%) than those enrolled in private school (Table 36). No smartphone availability was also the reason given by a third of parents in the 'low' education category (Table 37).

Across the varied reasons offered by the parents, no differences can be observed on the basis of sex (Table 38).



State variations

Table 39: % Enrolled children who received learning materials/activities in the reference week. By state and school type. 2020

State	Govt	Pvt	Govt & Pvt
Andhra Pradesh	23.9	27.4	24.9
Arunachal Pradesh	39.4	62.4	50.1
Assam	15.5	44.7	24.9
Bihar	4.6	22.7	7.7
Chhattisgarh	38.4	39.9	38.8
Gujarat	81.9	82.6	82.0
Haryana	67.7	72.2	69.9
Himachal Pradesh	85.4	89.5	87.2
Jammu & Kashmir	35.9	43.5	39.1
Jharkhand	28.6	24.6	27.6
Karnataka	73.4	67.1	71.7
Kerala	82.1	84.4	82.9
Madhya Pradesh	50.1	38.5	46.6
Maharashtra	63.6	64.3	63.8
Manipur	15.1	32.3	30.0
Meghalaya	23.4	32.0	28.3
Nagaland	56.0	79.1	71.3
Odisha	18.5	50.6	23.8
Punjab	87.1	88.1	87.6
Rajasthan	22.5	19.7	21.5
Tamil Nadu	38.5	50.3	41.9
Telangana	67.4	37.0	55.0
Uttarakhand	77.0	72.9	75.1
Uttar Pradesh	19.4	23.0	21.0
West Bengal	18.5	39.0	20.5
All India	33.5	40.6	35.6

There is a lot variation across states in the proportion of children who received any learning materials, other than textbooks, during the reference week (Table 39). In states like Gujarat, Himachal Pradesh, Kerala and Punjab, more than 80% of all enrolled children received learning materials irrespective of school type. On the other hand, in the states of Bihar, Rajasthan and Uttar Pradesh, less than a quarter of all children in both types of schools received learning materials.

In most states, more children enrolled in private schools received materials than their government school counterparts. This difference between government and private school going children was especially stark in Odisha, Assam and Nagaland.



Chart 7: Statewise chart showing % of Govt school children who received learning materials/activities in the reference week. 2020

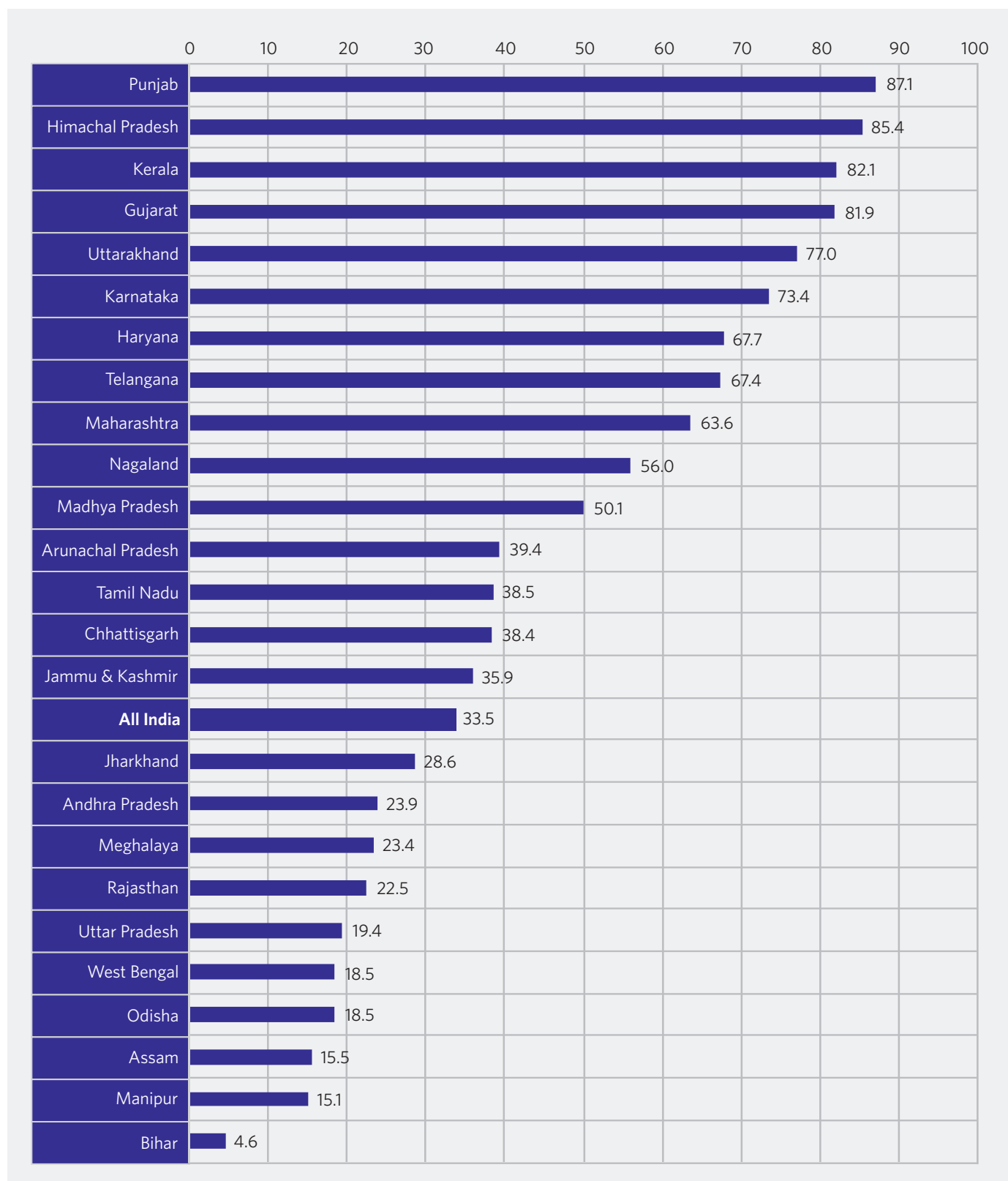


Table 40: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By state, school type and medium. 2020

State	Govt				Pvt			
	WhatsApp	Phone call	Personal visit	Other	WhatsApp	Phone call	Personal visit	Other
Andhra Pradesh	55.3	45.5	30.2	1.3				
Arunachal Pradesh					96.4	0.0	2.9	0.7
Assam	74.6	22.7	14.7	7.3	86.4	14.6	11.8	12.1
Bihar	57.3	17.7	33.5	7.6	88.9	16.7	3.3	2.9
Chhattisgarh	69.3	12.2	26.3	7.7	82.4	13.5	16.4	1.4
Gujarat	61.6	14.4	50.0	2.5	86.2	23.7	29.4	4.6
Haryana	92.2	3.3	4.5	2.8	96.3	1.2	1.8	2.7
Himachal Pradesh	93.2	8.0	2.6	5.8	98.9	9.2	0.9	3.0
Jammu & Kashmir	51.6	9.1	51.0	7.5	64.5	6.7	36.5	4.3
Jharkhand	78.4	4.0	17.6	4.1	93.6	3.1	3.7	0.9
Karnataka	40.3	12.9	70.0	9.1	76.2	16.1	36.5	8.4
Kerala	97.4	20.1	0.4	3.1	93.7	14.9	0.0	10.3
Madhya Pradesh	72.9	5.6	30.8	4.3	88.0	3.4	13.6	3.3
Maharashtra	89.1	10.5	14.0	6.6	95.5	6.6	6.5	9.6
Manipur					76.6	10.4	17.6	13.3
Meghalaya				Data Insufficient				
Nagaland	74.2	5.4	26.8	0.7	88.8	7.3	16.4	2.0
Odisha	69.7	8.8	22.6	2.3	88.5	7.4	6.0	0.8
Punjab	93.7	10.7	10.9	5.0	95.1	10.1	4.8	5.3
Rajasthan	75.9	4.2	20.1	5.4	87.4	2.1	10.8	6.5
Tamil Nadu	73.2	13.0	14.1	3.6	93.9	4.2	1.5	2.1
Telangana	42.7	32.7	38.7	5.7	59.4	33.6	17.9	5.9
Uttarakhand	88.3	5.9	7.0	3.5	97.9	9.5	4.3	1.8
Uttar Pradesh	61.0	14.0	28.4	10.3	83.6	6.4	10.8	4.8
West Bengal	24.1	4.6	68.6	3.8				
All India	67.3	12.3	31.8	5.6	87.2	9.9	11.5	5.8

With the exception of Karnataka, across all states, WhatsApp was the most common medium for sharing learning materials with children, regardless of school type. Also similar to the national picture is that more private school children received materials via WhatsApp than government school children. In Haryana, Himachal Pradesh, Punjab and Kerala, almost all children received materials via WhatsApp.

For children going to government schools, personal visits were an important means of receiving materials in several states. For instance, in Karnataka, Jharkhand and Gujarat, more than half of all enrolled children in government schools received materials via personal visits (Table 40).



Table 41: % Enrolled children who received learning materials/activities in the reference week. By state and parents' education. 2020

State	Low	Medium	High
Andhra Pradesh	23.3	22.6	34.1
Arunachal Pradesh		54.0	68.8
Assam	10.2	22.8	35.2
Bihar	3.1	6.1	17.2
Chhattisgarh	27.7	41.8	45.0
Gujarat	69.4	81.0	89.8
Haryana	49.7	71.8	77.1
Himachal Pradesh		88.9	88.7
Jammu & Kashmir	32.1	38.1	48.0
Jharkhand	21.3	24.7	45.0
Karnataka	65.8	73.3	73.9
Kerala		83.1	83.1
Madhya Pradesh	40.3	48.0	52.5
Maharashtra	39.8	61.3	69.4
Manipur		23.7	32.2
Meghalaya	18.6	23.1	
Nagaland	58.3	73.3	75.1
Odisha	16.4	14.8	37.0
Punjab	81.7	87.7	89.2
Rajasthan	16.4	22.5	33.3
Tamil Nadu	26.1	40.8	49.9
Telangana	52.8	59.7	50.4
Uttarakhand	44.0	73.3	89.7
Uttar Pradesh	14.4	20.5	30.2
West Bengal	15.1	17.2	32.9
All India	23.5	33.8	48.9

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Overall, national trends show major disparities in receipt of learning materials depending on parents' education levels. This disparity was found to be the highest in Uttarakhand and Maharashtra (Table 41).

However, there are notable exceptions. Among children with parents in the 'low' education category, a notable two-thirds received materials in the states of Gujarat, Karnataka and Punjab.



Table 42: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By state, parents' education and medium. 2020

State	Low				High			
	WhatsApp	Phone call	Personal visit	Other	WhatsApp	Phone call	Personal visit	Other
Andhra Pradesh								
Arunachal Pradesh								
Assam					84.9	11.8	14.1	12.6
Bihar					81.6	19.3	16.0	3.6
Chhattisgarh					82.2	10.0	18.8	2.7
Gujarat	44.6	17.0	55.5	2.4	75.5	21.5	43.0	3.8
Haryana	87.5	0.0	9.7	4.4	97.3	0.6	0.8	2.2
Himachal Pradesh					96.0	8.2	2.3	4.5
Jammu & Kashmir	50.5	11.6	48.8	0.3	66.9	3.1	34.1	12.2
Jharkhand	73.2	4.3	26.0	1.2	86.8	5.3	7.3	3.7
Karnataka	35.7	9.4	71.5	10.2	62.1	17.6	49.8	7.0
Kerala					97.8	17.1	0.4	3.9
Madhya Pradesh	70.3	3.8	34.7	2.4	89.8	3.4	10.5	6.0
Maharashtra					96.3	7.4	6.8	8.2
Manipur					83.2	7.4	11.0	8.1
Meghalaya								
Nagaland	74.1	5.8	32.0	0.0	89.7	4.9	14.2	1.8
Odisha					87.7	4.4	9.9	1.5
Punjab	91.1	15.8	12.5	10.2	97.5	8.9	5.7	4.8
Rajasthan	66.3	5.0	24.7	9.1	87.1	4.2	16.3	4.0
Tamil Nadu					90.2	4.2	5.9	2.9
Telangana	36.6	28.7	39.3	9.8	59.6	28.1	26.0	5.0
Uttarakhand					97.4	2.4	3.9	2.3
Uttar Pradesh	49.2	13.6	37.9	12.8	85.4	8.7	9.1	5.3
West Bengal								
All India	55.9	11.8	39.6	6.9	85.2	10.6	15.7	5.2

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Children with parents in the 'low' education category were the most likely to access learning materials via personal visits. In Karnataka and Gujarat, more than half such children received materials via personal visits (Table 42).



Table 43: % Enrolled children who received learning materials/activities in the reference week. By state and smartphone availability. 2020

State	Available	Not available
Andhra Pradesh	33.1	11.8
Arunachal Pradesh	60.2	
Assam	35.1	9.1
Bihar	11.4	3.7
Chhattisgarh	43.8	23.3
Gujarat	84.8	70.6
Haryana	78.2	31.5
Himachal Pradesh	90.9	53.6
Jammu & Kashmir	44.6	20.6
Jharkhand	44.9	10.3
Karnataka	73.8	66.9
Kerala	85.2	
Madhya Pradesh	60.7	23.0
Maharashtra	74.9	28.4
Manipur	33.2	12.7
Meghalaya	36.7	6.8
Nagaland	78.1	40.4
Odisha	38.1	9.6
Punjab	90.1	68.9
Rajasthan	29.6	8.1
Tamil Nadu	53.5	22.7
Telangana	56.8	51.4
Uttarakhand	82.7	52.5
Uttar Pradesh	29.7	11.0
West Bengal	23.3	17.9
All India	47.2	17.1

The availability of a smartphone in the household made a big difference in whether children received learning materials/activities in the reference week; while close to half the children who had a smartphone received materials, this proportion was only 17% for children who did not have smartphone (Table 43).

This difference is the highest at 35 percentage points in Haryana, Maharashtra, Nagaland and Madhya Pradesh.

However, some states like Gujarat, Karnataka and Punjab made a substantial effort to send learning materials to children without smartphones - close to 70% such children received learning materials in these states.



