COVID-19: Navigating Digital Learning in Government Schools in Rajasthan: *Voices from the Field*

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Abstract

The COVID-19 pandemic has been unprecedented in nature. It has affected large populations globally with high fatalities. The impact of COVID-19 pandemic on education has been far reaching. In India the countrywide closure of educational institutions including schools and colleges has affected a large majority of students across geographies. Around 300 million learners across all age groups are said to be out of school now. In response to the crisis, governments and ministries of education have put in place strategies to address issues arising out of disruption of schooling. There has been a push to provide digitally-based distance learning opportunities to ensure educational continuity. These initiatives have focused on the use of text/video/audio content through SMS, WhatsApp, Radio and TV programmes to reach out to the students and engage with them.

This paper analyzes experiences of digital/online learning initiatives of the Government of Rajasthan (GoR) during the COVID -19 pandemic for students enrolled in government schools. It is based on qualitative interactions with teachers, students and parents across government schools in different districts in Rajasthan. The paper argues that given the current disruption in schooling, any strategy to continue educational engagement with students and address their learning needs should be guided by a concern for equity and inclusion and creates an environment where learning can continue. . There is a need to ensure that the delivery of distance learning does not exacerbate the existing educational and social inequalities.

Key words: Covid-19, school closure, digital learning, online education, quality education, Rajasthan

Introduction

The COVID-19 pandemic has been unprecedented in nature and has affected large population globally with high fatalities. The impact of the pandemic on the social, economic and political spheres has been extensive. The lockdowns and quarantine have led women, men, children and transgender to face challenges never encountered earlier and devise coping strategies.

It is estimated that the resultant impact of COVID-19 pandemic on education has been far reaching. A recent UNESCO report states that schools around the world have closed, affecting 1.6 billion learners – approximately 91 per cent of the world's enrolled students (UNESCO 2020). In India the countrywide closure of educational institutions including schools and colleges has affected a large majority of students across geographies. Around 300 million learners across all age groups are said to be out of school now. Though temporary, school closures have had a significant impact on students, even more so in vulnerable and underprivileged contexts. As the shutdown came in the last quarter of the academic calendar; it led to postponement and rescheduling of examinations and curtailed syllabi. The education sector now faces challenges of educational delivery particularly pedagogic processes, classroom assessment frameworks and teacher engagement and support in this period.

In response to the crisis, governments and ministries of education have put in place strategies to address issues arising out of disruption of schooling. There has been a push to provide digitally-based distance learning opportunities to ensure educational continuity. In India, while many private schools began online classes early on, their government

counterparts followed soon shifting to a teaching learning model driven by technology to ensure continuity of learning. These initiatives have focused on the use of text/video/audio content through SMS, WhatsApp, Radio and TV programmes to reach out to the students and engage with them.

At the National level, the Department of Human Resource Development (HRD), Government of India on March 21, 2020, shared various free digital e-Learning platforms to help students capitalise and continue their learning during COVID-19 based school closures. These include:

The DIKSHA portal contains e-Learning content for students, teachers, and parents aligned to the curriculum, including video lessons, worksheets, textbooks and assessments. QR codes in textbooks encourage students to go beyond the book. The app is available to use offline.

E-Pathshala is an e-Learning app by NCERT for classes 1 to 12 in multiple languages. The app houses books, videos, audio, etc. aimed at students, educators and parents in multiple languages including Hindi, Urdu, and English.

The National Repository of Open Educational Resources (NROER) portal provides a host of resources for students and teachers in multiple languages including books, interactive modules and videos including a host of STEM-based games.

SWAYAM hosts 1900 complete courses, including teaching videos, weekly assignments, exams and credit transfers, aimed both at school (class 9 to 12) and higher education (undergraduate and postgraduate) levels.

SWAYAM Prabha is a group of 32 Direct to Home (DTH) channels devoted to telecasting of educational programs round the clock and accessible all across the country. The channels air courses for school education (class 9-12), higher education (undergraduate, postgraduate) as well as for out-of-school children, vocational education and teacher training. Schedules for the television broadcast as well as archived programs are available on the website (World Bank 2020).

