



School Closures: Facing Challenges of Learning Loss in India

Chandra B P Singh 

Department of Psychology, Tilka Manjhi Bhagalpur University, Bhagalpur, Bihar – 812007, India

chandrapsingh@gmail.com

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ABSTRACT

Background: Learning losses does not mean forgetting only curricular learning but slipping back of fundamental learning abilities that learner would have acquired during schooling. School closures in India have severely disrupted learning processes of children resulting in learning losses and social gaps in academic outcomes. Though school closure is a global phenomenon, its adverse effects on learning outcomes are unevenly distributed in the society.

Purpose: The paper aims to trace the phenomenon of learning losses resulting from a prolonged school closures during COVID 19 pandemic at the national level since march 2020. The study further is directed to trace accessibilities and uses of digital resources in India.

Method: The study used secondary sources of data mainly of Bihar to ascertain the trend of learning losses. The data were regenerated to measure the emerging trend.

Results: Learning loss was unevenly distributed in the society. Those who were digitally equipped had compensated their learning losses during school closures. The Bihar had mere 5 per cent computer and 15 internet facilities. The rural households had only 3 per cent computer and 13 per cent internet facilities. Primary grade children especially of disadvantaged groups in Bihar suffered more because they have very limited home learning resources. Learning crisis was more prominent at elementary school level where both the home resources and digital tools were inadequate. They spent hours in surfing social media for private purposes. The phenomenon of cyber loafing was widely seen among young students, showing a serious problem of internet abuse by secondary school students.

Conclusion: Despite constraints Bihar managed to continue school learning programme during COVID 19. It had a largest force of digitally-equipped teachers (about 1.25 lakh) known as Potential Learning Community (PLC) who were ready to deliver e-contents to beneficiaries. Teachers established connectivity with parents and learners who had no android mobile. They started running Schools on Mobile (SOM) classes. The paper discusses learning recovery plan such as engaging community, reallocating resources for schools, etc.



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1. Introduction

The paper is designed to address the issue of learning loss and its recovery plan. Another purpose of the study is to capture the availability of digital resources in India with a particular context of Bihar. Almost all state governments are seriously planning to reopen schools and other educational institutions for recovering learning losses that slipped back during COVID 19. Senior secondary and universities in Bihar for instance, with certain guidelines have been reopened since 12th July 2021. What about primary and elementary schools? All state governments are busy preparing a roadmap that would protect children enrolled either in public or private schools. This is not an easy task to ensure both the health and learning of children under the perceptual threat of third wave of COVID

19. Learning crisis is more prominent at elementary school level where both the home resources and digital tools are inadequate and children have minimal access to computer and internet facilities. School closures in India during COVID 19 pandemic since March 2020 have severely disrupted learning processes of children resulting in learning losses and social gaps in academic outcomes. Though school closure is a global phenomenon, its adverse effects on learning outcomes are unevenly distributed in the society. When quality education in many states is already at the lowest level (NITI Aayog, 2020-21), the discontinuity in schooling is bound to accumulate a huge learning loss. Once a child is out of school, she gets stuck at home all day and gradually moves away from curricular learning. Schools keep them on learning track and monitor their

learning activities. Primary grade children especially of disadvantaged groups, suffer more because they have very limited home learning resources. At the same time elementary grade children have limited access to digital learning. Private schools with a support of some educational apps and online teaching manage to minimize learning losses as they claim. But it is a piece meal effort, not a comprehensive strategy to neutralise learning losses. Instructional teaching time distributed among students across grade tends to be more beneficial for those who come from poor families and thereby, helps reduce gaps in school learning achievement. These students have hardly any option other than instructional teaching in school for learning. When schools are closed for a longer period the privileged students spend more time on online learning and compensate learning loss as compared to the disadvantaged children. They can afford digital tools and use many other resources for learning. It is widely observed that they show interest in digital resources and misuse internet facility. Under the circumstances more learning loss can be expected. Bihar for instance, boosts of introducing online classes early as compared to other states, preparing e-learning contents for all classes and of using the allotted slots of Doordarshan across grades. The fact is that digital resources facilitate online learning but cannot substitute the classroom learning. Before designing any intervention for learning recovery it is worth to consider some factors that revolve around family resources and parental awareness of the prevailing crisis.