Chart 8: Statewise chart showing % of enrolled children without a smartphone who received learning materials/activities in the reference week. 2020

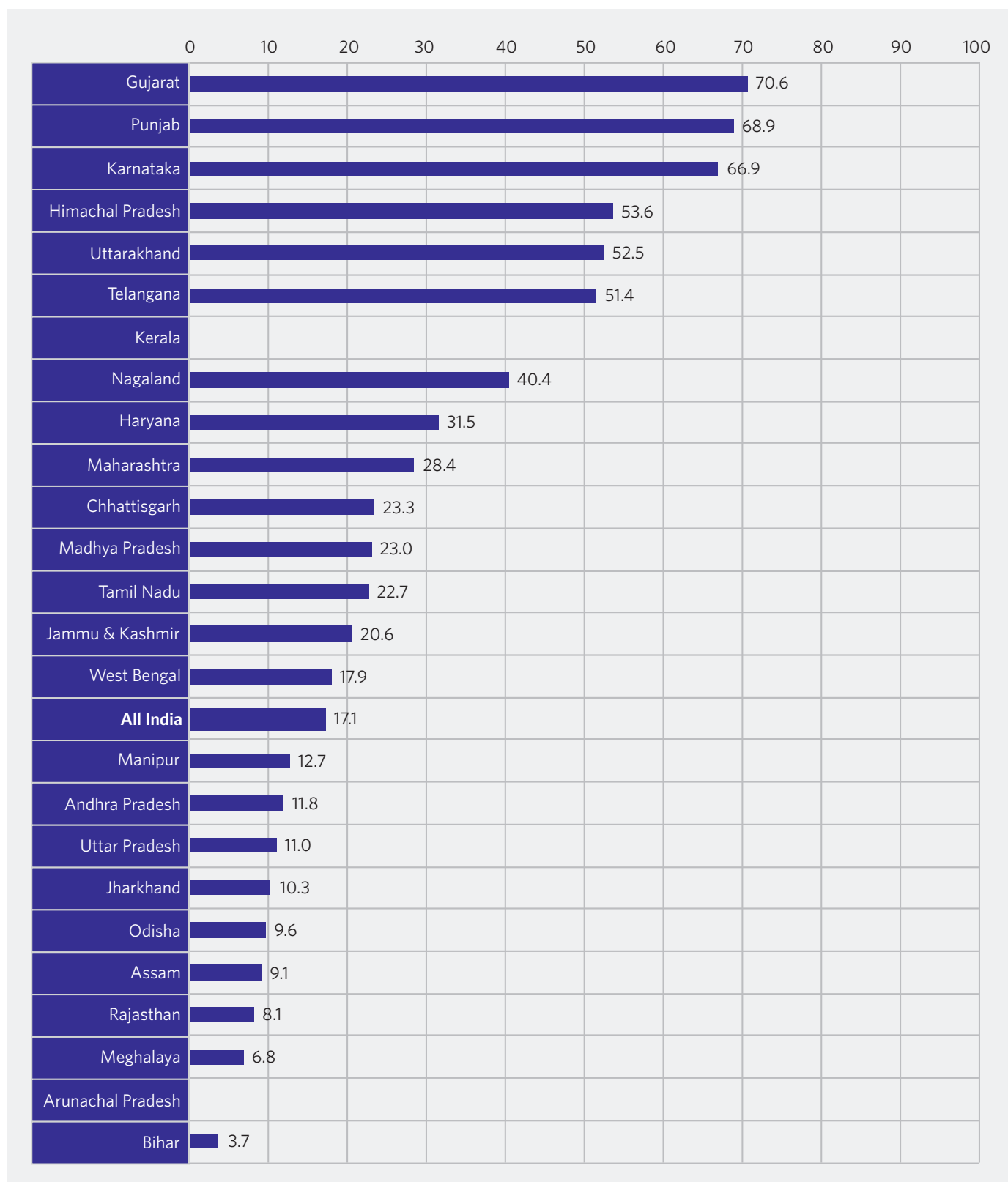


Table 44: Of enrolled children who received learning materials/activities in the reference week, % children who received these through different mediums. By state, smartphone availability and medium. 2020

State	Available				Not available			
	WhatsApp	Phone call	Personal visit	Other	WhatsApp	Phone call	Personal visit	Other
Andhra Pradesh	75.0	29.0	14.5	3.5				
Arunachal Pradesh	93.5	0.3	5.1	2.7				
Assam	89.4	18.1	7.2	10.1		Data Insufficient		
Bihar	83.5	16.7	12.7	3.8				
Chhatisgarh	80.3	13.8	19.2	3.5				
Gujarat	72.7	16.8	42.4	2.4	19.3	10.2	74.8	5.2
Haryana	97.2	1.6	1.6	1.7	61.1	11.9	18.5	17.2
Himachal Pradesh	98.6	8.8	1.7	2.1				
Jammu & Kashmir	64.2	7.5	38.7	6.8	10.0	10.9	84.0	0.8
Jharkhand	90.5	3.8	7.1	2.6	33.6	3.4	55.7	7.9
Karnataka	64.4	15.8	53.6	7.2	13.0	8.8	80.8	13.2
Kerala	97.0	16.0	0.3	5.6				
Madhya Pradesh	89.6	4.4	16.5	3.2	19.6	8.1	70.4	7.7
Maharashtra	96.5	8.3	7.9	7.3	48.6	15.4	40.1	10.8
Manipur	79.5	12.0	13.3	12.9				
Meghalaya	62.3	13.3	42.0	0.6		Data Insufficient		
Nagaland	91.3	6.3	12.7	1.4				
Odisha	88.3	6.2	8.0	1.3	35.1	10.6	51.3	3.7
Punjab	98.1	8.3	6.5	4.9	58.0	30.9	21.1	7.0
Rajasthan	89.7	2.0	10.5	3.9	18.4	14.1	56.7	19.1
Tamil Nadu	90.5	5.9	6.1	1.1	38.4	26.8	24.5	11.2
Telangana	57.9	29.2	30.2	4.6	12.0	45.0	42.1	9.8
Uttarakhand	98.5	4.5	3.8	1.6	64.6	18.5	15.3	8.4
Uttar Pradesh	86.8	7.3	8.0	6.4	24.3	19.9	56.4	13.0
West Bengal	54.8	5.4	41.2	3.3	2.9	10.2	79.5	7.3
All India	85.1	10.3	17.3	4.7	25.0	16.4	58.1	10.5

Table 44 shows that of those children who received materials and had a smartphone at home, the most common mode of receiving materials was WhatsApp for most states.

Among children who did not have a smartphone available at home, personal visits (either by the teacher to the household or by student to the school) played an important role in all the states - more than half of these children who received materials received them via personal visits.

Interestingly, even among children without smartphones, overall, close to a quarter received materials on WhatsApp by accessing someone else's smartphone.



Table 45: Of enrolled children who did not receive learning materials/activities during the reference week, reasons given by parents. By state, school type and reason. 2020

State	Govt					Pvt				
	School not sending	No internet	No smartphone	Connectivity issues	Other	School not sending	No internet	No smartphone	Connectivity issues	Other
Andhra Pradesh	85.4	10.5	14.2	3.7	2.9	73.9	15.9	21.0	10.1	2.0
Arunachal Pradesh	35.3	12.1	13.7	17.5	31.1					
Assam	79.1	10.8	22.5	3.7	1.2	82.5	9.1	13.9	7.6	1.0
Bihar	82.1	11.5	19.9	1.4	2.2	75.7	13.8	16.3	2.1	2.3
Chhattisgarh	46.3	9.8	22.3	4.9	22.1	53.2	6.8	17.0	6.1	21.3
Gujarat	34.9	29.7	27.1	7.6	8.8					
Haryana	40.1	10.0	46.8	2.6	8.6	45.7	13.6	31.9	1.9	8.8
Himachal Pradesh	14.2	2.1	36.9	0.6	51.2					
Jammu & Kashmir	62.7	9.9	31.6	15.9	1.0	74.6	11.5	10.2	17.4	0.9
Jharkhand	38.8	10.9	54.2	5.6	8.2	58.8	8.8	45.2	3.3	5.7
Karnataka	69.8	13.2	13.4	19.0	1.6	67.8	16.3	9.9	14.5	2.6
Kerala					Data Insufficient					
Madhya Pradesh	61.4	7.3	47.1	1.6	2.7	75.0	7.3	24.8	2.3	3.7
Maharashtra	56.9	8.3	33.8	4.1	6.9	60.2	9.7	30.7	2.7	6.3
Manipur					6.5	84.1	5.1	7.7	3.5	7.8
Meghalaya	93.1	1.5	6.9	0.0	6.6	92.9	1.5	9.7	0.2	2.3
Nagaland					Data Insufficient					
Odisha	65.8	5.9	24.7	20.5	2.6	59.4	8.4	24.1	21.3	7.1
Punjab					Data Insufficient					
Rajasthan	64.6	9.7	26.6	5.7	6.4	73.5	10.2	11.3	5.8	6.4
Tamil Nadu	59.4	8.6	31.3	3.0	3.4	61.4	14.0	19.1	3.3	12.8
Telangana	58.0	7.8	29.9	1.3	13.3	67.7	6.1	10.5	5.2	19.4
Uttarakhand					Data Insufficient					
Uttar Pradesh	57.3	14.8	32.1	3.0	4.2	60.7	13.8	23.8	5.1	4.9
West Bengal	83.4	9.8	10.8	5.8	2.9					
All India	68.5	10.7	25.8	5.1	4.3	66.9	11.6	20.4	5.2	6.0

Like in the national findings, irrespective of school type and state, the major reason that parents cited for not receiving learning materials was that the school did not send materials (Table 45).

The lack of a smartphone was cited as another important reason for not receiving materials across most states, more so among government school children than private school children.

In Odisha, Jammu & Kashmir connectivity issue was cited as a common reason.



Children's engagement with learning materials

While the previous section explored whether households received learning materials and activities from schools in the week prior to the survey in September 2020, this section analyses whether children actually engaged with different kinds of materials and activities during that week. Households were asked about a variety of materials and activities received from any source, including traditional materials like textbooks and worksheets (in print or virtual format), lessons that were broadcast on television or radio; and online activities such as pre-recorded videos or live classes.

Did children do any learning activities during the reference week?

Table 46: % Enrolled children by the number of learning activities done during the reference week. By school type and number of activities. 2020

School type	No activity	1 activity	2 activities	3 or more activities	Total
Govt	30.5	26.2	24.2	19.1	100
Pvt	28.1	21.0	24.2	26.7	100
Govt & Pvt	29.8	24.6	24.2	21.4	100

Table 47: % Enrolled children who did learning activities during the reference week. By school type and type of material. 2020

School type	Traditional		Broadcast		Online	
	Text-book	Work-sheet	TV	Radio	Videos/re-corded classes	Live online classes
Govt	59.5	34.1	20.2	2.8	18.3	8.1
Pvt	60.1	38.0	18.4	2.3	28.7	17.7
Govt & Pvt	59.7	35.3	19.6	2.7	21.5	11.0

Even though only a third of all children received materials, other than textbooks, from their schools during the reference week, households reported that most children did do some learning activity during that week.

These activities were shared by diverse sources such as schools, families, and private tutors, among others. Based on responses from households, 30.5% students in government schools and 28.1% children in private schools did not do any learning activities during the reference week (Table 46).

Close to a fifth of all children did three activities or more. In this category, there is a higher proportion of private school students (26.7%) as compared to government school students (19.1%).

While the proportion of children doing different types of activities is quite similar for government and private schools, there is one significant difference. Children enrolled in private schools were much more likely to be connected to online classes and recorded video lessons. For example,

- While close to 60% of all children in both types of schools reported using textbooks during the reference week, 28.7% of private school children reported using recorded video lessons opposed to 18.3% of government school children.
- Further, 17.7% children in private schools accessed live online classes during the reference week as compared to 8.1% of government school children (Table 47).



Table 48: % Enrolled children by the number of learning activities done during the reference week. By parents' education and number of activities. 2020

Parents' education	No activity	1 activity	2 activities	3 or more activities	Total
Low	40.8	26.2	21.3	11.7	100
Medium	30.1	26.1	24.7	19.2	100
High	19.6	20.9	25.9	33.6	100

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Parents' education had a strong relationship with whether children did any activities at home, with major differences in the number of activities done by children whose parents have studied upto Std V or less ('low' category) and children whose parents have completed Std IX or more ('high' category):

- While close to 20% children whose parents are in the 'high' education category did not do any activity, this percentage is much higher for children whose parents are in the 'low' education category (40.8%).
- A much higher proportion of children who have parents in the 'high' education category did three or more learning activities as compared to children who have parents in the 'low' education category - a difference of 21 percentage points (Table 48).

Across all types of material, a higher percentage of children with parents in the 'high' education category did some learning activity as compared to their counterparts with parents in the 'low' education category. This difference is especially stark in online activities.

For example, around 5% children with 'low' parental education accessed live online classes as opposed to 20% children with 'high' parental education (Table 49).

Table 49: % Enrolled children who did learning activities during the reference week. By parents' education and type of material. 2020

Parents' education	Traditional		Broadcast		Online	
	Text-book	Work-sheet	TV	Radio	Videos/re-recorded classes	Live online classes
Low	50.2	28.4	13.5	1.9	11.1	4.7
Medium	59.2	33.8	19.0	2.8	19.8	8.9
High	69.2	44.0	25.7	2.9	33.3	20.0



Table 50: % Enrolled children by the number of learning activities done during the reference week. By sex and number of activities. 2020

Sex	No activity	1 activity	2 activities	3 or more activities	Total
Boys	30.3	24.0	24.2	21.5	100
Girls	29.2	25.3	24.2	21.3	100
All	29.8	24.6	24.2	21.4	100

Table 51: % Enrolled children who did learning activities during the reference week. By sex and type of material. 2020

Sex	Traditional		Broadcast		Online	
	Text-book	Work-sheet	TV	Radio	Videos/re-recorded classes	Live online classes
Boys	58.8	35.4	19.2	2.7	21.8	11.5
Girls	60.6	35.1	20.1	2.6	21.1	10.5
All	59.7	35.3	19.7	2.7	21.5	11.0

Tables 50 and 51 compare the learning activities done by boys and girls in the reference week. No notable difference can be seen in the number of activities that boys and girls did; overall, 30% boys and girls did not do any activity in the reference week (Table 50). Boys and girls alike did learning activities using different materials (Table 51).

Table 52: % Enrolled children who did learning activities during the reference week. By grade and type of material. 2020

Std	Traditional		Broadcast		Online	
	Text-book	Work-sheet	TV	Radio	Videos/re-recorded classes	Live online classes
Std I-II	55.6	33.5	15.7	2.3	16.6	7.3
Std III-V	60.2	35.5	19.7	2.7	19.7	8.9
Std VI-VIII	60.7	36.0	20.8	2.9	21.9	11.5
Std IX & above	61.2	35.5	21.5	2.6	27.5	16.3
All	59.7	35.3	19.6	2.7	21.5	11.0

The proportion of children in different grades doing learning activities is quite similar. The only substantial difference is that the students in higher grades were more likely to be connected to online classes or video recordings as compared to their younger counterparts (Table 51).



How much contact was there between school and home during the reference week? And since schools closed?

Table 53: % Enrolled children in contact with schools. By school type and type of contact. 2020

School type	Contact to discuss learning materials/activities or child's progress/wellbeing			Contact for administrative purposes
	Teacher visited or called parent/child in the reference week	Parent/child visited or called teacher in the reference week	Of those who had no contact in the reference week, teacher or parent/child called or visited each other at least once since the lockdown	Teacher or parent/child contacted each other at least once since the lockdown
Govt	32.3	29.2	19.3	40.4
Pvt	37.4	36.1	21.7	31.5
Govt & Pvt	33.9	31.3	20.0	37.7

Table 54: % Enrolled children in contact with schools. By parents' education and type of contact. 2020

Parents' education	Contact to discuss learning materials/activities or child's progress/wellbeing			Contact for administrative purposes
	Teacher visited or called parent/child in the reference week	Parent/child visited or called teacher in the reference week	Of those who had no contact in the reference week, teacher or parent/child called or visited each other at least once since the lockdown	Teacher or parent/child contacted each other at least once since the lockdown
Low	25.2	23.0	15.0	32.0
Medium	32.8	30.4	20.3	37.3
High	43.3	40.0	24.5	43.0

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Table 55: % Enrolled children in contact with schools. By sex and type of contact. 2020

Sex	Contact to discuss learning materials/activities or child's progress/wellbeing			Contact for administrative purposes
	Teacher visited or called parent/child in the reference week	Parent/child visited or called teacher in the reference week	Of those who had no contact in the reference week, teacher or parent/child called or visited each other at least once since the lockdown	Teacher or parent/child contacted each other at least once since the lockdown
Boys	33.5	31.1	19.5	36.9
Girls	34.2	31.4	20.5	38.6
All	33.8	31.3	20.0	37.7

Even when schools are closed, contact between the home and school is important to discuss how the child is doing both academically and in terms of well-being. ASER 2020 explored this issue in two ways: whether parents and teachers had been in touch (phone or visit) during the reference week; and if not, whether there had been contact since the lockdown began in March 2020.