Following, these national initiatives, various State governments also followed suit and launched programmes for digital learning using various delivery channels including social media and TV/radio-based teaching. However, early evidence and media reports indicate that the rapid transition to digital/online learning has been challenging. The move has also not considered the existing spatial, digital, gender and class divides. A recent UNICEF report points out that the massive scale of school closures caused by COVID-19 has laid bare the uneven distribution of the technology needed to facilitate remote learning. It has also highlighted the lack of preparedness and low resilience of systems to support teachers, facilitators and parents/caregivers in the successful and safe use of technology (UNICEF 2020).

This paper analyzes the experiences of digital/online learning initiatives of the Government of Rajasthan (GoR) during the COVID -19 pandemic for students enrolled in government schools. The paper is based on qualitative interactions with teachers, students and parents drawn from government schools in different districts in Rajasthan.

The paper is structured in four sections. Section I presents the context of education in Rajasthan; Section II details the key policy initiatives taken by the State government to address educational needs of students in government schools during the pandemic; Section III analyses the experience and impact of a digital learning initiative on teachers, students and parents and Section IV presents the conclusion.

The Context

The state of Rajasthan is geographically, the largest state in India. It is one of the eight states under the Empowered Action Group (EAG), states with low socio-economic indicators. Despite considerable investment from the government, gender-based inequalities and discrimination in access to crucial resources of health and education remains pervasive.

In the past two decades, the State has addressed the continuing educational challenges and some shifts can be observed in the educational landscape. There has been a gradual increase in school enrollments and the participation of girls at all levels of schooling has been rising. To improve the quality of government schools in the state, the Government of Rajasthan launched several interventions targeted towards improving different aspects of school education - monitoring and supervision, pedagogy, teacher recruitment, real time access to school related data, and the optimal utilization of human and physical resources. Some of the key initiatives include:

- The 'Adarsh Yojana' programme, launched in 2015-16, aims at ensuring one secondary school or senior secondary school with grades I to X or I to XII in each Gram Panchayat. These schools are intended to be high quality, fully equipped, and fully staffed;
- The 'State Initiative for Quality Education' (SIQE) scheme launched in 2015-16, to improve learning levels of students in grades I to V in all secondary or senior-secondary schools of the state;
- Consolidation of government schools with an aim to improve efficiency in resource use and improve management under the prevailing administrative structure (Bordoloi and Shukla 2020).

A recent process assessment of Adarsh Yojana shows that there is improved access as Adarsh schools are now available in 99 per cent of the gram panchayats; enrollment in Adarsh schools has also increased and there has been significant investment and improvement in school infrastructure (Development Solutions, 2019). Another inquiry into the consolidation of schools highlights that the schools selected for closure did not always follow the low enrollment norm and that there was greater decline in enrolment in consolidated schools compared to all government schools across the state (Bordoloi and Shukla 2020).

According to National Achievement Survey (NAS) 2017, Rajasthan performed relatively better than most states in the learning assessments in Grades 3, 5 and 8. Additionally, government schools continue to be preferred over the last three years and Rajasthan happens to be one of the only two states in the country (the other Bihar) that had not witnessed a decline in government school enrolment between the years 2014-15 and 2016-17. On the other hand, the ASER survey (2018-19), while indicating a consistent improvement in performance from 2012-2016 reflects a minor dip in 2018. The report highlighted that the percentage of Class VIII students who could read a Std. II level text was 78.3 percent; the percentage of Std VIII students who could do subtraction was 21.3 per cent and the percentage who could do divisions was 47.6 per cent. In the state, 20 per cent girls in the age group of 15-16 years were found to be out of school as against a national average of 13.5% (ASER 2018).

As per the State Report Card (2018-19) the state has a total of 69929 Government Schools functioning in the state. The total enrolment in these school was reported

92,80545(45,07520 boys and 47,73025 girls). Total number of teachers working in government schools were 382957 (25,8288 men and 124669 women). The percentage of SC enrolment at the upper primary and Secondary stages was 19.47 and 18.33 per cent respectively. The percentage of ST enrolment in upper primary and secondary level was reported 14.47 and 13.18 percent respectively. The percentage of minority enrolment at these stages was 7.54 per cent and 5.36 per cent respectively (GoR 2019). The State which has experiences of some pioneering initiatives in education like the *Shiksha karmi* Project and *Lok Jumbish*, continues to grapple with a range of longstanding systemic issues pertaining to quality education, equity and gender influencing education outcomes in the State.

