

Barriers to Education in COVID-19 Pandemic: From the Lens of Government Schools' Students

Kanika

Abstract

COVID-19 pandemic led to the closure of schools due to lockdown in India. Under these circumstances, students were provided education online. This paper presents the barriers faced by the senior secondary students in online education in this pandemic. Telephonic interviews of three government school students were taken to explore their learning experiences of online education. Then, based on emerging themes from the interviews, a questionnaire was designed and administered to know their learning experiences of online education vis-à-vis digital devices, network connectivity, data availability, study environment, class attendance, live and recorded online classes, online assignments and study material. The sample size was 118 students out of which 84 were from humanities and 34 from the commerce stream. It became apparent from data analysis that lack of a personal device, poor network and no internet data affected their education. In the absence of a personal study room, their families cooperated in providing them a nice study environment. In learning, they missed out on spontaneous interaction with the teacher and classmates. Interaction time between teachers and students also dropped down. Low face to face interaction was a shortcoming too. They faced technical problems. The paper concludes with suggestions for the provision of a personal device, sufficient internet data availability and better network as the basic need to improve online education. Teaching-learning activities can be more interactive. Assignments can be more innovative and original. Amidst all this, the value of school-based education remains intact as it provides an educational environment that is much wider than mere teaching-learning transactions in online education.

Introduction

Extensive use of technology in education is mentioned as one of the fundamental principles in the National Education Policy 2020. Technology is suggested to be used for translation, teaching-learning different languages, popularize language learning, inclusion of differently-abled students, orientation of parents for home-based education, dissemination of learning material, study at their own pace, better learning experiences, better participation and learning outcomes, adult learning, educational processes, enhancement of learning, assessment, planning and administration, building education platforms and so on. This technology became the prominent mode of education during the COVID-19 pandemic. As the situation unfolded, the activities brought forward challenges faced in online education.

Kanika, Ph.D. Scholar, Department of Education, University of Delhi, India

Research Objectives

1. To explore the barriers faced by senior secondary government school students in online education especially English as a second language.
2. To analyse their experience of online education.

Delimitation

This study is delimited to students of a government school.

Research Approach

This is a mixed methodology study in nature. This type of study is useful when both qualitative and quantitative data and analysis methods are required for conclusion.

Tools

Firstly, in-depth interviews of three senior secondary government school students were taken. The respondents were asked a few closed ended and some open-ended questions to explore their experiences of online education vis-à-vis digital devices, network connectivity, data availability, study environment, class attendance, live and recorded online classes, online assignments and study material. Then, based on emerging themes from the interviews data, a questionnaire was designed and administered. 118 senior secondary students responded to it.

Sampling Technique and Sample Size

The sampling done for interview and questionnaire was purposive. Only three female students who are pursuing senior secondary education were interviewed to share their experiences who agreed to do so. They belong to the age group of sixteen to seventeen. Two of them belong to the humanities stream and one of them is from the commerce stream. The questionnaire was responded to by 118 students out of which 84 were from humanities and 34 from the commerce stream. All of them study English as a second language.

Data Collection Procedure

Telephonic interviews of these students were taken after school hours to collect data. Google Form was used to administer the questionnaire.

Translated Interviews of Three Senior Secondary Students

Student 1

She had a family smartphone. It was shared for study purpose with her brother who was also in XII class like her. Both of them attended classes on the same phone. If she had a personal phone, she would be able to attend all the classes and do all the assignments. Both of them had online classes at the same time. So, she was not able to attend all the classes. She missed a lot of classes due to this sole reason. Otherwise, her

overall experience of all classes was good. Internet connectivity was also good. One day, she was not able to attend her physical education class because her mobile data pack was over for which they paid Rs. 200/- per month. Since the class was on a YouTube channel, she was able to watch the recorded video later on but if she missed a live class such as on Google Meet, she was not able to do so. In later case, she got to know the topic taught in that class through her friends and then she read the concerned chapter from the textbook. She did not attend any tuition classes except for the subjects-accountancy and economics. She did self-study and got general guidance from her parents. She guided her younger brother, who studied in class X, in his studies. Between self-study and studying under the guidance of the teacher, she did notice some differences such as lack of immediate discussion of a problem or topic. She studied in a family room but the environment was peaceful enough to study.