Overall, teachers of about a third of all children contacted parents/families during the reference week. This proportion is higher among children in private than in government schools (Table 53).

More educated parents had greater contact with school teachers during the reference week (Table 54). This suggests that children whose parents could offer support at home were also those who got more support from school.

Children's sex had no bearing on the contact that their teacher had with their parents (Table 55).



State variations

Table 56: % Enrolled children by the number of learning activities done during the reference week. By state, school type and number of activities. 2020

State	Govt			Pvt			Govt & Pvt		
	No activity	1 activity	2 or more activities	No activity	1 activity	2 or more activities	No activity	1 activity	2 or more activities
Andhra Pradesh	50.9	23.1	26.0	49.0	21.1	29.9	50.4	22.5	27.1
Arunachal Pradesh	39.6	21.3	39.1	20.4	20.2	59.5	30.6	20.8	48.6
Assam	43.9	35.2	20.9	29.1	33.1	37.9	39.2	34.5	26.4
Bihar	33.5	31.4	35.1	18.1	24.2	57.7	30.9	30.2	39.0
Chhattisgarh	18.9	35.8	45.3	25.3	25.9	48.8	20.8	32.8	46.3
Gujarat	8.1	14.8	77.1	6.5	8.9	84.6	7.8	13.9	78.2
Haryana	29.8	18.8	51.4	19.7	19.1	61.2	24.8	19.0	56.2
Himachal Pradesh	12.3	17.3	70.4	10.7	12.2	77.1	11.6	15.1	73.3
Jammu & Kashmir	45.9	23.0	31.1	33.9	32.7	33.4	40.8	27.1	32.1
Jharkhand	40.0	29.3	30.7	33.6	23.0	43.4	38.4	27.8	33.8
Karnataka	18.8	20.1	61.2	18.4	19.5	62.1	18.6	20.0	61.4
Kerala	6.5	6.6	87.0	2.8	10.1	87.1	5.2	7.8	87.0
Madhya Pradesh	18.7	20.2	61.2	30.1	22.1	47.8	22.1	20.8	57.2
Maharashtra	16.8	24.5	58.7	18.9	23.5	57.6	17.5	24.2	58.3
Manipur	23.5	23.7	52.8	24.3	20.1	55.5	24.2	20.6	55.2
Meghalaya	59.3	17.0	23.8	60.2	17.4	22.4	59.8	17.2	23.0
Nagaland	40.1	19.7	40.2	13.8	32.0	54.3	22.7	27.8	49.5
Odisha	32.1	33.1	34.8	17.6	19.2	63.2	29.7	30.8	39.5
Punjab	5.4	16.3	78.3	5.1	10.2	84.8	5.3	13.2	81.5
Rajasthan	49.6	20.9	29.5	48.7	19.7	31.6	49.2	20.5	30.3
Tamil Nadu	26.5	29.5	44.0	30.0	22.2	47.8	27.5	27.4	45.1
Telangana	7.0	18.0	75.0	19.8	26.9	53.3	12.2	21.6	66.2
Uttarakhand	29.1	25.9	45.0	24.0	19.8	56.2	26.8	23.1	50.2
Uttar Pradesh	43.4	23.8	32.8	35.2	17.9	46.9	39.7	21.1	39.2
West Bengal	29.0	33.7	37.3	21.9	31.4	46.7	28.3	33.5	38.2
All India	30.5	26.2	43.3	28.1	21.0	50.9	29.8	24.6	45.6

Overall, Table 56 shows that in most states, more than two thirds of all enrolled children engaged in some type of learning activity during the reference week. The only states where close to half the children did not do any activity are Andhra Pradesh, Meghalaya and Rajasthan.

As seen in the national trend, more private school going children engaged in learning activities than government school children across all states. For instance, in Bihar there is a difference of close to 20 percentage points in the proportion of children who did some learning activity in government and private schools.

Notably, in Kerala, Punjab, Gujarat and Telangana, more than three quarters of all children enrolled in government schools did 2 or more activities in the reference week.



Chart 9: Statewise chart showing % of Govt school children who did not do any activity in the reference week, 2020

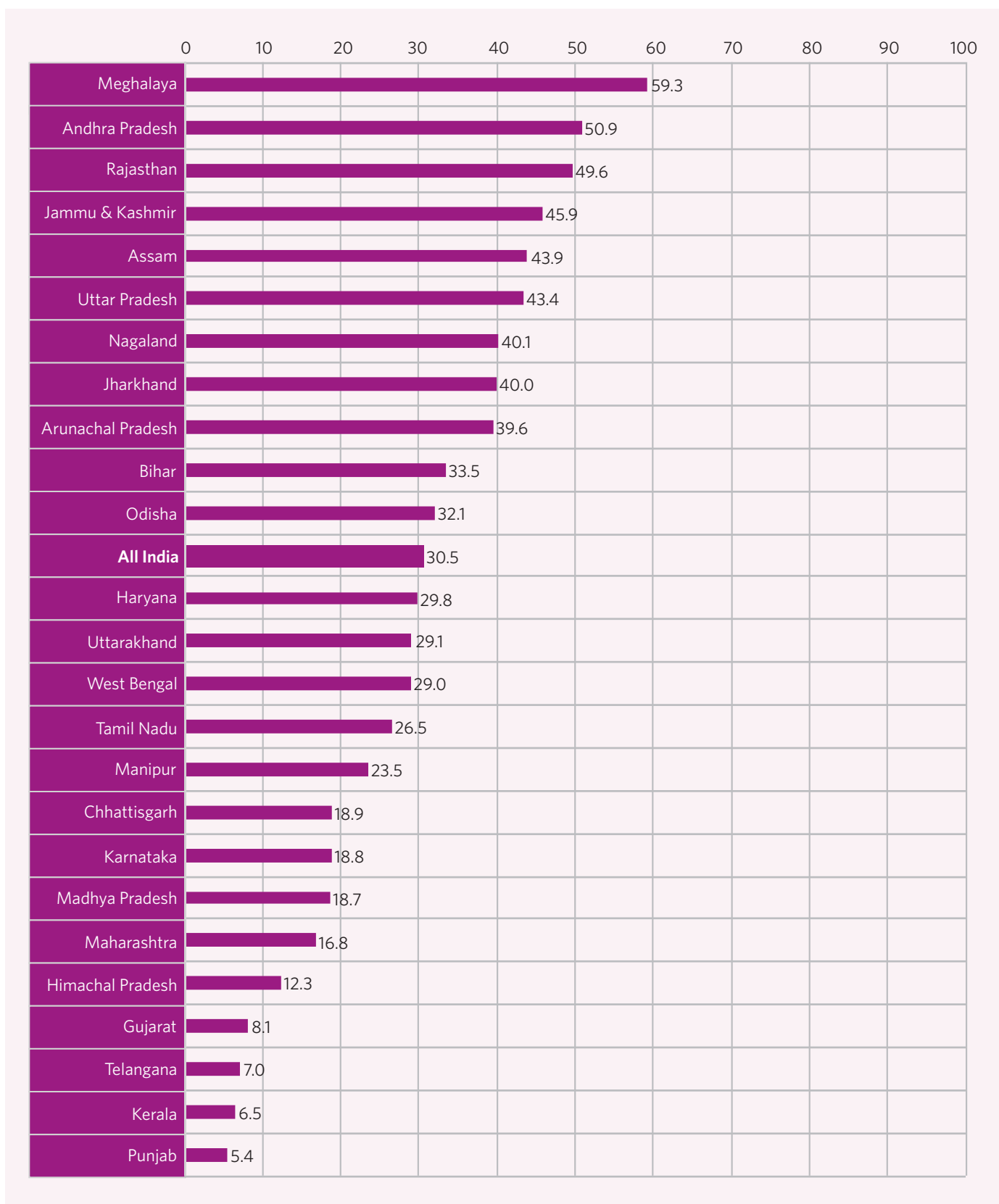


Table 57: % Enrolled children who did learning activities during the reference week. By state, school type and type of material. 2020

State	Govt			Pvt			Govt & Pvt		
	Traditional	Broadcast	Online	Traditional	Broadcast	Online	Traditional	Broadcast	Online
Andhra Pradesh	28.0	33.3	12.7	30.7	24.1	28.1	28.8	30.7	17.1
Arunachal Pradesh	51.4	15.4	32.4	73.8	9.4	45.6	61.9	12.6	38.5
Assam	51.8	8.0	10.5	65.7	9.5	23.6	56.2	8.5	14.7
Bihar	63.1	9.7	7.9	78.9	13.5	26.9	65.8	10.3	11.2
Chhattisgarh	76.5	9.1	33.3	64.6	10.9	37.7	72.9	9.7	34.6
Gujarat	83.9	60.1	56.6	85.4	48.6	73.9	84.1	58.4	59.3
Haryana	63.3	18.2	39.7	72.4	15.6	44.3	67.8	16.9	41.9
Himachal Pradesh	82.3	7.6	63.7	81.4	4.6	76.6	81.9	6.3	69.2
Jammu & Kashmir	50.7	9.7	21.9	59.4	10.2	24.8	54.4	9.9	23.2
Jharkhand	55.6	8.7	18.7	60.1	14.2	31.5	56.7	10.0	21.8
Karnataka	76.2	28.7	27.0	71.6	24.2	44.3	75.0	27.5	31.6
Kerala	88.4	71.6	50.8	93.3	29.5	65.5	90.2	56.7	56.0
Madhya Pradesh	74.6	30.4	32.1	60.6	23.8	29.3	70.4	28.4	31.3
Maharashtra	73.7	39.6	39.4	69.1	32.3	47.6	72.1	37.0	42.3
Manipur	71.4	20.6	10.8	72.2	17.4	16.2	72.1	17.8	15.5
Meghalaya	39.7	2.6	11.6	39.2	3.2	7.1	39.5	2.9	9.0
Nagaland	57.6	12.6	20.8	83.4	9.8	32.2	74.7	10.8	28.4
Odisha	63.8	10.5	11.2	79.3	13.4	34.3	66.3	10.9	15.0
Punjab	88.9	32.9	52.9	91.2	10.7	74.2	90.1	21.9	63.5
Rajasthan	47.0	9.5	12.1	46.1	8.0	16.5	46.7	8.9	13.7
Tamil Nadu	57.2	47.9	15.9	58.1	29.9	36.9	57.5	42.8	21.9
Telangana	71.4	75.4	38.7	49.8	47.7	44.0	62.7	64.3	40.8
Uttarakhand	64.9	21.4	28.2	73.0	9.5	42.2	68.6	16.0	34.6
Uttar Pradesh	52.7	12.3	13.4	59.4	17.7	24.5	55.8	14.8	18.5
West Bengal	68.5	11.0	9.5	77.7	5.9	23.1	69.4	10.5	10.8
All India	63.4	21.4	20.5	64.1	19.3	33.4	63.6	20.7	24.5

In all states, irrespective of school type, the majority of children who did some learning activity used traditional materials such as textbooks and workbooks.

In many states, more government school going children used broadcast materials from TV and radio as compared to private school going children. Broadcast materials were used the most widely by children in Telangana, Gujarat and Kerala (about 60%).

Online materials such as recorded videos and live online classes were used more by children enrolled in private schools than those in government schools. This disparity exists across all states, but is the starkest in Odisha, Punjab and Tamil Nadu (Table 57).



Table 58: % Enrolled children by the number of learning activities done during the reference week. By state, parents' education and number of activities. 2020

State	Low			Medium			High		
	No activity	1 activity	2 or more activities	No activity	1 activity	2 or more activities	No activity	1 activity	2 or more activities
Andhra Pradesh	54.9	27.6	17.5	52.5	20.5	27.0	36.1	24.9	39.0
Arunachal Pradesh				24.5	23.1	52.4	17.5	14.2	68.4
Assam	55.6	31.4	13.0	38.4	39.3	22.3	32.0	30.6	37.4
Bihar	41.4	32.3	26.3	28.8	31.8	39.4	20.4	24.6	55.0
Chhattisgarh	25.3	39.9	34.9	21.5	32.2	46.3	17.5	26.0	56.5
Gujarat	14.3	23.0	62.8	7.9	13.5	78.6	4.8	9.6	85.6
Haryana	39.5	18.8	41.7	27.3	20.1	52.6	14.7	17.5	67.8
Himachal Pradesh				7.5	22.4	70.2	12.0	10.4	77.6
Jammu & Kashmir	52.2	23.7	24.1	36.8	29.6	33.6	37.7	25.0	37.4
Jharkhand	43.8	26.1	30.1	38.7	31.6	29.8	27.8	22.6	49.6
Karnataka	25.7	21.5	52.8	17.1	22.2	60.7	15.9	16.1	68.0
Kerala				5.5	4.0	90.5	5.4	7.2	87.5
Madhya Pradesh	23.7	21.5	54.8	22.5	19.9	57.6	17.2	22.7	60.1
Maharashtra	36.3	23.1	40.6	18.3	30.0	51.6	13.6	18.5	67.9
Manipur				25.4	15.6	59.0	19.3	25.8	54.9
Meghalaya	63.7	15.6	20.6	74.2	13.5	12.3			
Nagaland	41.1	22.4	36.5	19.3	33.6	47.1	17.5	22.4	60.1
Odisha	41.2	31.3	27.6	33.0	34.2	32.8	20.5	26.6	53.0
Punjab	9.7	17.6	72.7	4.9	15.3	79.8	3.5	8.5	88.0
Rajasthan	57.2	20.7	22.1	48.0	21.6	30.4	31.2	14.0	54.8
Tamil Nadu	36.7	28.2	35.1	30.0	25.2	44.8	21.5	29.2	49.4
Telangana	11.6	24.1	64.3	10.6	19.6	69.8	13.0	19.2	67.9
Uttarakhand	40.8	18.5	40.7	32.0	21.8	46.2	13.5	26.4	60.1
Uttar Pradesh	50.9	21.9	27.1	38.3	22.5	39.2	28.8	17.1	54.1
West Bengal	35.7	35.1	29.2	28.3	35.1	36.6	18.2	29.9	51.9
All India	40.8	26.2	33.0	30.1	26.1	43.9	19.6	20.9	59.5

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Parental education level has a distinct influence on children who did learning activities. With increasing parental education level, the proportion of children who did not do any activity decreases and that of children who performed 2 or more activities increases across all states.

Among children with parents in the 'low' education category, more than half the children did not do any activity in the reference week in Rajasthan, Assam, Andhra Pradesh and Jammu & Kashmir.

On the other end, almost all children who have parents in the 'high' education category did two or more activities in the reference week in Punjab, Gujarat and Kerala (Table 58).