Access to Digital Technology

Data drawn from Key Indicators of Household Social Consumption on Education in India NSS 75th round notes that in Rajasthan the percentage of households with computer and internet facility is 11.7 per cent and 26.7 percent respectively. The percentage of persons of age 5 years and above with the ability to operate a computer is 14.2percent (18.47 male and 9.5 female). The percentage of persons of age 5 years and above with the ability to use internet is 17.1 percent (22.7 male and 11.0 female) (GoI 2018).

While there is a focus on ICT in government schools and computer labs facilities and internet have been made available, there are several gaps as quality and usability remain a challenge.

A study on adolescents in Rajasthan noted that while there was also a huge increase in internet access among adolescents with five or more years of education; the urban rural gap in internet usage was apparent (Jejeebhoy and Acharya 2014). Another study pointed out the limited access of girls to internet and information technology (IDSJ and FXB 2015) further substantiating the gender gap in access to digital devices/mobile phones.

Recent media reports regarding the implementation of online learning programmes in the State point towards the uneven reach of these initiatives. The non-availability of phones/TV and radio among poor households is a major constraint in most districts. It is estimated that only 5-10 percent of students can take advantage of online classes in districts in western Rajasthan due to lack of Smartphones. Similar situation prevails across districts (Rajasthan Patrika, 3 June, 2020, Indian Express May 22, 2020).

A recent report on access to mobile phones in the context of online learning in Bihar revealed that out of 733 children surveyed in classes VII and VIII, 38% had Smartphones.and 16% had other phones. A higher percentage of boys (36%) had access to Smartphones. as compared to girls (28%) (Jha and Ghatak 2020).

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Section II

Key Policy Initiatives for Education during the Pandemic

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As a response to the current crisis and extended lockdown period due to COVID-19 pandemic, the Government of Rajasthan has taken several measures to ensure continuity of learning for students and teachers. As per government directives, students enrolled in Classes I-VIII were promoted to the next grade. The Rajasthan Board of Secondary Education (RBSE) also announced a onetime relaxation for promotion of students studying in Classes IX and class XI, to next grade considering the ongoing lockdown. The promotion was to be based on student performance in three-unit tests, half-yearly examination, co-curricular activities and all-round performance of the student during the academic year.

The three programmes using a mix of technologies introduced to deliver education remotely are as follows:

Social Media Interface for Learning Engagement (SMILE)

The Social Media Interface for Learning Engagement (SMILE) an e-learning platform via WhatsApp group was introduced in April 2020 to provide online courses and classes in all government schools of the state'.

Official reports indicate that 20,000 WhatsApp groups have been created involving parents and students. Students of senior classes who have been promoted to the next grade are expected to access study material through SMILE. Assessment work is also to be assigned through digital platforms. It is expected that the teaching process will continue in the online mode and teachers and officers will remain available accordingly (https://education.rajasthan.gov.in).

Discussion with teachers at school level indicates that officials from Samagra Shiksha Abhiyan (SamSA) instructed all district officials through a video conference to implement the SMILE programme as per following guidelines:

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Box:1 Guidelines for SMILE
- The e-content will be uploaded at the state level on School Education Department WhatsApp group; it is sent further to the Chief District Education Officer (CDEO) Group, from there to the Chief Block Education Officer Group (CBEO) and then Panchayat Elementary Education Officer PEEO) Group or Free Textbook Book (FTB) Nodal officer.
- All PEEOs will be the group administrators of their WhatsApp group. They are expected to create two WhatsApp groups-one of teachers and other of parents
- Online teaching to be started with help of videos
- The content will be uploaded at 8 a.m. in the CDEO group and then made available to the block level CBEO group.
- The competency schedule for the subsequent day will be shared the previous evening
- Only the PEEO can upload messages in the group. He/she has to ensure that only academic -content is shared in SMILE WhatsApp groups.
- The CBEO uploads details of WhatsApp group in the tracker sheet.
- The CBEO has the responsibility of updating the Google sheet
- The PEEO and teachers are expected to take these tasks seriously
- Teachers can also submit their own content at the state level
- RSCERT is the nodal agency for preparing the content; all DIETs are expected to support preparation and reviewing the e- content.
- Districts with less than 40% entries should improve their performance
- The goal of the department is to reach all the children enrolled in government schools through this initiative.