1.1. Estimating Learning Loss

It is worth to mention two reports-“Lancet COVID 19 Commission, Indian Task force” (April, 2021) and “Loss of Learning during Pandemic” (Azim Premji Foundation, February 2021) for estimating learning losses in India. Remarkably, no any specific study on either learning losses or learning gains has been designed at the national level. A study on learning loss after summer break was conducted on children of grade III and V in Uttar Pradesh (Banerji, 2020). The study noted a significant learning loss of 7 percentage points in some basic abilities during summer break across grades. A similar study was noted in Netherland (Blasko, da Costa & Schnef, 2021). Some basic abilities such as reading, writing, addition, subtraction, etc. need to be rehearsed for

good performance which children missed to do it during summer vacation. A crude estimation by UNICEF is that about 7.5 million children in Bihar have experienced learning losses till March 21. Of them about 3 per cent are not expected to come back to school. National Sample Survey (2017-18) captures a trend of computer and internet facilities available in India. About 15 per cent rural families had internet facilities as compared to 42 per cent urban families. By the same token, about 4 per cent rural and 23 per cent urban families had computer facilities. Another breakup made it clear that about 25 per cent male and 16 per cent female (having 15-29 years old) had knowledge of computer. The survey further indicated that only 6 per cent male and 4 per cent female from rural area whereas, about 21 per cent male and 18 per cent female from urban area (having 5-14 years old) had knowledge of internet handling. National Family Health Survey-5 (2019-20) reveals that percentage of women who have ever used internet in urban and rural areas was 38 and 17 respectively. Similarly, percentage of men using internet in urban and rural societies was 58 and 38 respectively. Though the figure of internet facilities and its uses have been progressed during the last three years, the data do not substantiate area wise and gender wise break up where these facilities are being used.

2. Methodology

The study used secondary sources of data-The national Family health Survey (2019-20), The National Sample Survey (2017-18) and a few recent reports- Lancet COVID 19 (2021) and Azim Premji Foundation Report (2021) for regenerating the relevant data for analysis. Besides the reports on learning losses (UNICEF, 2020) and ASER (Banerjee, 2020) were extensively reviewed. Relevant information was extracted for analysis. No primary additional tool was used for data collection. This study's major focus is on tracing the phenomenon of learning losses owing to the prolonged school closures during the COVID 19 pandemic since March 2020. The procedural steps follow as: first of all, Bihar state of India is selected for analysis of the secondary sources of data. The reason for choosing Bihar is to ascertain the trend of learning losses as this study is directed to trace the accessibilities

and uses of digital resources in India. Further, the secondary source data is sorted while projecting the aspects such as: online learning, home resources, parental background, learning recovery plan, and stakes in reopening of the schools.

3. Results

3.1. Digital Resources

How much time do students spend on various digital platforms of education and how long do they stay there for learning? It is still a grey area of research. It is believed that a small segment of school goers have used digital resources for learning during pandemic. National Sample Survey (75th round) for instance, presents meagre availability of digital resources in Bihar. The state had mere 5 per cent computer and 15 internet facilities. The rural households had only 3 per cent computer and 13 per cent internet facilities. On the contrary, the urban households had 20 per cent computer and 39 per cent internet facilities. 9 per cent male and 4 per cent female of rural societies and about 28 male and 18 per cent female of urban societies had knowledge of computer handling. By the same token, about 14 per cent male and 6 per cent female from rural and about 35 per cent male and 21 per cent female from urban societies were using internet facilities. The dismal scenario of computer as well as internet facilities in Bihar creates a doubt over benefits of online learning. The survey does not reflect misuse of internet facilities. A speculation on misuse of internet or smart phones needs a data-based support in India. It is right now, difficult to estimate how many school students have attended online classes and how much benefits have they taken from it during school closures? Surprisingly, more than 90 per cent households have access to mobile phone in India. The survey discloses that about 93 per cent households in Bihar have access to mobile phone. A vast majority of children in India are still reluctant to attend online classes; though they use smart phones. They spend hours in surfing social media for private purposes. The phenomenon of cyberloafing is widely seen among young students, showing a serious problem of internet addiction or internet abuse by secondary school students. India lacks data on uses and misuses of internet by school students. Banerji (2020) points out some missing linkages to learning losses during pandemic:

1. India lacks a comprehensive data on “learning loss” and “learning gain” that would help guide the educational planning.
2. It is still not clear what kind of learning loss has occurred during pandemic?
3. India lacks data on grade wise learning loss that would be used for formulating “catch up” intervention.

A prolonged absence of curricular learning in the classroom has not only alienated students from schools but has resulted in the phenomenon of disappearance of basic abilities (e.g., reading, writing and performing addition and multiplication) which are essential for further learning.

4. Online Learning

The education sector has focussed mainly on online learning and digital resources to minimize the volume of learning losses. Access to learning means access to the internet and digital platform of learning. Sudevan (2020) has quoted a report of “The World Economic Forum” on a sudden boom of digital learning platforms. At the global level schools have started using language apps, virtual tutoring, video conferencing tools and online learning software for their students. This is known as paradigm shift in school education. India cannot be exception one. An upsurge of digital platforms such as Facebook, Twitter, Whats app and Skype and digital tools has modified the design of classroom transaction. Of late students prefer more interactive classes to cater to their needs. Sudevan (2020) has cited many examples of many functional digital platforms in India. Schools are utilizing a free web service of Google classroom for creating and distributing lessons and grade assignments. Another service known as TED-ED’s Earth School has collaboration with the United Nations Environment Programme on planet discovery. About viruses and outbreaks ‘Discovery Education’ delivers free educational resources across grades. Khan Academy has, for instance, offers free lessons and tests in maths, science and humanities for various grades. For Hindi medium government schools for class IX-XII students Avanti, a social-education enterprise has launched a free learning app. In Odisha Think Zone, a start up is employing an Interactive Voice Response (IVR), Short Message Service (SMS) and Radio to help those who have no internet service. Many European countries have introduced learning solutions to the world, supporting teachers and learners during the school closures.

A recent study on 5 states (Azim Premji University, 2021) disclosed that 92 per cent children in language and 82 per cent in mathematics lost foundational ability as compared to the previous year. In a country like India, with already low learning levels, these losses can be devastating and can take more time to recover. This loss of learning was not limited to curricular learning that learners would have acquired during schools' working days. It was more than curricular learning including the abilities that learners had lost due to lack of practice. The study noted a sharp deterioration in the ability to read with understanding. Students lost the ability to write correctly. Similar deterioration was recorded in the ability to perform basic mathematical operations like addition and multiplication. Without engagement with the curriculum of class 2 a child studying in class 1 in March 2020 will be promoted to class 3 in 2021. Hardly any evidence of benefits of the sporadic online or community-based engagements has been recorded. ASER (2020) pointed out severe learning losses in disadvantaged children. This increasing inequality is a result not just of unequal access to learning materials but also the quality of materials being accessed by different groups. The report also suggested that hardly 5 per cent children having low parental education attended online classes as opposed to 20 per cent children from high parental education background. Many countries where learners had no access to internet and computer facilities opted for radio and television lessons, 55 per cent households of low income groups in West Africa relied on radio and television lessons. However, 93 per cent families of upper-middle-income opted for online learning platforms. It is yet to verify how many students are using such digital platforms of learning. A few western studies do not substantiate ground realities of India. A few points need to consider:

- I. To identify children who were deprived of basic home resources for continuing learning from their home during school closures. This data may be regenerated with the help of UDISE.
- II. To investigate how important these home resources were for learning during pandemic. Home resources and parental background play a crucial role in continuing learning processes of children.
- III. Data on family resources and parental education background will help catch the missing linkages of learning loss and learning gains.