Table 59: % Enrolled children who did learning activities during the reference week. By state, parents' education and type of material. 2020

State	Low			Medium			High		
	Traditional	Broadcast	Online	Traditional	Broadcast	Online	Traditional	Broadcast	Online
Andhra Pradesh	24.6	26.2	6.7	27.7	31.9	15.8	39.1	34.9	32.6
Arunachal Pradesh				69.4	12.0	35.6	77.3	17.4	54.7
Assam	40.5	3.5	7.6	56.9	8.3	10.9	63.5	10.8	22.2
Bihar	56.3	5.1	4.2	66.9	11.5	9.6	76.8	14.9	23.3
Chhattisgarh	70.6	10.2	22.0	72.1	9.6	34.8	73.7	9.9	45.0
Gujarat	77.6	48.2	35.1	83.5	59.9	56.6	87.9	61.2	76.1
Haryana	55.0	11.1	29.5	64.0	18.9	41.8	78.9	17.5	47.2
Himachal Pradesh				86.2	6.6	65.0	81.7	6.8	73.2
Jammu & Kashmir	45.9	5.0	13.6	57.5	10.3	25.7	56.6	14.5	28.7
Jharkhand	51.4	8.7	15.7	57.1	7.2	19.1	65.3	17.9	38.8
Karnataka	69.8	23.4	21.2	76.4	27.5	30.1	76.3	30.1	42.1
Kerala				86.8	51.0	54.0	90.6	58.0	59.4
Madhya Pradesh	69.9	27.9	22.5	69.5	28.1	33.1	74.3	33.6	38.6
Maharashtra	52.1	30.5	22.8	70.7	33.4	36.0	76.8	41.6	51.6
Manipur				72.2	19.4	17.5	75.3	17.5	14.0
Meghalaya	35.1	4.0	7.0	25.4	0.5	3.6			
Nagaland	57.2	4.0	15.7	77.6	8.7	31.0	79.6	20.3	32.1
Odisha	55.7	7.6	9.7	62.2	9.6	7.9	76.0	14.3	25.7
Punjab	87.2	26.4	45.1	89.1	24.8	58.6	93.2	16.5	77.3
Rajasthan	38.7	6.7	8.1	47.6	9.5	14.7	65.8	14.1	27.2
Tamil Nadu	56.0	34.8	10.8	56.4	43.3	17.9	60.2	42.6	33.3
Telangana	58.1	72.6	35.9	67.9	68.9	40.7	62.9	52.0	49.8
Uttarakhand	58.9	4.6	25.7	62.1	19.2	26.5	82.3	16.1	48.8
Uttar Pradesh	45.4	8.2	9.3	57.0	15.0	18.8	66.4	21.4	29.5
West Bengal	62.1	6.1	4.2	69.3	9.6	7.9	79.3	17.5	24.2
All India	53.8	14.4	12.7	63.2	20.3	22.2	73.2	26.6	38.4

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

Irrespective of the type of material, more children whose parents are in the 'high' education category did learning activities in the reference week.

This difference is especially stark when it comes to using online recorded videos or live classes to do a learning activity. For example, in Punjab and Gujarat more than three-quarters of all children whose parents have completed Std IX or more did a learning activity using online materials. In case of children with parents in 'low' parental education category, this percentage is less than 50% for all states (Table 59).



Table 60: % Enrolled children by the number of learning activities done during the reference week. By state, sex and number of activities. 2020

State	Boys			Girls		
	No activity	1 activity	2 or more activities	No activity	1 activity	2 or more activities
Andhra Pradesh	52.2	22.9	24.9	48.5	22.1	29.4
Arunachal Pradesh	35.4	19.0	45.6	25.5	22.8	51.8
Assam	39.5	32.0	28.5	38.8	37.1	24.0
Bihar	31.1	29.3	39.6	30.6	31.2	38.2
Chhattisgarh	21.5	30.0	48.5	20.3	35.5	44.3
Gujarat	8.7	15.3	75.9	6.9	12.3	80.8
Haryana	25.2	19.4	55.4	24.3	18.4	57.2
Himachal Pradesh	10.1	14.9	75.0	13.2	15.4	71.4
Jammu & Kashmir	40.6	25.9	33.5	41.1	28.6	30.3
Jharkhand	37.8	26.5	35.7	39.1	29.0	31.9
Karnataka	20.3	20.1	59.7	16.9	19.8	63.3
Kerala	4.3	8.2	87.5	6.0	7.5	86.6
Madhya Pradesh	22.8	21.4	55.7	21.4	20.1	58.6
Maharashtra	18.9	23.9	57.3	16.2	24.2	59.6
Manipur	24.7	19.1	56.3	23.7	22.2	54.2
Meghalaya	65.1	13.5	21.5	55.8	20.0	24.2
Nagaland	21.2	28.0	50.8	24.2	27.7	48.1
Odisha	31.7	30.6	37.7	27.8	31.2	41.0
Punjab	5.5	13.0	81.5	5.0	13.5	81.5
Rajasthan	49.0	20.1	30.9	49.6	21.0	29.5
Tamil Nadu	28.7	26.8	44.6	26.4	28.0	45.7
Telangana	13.0	24.1	62.8	11.2	18.7	70.1
Uttarakhand	26.4	22.4	51.2	27.3	23.9	48.8
Uttar Pradesh	38.8	20.5	40.6	40.8	21.9	37.4
West Bengal	28.6	30.5	41.0	28.0	36.4	35.6
All India	30.3	24.0	45.7	29.2	25.3	45.5

Table 60 compares the proportion of boys and girls who did learning activities in the reference week, revealing that across most states, marginally more boys did not do any activity as compared to girls.



Table 61: % Enrolled children who did learning activities during the reference week. By state, sex and type of material. 2020

State	Boys			Girls		
	Traditional	Broadcast	Online	Traditional	Broadcast	Online
Andhra Pradesh	28.1	29.1	14.8	29.5	32.5	19.5
Arunachal Pradesh	59.2	14.3	33.3	64.7	10.8	44.1
Assam	55.7	8.7	15.5	56.8	8.3	13.7
Bihar	65.3	10.2	12.2	66.3	10.5	10.0
Chhattisgarh	71.0	11.6	35.9	74.8	7.8	33.4
Gujarat	81.0	56.7	60.3	87.5	60.2	58.1
Haryana	67.5	15.2	41.1	68.1	19.0	42.9
Himachal Pradesh	82.3	6.5	72.0	81.5	6.1	66.2
Jammu & Kashmir	53.9	7.8	23.3	55.1	12.3	23.1
Jharkhand	56.8	11.9	22.6	56.6	8.1	21.1
Karnataka	73.5	26.1	30.8	76.6	29.0	32.5
Kerala	89.7	55.4	54.9	90.6	57.9	57.0
Madhya Pradesh	69.0	26.9	31.4	71.8	30.0	31.2
Maharashtra	71.1	35.7	41.9	73.0	38.6	43.0
Manipur	71.5	18.8	16.7	72.7	16.9	14.4
Meghalaya	33.8	1.5	7.9	43.8	4.0	9.9
Nagaland	76.3	11.4	30.5	73.0	10.2	26.3
Odisha	64.8	10.1	16.2	67.7	11.8	13.8
Punjab	89.4	20.3	64.0	90.8	23.8	62.8
Rajasthan	46.4	9.9	14.6	47.0	7.7	12.7
Tamil Nadu	55.3	41.4	24.2	59.7	44.2	19.6
Telangana	59.9	63.1	39.5	65.7	65.5	42.4
Uttarakhand	69.6	16.2	36.5	67.4	15.7	32.3
Uttar Pradesh	56.1	15.7	19.3	55.3	13.6	17.5
West Bengal	69.3	10.2	12.2	69.6	10.7	9.4
All India	62.7	20.4	24.9	64.5	21.1	23.9

Although the difference is very minor, in most states, more girls engaged with traditional materials and more boys engaged with online materials (Table 61).



Table 62: % Enrolled children by the number of learning activities done during the reference week. By state, smartphone availability and number of activities. 2020

State	Available			Not available		
	No activity	1 Activity	2 or more activities	No activity	1 Activity	2 or more activities
Andhra Pradesh	41.7	24.0	34.3	64.1	20.2	15.7
Arunachal Pradesh	23.2	20.7	56.1			
Assam	33.7	32.8	33.5	47.6	37.0	15.4
Bihar	24.2	28.0	47.8	37.6	32.7	29.8
Chhattisgarh	18.3	29.6	52.1	29.4	43.5	27.1
Gujarat	7.0	12.2	80.8	11.6	22.7	65.7
Haryana	20.0	18.2	61.8	47.4	22.4	30.2
Himachal Pradesh	9.0	13.0	78.0	35.1	34.5	30.4
Jammu & Kashmir	34.0	28.9	37.1	63.6	21.2	15.2
Jharkhand	25.7	23.9	50.4	51.3	31.7	17.0
Karnataka	16.0	16.8	67.2	24.5	26.8	48.7
Kerala	4.6	7.4	88.0			
Madhya Pradesh	18.5	17.7	63.8	28.1	25.9	46.0
Maharashtra	13.3	21.6	65.1	30.9	32.7	36.4
Manipur	23.5	20.1	56.4	28.0	23.5	48.5
Meghalaya	55.2	16.8	28.1	71.7	18.3	10.0
Nagaland	16.3	30.2	53.5	51.8	16.9	31.3
Odisha	25.0	23.7	51.3	34.6	37.4	28.1
Punjab	4.7	11.9	83.5	9.8	23.6	66.6
Rajasthan	43.5	20.3	36.3	59.0	20.8	20.2
Tamil Nadu	21.7	26.9	51.4	35.9	29.1	35.0
Telangana	10.6	19.7	69.7	16.9	26.5	56.7
Uttarakhand	23.3	21.2	55.5	37.1	29.4	33.6
Uttar Pradesh	32.4	20.6	47.0	48.3	21.6	30.2
West Bengal	24.8	30.3	44.9	31.5	36.3	32.2
All India	23.5	22.0	54.5	40.0	28.8	31.3

The availability of a smartphone in the household makes a marked difference in children's engagement with learning activities in all states; overall, 40% children who do not have a smartphone did not engage in any learning activity as compared to 23.5% children who have a smartphone at home.

The proportion of children without smartphones who did not engage in any activity in the reference week is especially high for the states of Andhra Pradesh, Jammu & Kashmir and Meghalaya (60%).

In contrast, in Gujarat and Punjab, over two-thirds of all enrolled children without smartphones engaged in two or more activities (Table 62).



Table 63: % Enrolled children who did learning activities during the reference week. By state, smartphone availability and type of material. 2020

State	Available			Not available		
	Traditional	Broadcast	Online	Traditional	Broadcast	Online
Andhra Pradesh	32.8	34.7	26.7	22.3	24.4	1.8
Arunachal Pradesh	68.2	13.9	45.7			
Assam	61.2	8.8	21.9	48.5	8.0	3.5
Bihar	71.2	13.4	19.3	60.3	7.2	2.7
Chhattisgarh	74.1	9.3	43.0	67.9	11.0	7.0
Gujarat	83.9	60.1	67.4	85.9	49.7	17.4
Haryana	72.3	17.9	48.4	46.7	12.1	11.6
Himachal Pradesh	84.0	6.2	74.8	62.7	7.4	18.4
Jammu & Kashmir	60.0	11.7	28.6	35.7	3.8	4.9
Jharkhand	67.3	15.0	39.8	46.0	5.0	3.4
Karnataka	76.7	30.1	42.1	71.3	21.7	8.7
Kerala	92.1	55.9	57.5			
Madhya Pradesh	73.3	30.1	45.3	65.4	25.6	7.8
Maharashtra	76.0	37.9	53.1	59.7	34.2	7.7
Manipur	72.6	17.3	17.8	69.2	20.3	3.1
Meghalaya	44.1	3.3	11.5	27.5	2.0	2.5
Nagaland	81.6	12.3	32.1	43.4	3.9	11.3
Odisha	70.7	13.7	27.7	61.7	8.2	2.7
Punjab	90.9	20.8	69.0	83.4	29.7	21.2
Rajasthan	51.5	9.2	19.7	38.5	8.5	3.5
Tamil Nadu	63.5	42.6	29.5	48.2	44.2	8.8
Telangana	64.4	62.1	51.1	58.4	70.1	11.4
Uttarakhand	72.7	14.2	41.9	56.5	21.7	11.5
Uttar Pradesh	61.6	19.0	30.1	48.7	9.8	4.9
West Bengal	72.6	13.7	18.1	66.5	7.6	4.3
All India	68.7	24.3	36.3	55.4	14.9	5.2

As seen in the previous table, a much higher proportion of children who have a smartphone at home engaged with online materials/classes as compared to children who do not have a smartphone. In the case of the latter, engagement with traditional materials was the most common.

Across all types of materials, a higher proportion of children with a smartphone did some learning activity in the reference week as compared to children who do not have a smartphone.

In the states of Telangana, Gujarat and Tamil Nadu, close to half the children without a smartphone made use of broadcast material to do some learning activity (Table 63).



Table 64 and 65: % Enrolled children who had contact with their school teacher in the reference week to discuss learning materials/activities or child's progress/well-being. By state, school type and parents' education. 2020

State	By school type			By parents' education		
	Govt	Pvt	Govt & Pvt	Low	Medium	High
Andhra Pradesh	30.7	31.2	30.9	29.5	27.9	43.3
Arunachal Pradesh	32.9	42.2	37.2		35.7	39.8
Assam	18.5	40.2	25.5	16.5	20.9	35.9
Bihar	15.4	36.1	18.9	14.4	18.7	26.8
Chhattisgarh	42.4	47.3	43.8	37.9	41.1	54.8
Gujarat	79.2	77.0	78.9	71.3	77.3	85.0
Haryana	60.4	62.8	61.5	57.3	62.4	63.7
Himachal Pradesh	73.6	79.4	76.1		72.4	79.5
Jammu & Kashmir	36.6	44.5	40.0	33.4	41.3	42.3
Jharkhand	32.3	31.4	32.1	28.0	31.8	39.9
Karnataka	65.9	62.5	65.0	56.3	66.4	69.0
Kerala	76.2	74.1	75.4		75.0	77.3
Madhya Pradesh	56.8	44.0	53.0	51.1	53.1	56.5
Maharashtra	62.7	58.0	61.0	44.8	58.9	65.7
Manipur	24.2	20.2	20.7		17.4	22.1
Meghalaya	26.4	31.7	29.4	20.7	25.8	
Nagaland	41.4	70.8	60.8	54.4	63.6	62.3
Odisha	24.3	40.6	27.0	20.5	22.4	35.4
Punjab	78.5	71.6	75.0	78.4	75.3	73.4
Rajasthan	35.1	31.9	33.9	30.6	33.4	41.5
Tamil Nadu	43.0	51.3	45.4	32.5	47.7	50.3
Telangana	70.9	46.0	60.8	52.2	65.9	58.8
Uttarakhand	63.2	66.4	64.6	57.8	56.7	76.9
Uttar Pradesh	29.7	34.4	31.9	23.7	33.2	39.9
West Bengal	13.6	35.8	15.7	9.5	12.5	29.3
All India	37.6	44.2	39.6	30.2	38.5	49.7

We categorize parents' education as follows: 'low' parental education includes families where both parents have completed Std V or less (including those with no schooling). At the other end of the spectrum, the 'high' parental education category comprises families where both parents have completed at least Std IX. All other parents are in the 'medium' category where there are many possible combinations.

The contact between teachers and parents shows substantial variation by state. For example, in Assam, Bihar and West Bengal, less than 20% parents of children going to government schools had contact with their school teacher in the reference week as opposed to Gujarat, Punjab and Kerala, where this proportion is more than 75%.