(Extracts from Minutes of Video Conference Meeting held by SPD (SamSa) with districts officials. April 2020)

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A YouTube channel and a Facebook page has also been developed where all the study materials are uploaded. Students and parents, who cannot connect through WhatsApp, can access contents through the social media platforms.

Hawa Mahal and Shiksha Vani

Two radio-based learning initiatives *Hawa Mahal* and *Shiksha Vani* have been introduced to reach out to students during the lockdown period. The classes aired were of 55 minutes duration and aired from 1 May to June 30, 2020.

Shiksha Darshan

A television-based programme called Shiksha Darshan has also been started since June 1, 2020 by GoR. This programme is implemented in collaboration with UNICEF and Ekcovation. The official order notes that Shiksha Darshan will be relayed in two slots by the Doordarshan (DD) Rajasthan channel from Monday to Saturday for three hours. Students of Classes IX-XII can view the programme from 12.30p.m. to 2.30 p.m. The students of Classes I-VIII can view the programme from 3.00 p.m. to 4.15 p.m. The teachers are to publicise these programmes through social media networks. The programme is also being made available on YouTube (GoR, 2020).

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Section III

SMILE in Rajasthan: Field Experiences

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This section is based on qualitative interactions with teachers, students/parents across ten districts in Rajasthan. Around 60 teachers from 50 government schools located in both urban and rural areas were contacted through various networks. Since face to face interactions were not feasible due to COVID-19 restrictions, the discussions were carried out online and via phone.

Impact of COVID-19 on education and health

An effort was made to understand the perception of teachers on impact of COVID-19 on education and learning. Most teachers in urban and rural schools were of the view that education has been affected severely. Initially the children were happy about the school closure but now they are restless. Children in the higher classes have been most affected. Due to the disruption, children are forgetting what they had learnt as continuity has been broken. Most children have got involved in household tasks during the lockdown and have not been able to concentrate on their studies. The education routine has also been disrupted.

As a result of the lockdown, both school level and Board examinations were postponed. The government then took a decision to promote all children to the next grade. All students have been promoted, except those in Classes X and XII. The students who were 'lagging behind' and were not serious about studies have also been promoted. It was also pointed out that when schools reopen after a long gap, some of the children may not be able to cope up with the pressure of studies.

The teachers also feared increase in drop out in schools as many children enrolled in school have left the village with their parents, particularly those from migrant households.

Teachers in both urban and rural areas pointed out that the suspension of the Mid-day meal programme and school health programmes would have a negative impact on the physical and mental well-being of students in the long term. Lack of physical activity is also affecting the health of students adversely. The fear of the disease is making children anxious. They

are also depressed as they do not have access to digital resources, i.e., Smartphones, which is necessary for online classes. Women teachers also recounted that girls are suffering as they have stopped getting the Iron Folic Acid (IFA) supplements and sanitary napkins from schools. On the other hand, being at home, the students had become aware of COVID-19 prevention practices like washing hands, using sanitizers and mask and maintaining physical distance of six feet.

Student responses in both urban and rural areas indicate that older students were anxious that their studies got disturbed due to the pandemic. The lockdown came in March when examinations were scheduled. Students felt that since they had been promoted to the next grade without an examination, they would have to work harder in the new class. The students in higher class and those at a transitional stage were worried about their future. They had not been able to attend coaching classes or access a library. Many voiced their concerns for the future if there is a delay in re-opening of schools. Some of the students said they were unhappy as they could not meet their friends, consult them for studies and go out to play due to restrictions on movement.

The KGBV also closed due to the lockdown; all girls were sent home on 12 March. The girls who were in Class 8 were promoted to the next class. They were disappointed as many of them were hoping to perform well in the examinations and get a Laptop. Around 20 girls were expecting to receive it. Some of them have called up wanting to know whether they will get a laptop or not (Teacher, Kasturba Gandhi Balika Vidyalaya, Ajmer).

Some parents who were members of school management committees, were worried that children were missing out on school-based activities and felt that they would need extra support when the school reopens.

Objectives of SMILE and Readiness for Digital Learning and Pedagogical Shifts

The programme SMILE was started in April 2020 to enable children to continue learning during the lockdown period. Teachers reported that the objective of the initiative was to keep children connected to education and ensure learning. It was to ensure '*padha*yee *ke prati rujhan rahe'* (there is an inclination towards studies).

The initiative is coordinated by the State department and the CBEO, PEEO are involved at the block and gram panchayat level. The Rajasthan State institute of Educational Research and Traning (RSCERT) is the nodal agency for the programme. A few teachers, who were also the in charge (Prabhari) of the programme at the school level, stated that the e-content for various classes is sourced from the following sources: NCERT website- E-pathshala, DIKSHA programme and other open sources. Subject teachers are also uploading additional content in PDF format in the whatsapp group. In their view, while the content is shared in the morning, there is no fixed schedule for the students to study the content. It is expected that the students will access the e-content during the day as per their conveniencev and availability of the phone.

*The e-content is decided at the State level by a committee. The e-content is received from State to the district level and then it is further sent to block and the school level. The PEEO is responsible for further uploading the contents on WhatsApp to be delivered to the students. Every day the content is uploaded around 9.30 am, 5 days a week. Teachers are taking a feedback from students every 4-5 days (*PEEO, Barmer)*.

The response of teachers from urban and rural schools regarding feasibility of the SMILE programme was mixed. While some teachers felt that the initiative was beneficial, and the online platform had got the children interested in learning, others felt that it was partially effective. A few rural school teachers were non-committal and expressed their reservation

regarding its feasibility in rural areas, as children had no access to digital devices and the internet network was also poor. It was felt that the initiative was useful where students had access to resources like a Smartphone, internet, electricity and readiness of parents to support their children, mostly in urban settings. In addition, the programme had not reached many students as phone numbers of all parents was not available. It was also expressed that that digital teaching - learning is 'one sided' as there was lack of interaction.

The teachers were of the view that the initiative had been implemented without prior information and preparation. The teachers were not prepared for this shift to online learning and there was no consultation with them regarding the programme. The lessons had been put together in a hurry. It was apparent that most PEEOs/teachers in schools followed the orders from State/district level. The teachers articulated that teacher orientation should have been organized to enable them to prepare for the transition as many of them were not well versed with use of digital technology for distance learning.

The uploaded subject matter is not proper. The content for two classes are uploaded at the same time that causes confusion among teachers (Teacher, Baran).

Student interactions made evident that many of them were not aware about the name of the programme- SMILE. They said that teachers are teaching through WhatsApp. In the urban areas some students were aware that government had started Shiksha Darshan on TV and Shiksha Vani on radio.

The students reported that the class teacher had contacted the parents (mostly fathers) when online teaching had just started. They had explained that this initiative was to keep students engaged with learning. The teacher had enquired whether the parents were willing to connect children to online education. On consent from parents, the teachers added the phone number on WhatsApp group. As most students do not possess individual phones; the lessons are usually viewed on the father's or older siblings phone.

"*Teachers started sending the content online in April. They called up to inform that a program was going to begin, and students should try to study online. But only 50 per cent students in my class have been enrolled as the rest of them do not have the necessary mobile devices* (Student, Class IX, Jaipur city.)

Linkage and Access to SMILE

The first step to take advantage of the online resources is to establish a linkage to the programme. The experience of SMILE makes evident that access to online resources and modes continue to be a challenge in most districts of Rajasthan.

As seen earlier, teachers contacted parents and informed them about the new initiative. They accessed phone numbers of parents/guardians of students via Shala Darpan portal and school records. They informed that lessons would be sent daily on WhatsApp and parents should help children view the lessons. As per the teacher estimates (both urban and rural) the number of parents/students that they have been able to connect to SMILE ranges from 25 percent to 50 percent of total enrollment in schools. A few outliers were also reported wherein teachers had reached out to 70 percent of total enrolled students in school and linked them to the programme. These were mainly urban schools, where the head teacher had played a pro-active role in reaching out to maximum number of children. There were also instances where some of the phone numbers were not operational, so parents could not be reached.

Initially, we had contacted around 700 students through their parents; currently, we are reaching around 300 students as many parents have left Jaipur and gone back to their villages/States due to the pandemic (Teacher, Jaipur city).

The teachers pointed out that in most cases, the parents' struggle for livelihood during COVID-19 has been acute. It is difficult for poor parents to afford Android/Smartphone and give it for exclusive use to the children. Even if there is a Smartphone, it is difficult for parents to purchase internet packages. The teachers articulated that this aspect should have been factored in when the programme was launched.

Internet connectivity was also identified as another barrier to accessing online resources. The teachers working in remote areas informed that it was impossible to download the content as internet connections are poor. In addition, electricity was erratic in many of the areas making access to TV programmes also difficult. Teacher illustrations note:

"The children who are enrolled in the government schools come from working-class backgrounds; many parents have a hand to mouth existence; they do not possess an Android phone; they have keypad phones with limited internet bandwidth. It has been a challenge to reach out to these children" (Teacher, Ganganagar*)*.

*In a district like Barmer, where it is a big challenge to ensure regularity of students in school on normal days and the teachers have to make a lot of effort; it is difficult to assume that children will be inspired to learn at home on their own. Even when we hold extra classes, students do not come (*Head teacher, Barmer).

There are more ST, SC and girls enrolled in our school. The parents do not have the resources to buy a Smartphone*; the internet connectivity is also erratic; in many areas there is no electricity too* (Teacher, Baran)

Students in rural schools complained that the teachers had not shared the information regarding online classes on time. When one parent called the head teacher and asked about SMILE, the teacher said he would inform them the next day. Students pointed out that they were keen to study and get linked to the programme; but in the absence of a phone it was difficult to take advantage of the programme. It was also reported that teachers had not kept in touch with the students or taken a feedback from them.

The class teacher called my father and informed that lessons will be sent on WhatsApp. The lessons come on my brothers' phone. I am able to see it only when he returns home from work. I cannot view the lessons every day, as the phone is with my brother. Given the economic condition of our family, it is not possible to provide a phone to every member of the family (Student, Class XII, Dausa).

In urban schools, students spoke of phone calls being made by teachers, seeking parents support to help children study. It is feared that when the schools do reopen, the teachers may not revise lessons already covered online. This may lead to further marginalization of students with no access to digital resources.

Media reports also quoted a senior government official saying" *out of 13 lakh families who get messages barely 2 lakh use them* (as quoted in Indian Express May 22, 2020)

Children's Engagement and Disengagement

Once the content is uploaded on WhatsApp, students are expected to view the lessons. The content is usually uploaded around 9.am every day. Grade wise lessons are sent out. The students are expected to check their phones for the lesson in the morning and make notes.

In case the lesson is not viewed by the parents/ students, the teachers call up the parents and check on why the lesson has not been viewed. The only indication for teachers to asses if the lesson has been viewed in WhatsApp is to look at the ''Seen by'' blue tick marks. More recently a worksheet has also been added and children are given home based tasks to gauge what they have learnt. The students are advised to contact the subject teachers in case they are not able to comprehend the lesson.

*Currently there is farm work as it is harvesting time; the parents leave in the morning and get back home in the evening. There is only one phone in the family. The students can only view the lessons in the evening. The parents say 'how can we leave the phone with the children'; there is fear of misuse (*Teacher, Dudu, Jaipur)

In a context where students face multiple challenges to learning, ensuring that they undertake self-study and learn without guidance seems unrealistic. In addition, most students do not have access to the textbooks of the new grade, they have been promoted to. The free textbooks are yet to be distributed to students.

Students have to be motivated every day to view the content. I contact the mothers daily and request them to allow the girls to see the lesson (Teacher, Jaipur city)

The big question is whether the students can comprehend what is uploaded. Some students have contacted us for clarifications but not all students are active. More girls have called than boys. We take a feedback, but I feel boys do not speak the truth- phone pe kuch bhi keh saktein hain (boys can say anything over phone) (Teacher, Jaipur city).

In addition, the engagement is dependent on parent's convenience and availability of the mobile phone with internet. One of the teachers pointed out that when she contacted the parents, they got irritated "we cannot *spend money on getting a recharge and teachers should stop making repeated calls!"*

Discussions with students in urban areas show that there is no fixed routine for viewing the e-content. The teachers upload the lessons in video/audio/PDF format. Some lessons are easy to comprehend, while others are difficult. Since the students don't have textbooks, the teacher were also sending the related chapters online. Hindi and Sanskrit books have been uploaded on the phone. The content uploaded is grade wise and chapter wise. If the chapter is long- it is split over two days. However, the students do not have prior information regarding lessons for the next day. In case of Shiksha Darshan, there is a weekly schedule that has been prepared. Some urban students stated:

We have never been taught in this manner- so it is very difficult for us to understand lessons. Sometimes it is not easy to understand lessons on TV too. Learning in school from a teacher is so much easier!

In case I do not understand a lesson then I ask the class teacher over What's app'- if the teacher sees my message, she reverts back. Teacher also calls from time to time asking if there is any problem. She also tells us to be regular in our studies. She also calls my father from time to time to know whether I am studying or not. She tells him to help me out in case I have problems in understanding the lesson.

Discussions with students in rural areas show that many students are still not linked to the programme. Those who were connected opined that it was difficult to comprehend the lessons sent by the teachers as they did not have textbooks; some borrowed textbooks and consulted them. The teachers had not contacted the students to discuss their problems.

Gender equitable access to digital devices is also an important aspect in view of the gender-based roles and responsibilities within households and gender imbalance in access to resources.

In urban areas the teachers working in Girls' secondary schools, reported that girls were making an effort and those who were accessing the lessons often called to clarify their doubts .

The head teacher in a resource poor area of Jaipur city stated "*In my school more than 70 percent girls participate regularly and they are responsive. They wait for the lessons to be uploaded and also seek clarifications; but in case of boys we have to follow up and request them to see the lessons!* (Head Teacher, Jaipur city).

Some of the girls in our school are from economically better off households; they have access to android phones and can view the lessons. They have been taking notes and calling up the teachers for clarifications (Teacher, Ganganagar).

However, in rural areas access to a mobile phone is curtailed for girls, as parents are not willing to hand over their mobile phones for long duration. The parents fear that they may be exposed to wrong information on the internet or talk to friends.

In my school, out of 57 girls - only 10-15 girls can access SMILE on phone. The girls are not given mobile phones. During COVID- 19 the burden of domestic work has increased for girls, there is no time to look at lessons on the phone (Girl Student, Class XII, Dausa).

Teacher and Parental Support

As mentioned earlier, the teachers are expected to contact parents/students and take a feedback on daily lessons. Every teacher has to call five students. The students can also contact teachers in case they need clarifications. One of the problems faced by teachers was that not all subjects are covered in SMILE. Sourcing material for subjects like Sanskrit and Commerce is difficult. The teachers were developing their own lessons in video format and forwarding them to children.

The first thing we did was to download all the books and syllabus. We have shared this with the children. Each child now has access to the books and syllabus (Head Teacher, Jaipur city)

In our school a timetable has been drawn up; every day content pertaining to a certain subject is uploaded for all classes. For instance on Thursday, content pertaining to Science subjects is uploaded for all classes and I follow up with the students (Teacher, Jaipur city).

There is a variation in support of teachers in rural schools. According to students, the follow up by teachers was irregular and they also did not reach out to the students.

Given the background of children enrolled in government schools, there is little parental support to navigate digital learning. Most parents have low levels of education and are not able to support children's learning at home.

Monitoring and Feedback Mechanisms

The monitoring of the programme is carried out at multiple levels. In rural areas the PEEO and the FTB (Nodal)in the urban areas are responsible for monitoring the implementation of the programme. As mentioned earlier, one teacher In-charge (*Prabhari*) has also been designated to coordinate all activities pertaining to SMILE programme.

At the school level, teachers are contacting students daily and taking a feedback over phone. Two sets of Google forms – one for recording call details and the other for eliciting teacher suggestions on e-content are to be completed and uploaded by teachers.

The initial order issued by the Rajasthan State Council for Education suggests that the CBEO will prepare the tracker Google sheet which will be the basis for monitoring the programme. The information collected by the PEEO/FTB is submitted to the CBEO at the block level. The CBEO consolidates the information at the block level and further sends it to the CDEO. The information from all the blocks is further consolidated at the district level and sent to the state.