She was able to comprehend the content of the classes on the YouTube channel. She did assignments given in classes over there. Since they discussed how to do those assignments, she was able to do those without any problem. She was able to read the presentation such as content in slides in the live classes on Google Meet. Sometimes, when she faced sound problem in these classes, she communicated orally or in writing in the chat box to her teacher. She was able to read the text-based recorded videos on Google Meet and found the sound clear enough to hear properly. A difference that she found between YouTube and Google Meet classes was that there was no option to clear their doubts in the former as compared to the latter option. The main difference between face-to-face classes in school and on Google Meet was the time limit of 40 minutes per period. They were not able to do much discussion due to the time limit. She found more time to discuss her problems in school time. Since students were not asked to turn on their videos during the live classes for their safety and to save collective data, this lack of face to face interaction felt awkward. Being able to see their teachers and classmates in the classroom and being around them turned the classes interesting. She was able to understand the study material since she had read all the chapters in English coursebooks before they were undertaken in the online classes. She read it right after her exams and just when the lockdown started. She had noted down points from it. She did not face any problem in doing chapter reading-based assignments since she had already read those chapters. She faced some problems in grammar. She attributed it to missing out on her classes. But there was no problem in reading, writing and listening assignments because she had attended those classes. She had joined Google Classroom. She had read eBook Flamingo and found it decent. Since the chapters were in English, she read the chapter in translation in Hindi. Lack of availability of personal phone or family phone during classes was the reason for missing classes. Classes in school are a better option because during online classes, all the communication was done on phone and not everyone was having a personal phone. So, all were not able to attend all of their classes. But some students had a personal phone and still did not attend classes or got themselves busy in some other tasks instead of paying attention to the topic studied in the online class. This was a misuse of resources.

Student 2

She found a lot of issues in online classes. Sometimes, she was not able to attend them due to class timings. Her four sisters also had classes around the same time. So, the time schedule was an issue. Sometimes, she had poor network. But she attended classes as much as possible. She found online classes quite good. She was able to understand the content. But classes in school had better face to face in person

interaction such as she felt during learning notice writing. One could not know that well on Google Meet about activities of others if camera is off. She was not able to concentrate that well in online classes because her sisters attended their classes at the same time in the same room which was distracting for her. Her three sisters who were in class 7th, 9th, 11th and she was in class 12th. They read the textbook to overcome this problem. They had a room which was shared by all the sisters for study purpose. They attended classes on two shared smartphones. When their father left for work, they fell short of a device. They had a Wi-Fi connection but poor network was an issue due to which they were sometimes disconnected from the classes. As a result, they had to join the same class twice. Sometimes, due to network issues, she had to move to the balcony to attend classes even during the summer season. Sometimes, the network was not available for hours or the entire day. Even when the hotspot of some other network-based device was used, the speed slowed down affecting their class attendance. If she missed her class, she would watch other videos on YouTube channels and then discussed it like a story during bedtime which would help her retain the content of a chapter. She attended all the classes on the YouTube channel. She found English classes such as one on advertisement on Education Directorate's YouTube channel more interesting in comparison to other subjects because they were more interactive. The teachers over there taught very well. She submitted some assignments and could not submit some due to time or other issues. She attempted those on Sundays after going herself through the content. They were also a few questions in one of the reading-based assignment which she was not able to understand due to the lack of clarity in the diagram.

She had problem reading onscreen during the presentations on Google Meet but she had kept her textbook ready and read from it during the class. Sometimes, there were sound issues such as voice echo. At other times, the shared screen was not visible. She missed the classes in school because in face to face in person interaction, they could clarify doubts instantly right there but in online classes, they noted down their doubts and clarified them towards the end. As a result, some points were missed. Though online classes were supportive, face to face in person interaction was better. Once, a teacher asked them to switch on cameras for a while or asked questions during the classes to check on students' attentiveness when the camera was off. Very few students answered the questions and some even left the meeting when their name was taken. This action was not appreciated by the teacher. She was able to understand the assignments but could not understand a few questions. The demonstration of controlled writing activities helped her in understanding how to write advertisements. While doing writing assignments, if the network went away all of a sudden, they had to restart it. Online writing assignments were time taking. Copy-paste could not be done more than once. Small screen affected their reading. If the study material screen was shared during the presentation, they read it from their hardcopy but for other material, they had to zoom in. She read from the textbook instead of an eBook. They had a problem in uploading assignments in Google classroom. First, they took screenshots and then made a file to upload it. They had a lot of material in the phone which was difficult to manage while uploading assignments. They also had issues due to the quantity of material shared by different subject teachers of all sisters and limited phone storage. So, they deleted it alongside from their shared device. Also, they had to charge battery of their phone throughout the night to be able to use it during the day. To improve these classes, they can be given a time in which all are available to address their questions just like in offline classes where attention is paid to individual students. They can be provided a laptop or desktop to read easily from a distance and to type their answers comfortably in real time such as in Google Forms instead of copy-pasting them.