As was observed in the national findings, in most states, parents of children in private schools were more likely to be in contact with the school teacher as opposed to those of government school going children. The only significant exceptions are Telangana, Madhya Pradesh and Punjab (Table 64).

As reflected in the national trends, in all states, more children of parents with 'high' education levels had more contact with their school teacher as compared to children of parents with 'low' education levels. The most marked differences is seen in Maharashtra.

However, in Punjab, Gujarat, Haryana and Uttarakhand, more than half of all children with parents in the 'low' education category had contact with their school teachers (Table 65).



Chart 10: Statewise chart showing % of Govt school children who had contact with their school teacher in the reference week to discuss learning materials/activities or child's progress/well-being. 2020

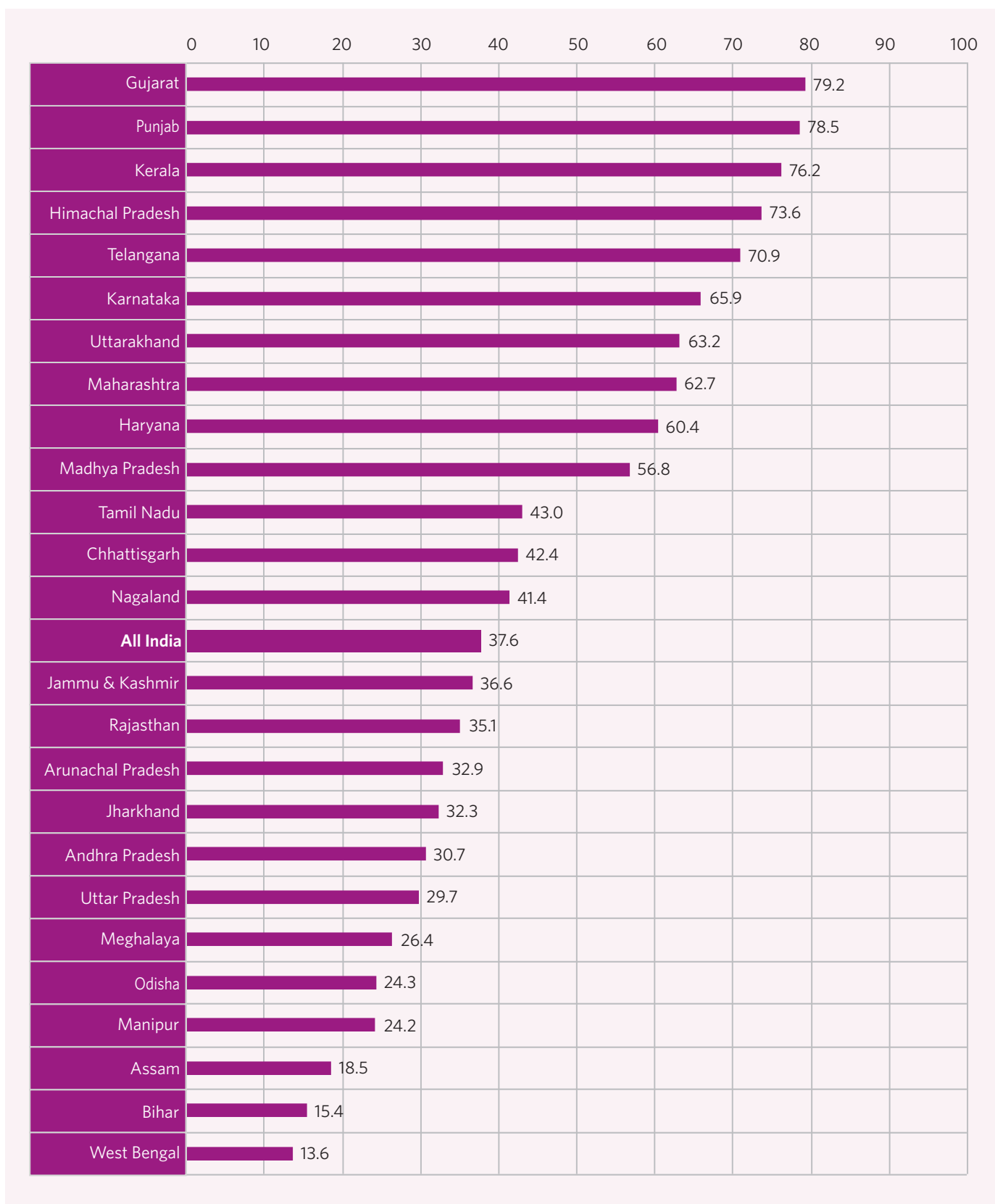


Table 66 and 67: % Enrolled children who had contact with their school teacher in the reference week to discuss learning materials/activities or child's progress/well-being. By state, sex and smartphone availability. 2020

State	By sex		By smartphone availability	
	Boys	Girls	Available	Not available
Andhra Pradesh	29.8	32.0	36.0	22.7
Arunachal Pradesh	34.2	40.4	36.7	
Assam	25.1	25.9	32.6	14.5
Bihar	18.7	19.2	22.3	15.5
Chhattisgarh	44.6	43.2	47.3	35.0
Gujarat	76.4	81.6	79.3	77.0
Haryana	58.3	65.2	65.1	44.9
Himachal Pradesh	79.4	72.4	79.4	46.2
Jammu & Kashmir	38.9	41.2	41.6	34.1
Jharkhand	32.7	31.5	44.3	19.6
Karnataka	64.7	65.3	66.5	61.4
Kerala	75.3	75.6	77.0	
Madhya Pradesh	51.8	54.2	58.4	43.8
Maharashtra	60.6	61.2	64.8	48.8
Manipur	16.8	24.5	21.9	14.4
Meghalaya	25.8	32.1	35.6	13.5
Nagaland	61.6	60.0	63.5	48.9
Odisha	26.5	27.3	31.3	22.1
Punjab	73.0	77.6	73.9	83.6
Rajasthan	33.5	34.5	37.0	28.8
Tamil Nadu	46.2	44.5	49.0	39.7
Telangana	58.8	63.0	62.9	55.2
Uttarakhand	64.4	65.1	67.8	55.0
Uttar Pradesh	32.0	31.8	37.8	24.9
West Bengal	18.2	13.3	20.5	11.5
All India	39.4	39.9	46.8	28.0

Across most states, parents of girls had marginally more contact with teachers as opposed to those of boys (Table 66).

Without exception, in all states, more parents with a smartphone available were in contact with teachers as opposed to parents without smartphones. This difference is especially stark in Himachal Pradesh, Jharkhand and Meghalaya.

However, in the states of Gujarat, Karnataka and Punjab, even among families where no smartphones were available, most parents had contact with teachers (Table 67).



ASER 2020 process documents



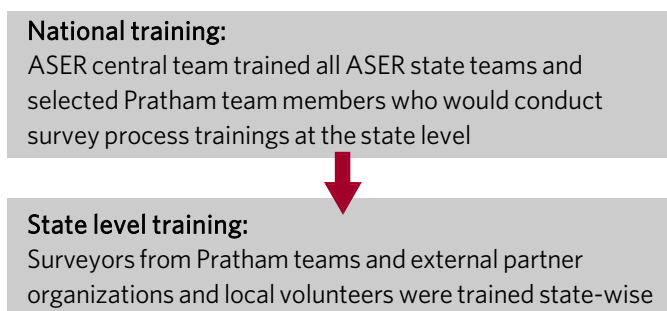
Training

The ASER survey is conducted in almost every rural district in India, usually with the help of local organisations and institutions like universities, colleges, and non-governmental organisations. However, this year was different. The survey was conducted in most states by Pratham and ASER teams themselves. In the few states, where there is no Pratham presence, it was conducted with the help of local partner organisations or independent local volunteers.

In all, 1,382 internal staff and 132 external volunteers conducted the ASER 2020 phone survey, reaching 584 districts in 26 states and 4 union territories, 52,227 households and 8,963 schools in 16,974 villages across India. As in every ASER, for the surveyors to be able to conduct the survey properly, they needed to be trained rigorously.

In the light of COVID-19, ASER 2020 survey training was conducted virtually for the first time, with surveyors participating in training from their homes in different locations across the country. Various new methods were employed to make the training as comprehensive and effective as a regular in-person training. The ASER training process was designed to give surveyors the skills needed to conduct a phone survey including managing calling lists and tracking repeat attempts to phone numbers that did not connect in the first instance, introducing themselves and the survey to the respondent, explaining the objectives and importance of the data being collected in this survey, asking survey questions clearly and precisely, recording information over a phone call, and entering this information accurately in the survey application.

ASER survey trainings followed a two-tier model that consisted of:



Standardization in training and survey is extremely important in order to ensure that the data collected is reliable and valid across districts and states. For this purpose, the guidelines and instructions for the training delivered were clear and consistent across tiers, so that each participant was able to conduct the survey accurately following the same protocols.

Tier I: National training:

The ASER 2020 survey began with a 6-day national training from 2 to 7 September. Conducted over Zoom, an online meeting platform, the training comprised 140 participants drawn from the ASER central team, ASER state teams from across the country, selected Pratham team members, and external guests. The main objective was to thoroughly train state teams on all survey formats and processes, so that they could deliver the training at the state level. Participants attended 5 days of virtual classroom sessions (about 4 hours per day) and a half day was dedicated to making pilot phone calls. 1-2 days of mock training sessions were held additionally to prepare trainers in their delivery of content.

Key aspects of the national training included:

- **Virtual classroom sessions:** These were designed to provide a theoretical understanding of the survey process, quality control processes, sampling for the survey, etc. Presentations, role plays, and energizers were used to make the virtual classroom sessions effective and engaging. To ensure that there was a more participative learning environment, role-play sessions were held in breakout rooms with 7-8 participants in each room so that every participant got a chance to practice the administration of the survey questionnaire.
- **Pilot calls:** Each participant was assigned a few household numbers to practice calling actual respondents. These pilot calls were extremely useful for the participants to get hands-on experience of doing the phone survey.

- **Quiz:** A quiz was administered in order to ensure that every participant understood the survey content and the quality control processes thoroughly. Additional sessions were organised to clarify doubts. The quiz was conducted in an online format, enabling prompt sharing of results and clarification of doubts.
- **Mock training:** Mock training sessions gauged participants' ability to train on the survey process and assisted them in improving the quality of training. Participants were allotted topics to train on and were assessed by experienced Pratham/ASER master trainers. Personalized feedback was given to each participant.
- **State planning:** Survey roll-out plans for each state were finalised, including the shortlisting of surveyors, district allocation to managers, plans for state level trainings, timelines for execution of the survey, and detailed budgeting, among others.

Tier II: State level training:

State level trainings spanned 3-4 days. 128 Pratham/ASER members trained 1,386 surveyors on how to conduct the phone survey. Like national training, key elements of the state level trainings included virtual classroom sessions, pilot calls and a quiz. Surveyors who scored low on the quiz or did not show a good performance during the role play sessions were replaced, re-trained or provided additional support during the survey. It was mandatory for all participants to be present on all days of the training.

Monitoring of trainings:

Specific steps were taken to ensure that the key aspects of training were implemented across all state level training sessions:

- State level training sessions were attended and monitored by the head of the Pratham programs in the state as well as members of the ASER central team.
- Records were maintained for each surveyor. These records contained attendance for each day of training, quiz marks, and role play performance. The data in this sheet was used to select surveyors for monitoring and recheck.



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Survey Process

Getting ready for the survey

The surveyor should keep all essential items (phone, earphones, drinking water, formats, stationery, phone charger) ready before making the calls. She must practice and revise the introduction to be given to the respondent before making the calls. It is important that she check all numbers to be called for the day in the call log sheets, keep all survey formats ready, and as far as possible, sit in a quiet place with good network connectivity before starting calls.

1. Household survey

This section describes the household survey process.

• What to do when calling a household

Purpose: Surveyor introduces herself to the respondent, explains the rationale behind the household survey and how the data will be used.

Introducing oneself on the call: Conducting a survey over the phone where neither party can see the other is difficult, and everyone is apprehensive of cold calls - the purpose behind them, how the surveyor got the number, what will be done with the personal information, why one should cooperate, etc. It is important to explain these things on each call in a standardized manner:

- Who the surveyor/organization is
- How we got the respondent's number
- Why we are calling
- How we will use the information collected
- How we will keep their identity confidential.

The answers to these questions form a part of the introduction script. Surveyor uses the introduction script to introduce herself, the organization and the survey; and to confirm that the correct person has been called by confirming the village, block and district where they live.

Confirming the location: The call log sheets list the sampled households with their village, block, and district locations, which were recorded during ASER 2018. The first step after the surveyor explains where she is calling from once the call connects is to confirm whether the recorded location is correct. For this, she asks the respondent: "Are you staying in ____ village of ____ block in ____ district?". If the respondent identifies the location as correct, then the conversation is continued.

Introduction script, rationale and usage: Once the location is confirmed as correct, the surveyor clarifies how she got the respondent's number referring to two other surveyors who must have visited the household two years ago to conduct the ASER 2018 survey. While explaining the rationale for calling/purpose of the survey, she emphasizes the following points:

- Children's learning has been affected since schools closed due to the pandemic
- It is important to find out how children are learning at home, what support they are receiving from schools/families, and what challenges they face
- The survey is being conducted in 1,00,000 households. The data will be collated and presented, and the respondent's and child's name will be kept confidential
- The data will be useful for various stakeholders trying to support children's learning during the pandemic.



Introduction script



Script to introduce yourself during the household phone survey

Good morning/afternoon/evening! I am calling from an NGO called Pratham which works in children's education. Are you staying in ____ village of _____ block in ____ district?

<If Yes, then ask>

Some of my colleagues came to your house two years ago, in 2018, to conduct a survey on children's education (ASER survey). As you know, ever since the lockdown began in March this year and schools were shut, children's learning has been affected.

We are conducting this phone survey to understand how 5-16-year-old children are studying/learning at home during the lockdown, what support are they receiving from their schools/teachers/parents, what challenges are they facing, etc.

We are conducting this survey all over India in about 1 lac households. We will collate and present data in a report so that the findings can be discussed with all stakeholders and informed policy decisions can be taken.

Please be assured your name or your child's name(s) will not be published anywhere in the report. This information will be completely confidential. I can share the address and phone number of the office with you if you require any further clarifications.

This survey will take about 15-20 minutes. Can we talk now?

<If Yes, start the conversation and ask questions in the same order as listed in the 'Household Survey Sheet'.>

<If No, ask for a new time to call the respondent back.>

<If No, then>

<Thank the respondent and end the call.>



• How to fill the household call log sheet

Purpose: To note the call connection status and the survey completion status for each sampled household.

Household call log sheet: The household call log sheet contains the record of calls to be made to all the households assigned to a surveyor. The call log sheet gives the following information for each household: whether the call made was answered, the number of attempts made till the call was answered, and whether the survey was completed. Each row of the household call log sheet contains information for one household. The phone number provided for each household is used to contact the household for the survey. The general information section is pre-filled by the ASER state team and given to each surveyor before the start of the survey. The surveyor checks the household call log sheet at the start of each survey day to identify all the households to be called that day.