At the State level there is close monitoring of daily number of calls made by teachers and performance of districts in reaching out to children as per the status reports collected from districts.

It was also pointed out that the status of teacher feedback is uneven across districts. The students in urban areas pointed out that feedback is taken regularly by teachers. But in the rural schools there was a gap.

There was a suggestion that the feedback calls be made weekly as parents were getting irritated with daily phone calls. In a few districts, the teachers have also asked the parents to take photographs of children studying and share them in the group.

Challenges

The teachers talked of a range of challenges in the transition to digital learning. They felt that students, parents and teachers were not prepared for this pedagogical shift. While the use of digital technology is beneficial, and the students stand to gain by it, proper preparation is necessary. It is also essential to understand the academic consequences of these initiatives.[ii]

It is evident that a large number of students are being left out and have not been able to access the programme due to various reasons, i.e., non-availability of smartphones, internet connectivity and bandwidth and lack academic support at home. All these should have been considered by the government before launching the programme.The online classes cannot be compared to offline classroom situations and cannot be substituted. In the current situation there is a gap in learning. The content and design of learning materials has to be suitable for diverse sets of learners. The teachers also felt that in the absence of textbooks students are not able to undertake self-study; the academic support from parents is also negligible.

The challenges as articulated by the students include

- Online learning is an unfamiliar terrain; It is difficult for students to shift to this pedagogy without support;
- Phone is available only in the evening and if there are siblings each one gets a very limited time slot to view the content.
- The teachers are just taking pictures of the chapter from text book and uploading them
- The videos use up lot of data and internet recharge is an issue.
- The lessons are not easy to comprehend and there is no support at home
- Access to mobile phones is limited for girls in the rural areas

The responses of teachers, students and parents clearly point out that experience of digital learning is fraught with problems and is not the same across the districts. The push for digital

learning in government schools has made the digital divide prominent and large number of students in these schools are being excluded due to several reasons. The need for educational planning to be context specific, gender-responsive and inclusive cannot be overstated here.

Section IV

In Conclusion

The experience of digital learning discussed in preceding sections illustrates that the reach of SMILE programme is not universal, and many students have been left out as they do not have access to digital resources. The gaps are further accentuated in rural areas of the state.

First and foremost, the assumption that online learning can be introduced by a government order from above and a highly heterogeneous population of students, parents and teachers, under conditions of stress and scarcity should comply and adapt to a new pattern of engagement without necessary support and preparation is problematic.

If the desired outcome of the online learning initiative was to provide continuity in learning; mere provisioning and delivery of content/lessons through WhatsApp, cannot be equated with either academic engagement or quality learning. Student's experiences indicate that navigating online content itself is not easy given the various constraints faced by them.

The lack of preparedness of teachers for negotiating an alternative pedagogy has translated into merely forwarding the e-content to the students. The teacher student engagement is conspicuous by its absence. The teachers respond only if a student reaches out to them. The teachers also have a burden of submitting a daily status report of children contacted. This then is a measure for assessing the performance of the programme in districts. It also raises issues of data generated regarding the outreach of the programme.

In a state where educational challenges abound, it is imperative that there is a judicious mix of strategies for meeting learning needs of children. Given the socio-economic background of students enrolled in government schools, it is essential to address the social, economic and structural barriers faced by students in accessing any new resource. The feeling of deprivation among the have-not groups of students can also have long term impact on their health and education. It is also evident that many of the students may not return to schools given the pandemic and be forced to drop out of the educational stream. Educational planners and managers will need to address these concerns and works towards building more inclusive, efficient and resilient education systems in the long term.

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[i] Shobhita Rajagopal is Associate Professor , IDS, Jaipur and Mukta Gupta is a freelance researcher on education Jaipur. The authors would like to acknowledge the support provided by Somotilal, Sunil Shekhar, Usha and Bhanwar in facilitating teacher and student interactions in different districts.

[ii] Also See Kidwai. A and Atul Sood (2020)' Digital (in)Justice Winter Semester of JNUs Teachers discontent' for an analysis on digital learning at the higher education/University level.