Student 3

She had a smartphone at home which belongs to her father but she was not having a personal one. She did not have a laptop or desktop. The phone was used for study purpose both by her and her brother who studied in 8th standard. They were able to attend their respective classes since she had her classes from morning till noon whereas her brother had his classes from the afternoon. So, she faced no problem in attending her classes. But since the school had reopened, her brother had his classes in the morning. So, she faced problem in attending online classes on non-school days because of the same timings. Her father had given his phone to them and used their mother's phone when he went out for work. They used mobile data for internet connectivity for which they bought a three-month plan. They had not faced any situation when they had to miss class due to no data. If at all, she has missed any class it was due to other reasons such as her mother being unwell. Whenever she missed her class, she asked her friends about what was taught in the class who described it briefly. She was not able to understand that topic. So, she planned to discuss it with the concerned teacher when she had a face-to-face interaction with them in the school. She was able to attend her online classes even when she was in some other state. She did not face any other problem in attending classes. Where she studied in the common room, her father had instructed his family to not disturb them when they were studying there.

She had attended and had liked all live YouTube classes. She did all the assignments. She also attended the live classes on Google Meet. When she was not able to read the content of the presentation onscreen, she would zoom in to see clearly. She faced sound problem in a few classes such as voice breaking. She did not face any technical problem in watching the video. She found everything well in online classes and found it better than face to face classes in the school. She did not feel any problem in not being able to see the face of friends in online classes. She talked to them over phone and met them in her place. She found it wise enough to not attend school since the students might touch one-another. She was able to understand the study material. But found it a bit difficult to understand the listening activity. Other reading and writing assignments were comprehensible. She reads from the textbook and had also used eBooks which she found decent. She found it difficult to submit work in Google Classroom.

Findings

Based on emerging themes from interviews' data, a questionnaire was designed and administered to which 118 students responded. The findings are as follows: -

- 89.8% used smartphone and 5.08 % used tablet/laptop/desktop for online education. 5.08% had no device.
- 77.9% did not have their device available all the time for study.
- The reason for the device not available all the time was family (54.2%) and siblings (35.5%).
- When they missed out on online English class, it was because device was not available (44.06%), no data (23.7%), no network (24.5%), being unwell (9.3%), family problems (16.1%), attending tuition class (7.6%), live class (3.3%), siblings' class (36.4%).
- When they missed out on live English classes, they studied the matter by themselves (53.3%), with siblings (12.7%), in tuition classes (16.9%), on YouTube (45.7%) and 5.08% did not study.

- The technical problems faced by the students in online education were voice breaking in live class (56.7%), reading on a small screen (32.2%), unreadable text in presentation (8.4%), low storage space (43.2%), fast battery drainage (23.7%) and no physical keyboard (3.3%).
- The problems faced in online English classes were low interaction (32.2%), low individual attention (25.4%), no face to face interaction (53.3%), less time (24.5%) and low feedback (11.8%).
- They studied in online education in their family room (75.4%), personal room (6.7%), balcony (8.4%) and terrace (8.4%). The study environment there was peaceful (10.1%), okay (63.5%) and noisy (23.2%).
- 72% learnt somewhat, 20.3% learnt very well and 7.6% did not learn the topics taught in live English classes on Google Meet.
- 69.49% learnt somewhat, 22% learnt very well and 8.4% did not learn the topics taught in English classes on YouTube.
- 71.1% understood somewhat, 22% understood very well, 5% did not understand, 1.6% did not read the study material.
- 72% understood somewhat, 20.3% understood very well, 4.2% did not understand, 3.3% did not do the online assignments.
- 40.6% found Google Classroom somewhat useful, 43.2% found it very useful, 6.7% did not find it useful, 9.3% did not use it.
- 43.2% found 'Flamingo' and 'Vista' eBooks somewhat useful, 44.9% found them very useful, 9.3% did not find them useful, 2.5% did not use them.
- They should have a personal device (54.2%), free data (50.8%), better network (51.6%), more interaction (36.4%), individual attention (34.7%), more time (42.3%), peaceful study space (55%) to improve online education.

Conclusion

The need for elimination of digital divide through the availability of affordable computing devices and data is required in online education. In addition to digital infrastructure, appropriate pedagogy, training and development, content creation, assessment and apps or software for online education is also a requirement. Still, face to face in person education is essential.

Reference

Government of India. (2020). National Education Policy 2020. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf