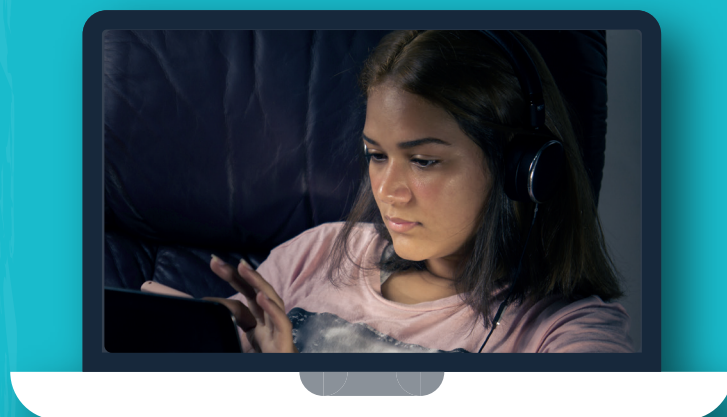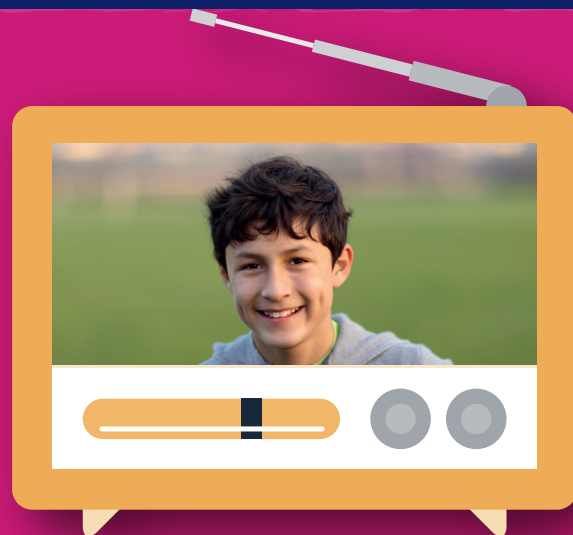Education continuity during the Coronavirus crisis

India: #Ab Padhai Nahi Rukegi (#Learning Will Not Stop)

Garima Batra, Aditi Nangia, Fernando Reimers

OECD

WORLD BANK GROUP

hundrED

Global Education Innovation Initiative

India: #Ab Padhai Nahi Rukegi (#Learning Will Not Stop)

Author: Garima Batra, Partner, The Boston Consulting Group; Aditi Nangia, Programme Manager, Central Square Foundation; Fernando Reimers, Harvard University

Type of intervention: Governmental (Madhya Pradesh, India)
Website: https://www.vimarsh.mp.gov.in/

The coronavirus crisis led schools and universities to rapidly transition to a distance-learning mode, via the Internet, television or radio. This series documents some country initiatives that ensured education continuity for all using technology and provided support to teachers, students, and their families.

WORLD BANK GROUP

Global Education Innovation Initiative

OECD BETTER POLICIES FOR BETTER LIVES

hundrED

General description

Madhya Pradesh (MP), a state in central India, has over 16 million children enrolled in approximately 150 000 schools spread across 52 districts, including 10.7 million children in rural areas. 60% of all students are enrolled in government-run schools (Government of India, Unified District Information System for Education 2017-18).

In 2017, with the support of the National Institution for Transforming India (NITI Aayog,the Government of India's policy think tank), the Government of Madhya Pradesh implemented the Sustainable Action for Transforming Human Capital in Education (SATH-E) project for the systemic transformation of elementary and secondary school education. Knowledge partners, the Boston Consulting Group and Piramal Foundation for Education Leadership (PFEL), were chosen to facilitate project implementation, data collection and review. The project's main goals included improving students' access to large, well-resourced schools, building capacity to improve learning, and strengthening governance to monitor and deliver better outcomes. Over three years, the project implemented the Dakshata Unnayan learning enhancement programme in 110 000 elementary schools and 9 000 secondary schools, app-based academic monitoring, data driven accountability systems, teacher professional development, and consolidated 35 000 schools to 16 000 well-resourced schools in the state. Some of the partners involved in implementing these programmes include Avanti

learning, Central Square Foundation, The Education Alliance, Pratham, Peepul India and the United Nations International Children's Emergency Fund (UNICEF).

COVID-19 led to prolonged school closures in Madhya Pradesh in March 2020, resulting in the loss of about 60 school days during the 2019-20 academic year (as of August 2020). Under these circumstances, Madhya Pradesh continued improving learning through digital and non-digital programmes under the campaign '#ab padhai nahi rukegi' (# learning will not stop). The non-digital programmes for students include school lessons on the radio for primary school grades (1-8), educational television programmes for secondary school grades (9-12), as well as books, worksheets, and one-on-one teacher interactions for all grades. The digital learning component, the 'Digital Learning Enhancement Programme' (DigiLEP) shares curated learning material for all grades through WhatsApp groups. The CM RISE digital teacher-training programme was launched to support online teacher professional development. The TopParent App was launched to help parents monitor primary school students' learning.

Main problems addressed

Ensuring learning continuity and avoiding learning losses while minimising the divide between those with digital access versus not was the main objective. Abrupt school closures due to COVID-19 revealed that the majority of children in India had poor access to digital devices (and thus online learning materials). In Madhya Pradesh, between 35% and 40% parents have access to smartphones. Given low data connectivity and limited number of smartphones in every household (one smartphone per household with two to three children and two adults), conducting online live classes was not a viable option. While radio and television programmes offer a wider reach (over 65% population in Madhya Pradesh has access to a TV), they limit the two-way interaction necessary for effective learning and feedback, are susceptible to power cuts and do not offer the convenience of pausing and revisiting content. WhatsApp has near ubiquitous presence amongst those who possess a smartphone with internet in Madhya Pradesh. It was hence chosen as the key medium to reach children with digital content. The advantage of WhatsApp is that it offers a two-way interaction and has a wider reach, even though it also requires access to smartphones and Internet connectivity. However, the state decided to adopt an omni-channel approach and provide digital content via all of the channels mentioned above to ensure maximum reach, acknowledging the pros and cons of the various options. In addition, to reach out to students who did not have access to any of the above communication channels, the state rapidly distributed workbooks that were initially created for its 'Dakshata Unnayan' programme focusing on foundational literacy and numeracy.

The challenge was twofold in disseminating the digital material. First, resource libraries with high-quality content had to be curated for all grades. While more than 100 organisations develop content in India in Hindi, high-quality free content had to be curated from various libraries in order to ensure that there was a series of short videos available to learners on every topic. For example, there is a series of short videos from a variety of sources on fractions, as illustrated in Figure 1.

Figure 1. Sample sequence of video bytes curated for DigiLEP
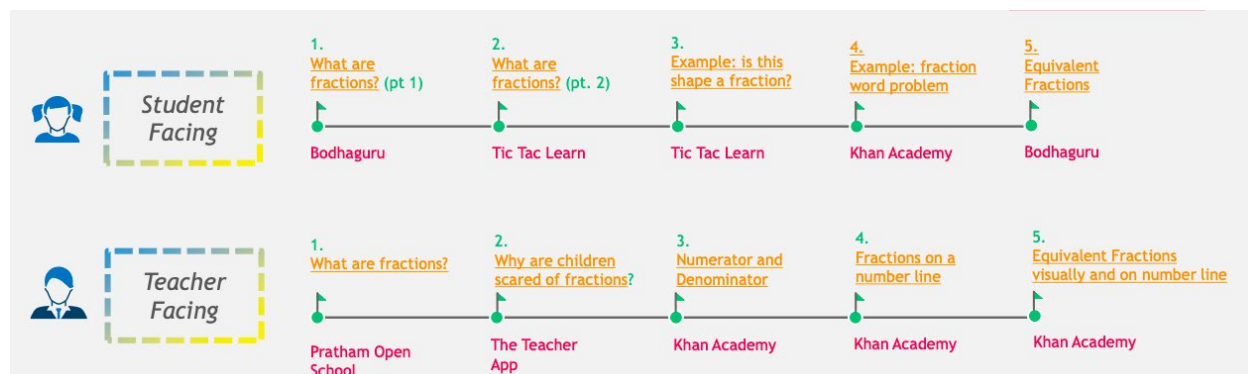
Second, before COVID-19, the state department did not use WhatsApp to communicate with students and parents in government schools. In addition, most government schools and teachers did not communicate with parents through WhatsApp. In order to disseminate these videos, the state had to create WhatsApp groups for every school, cluster and district: over 50 000 WhatsApp groups were created in a few days and have since been managed and monitored to ensure availability of digital learning content and learning plans to parents and students.

Mobilising and developing resources

Most of the material for the programme was curated from existing platforms and packaged to meet the needs of the state. The new resources/products and services launched included the CM RISE teacher-training portal, the Top Parent app and TicTacLearn video library.

Non-digital learning materials (radio, TV and workbooks)

The radio school programme was launched on 1 April 2020, seven days after the lockdown, with stories in English and Hindi broadcast every day for 1 hour from 17 radio stations in the state. The radio programme content was curated from radio school content that was previously broadcast by the state government and also included material curated by UNICEF. The programme's first story was narrated by the Chief Minister (CM) of Madhya Pradesh, Shri Shivraj Singh Chouhan, in order to emphasise the importance of learning continuity.

The other learning methods are through educational television programmes and workbooks. TV content for grades 9 through 12 is broadcast every day for two hours on local cable television channels. Additionally, four of the state-owned television channels (Doordarshan) broadcast content for students in these grades for an hour every day since 11 May 2020.). Broadcast of 20-minute content for basic English has been added each day from 22 June. To the extent possible, the sources of content broadcast on TV and those sent via DigiLEP WhatsApp groups is kept the same.

The Dakshata Unnayan (competency enhancement) programme's workbooks were distributed to students' homes by teachers. These workbooks, re-used during the COVID-19 lockdown, were originally printed for use in school and provide practice material to improve foundational competencies.

Digital learning materials

Resources for students. Competency-aligned videos for grades 1 through 12 were curated as part of the DigiLEP video library and launched on 9 April 2020 by the Chief Minister. (DigiLEP is the Digital Learning Enhancement Programme launched to support online studies in the state.) High-quality content from existing service providers, such as Khan Academy, Pratham Open School, Bodhaguru, The TeacherApp,

Avanti Learning, etc. and new video libraries, such as TicTacLearn were mapped to key competencies for these grades to ensure that learning continued during the lockdown. The TicTacLearn video library was developed by Central Square Foundation, in partnership with Google.org. It was launched in April with over 10 000 high-quality videos for mathematics and science in five languages. The byte-sized video sequences curated for the DigiLEP programme provide topic-wise seamless learning experiences for all subjects, and include a variety of examples and activities. The DigiLEP library and the learning apps are disseminated through WhatsApp and the existing National DIKSHA portal run by the Government of India. The cascade method of dissemination through WhatsApp groups across multiple levels reaches grade specific parent-teacher groups, where a 20-minute lesson or educational sequence is shared every day at 9am. Boston Consulting Group coordinated the curation efforts as part of the ongoing SATH project mentioned above.

Resources for teachers. The CMRISE digital teacher training programme was launched on 1 May 2020 for teachers to access digital training content and develop their skills during the school closure. The modules include training in general classroom pedagogies and teachers receive a certificate upon completion of a course. The two courses launched in May were an "introduction to the training" and understanding "the role of a teacher". The portal aims to develop teachers' skills in navigating digital learning, support children during the COVID-19 crisis, prepare for reopening schools, educate children on COVID-19 and support them with the transition once schools reopen. Peepul India, an NGO, supported the state in developing the content for teacher development, which is delivered on the national DIKSHA portal.

Resources for parents. A free learning app accessible on mobiles and tablets was launched on 9 April 2020 for parents to engage with their children's learning journey. Top Parent is a unique free mobile app in Hindi that empowers parents with knowledge, language and strategies on child development to help them meaningfully engage with their children between the ages of 3 and 8 years old. Top Parent builds parents' skills as educators by providing simple day-to-day solutions via videos and games, and recommending easy and free digital solutions for their children's learning needs. The app can be accessed on mobile phones and tablets, and recommends fun EdTech solutions such as Google Bolo, Math Masti (based on XPrize winner KitKit School) and Chimple (Xprize finalist) for children to continue learning their letters and numbers without missing out on school.

Fostering effective use and learning

The central curriculum team in the state has been disseminating messages to District DigiLEP WhatsApp groups targeting district and block level education officers in the state along with cluster level officials, who in turn have their own WhatsApp groups with school principals and teachers to disseminate daily messages. (Clusters and blocks are administrative levels in the state.) A dedicated WhatsApp helpline has been added to all 3 000+ WhatsApp groups for monitoring, and video messages were circulated to set norms at the beginning of the exercise. In addition to WhatsApp, the material is uploaded on the DIKSHA platform where lessons are packaged into courses and sent out to teachers with clear targets and deadlines. After about 8 weeks, there were 51 000 WhatsApp groups with almost 2.1 million parents. However, only 600 000 to 700 000 students have watched the videos shared with the groups on any given day. This number has been rising continuously through consistent communication campaign by the state, but points to the challenges in the field, which are elaborated subsequently: awareness, motivation, technical and various other challenges given the COVID-19 situation amongst the target segment of the population.

The key mechanisms used by the state to enhance uptake and learning include:

- *Constant communication via field staff as well as mass communication channels*. Large scale video conferences with district officers explaining their roles, direct webinars for teachers, mass media like radio and television jingles etc. were all used to communicate the campaign agenda. The leadership in the State Education Department including the Principal Secretary, State project Director, etc., addressed teachers in large-scale teacher webinars for the first time. These

measures also included local level innovations for communication such as painting on the walls of schools, use of a travelling loudspeaker to broadcast the message to parents, etc.

- *Facilitating teacher-student engagement.* Teachers were asked to call 5 students every day, to help them access the learning material and answer any queries. This communication is tracked via a simple google form and the central analytics team derives accountability indicators on a daily basis. This measure was found to be key in ensuring the growth of material viewership.

- *Strong monitoring and accountability system.* District level DigiLEP cells were set up with the task of ensuring that the learning content reaches parents on time, and of monitoring the WhatsApp groups for spam. They report feedback to the central team.

- *Randomised calling via call centres*. Large scale randomized calling was set up at the state level to get feedback from teachers, parents, field officers, etc. in order to continuously understand and fget feedback on the implementation on the ground and to collect stakeholders' views. The call centre speaks with over 500 teachers and parents every day. Initial estimates in early May 2020 suggested that 75% of parents had minimal awareness of the program despite all the efforts to build salience among parents, which led to subsequently enhance the communication and publicity efforts.

Implementation challenges

The main implementation challenge related to adoption of the proposed learning solutions.

Estimates suggest that anywhere between 0.6 and 1.1 million parents and their children could be engaged through digital learning programmes. This corresponds to about 7 to 10% of the state's total school enrollment. In the first 1-2 weeks of the programme, this number stood at 0.2 million, and the key constraining factors were low awareness amongst parents about the programmes, low levels of motivation and technical challenges.

Awareness. Feedback in early May 2019 collected through random phone calls by the state call centre suggested that some parents who had been added by the state's cluster officials to the WhatsApp groups were not aware of the purpose of the group. Others were aware of the groups' purpose and were receiving study material but had not internalised its importance and were thus either inconsistent or not motivated enough to share their mobiles with their children. Finally, a share of parents also had technical challenges with data and connectivity. Over time, with consistent field communication and publicity efforts, as well as the activation of the daily teacher-student and teacher-parent engagement measures described above, the awareness and motivation issues were tackled. However, the viewership still remains below 10% of enrolment numbers.

Digital divide. This primarily points to the digital divide, which is indeed significant. The number of parents with smartphones with internet as well as sufficient data packages is limited. Even when it is the case, most families have one phone for three children, making it difficult to allocate time for all the children to study online in a 'home' setting, which further often takes place in the presence of other children and adults.

Perception of online learning. Further, parents' perception of online learning through smartphones was not always as positive as face-to-face learning. Building more respect and serious commitment to this form of learning needs to be continually enhanced to enable better usage of the learning contents shared through the programme.

Teachers' multiple responsibilities. Finally, teachers have been key to drive viewership numbers up in the state. They have been calling their students, delivered workbooks and engaged in teacher professional development, but given their various additional responsibilities related to COVID-19, such as the contact tracing of patients, teacher-student engagement has not fully materialised.

As the summer vacation period ends, and if schools remain closed over the next 1-2 months, strengthening the teacher-parent and teacher-student engagement will be key to improving the results of the programme.

On the positive side, there is clear evidence that a behaviour change will set in during this period with respect to greater acceptance and appreciation of digital learning tools and the benefits it can provide amongst parents, students and teachers. This will inform the state's future digital efforts. On the content side, the curation effort led by the Boston Consulting Group has revealed gaps in content for language learning in primary grades as well as for non-science subjects in secondary grades, which should also

Monitoring success

The programme has reached many stakeholders, including parents and teachers who were previously connected through digital platforms for education programmes. Within 2 months, 51 000 WhatsApp groups were created with over 1.9 million parents and 200 000 teachers. This success is unprecedented for the state, and could continue to serve as a useful communication channel between parents and the school as schools reopen in the coming months. The accountability systems have ensured that parents are continuously added to these groups, and feedback through the call centre have provided useful insights on parents' engagement. The state has been using this information to develop localised measures to increase use.

Teachers are continuing to engage in both COVID-19 responses and education programmes. More than 250 000 teachers enrolled in the CMRISE training programme and over 95% completed the first training module.

While the non-digital interventions cannot be tracked precisely, the metrics to monitor the implementation success of the DigiLEP programme are:

- Number of parents: The objective is to increase the reach of parents. 2.1 million parents have been added to the groups so far (starting from about 1.3 million in the first 1-2 weeks of the programme);
- Minimised spam messages on the WhatsApp groups through randomised monitoring;
- Percentage of teachers who report calling and engaging with 5 students every day;
- Overall number of students viewing resources on the DigiLEP, including a tracking of grade and subjects and split across various districts to drive district-specific strategies and action.

Adaptability to new contexts

To build on existing efforts, Madhya Pradesh will continue to use these resources and platforms once schools reopen.

From July onwards, as the summer vacation period ends in the state and the new academic year resumes, this initiative will expand to the '*Hamara ghar hamara vidyalaya*' (our home is our school) programme. This programme will supplement ongoing online efforts (such as the DigiLEP content) with offline content, since the new year's textbooks and workbooks will now reach students via door-to-door delivery. The state plans to develop and share weekly self-study plans for students, with digital content synchronised to the same learning goals and with continued structured teacher-student engagements to support the students.

Madhya Pradesh will continue a blended learning model for students, digital training for teachers to self-learn skills and leverage parents as co-educators to enable learning at home even after schools reopen and is currently developing its long-term digital strategy.

Once schools reopen, the digital library and WhatsApp communication channels can be integrated with in-class instruction, and leveraged to reinforce everyday lessons, especially since the upcoming academic year might have staggered school days, or regular periods of lockdowns and school closures. In Madhya Pradesh, the programme will be extended to enable a blended learning model for students, digital training for teachers to develop their skills, and the education department will continue to leverage parents as co-educators to continue learning at home.

This initiative is already provided at scale in a very large state of 73 million inhabitants, with the living conditions of a lower middle income region. It is thus applicable to other similar countries and regions. Within India, the model has inspired other state-level approaches. The Boston Consulting Group works with the education departments in the state of Rajasthan, Jharkhand and Odisha, where similar programmes are being implemented.

Additionally, all the DigiLEP material is available for use in all Hindi-speaking regions in India and is being implemented in Haryana, Himachal Pradesh, etc.

Key points to keep in mind for a successful adaptation

1. Develop both digital and non-digital programme components to ensure that all children have access to learning material and support.
2. Establish clear communication channels and accountability mechanisms to ensure the content reaches intended recipients.
3. Promote consistent interaction between teachers and parents to explain and follow up on learning materials shared on WhatsApp (or other communication channels) and drive engagement on a daily basis.
4. Track and monitor progress continuously on key indicators from day 1, and relay performance back to the field officers via district-wise dashboards.
5. Connect with teachers, district officials and school principals through district and state level events over video conferencing to boost morale, communicate expectations and progress.
6. Encourage local dissemination strategies to increase usage of learning material, engage district Commissioners to reinforce expectations and use mass media to publicise programmes to parents.
7. Encourage and develop guidelines for one on one interactions through phone calls, material delivery, competitions over WhatsApp, etc., to ensure frequent teacher-parent and teacher-child interaction.
8. Provide professional development for teachers to adapt to digital learning, prepare for school reopening and support students once they are back in school

Acknowledgements