Attempts and time slots: The surveyor makes a maximum of three additional attempts to each number that does not connect in the first attempt. This is done to maximize reach in the survey. The attempts are spread across the day. Time slots can be before and after 1 pm. Each new attempt is made in a new time slot. For example, if the first attempt to a school is at 10 am and the call does not connect, the second attempt is made after 1 pm. This increases the chances of the call being answered. The date and time for each new attempt is recorded in the section 'call connection status'.

Call connection status: Call connection status gives information about whether the surveyor could reach a particular household and the reason if she could not. For every call attempt to a household, the call connection status is recorded as per the codes given for each possible situation, along with the date and time when the household was called.

Call connection status		
Code	Possibility	Action to be taken
1	<i>Call connected</i> - someone answers the call	Surveyor continues with the survey
2	<i>Invalid number</i> - number does not exist/is temporarily out of order	Surveyor makes another attempt in the next assigned time slot
3	<i>Incoming not allowed</i> - incoming calls have been suspended on a number temporarily or permanently	
4	<i>Number busy</i> - includes call waiting	
5	<i>Number not reachable</i> - phone is out of network coverage area	
6	<i>Switched off</i>	
7	<i>No response</i> - phone ringing but not answered	

Survey completion status: Survey completion status gives information about whether the surveyor could complete the survey of a household after the call connected and the reasons if not. For every call answered, the survey completion status is recorded as per the codes given for each possible situation.



Survey completion status		
Code	Possibility	Action to be taken
1	<i>Survey completed</i> - the whole questionnaire was administered and answered by the respondent	Not applicable
2	<i>Refused to participate</i> - respondent does not want to be part of the survey	Surveyor ends the survey
3	<i>Incorrect village/district</i> - respondent has never lived in such a village/ has relocated to a new place	
4	<i>Left survey midway</i> - respondent answers a few questions but does not want to answer the rest, and ends the call	
5	<i>Call dropped</i> - call cuts mid-survey due to network/other issues	Surveyor calls again immediately; if no connection is made, then she will make a new attempt in the next assigned time slot
6	<i>Asked to reschedule</i> - respondent is busy and asks to call back at another time	Surveyor calls back at their preferred time and date

- *Case: Incorrect village/district:* In case the respondent does not know this location and says she has never lived in such a place, then such a household is recorded as 'incorrect village/district' with code 3 in survey completion status in the household call log sheet. In such a scenario, the surveyor thanks the respondent for their time and ends the survey.
- *Case: Refusal to participate:* Even after explaining rationale and usage, some respondents may not want to participate in the survey. In this case the surveyor:
 - Does not give up immediately
 - Acknowledges participants' concerns and emphasizes complete confidentiality
 - Reiterates the importance of this data in spreading awareness about the condition of children's learning in the pandemic
 - If the respondent still does not want to participate, then the surveyor records such a household as 'refused to participate' with code 2 in survey completion status in the household call log sheet, thanks the respondent and ends the call. No further attempts to this number are made
- *Case: Rescheduling the call:* In some cases, the respondent may be busy when called and may request a call back at some other time. In such situations, the surveyor explains that the survey will take only 10-15 minutes and requests them to spare the time if possible. If the respondent still asks to call some other time, then the surveyor makes a note of this in survey completion status and also records the next preferred date and time at which the respondent is to be called back under the next attempt in the call connection status of the household call log sheet.
- *Other cases:*
 - No child age 5-16 years in the household: The surveyor asks and records only Q1 and Q2 from the household survey sheet (Section A), marks 'survey completed' in survey completion status in the household call log sheet and ends the call
 - A child answers the call: The surveyor asks the child to let her speak to an adult in the household. If an adult is not available, she asks the child for a time when they will be home. The surveyor records this situation as 'Asked to reschedule' under survey completion status and notes the time and date when the adult will be home for the next attempt in call connection status. The surveyor then calls back in the new time slot noted by her and attempts to do the survey with the adult for that household





ASER 2020: Household Call Log Sheet

This sheet is a record of all the households you have called, including those where the call did not connect.

Caller Name: Anita Pal		Caller ID: WB004		State: West Bengal															
HH No.	HH ID	District	Block	Village	Phone no.	Name of respondent	Call connection status (write appropriate code)				If call connected, survey completion status (write appropriate code)								
							Attempt 1		Attempt 2		Attempt 3		Attempt 4		Attempt 1	Attempt 2	Attempt 3	Attempt 4	
							Date	Start time (HH:MM)	Date	Start time (HH:MM)	Date	Start time (HH:MM)	Date	Start time (HH:MM)	Date	Start time (HH:MM)	Date	Start time (HH:MM)	Date
1	678450	Hooghly	Arambag	Ranipur	7579xxxxxx	Rakhi Sen	10/09	11:30	10/09	03:40									2
2	678451	Hooghly	Arambag	Jethua	6592xxxxxx	Biplab Ghosh	10/09	11:32											1
3	678452	Hooghly	Arambag	Tala	8370xxxxxx	Rama Sanyal	10/09	12:40											
4	678453	Hooghly	Arambag	Sonamukhi	7402xxxxxx	Probir Ray	10/09	12:41	10/09	04:33									
5	678454	Hooghly	Goghat	Rokhimganj	6665xxxxxx	Shantilata	10/09	12:45	10/09	06:30									6
6	678455	Hooghly	Goghat	Pansher	7986xxxxxx	Nabarun	11/09	11:15	11/09	04:00	12/09	03:15	13/09	05:00	7				
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			



• How to record information in the household survey sheet

Purpose: To collect information about children's access to and engagement with learning materials and activities from home; availability of infrastructure such as TV, radio, smartphones, mobile phones, etc. to facilitate this access; support from parents and/or teachers to facilitate learning; and challenges faced by parents/children in this process.

Surveyors keep the following in mind while conducting the survey:

- Read all questions as they are written in the household survey sheet
- Include only those children in the age group of 5-16 who eat from the same kitchen as the respondent
- If no adult is at home, a child aged 14 or above can be the respondent
- Ask the respondent whether the children being surveyed are nearby. If they are, ask to have the child sit with the respondent while they answer the questions. In case the respondent is unsure of any answer, they can quickly ask the child. This is only to make sure that the information provided is correct as far as possible
- Use the full phrase "since the lockdown began in March 2020" for each question where it is mentioned as such
- Note the time period carefully as "since the lockdown began" or "in the last week" while asking different questions
- For questions not applicable to a child, leave the answer option blank
- See the instructions to read out or not read out the answer options carefully in each question.

Sample information: In the first section in the household survey sheet, the surveyor enters the following sample details carefully from the household call log sheet: the state, district, block and village the household is in, contact information for the household, as well as the respondent's name.

Before starting the survey, the surveyor confirms that the respondent can provide information for children's learning; if not, she requests him/her to give the phone to someone who can.

Section A: Household information: This section captures general information about the sampled household with reference to the number of members in the household, number of children in the age group of 5-16 (if any), and whether any of those children migrated back to this sampled household because of the lockdown.

Section B: Child's information: This section contains name, age, sex, and enrollment for every child in the household who eats from the respondent's kitchen and is in the 5-16 age group.

Section C: Information for enrolled children: This section collects information about those children who are currently enrolled in an educational institution in more detail. It comprises questions on the child's current grade, type of school she is enrolled in, whether she was promoted in this year, and if the child has changed the type of institution she used to attend this year and the reason for the same.

Section D: Not enrolled children: This section collects information about those children who are currently not enrolled in any type of school as they either never enrolled or have dropped out.

Section E: Dropout children: This section collects information pertaining to those children who have dropped out of school in more detail. It comprises questions on the year the child dropped out, and if the child dropped out this year, then the reason for the same. Children awaiting admission to a new grade/school are counted as 'drop out' for this survey. The reason for dropping out in this case is recorded as 'awaiting admission'.

Section F: Tuition: This section collects information on paid academic tuition (no classes on dance, music, sports, etc.) being taken by children aged 5-16, regardless of their enrollment status. Tuition includes both online and in-person tuition. If a child has temporarily stopped going to tuition or has irregular attendance because of being in a containment zone, etc. but has paid the fees, then it is included as taking tuition. The section also captures changes in children's tuition since the lockdown began in March 2020.

Section G: Parents' information: This section records name, age and education level of the parent(s) living with the child.

- If one or both parents have died or do not live with the child regularly, or if the child lives at some relative's house/boarding school away from parents, then parents' information is not recorded



- If the child lives with their step-parents, their information is included in this section
- Highest education level for a parent that is the grade/degree which they have successfully completed is recorded. For example, if a parent dropped out in the 2nd year of their bachelor's degree, their highest education level is 1st year of graduation.

Section H: Respondent's information: This section notes down the relationship between the respondent and the children in the household they are giving information for.

Section I: Support at home: This section looks at whether children receive any support in learning from different members of the household and who helps most often.

Section J: Smartphone availability: Questions in this section explore the availability of a working smartphone in the household, and whether children in households that do not have a smartphone have access to one through any other means.

Section K: School textbooks: This section looks at whether the children have school textbooks of the grade they are currently enrolled in to study with at home.

Section L: Receipt of learning materials/activities from school: This section captures if the parent/child received any learning materials/activity for the child in the last week from the school teacher and the medium(s) through which the parent/child received it. If the parent/child has not received anything in the last week, then the reasons for the same are recorded.

Section M: Contact between HM/teacher and parents/children: This section captures contact between parent/child and school teacher in the last week to discuss learning materials/activities or the child's wellbeing. Separate questions check whether the initiative to call or visit was taken by the teacher, parent/child or both. If this contact did not happen in the last week, it explores if it happened at all since the lockdown started. This section also captures contact between parent/child and school teacher since the lockdown began to discuss administrative information such as mid-day meal, school reopening, etc.

Section N: Engagement with learning materials/activities: This section captures children's engagement in the last week. It explores whether children did any activity involving the use of school textbooks, worksheets, online learning applications/websites, TV, radio, etc. These questions are asked for all children aged 5-16 in the household, regardless of their enrollment status. For every activity that the child did, information on who shared the activity with the child is included.

Section O: Challenges faced while studying at home: This section captures challenges being faced by parent/child while studying at home.

Section P: Mid-day meal - Distribution of ration/fund: This section captures if children enrolled in an Anganwadi or government pre-school, or in a government school (Std 1-8) received any funds or ration under the mid-day meal scheme.

Section Q: Household indicators: This section captures other information about household members and household assets:

- If any member has completed Std 12
- TV and radio (in working condition) owned by the household. Radio in smartphones is included
- Motorized 2- or 4-wheeler such as bike, scooter, car, jeep (3-wheeler is not included). Vehicles should be owned by the household and can be used for commercial or personal purposes.



ASER 2020: HOUSEHOLD SURVEY SHEET								
State: West Bengal		District: Hooghly		Block: Serampore		Village: Nabagram		
HH ID: 6734xxxx		HH phone no.: 8793xxxxxx		Alternative HH phone no.: 7022xxxxxx		Respondent's Name: Naren Khan		
Caller ID: WB004		Caller's name: Anita Pal		Caller's phone number: 8854xxxxxx		Date: 10/09/2020 Start time: 02:34		
A. Household information	1. I am surveying people who eat from the same kitchen in a household. Can you tell me the number of people in your household who eat from the same kitchen as you? <write number>		5		If no in Q2, then thank the respondent and end the call. If yes in Q2, then ask: Will you be able to give me information about how children in the household are studying these days? If not, may I speak to someone who will be able to give me this information (Hint: Ask for a parent).			
	2. Do you have children in the age group 5-16 in your household? <write code: 1- Yes, 2- No>		1					
	3. No. of children in the age group 5-16 in the household <write number>		2					
	4. Of these, are there any children who have migrated back from other places after the lockdown began in March 2020? <write code: 1- Yes, 2- No>		2					
	4a. If yes, then ask: How many children migrated back? <write number>							
Section	Question		Coding		Child 1	Child 2	Child 3	Child 4
B. Child's information	5. Name		Write name		Tina Khatun	Smita Khatun		
	6. Age		Write age <number>		7	12		
	7. Sex		1- Male 2- Female		2	2		
	8. Is the child currently enrolled in Anganwadi/pre-school or school?		1- Yes 2- No		1	2		
C. For children currently enrolled in Anganwadi/pre-school or school	9. Has the child been promoted to a new Std this year? (If not sure, probe and urge the respondent to ask the child/another household member)		1- Yes 2- No 99- Don't know		1	99		
	10. Which Std is the child currently enrolled in? (While noting the Std confirm if this is the new Std to which child has been promoted)		Write grade: AW- Anganwadi PP- Pre-primary/LKG/UKG, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12		1	6		
	11. Which type of school is the child currently enrolled in?		1- Govt 2- Pvt 3- Madrassa 4- Other		1	1		
	12. Has the child changed her Anganwadi/pre-school or school after the lockdown began in March 2020?		1- Yes 2- No 99- Don't know		2	1		
	12a. If yes, then ask: Which type of school was the child previously enrolled in? (Before the lockdown began in March 2020)		1- Anganwadi/Govt pre-primary 2- Pvt LKG/UKG 3- Govt school 4- Pvt school 5- Madrassa 6- Other			4		
	12b. Why did the child change her Anganwadi/pre-school or school? <i>DO NOT READ out the options. Write one code that applies.</i>		1- Could not afford fees 2- School closed down permanently 3- Other <write> 99- Don't know			1		
D. For not enrolled children	If currently not enrolled in Anganwadi/pre-school or school, then ask all questions except K, L, M, (Q23-28) and P (Q36)							
E. For drop out children	13. Did the child drop out or was never enrolled in Anganwadi/pre-school or school?		1- Drop out 2- Never enrolled					
	14. If the child dropped out, then ask: Which Std did the child drop out in?		Write Std					
	14a. Which year did the child drop out in? (Include those awaiting admission in new grade as drop out)		Write year					
F. Paid tuition classes (in-person/online)	14b. If the child dropped out in 2020, then ask: Why did the child drop out this year?		1- Awaiting admission to new grade or school 2- Other <write> 99 - Don't know					
	15. Does the child currently take paid tuition? (Include online tuition)		1- Yes 2- No 99- Don't know		2	1		
	15a. If yes, then ask: Has the child started taking any new paid tuition after the lockdown began in March 2020?		1- Yes 2- No 99- Don't know			1		
G. Parent's information	16. Did the child take any paid tuition before the lockdown began in March 2020?		1- Yes 2- No 99- Don't know		2	2		
	17a. Father's name		Write name		Mintu Khan	Mintu Khan		
	17b. Father's age		Write age		37	37		
	17c. Father's highest qualification		Write qualification NA- Never enrolled		NA	NA		
	17d. Mother's name		Write name		Sima Khatun	Sima Khatun		
	17e. Mother's age		Write age		35	35		
17f. Mother's highest qualification		Write qualification NA- Never enrolled		BA 1st Year	BA 1st Year			



				Child's Name			
				Tina Khatun	Smita Khatun		
H. Respondent's info	18. How are you related to <child name>? <i>DO NOT READ out the options. Write one code that applies.</i>	1- Father 2- Mother 3- Elder brother/sister	4- Uncle 5- Aunt 6- Cousin 7- Other <write>	4	4		
I. Support for the child at home	19. Does anyone help the child in studying at home?	1- Yes 2- No	99- Don't know	1	1		
	19a. If yes, then ask: Who helps the child MOST often? <i>DO NOT READ out the options. Write one code that applies.</i>	1- Father 2- Mother 3- Elder brother/sister	4- Uncle 5- Aunt 6- Cousin 7- Other <write>	2	2		
J. Smartphones in the household	20. Is there a working smartphone in the household? <i>(Apply kitchen rule)</i>	1- Yes 2- No	99- Don't know	1			
	20a. If yes, then ask: How many working smartphones are there in the household?	1- One smartphone 2- Two smartphones	3- Three or more smartphones 99- Don't know	1			
	21. Did you/child's parent buy a phone for children's education after the lockdown began in March 2020?	1- Yes 2- No	99- Don't know	1	2		
	21a. If yes (bought a phone), then ask: Did you buy a regular phone or a smartphone? <i>DO NOT READ out the options. Write all the codes that apply.</i>	1- Regular phone 2- Smartphone	99- Don't know	2			
	22. If no or don't know in Q 20, then ask: Does the child have access to a smartphone, whether owned by somebody else in the household or owned by neighbours or friends? <i>(Household here means outside respondent's kitchen)</i>	1- Yes 2- No 99- Don't know					
K. School textbooks (for enrolled children only)	23. Does the child have the textbooks for the Std she is currently enrolled in?	1- Yes, all subjects 2- Yes, some subjects	3- No 99- Don't know	1	2		
	23a. If yes (for all or some subjects), then ask: Are these textbooks new?	1- All new 2- All old	3- Some new, some old 99- Don't know	2	2		
	23b. Where did the child get the textbooks from? <i>DO NOT READ out the options. Write all the codes that apply.</i>	1- Received from school 2- Bought from the market 3- Received from elder brother/sister	4- Other <write> 99- Don't know	3	3		
L. Receiving learning material/activities from school (for enrolled children only)	24. In the last week did the parent/child receive any learning material/activities from the school teacher?	1- Yes 2- No	99- Don't know	2	1		
	24a. If yes, then ask: How has the parent/child received the learning material/activities from the school teacher? <i>READ OUT the options. Write all the codes that apply.</i>	1- WhatsApp 2- Telegram 3- SMS 4- Phone call	5- Home visit 6- School visit 7- Other <write>		1, 5		
	24b. If no (not received), then ask: Why did the parent/child not receive any learning material/activities from the school teacher? <i>DO NOT READ out the options. Write all the codes that apply.</i>	1- School/teacher not sending anything 2- No internet 3- No smartphone	4- Connectivity issues 5- Other <write> 99- Don't know	1			
M. Contact between school teacher and parents/children (for enrolled children only)	25. In the last week did the school teacher call or visit parent/child to discuss about learning material/activities or the child's progress/well being?	1- Yes 2- No	99- Don't know	2	1		
	26. In the last week did the parent/child call or visit the school teacher to discuss about learning material/activities or child's progress/well being?	1- Yes 2- No	99- Don't know	2	2		
	27. If no or don't know in Q25 and Q26, then ask: Since the lockdown began in March 2020, have the parents/children and the school teacher spoken (on call or visit) to each other even once to discuss learning material/activities or children's progress/well being?	1- Yes 2- No	99- Don't know	2			
	28. Since the lockdown began in March 2020, have the parents/children and the school teacher spoken (on call or visit or SMS/WhatsApp) to each other even once to discuss any administrative information regarding mid-day meal, school reopening, etc.?	1- Yes 2- No	99- Don't know	1	1		
N. Children's engagement with learning material/activities	29. In the last week, did the child do any educational activity using school textbooks ?	1- Yes 2- No	99- Don't know	2	2		
	29a. If yes, then ask: Who shared this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Received from school teacher 2- Given by parent/elder sibling in the household on their own 3- Received from any other source such as NGO, etc. 4- Received from tuition 5- Other <write> 99- Don't know					



		Child's Name		Tina Khatun	Smita Khatun		
N. Children's engagement with learning material/activities	30. In the last week, did the child do any educational activity using worksheets ?	1- Yes 2- No	99- Don't know	1	1		
	30a. If yes, then ask: Who shared this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Received from school teacher 2- Given by parent/elder sibling in the household on their own 3- Received from any other source such as NGO, etc. 4- Received from tuition 5- Other <write> 99- Don't know		1	1		
	31. In the last week, did the child do any educational activity using online videos, recorded classes or games found on educational mobile learning apps/websites?	1- Yes 2- No	99- Don't know	2	1		
	31a. If yes, then ask: Who shared this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Received from school teacher 2- Given by parent/elder sibling in the household on their own 3- Received from any other source such as NGO, etc. 4- Received from tuition 5- Other <write> 99- Don't know			1		
	32. In the last week, did the child attend any live online classes such as on Zoom, Google Meet, WebEx etc.?	1- Yes 2- No	99- Don't know	2	2		
	32a. If yes, then ask: Who conducted this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Conducted by school teacher 2- Conducted by any other source such as NGO, etc.	3- Conducted by tuition teacher 4- Other <write> 99 - Don't know				
	33. In the last week, did the child watch any educational programs on TV?	1- Yes 2- No	99- Don't know	1	2		
	33a. If yes, then ask: Who shared this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Received from school teacher 2- Given by parent/elder sibling in the household on their own 3- Received from any other source such as NGO, etc. 4- Received from tuition 5- Other <write> 99- Don't know		2			
	34. In the last week, did the child listen to any educational programs on the radio?	1- Yes 2- No	99- Don't know	2	2		
	34a. If yes, then ask: Who shared this activity? <i>READ OUT the options and write all the codes that apply.</i>	1- Received from school teacher 2- Given by parent/elder sibling in the household on their own 3- Received from any other source such as NGO, etc. 4- Received from tuition 5- Other <write> 99- Don't know					
O. Challenges faced by parent/child during remote learning	35. Since the lockdown began in March 2020, has the parent/child faced any challenges while studying at home?	1- Yes 2- No	99- Don't know	1	1		
	35a. If yes, then ask: What kinds of challenges did the parent/child face while studying at home? <i>DO NOT READ out the options. Write all the codes that apply.</i>	1- No smartphone 2- Recharge/internet plan issues 3- Connectivity issues/no internet 4- Electricity issues 5- Limited access to smartphone 6- Lack of support from school teacher 7- Lack of supervision at home 8- Unable to operate technology 9- Child is not interested 10- Other <write>		2, 3, 6, 9	2, 3, 6		
P. Mid-day meal (AW/Govt school (1-8))	36. Have you received ration or funds for mid-day meal from the Anganwadi/school in August 2020?	1- Yes 2- No	99- Don't know	2	1		
	36a. If no or don't know, then ask: Have you received ration or fund for mid-day meal from the Anganwadi/school even once since the lockdown began in March 2020?	1- Yes 2- No	99- Don't know	1			
Q. Household indicators	37. Has anyone else completed class 12th in the household? <i>(Except mother and father of the children)</i>	1- Yes 2- No	99- Don't know			2	
	38. Is there a working television in the household?	1- Yes 2- No	99- Don't know			1	
	39. Is there a working radio in the household?	1- Yes 2- No	99- Don't know			1	
	40. Is there a motorized 2-wheeler or 4-wheeler in the household?	1- Yes 2- No	99- Don't know			1	
End time: 03:13							



2. School survey

A teacher (as far as possible, the HM) from one government school with primary sections was called in each village where sampled households were located. This section describes the school survey process.

• What to do when calling a school

Purpose: Surveyor introduces herself to the respondent, explains the rationale behind the school survey and use of these data.

Introducing yourself on the call: *The process to be followed by the surveyor is the same as given in the household survey process.*

Confirming the respondent and location: The call log sheets list the sampled schools with their village, block, district locations, which were recorded during ASER 2018. Additionally, the name and designation of the respondent, and name of the school and school type are also provided. After a call connects, the surveyor explains where she is calling from and confirms whether the respondent and recorded location of the sampled school are correct. For this, she asks the respondent: "Are you ____, a teacher/HM in ____ school in ____ village of ____ block in ____ district?" If the respondent identifies the location as correct, then the conversation is continued.

Introduction script, rationale and usage: The process to be followed by the surveyor is the same as given the household survey process.

• How to fill the school call log sheet

Purpose: To note the call connection status of each attempt and the survey completion status of each school.

School call log sheet: The school call log sheet contains a record of calls to be made to all schools assigned to one surveyor. It gives information for each school: whether the call made was answered, number of attempts made till the call was answered, and if the survey was completed. One row of the school call log sheet contains information for one school. The phone number provided for each school is to be used to contact the school for the survey. The general information section is pre-filled by the ASER state team and given to each surveyor before the start of the survey. The surveyor checks the school call log sheet at the start of each survey day to identify all the schools to be called that day.

Attempts and time slots: *The process to be followed by the surveyor is the same as given in the household survey process.*

Call connection status: *The process to record call connection status to be followed by the surveyor is the same as given in the household survey process.*

Survey completion status: The process to record survey completion status followed by the surveyor is the same as given in the household survey process; only two new situations detailed in codes 5 and 6 are added in the school survey.



Introduction script



Script to introduce yourself during the school phone survey

Good morning/afternoon/evening! I am calling from an NGO named Pratham which works in children's education. Are you ____ <name of respondent>, a <teacher/HM> in the government school in ____ village of ____ block in ____ district?

<If Yes, then ask>

Some of my colleagues came to your school two years ago, in 2018, to conduct a survey on children's education (ASER survey). As you know, ever since the lockdown began in March this year and schools were shut, children's learning has been affected.

We are conducting this phone survey to understand how schools are supporting 5-16-year-old children who are studying at home during the lockdown, what materials/activities are being sent, if teachers and parents are in contact with each other, what kinds of challenges teachers are facing etc.

We are conducting this survey all over India in about 16,000 schools. We will collate and present data in a report so that the findings can be discussed with all stakeholders and informed policy decisions can be taken.

Please be assured your name or your school's name will not be published anywhere in the report. This information will be completely confidential. I can share the address and phone number of the office with you if you require any further clarifications.

This survey will take about 10-15 minutes. Can we talk now?

<If Yes, then confirm the designation and type of school and ask questions in the same order as listed in the 'School Survey Sheet'.>

<If No, ask for a good time to call back.>

<If No, then ask>

Were you ever a <teacher/HM> in the government school in ____ village of ____ block in ____ district?

<If Yes, then ask if they have retired or have become an administrator or have been transferred/relocated to another school?>

<If yes, then refer to the procedure explained in the 'School Log Sheet'.>

<If No, (the respondent does not recognize this school/village even after asking the above questions), then>

<Thank the respondent and end the call.>



Survey completion status		
Code	Possibility	Action to be taken
1	<i>Survey completed</i> – the whole questionnaire has been administered and answered by the respondent	Not Applicable
2	<i>Refused to participate</i> – respondent does not want to be part of the survey	Surveyor ends the survey
3	<i>Incorrect school/village/district</i> – respondent does not identify the mentioned school/village/district, i.e., wrong number	
4	<i>Left survey midway</i> – respondent answers a few questions but does not want to answer the rest and ends the call	
5	<i>Retired/on leave/administrator/relocated</i> – respondent has retired, is on leave, has been promoted to an administrative position, has changed schools or been transferred	Surveyor takes information of another teacher/HM in sample school and conducts the survey with new respondent
6	<i>Unable to give information (may have redirected)</i> – respondent cannot give any information about any grade between grade 1-8 of the sample school	
7	<i>Call dropped</i> – call cuts mid-survey due to network/other issues	Surveyor calls again immediately; if no connection is made, then she will make a new attempt in the next assigned time slot
8	<i>Asked to reschedule</i> – respondent is busy and asks to call back at another time	Surveyor calls back at their preferred time and date

- *Case: Incorrect village/school/district, Refusal to participate, Rescheduling the call:* The process to be followed by the surveyor is the same as given in the household survey process.
- *Case: Retired/on leave/administrator/relocated:* If the respondent has retired/is on leave/has been promoted to any administrative position/has relocated to a new school, the surveyor asks the respondent for the name and number of any other HM/Teacher currently working in the school. If the respondent is able to provide the information, the surveyor completes the survey with this new respondent. If the respondent is not able to provide the alternate contact information, the surveyor ends the survey for this school.
- *Case: Unable to give information:* If the respondent says that they cannot give any information about any grade between Std 1-8 in the sampled school, then the surveyor asks the respondent for the name and number of any other HM/Teacher currently working in the school who will be able to answer our questions. If the new respondent is able to provide the information, the surveyor completes the survey with this new respondent. If the original respondent is not able to provide the alternate contact information, the surveyor ends the survey for this school.



<div style="display: flex; justify-content: space-between;"> ASER 2020: School Call Log Sheet ASER 2020 </div>																					
This sheet is a record of all the schools you have called, including those where the call did not connect.																					
Caller name: Rahul			Caller ID: PB205			State: Punjab			If call connected, survey completion status (write appropriate code)												
Sch No.	School ID	District	Block	Village	Type of school (Std 1-4/5 or Std 1-6/7/8 or Others)	Phone no.	Name of respondent	Designation (HM/Teacher)	Call connection status (write appropriate code)												
									Attempt 1	Attempt 2	Attempt 3	Attempt 4									
									Date	Start time (HH:MM)	Call connection status	Attempt 1	Attempt 2	Attempt 3	Attempt 4						
									Date	Start time (HH:MM)	Call connection status	Date	Start time (HH:MM)	Call connection status	Date	Start time (HH:MM)	Call connection status				
1	PB2600	Ludhiana	Khanna	Libra	Std 1-4/5	98XXXXXXXXXX	Rita	HM	02/09 09:30	4	02/09 1:00	7	03/09 11:00	1							
2	PB2601	Ludhiana	Khanna	Khanna	Std 1-4/5	88XXXXXXXXXX	Savita	Teacher	02/09 09:45	6	02/09 1:20	1	02/09 6:00								8
3	PB3015	Ludhiana	Sahnewal	Chumni	Std 1-4/6	97XXXXXXXXXX	Rahul	HM	02/09 10:00	2											
4	PB3024	Ludhiana	Sahnewal	Wadali	Std 1-4/7	99XXXXXXXXXX	Pradeep	Teacher	04/09 10:10	1											1
5	PB2605	Ludhiana	Khanna	Dahera	Std 1-6/7/8	81XXXXXXXXXX	Nazma	HM	05/09 11:15	1											5
6	PB3032	Ludhiana	Khanna	Pamaddi	Std 1-6/7/8	79XXXXXXXXXX	Meenal	HM	06/09 02:00	1											6
7																					
8																					
9																					
10																					
11																					
12																					



• How to record information in the school survey sheet

Purpose: To collect information on the school's facilitation of children's learning during the COVID-19 lockdown; information on children's enrollment, mobile phones and smartphone access to children/families; teacher orientation/training on remote teaching-learning processes; sharing and discussing materials and activities created by teachers/school as well as central/state government; contact with parents/children; tracking children's progress; community involvement and support in sharing and discussing learning material with parents/children; challenges faced in conducting remote learning activities; distribution of mid-day meals; and preparation for reopening schools are themes explored in the survey.

Surveyors keep the following in mind while conducting the survey:

- Read all questions as they are written in the school survey format
- Include only sampled schools in the school survey
- The sample has a mixture of HMs and teachers as respondents. Hence, the school questionnaire is designed as such that the HM can answer for the teacher and vice versa, if they have the required information. So, the framing is "have you/teacher". Keep this in mind while asking questions and noting responses
- In the school survey some questions are for the school overall, and some are for a specific grade chosen by the respondent him/herself. While taking answers from the respondent for a particular grade (as specified in the question), keep reminding them about giving information for the chosen grade only
- Use the full phrase "since the lockdown began in March 2020" for each question where it is mentioned
- Note the time period carefully as "since the lockdown began" or "in the last week" while asking different questions
- For questions that are not applicable, leave the answer option blank
- Review the instructions to read out or not read out the answer options carefully in every question.