5. Home Resources and Parental Background

Home resources are much discussed but less understood phenomenon. It may influence inequalities in learning progress irrespective of types of schools. A study in Netherland showed that students had a learning loss of about 3 percentage points during the two months of online classes (Blasko, da Costa and Schnef, 2021). The study witnessed very limited learning gains of online teaching. Students having less educated parents had more learning losses because their learning did not get any support from the family. Parents support in some cases, emerged as crucial factor, influencing learning loss irrespective of parents' education. Short-term school closures minimised volume of learning losses as parents continued supporting their children. Children are expected not only to use available home resources for learning but also to be able to follow online instructional learning.

Home resources under congenial home climate such as availability of books, parental time investment, arranging home tutor and promoting some other activities to support learning are believed to have significant influence on learning gains. Less educated parents with sufficient home resources supported their children for learning during school closures (Blasko, da Costa & Schnef, 2021). The study also noted that less educated parents provided digital tools for their children; though they did not know how to handle it. Only difference between less educated and more educated families was a place in the room for the study. Children of the educated families used a separate room for the study and online classes. Children of the educated families, on the other hand, had a room with internet facility for the study. It was difficult to say whether the internet facility was really being used for academic purpose. A few behavioural observations made it obvious that children attended online classes under parents' supervision irrespective of education background. Parents having lower income from disadvantaged groups spent less time with their children and were found indifferent to them (Blasko, da Costa & Schnef, 2021). Not all schools faced the immense challenges of online teaching. They suspended their all activities including online teaching during pandemic. This was more prominent in the government schools. They were completely dependent on the education department for distance teaching programme. In the West, teachers working in private or public schools

had access to ICT. They frequently uploaded learning materials and kept monitoring their progress through various ways (Blasko, da Costa & Schnef, 2021).

6. Learning Recovery Plan

In a State like Bihar, with already low learning levels, these losses matter and can take a long time to regain it, especially in the early years of schooling. If immediate steps are not taken to ensure a “remedial” period where children can catch-up on the learning that has been lost, they may continue faltering behind as the schools reopen. This faltering will be more pronounced among those who come from the disadvantaged groups, thus further widening existing inequalities. A few suggestions are recommended for recovering learning when schools reopen:

6.1. Engaging Community

People evaluate potential threat more seriously and manifest their intention to respond to the situation. Potential threat to health does not allow taking absolute risk. How to engage community members in reopening school programme is a major issue to any state government. For instance, the state government of Bihar is seriously thinking of reopening schools right from primary to secondary with certain guidelines since August 12, 2021. This will be a unilateral decision of the state government. To ensure attendance of learners is contingent upon parents’ perceptual threat to health of children. How to recover learning loss revolves around the education providers. School-based management committees and other parent organizations may be taken into confidence to run the classes without fear.

6.2. Reallocation Resources

Resources available for school education will require additional expenditure for ensuring child health. Sanitizations at regular interval, seating arrangement, mask wearing and some other measures may be incorporated in the education plan to neutralize the crisis.

6.3. Back to School

Education providers have yet to evolve a concrete plan of reenrolment of students. They need to ensure health safety who will return to schools after pandemic. A good number of children may be at greater risk of infection during this current pandemic. By the same

token, many families may hesitate in sending their children back to school. This becomes more prominent when a family has been victim of COVID 19 and has lost any member. When people perceive severity and vulnerability of infectious disease at the cognitive level they become more defensive for neutralizing health risk. Their defensive behaviour may slow down the process of back to school programme.