Sample information: In the first section in the school survey sheet, the surveyor enters the sample details carefully from the school call log sheet: state, district, block, village, school ID, school type, respondent's name, number, and designation. The designation column 'teacher' includes para teachers.

Section A: General information: This section captures general information about the sample school and about the grades the respondent teaches and sends learning materials to. The teacher is asked to select one grade between Std 1-8 for which she can give the most information for to continue the survey. If she cannot give information or a grade or can give information only for Std 9 and above, the surveyor requests her to provide contact information of another HM/teacher who can give this information and ends the survey with this respondent.

Section B: Enrollment and contact with children: This section asks questions about the number of children enrolled in the selected grade, availability of their contact details and the mode of contact with children whose phone numbers are not available.

Section C: Remote learning - Government and school: This section explores if the government has directly shared any learning materials via TV, radio or online broadcast, or the school has received any instructions, notifications, guidelines, or orders from the government to share learning materials with children of the selected grade. It also captures HM/teacher's own initiative to share learning materials/activities with children.

Section D: Training/orientation of HM/teachers: This section captures if the respondent has received any training to share or discuss learning materials with parents/children of the selected grade.

Section E: Learning materials/activities shared with parents/children: This section captures whether the school distributed textbooks (or funds for textbooks) to children of the selected grade, and/or asked them to watch/listen to any TV or radio broadcast of educational programs. It also collects information on whether the respondent shared any materials with parents/children during the last week; the different mediums used to do so; and whether they participated in creating the learning materials.



Section F: Children’s engagement with learning materials/activities: This section collects information on the kinds of learning materials/activities which the respondent shared with children, such as textbooks, worksheets, online videos, etc. It also explores which activity the teacher finds most useful.

Section G: Community involvement: This section explores if the school receives help from different community members to share or discuss learning materials/activities with children.

Section H: Learning materials/activities shared even once: This section applies to only those schools where learning materials were not shared in the week before the survey was conducted. It captures if learning materials were shared even once since the lockdown began in March 2020.

Section I: Contact between respondent and parents/children: This section records information about contact between parents/children and teachers in the same manner as given in the household survey process.

Section J: Challenges: This section collects information about the challenges being faced by the respondent in sharing and/or discussing the learning materials/activities with parents/children.

Section K: Mid-day meal ration and funds: This section focuses on the distribution of mid-day meal ration or funds by the school to children of the selected grade. Information for ration and fund is recorded separately.

Section L: Preparations for reopening schools: This section records information about the school’s preparation for physically reopening the school for children. Reopening the school for any one or a subset of grades is included. Reopening the school only for teachers is not included.



Annual Status of Education Report ASER 2020 Facilitated by PRATHAM		ASER 2020: SCHOOL SURVEY SHEET		State: Punjab	District: Ludhiana	Block: Khanna	Village: Libra
School ID:		Type of School (tick)		School Name: Libra Government Primary School		Date: 02/09	Start Time: 11:00 AM
Caller ID:		Std 1 to 4/5	Std 1 to 6/7/8	Others	Designation (tick)		HM Teacher
Respondent's name:		Meena		Respondent's phone number:		89XXXXXXX	
Section	Question			Coding		Answer	
A. General information	1. Which grade(s) do you teach?			Write all grade(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, NA - Not teaching		2, 3, 4, 5	
	2. Which grades do you send learning material/activities to?			Write all grade(s): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, NA - Not teaching		1, 2, 3	
	3. Which grade can you give the MOST information for? (Request the respondent to select only one grade which they know most about)			Write one grade between 1 to 8: 1, 2, 3, 4, 5, 6, 7, 8, NA - Can't give information		2	
	<p>If NA - Can't give information in Q3, then request the respondent to share contact details of another teacher/HM of the sample school who can give the information. Thank this respondent and end the survey.</p> <p>If the respondent can give information only for Std 9 or above, then request the respondent to share contact details of another teacher/HM of the sample school who can give the information for Std 1-8. Thank this respondent and end the survey.</p>						
	4. Can you tell me the no. of teachers in this school? (Do not include headmaster in this count)			<Write>	99- Don't know	5	
5. How far do you live from the school?			1- Less than 2 km 2- Between 2 and 5 km	3- More than 5 km 4- Another village/city 99- Don't know	4		
Section B to K will be asked for the grade selected by the respondent							
B. Enrolment and contact of children enrolled in the selected grade	6. Total number of children enrolled in this grade			<Write number>		20	
	7. How many children's phone numbers are available with you/teacher for this grade?			1- All 2- More than half 3- Half	4- Less than half 5- None 99- Don't know	2	
	8. Are you/teacher able to contact children of this grade whose phone numbers are not available or those children who don't have a phone?			1- Yes 2- No 3- Did not try to contact	4- All children have phone 99- Don't know	2	
	8a. If yes, then ask: How do you/teacher contact those children of this grade whose phone numbers are not available or those who don't have a phone? <i>DO NOT READ OUT the options. Write all codes that apply.</i>			1- Take neighbours' help 2- Do home visits 3- Taking help of Anganwadi workers 4- Meet in school 5- Other <write>			
9. How many children of this grade have smartphones in their households?			1- All 2- More than half 3- Half	4- Less than half 5- None 99- Don't know	3		
C. Remote learning at Govt and School level	10. Since the lockdown began in March 2020, has the Central or State Govt. shared any learning material/activities for children of this grade via TV or Radio or YouTube?			1- Yes 2- No 99- Don't know		1	
	11. Since the lockdown began in March 2020, has the school received any Govt. notification/guideline/instruction (oral or written) to share learning material/activities with parents of children of this grade?			1- Yes 2- No 99- Don't know		1	
	12. Since the lockdown began in March 2020, have you/teacher shared any learning material/activities with ANY children/parents on your own? (Children can be of any grade or school/community in this question)			1- Yes 2- No 99- Don't know		1	
D. Training/Orientation of HM/teachers	13. Have you/teacher been given any training/orientation to share and/or discuss the learning material/activities with parents/children of this grade and/or track children's progress? (Note: Include both in-person and online trainings/sessions or instructions given in meetings).			1- Yes 2- No 99- Don't know		2	
	13a. If yes, then ask: What kind of training/orientation have you/teacher received? <i>DO NOT READ OUT the options. Write all codes that apply.</i>			1- Brief instructions in an in-person meeting or over phone/online 2- Series of in-person/online training sessions 3- Enrolled in/completed an online course 4- Other <write>			
E. Sharing learning material/activities with parents/children	14. Has the school distributed textbooks for this grade to the parents/children of this grade?			1- Yes, all parents/children 2- Yes, some parents/children	3- No 99- Don't know	3	
	15. Has the school asked the children of this grade to watch any educational programs on TV?			1- Yes 2- No	99- Don't know	1	
	16. Has the school asked the children of this grade to listen to any educational programs on the radio?			1- Yes 2- No	99- Don't know	1	
	17. In the last week, have you/teacher shared any learning material/activities with parents/children of this grade?			1- Yes 2- No	99- Don't know	1	
	<p>If no or don't know in Q 17, then go to Q 23 in section H. Learning material/activities shared even once</p>						
	17a. If yes, then ask: How did you/teacher share this learning material/activities with parent/children of this grade? <i>READ OUT all the options. Write all codes that apply.</i>			1- WhatsApp 2- Telegram 3- SMS 4- Phone call	5- Home visit 6- School visit 7- Other <write>	1, 3, 4	
18. Were you/teacher involved in creating this learning material/activities for children of this grade?			1- Yes 2- No	99- Don't know	2		
18a. If yes, then ask: Did you/teacher create the above learning material/activities for children of this grade along with the Govt. or on your own? <i>DO NOT READ OUT the options. Write all codes that apply.</i>			1- Created along with the Govt (at any level: state/district/block/cluster) 2- On my own 3- Other <write>		2		



F. Children's engagement with learning material/activities	19a. In the last week, did you/teacher share any learning material/activities involving the use of school textbooks with parents/children of this grade?	1- Yes 2- No	99- Don't know	2	
	19b. In the last week, did you/teacher share any learning material/activities involving the use of worksheets with parents/children of this grade?	1- Yes 2- No	99- Don't know	2	
	19c. In the last week, did you/teacher share any learning material/activities involving the use of online videos, recorded classes, educational games, etc. found on educational mobile learning apps/websites with parents/children of this grade?	1- Yes 2- No	99- Don't know	1	
	19d. In the last week, did you ask children of this grade to do any other educational activity?	1- Yes <write> 2- No	99- Don't know	2	
	20. If yes in more than one question from Q 19a to 19d, then ask: Out of all the learning material/activities you shared with parents/children of this grade last week, which one did you find the MOST useful? <i>READ OUT the options mentioned above and write ONE code that applies.</i>	1- School textbooks 2- Worksheets	3- Content on educational mobile learning apps/websites 99- Don't know		
	21. Are you/teacher able to regularly track if children of this grade are using the learning material or doing the activities?	1- Yes 2- No	99- Don't know	1	
	21a. If yes, then ask: In the last week, how many children of this grade were able to complete the activities sent by you/teacher?	1- All 2- More than half 3- Half	4- Less than half 5- None 99- Don't know	3	
G. Involvement of community	22. Do you/teacher take help from any other member of the village or community to share or discuss learning material/activities with parents/children of this grade?	1- Yes 2- No	99- Don't know	1	
	22a. If yes, then ask: Which members of the village or community did you take help from? <i>READ OUT all the options. Write all codes that apply.</i>	1- Village head/Ward member 2- NGO/local volunteers 3- Older children	4- Select parents/caregivers 5- Anganwadi workers 6- SMC members 7- Other <write>	3, 7 - Retired school teachers	
H. Learning material/activities shared even once	If no or don't know in section E in Q 17, then ask Q 23 below:				
	23. Since the lockdown began in March 2020, have you/teacher shared any learning material/activities with parents/children of this grade even once?	1- Yes 2- No	99- Don't know		
I. Contact between HM/teacher and parents/children	23a. If yes, then ask: How did you/teacher share this learning material/activities with parent/children of this grade? <i>READ OUT all the options. Write all codes that apply.</i>	1- WhatsApp 2- Telegram 3- SMS 4- Phone call	5- Home visit 6- School visit 7- Other <write>		
	24. In the last week, did you/teacher call or visit parents/children of this grade to discuss about learning material/activities or children's progress/well being?	1- Yes, all parents/children 2- Yes, some parents/children	3- No 99- Don't know	2	
	25. In the last week, did the parents/children of this grade call or visit you/teacher to discuss about learning material/activities or children's progress/well being?	1- Yes, all parents/children 2- Yes, some parents/children	3- No 99- Don't know	3	
	26. If no or don't know in Q 24 and 25, then ask: Since the lockdown began in March 2020, have the parents/children of this grade and you/school teacher spoken (over call or visit) to each other even once to discuss learning material/activities or children's progress/well being?	1- Yes, all parents/children 2- Yes, some parents/children	3- No 99- Don't know		
J. Challenges faced by HM/teacher during remote learning	27. Since the lockdown began in March 2020, have the parents/children of this grade and you/school teacher spoken (over call or visit or SMS/WhatsApp) to each other even once to discuss any administrative information regarding mid-day meal, school reopening, etc.?	1- Yes, all parents/children 2- Yes, some parents/children	3- No 99- Don't know	1	
	28. Are you/teacher facing any challenges in sharing and/or discussing learning material/activities with parents/children of this grade? 28a. If yes, then ask: What kinds of challenges are you/teacher facing? <i>Probe but DO NOT READ OUT the options. Write all codes that apply.</i>	1- Yes 2- No	1- Parent/child unable to operate phone 2- Phone is not available for child's use 3- Connectivity issues/No internet 4- Child is not interested 5- Lack of support/supervision at home 6- Other <write>	99- Don't know	3, 5
K. Mid-day meal	Ration Fund				
	29. Has the ration and/or fund for mid-day meal been distributed to parents/children of this grade in the month of August 2020?	1- Yes 2- No 3- Have submitted list	99- Don't know	1	2
	29a. If yes, then ask: How many parents/children have received the ration and/or fund?	1- All 2- More than half 3- Half	4- Less than half 5- None 99- Don't know	1	
	30. If no or don't know in Q 29, then ask: Has the ration and/or fund for mid-day meal been distributed to parents/children of this grade even once since March 2020?	1- Yes 2- No 3- Have submitted list	99- Don't know		2
L. Reopening the school	30a. If yes, then ask: How many parents/children have received the ration and/or fund?	1- All 2- More than half 3- Half	4- Less than half 5- None 99- Don't know		
	31. Has the school begun any preparations for physically reopening the school for children? 31a. If yes, then ask: What kind of preparations has the school begun? <i>DO NOT READ OUT the options. Write all codes that apply.</i>	1- Yes 2- No	1- Sanitation/cleaning 2- Other <write>	99- Don't know	1
End time:					



Quality control

Quality control processes form an integral part of the ASER architecture, and these processes are reviewed and improved each year in order to ensure the credibility of ASER data. For ASER 2020, these processes were laid out for every stage of the survey and were executed by the Pratham/ASER state and central team members.

The quality control processes can be broadly divided into pre-survey quality control processes, internal phone-based processes, and data entry processes.

Pre-survey quality control and phone-based processes

These comprise 'pre-survey quality control', 'monitoring', and 'recheck' activities.

Pre-survey quality control:

During the training, surveyors were evaluated on their attendance and performances in survey process quiz, role play and pilot calls.

Monitoring:

During the survey, quality was controlled via oversight of phone-based activities in all districts while the survey was in progress. One manager managed 15 surveyors. The ASER 2020 monitoring process comprised two kinds of activities:

- **Call tracking sheet:** Pratham/ASER state teams made phone calls to all the surveyors as the survey rolled out in a district. Information regarding the progress of survey activities was collected during the calls and surveyors' doubts were clarified. This helped to provide immediate corrective action and to avoid repetition of mistakes in further calls. Along with this, data entry on a daily basis on the survey mobile application was ensured.
- **Tracking portal:** Pratham/ASER state teams cross-checked the survey progress in the call tracking sheet with that on the portal, and ensured that surveyors were making up to 3 additional attempts to households where the call did not connect in the first instance.

Recheck:

Information collected during the survey was verified at various levels. The following recheck activities were conducted in ASER 2020:

- **Desk recheck:** Pratham/ASER state teams conducted desk recheck of the survey formats filled by the surveyors. Surveyors were divided into two groups and allotted alternate days to send two of their completed formats each day. Pratham/ASER state teams shared prompt feedback with the surveyors in case of errors or omissions.
- **Phone recheck:** Based on the survey formats from desk recheck, households which needed further verification were identified for phone recheck. Additionally, Pratham/ASER state teams randomly selected formats from 2 villages and 3 households and 1 school in each village for phone recheck.

Overall, 40% households and 49% schools surveyed in ASER 2020 were rechecked. At the end of all these layers of quality control checks, households and schools with poor survey quality were either resurveyed or dropped from the data set.

Data entry processes

Data for the survey was recorded in printed survey formats. To compile and then process this data for analysis, it was entered into a mobile application by the surveyors on a daily basis. For each question in the survey, rules and validations were in place to ensure that the data entry was done efficiently.





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