7. Stakes in Reopening Schools

7.1. Vaccinate school teachers and assisting staff on a priority basis

This plan has not been formulated to vaccinate school teachers and assisting staff on a priority basis. Vaccination hesitancy still prevails in the mind of many people. Even vaccination drive is not aggressive in many states. Availability of doses is also a crucial factor that may delay school reopening programme. The most important factor is non-availability of vaccination for children.

7.2. Build in back capacity to cope with COVID 19 cases among the teaching and administrative staff

The State government has yet to evolve a programme exclusively for teachers and staff to participate in school reopening drive.

7.3. Adhere to Government SOPs

Though teachers, staff, parents and students are aware of the SOPs, they do not strictly follow it. This may push them into risk zone. Pandemic fatigue probably encourages them to suspend the restricted behaviour in public places. They keep their double faces in public places.

7.4. Keep classrooms, buses and other indoor spaces well ventilated

Well-ventilated spaces are critical to minimize the risk of COVID 19. Schools are expected to ensure that all classrooms, other indoors spaces are ventilated.

7.5. Limit indoor group activities and encourage outdoor group activities

It will be a good exercise to encourage outdoor activities. Even teaching can be tagged with outer activities.

Bringing back children to schools and restarting their offline learning processes without further losing

school days are two major challenges to education providers. Both issues demand a comprehensive plan and additional efforts to compensate learning loss and move further for curricular learning. At the same time it has to ensure that no child will suffer from any variant of COVID 19. Vaccination for child in India is still under trial and is difficult to say about time. During this vacuum schools must ensure the health of each child and protect them from pandemic. Education planners till now, do not have any full proof plan for either reopening elementary schools or compensating learning losses. Whatever measures have been initiated during the pandemic to ensure distance learning was limited to a small segment of student population. Not all school goers could take advantages of digital platforms. There may be several explanations of it but one thing is obvious that the pandemic has changed the design of school education at the global level. Though school closure is a global phenomenon, its adverse effects on learning outcomes are unevenly distributed in the society.

Conclusion

It is a pertinent issue whether beneficiaries (students) have access to the digital tools. Digital resources get no meaning unless beneficiaries use it for learning. Previous survey reports conducted in India capture the ground realities of availability and usage of the digital technology by beneficiaries. The rapid assessment of learning by UNICEF (2021) indicated that 97 per cent students across grades spent 3-4 hours on studying and learning. Despite constraints Bihar managed to continue school learning programme during COVID 19. It had a largest force of digitally-equipped teachers (about 1.25lakh) known as Potential Learning Community (PLC) who were ready to deliver e-contents to beneficiaries. Teachers established connectivity with parents and learners who had no android mobile. They started running Schools on Mobile (SOM) classes. Many catch-up classes were running on mobile. Teachers of Bihar had major contribution to innovation in school education. They not only developed websites but innovated e-LOTS (Library of Teachers and Students), e-magazines and many e-contents for learners. For 9-10th grade they designed many e-contents under UNNAYAN programme. They designed mobile and app- based

learning e-materials where no internet facilities were available (38-60 per cent). They had sufficient study materials under State Teacher Resource Repository (STRR). Many teachers had their own websites for their schools. It was also necessary to evaluate whether teachers had used e-contents during school closures for online teaching. Results showed that more than 50 per cent teachers used e-contents for online teaching. About 26 per cent of them in middle schools and 18 per cent in secondary/Hr. secondary schools were using it during offline teaching. Another part of the study was to ascertain whether they curated the available e-materials and disseminated it among the group. The study noted a discouraging trend. A few teachers (not more than 7 per cent) organised it before delivery or uploading on any social media. By the same token, a few teachers found it necessary to disseminate it through either portal or social media (7 per cent). The results showed that students were more comfortable with mobile (44-58 per cent). In secondary schools they not only used e-contents but shared it with others.

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Conflict of Interest

No conflict of interest with BEPC, Patna

Declaration

It is an original data and has neither been sent elsewhere nor published anywhere.

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