

Perceptions and Experiences of Learners about Online Learning in the Secondary Schools

VANDANA SINGH*

Abstract

Pandemic has successfully forced global shutdown of several activities, including educational activities. As a response to the crisis of continuing learning, almost all the educational institutions have opted for online education. Remote learning, home learning, online learning are the alternative learning methods for classroom learning.

This study was conducted to find out the perception of learners towards online education and it also tried to explore various attributes of online classes such as presentation of academic content, resolving a queries challenges, etc. It also took into account the issues related to the availability of devices and internet connection, which are helpful in designing an effective online environment. The findings of the study indicated that most of the learners have a positive perception about online learning to continue their studies. The students however, felt the need of providing flexibility in the time schedule of the classes. They also believed that online learning is stressful both physically and mentally as it affects the health and their social life.

It is argued in the paper that online learning must be cautiously designed keeping in mind the pedagogical considerations, while instructional activities have to become hybrid. In order to adjust with this new normal, educational systems have to adopt blended learning in a much rigorous way. The lessons which are learnt now in the form of challenges have to be optimally converted into opportunities.

*Professor, School of Education, IGNOU

BACKGROUND

With the sudden outbreak of pandemic, a lot of changes have been brought in the society. Schools, where learning spaces and learning environments are designed to provide meaningful learning experiences, which helped in improving both cognitive and social emotional outcomes of learners, are also closed.

According to the UNESCO report (2021), closure of schools in India has impacted around 320 million, which is a huge number. This has forced learners to stay at home and continue their learning. Apart from schools, closure of all parks, sports centers, etc., have left children with no chance of engaging themselves in any kind of physical activity and recreation. This prolonged physical inactivity, lack of mental stimulation, social isolation, lack of routines and structures can result in aggressive, destructive behaviour among children.

Natural disasters can stimulate our motivation for the adoption of highly innovative communication technology and e-learning tools et al. (2017). Amidst, these prevailing circumstances to continue the learning and maintain the quality of learning process, online education has been adopted by educational institutions. In this perspective, the National Education Policy (2020) also recognises the potentials and risks of using technology in education.

In order to lower the impact of pandemic, the schools have remodeled their ways of continuing

education. The schools adopted online mode to continue learning at home. Online education can be understood as electronically supported learning which depends on continuous use of the Internet for facilitating interaction between teachers and learners. Further, in this online learning environment, students can learn and interact with teachers and other students from anywhere (Singh and Thurman, 2019). According to Hrastinski (2008), there can be two types of online learning, namely asynchronous (which doesn't happen at the same time) and synchronous (which happen at the same time) online learning which are most often compared. During the pandemic synchronous type of online learning was adopted, in which online classes, easy accessibility, stable internet connections, use of laptops and smart phones were common features (Basilaia et al., 2020). The various digital/online platforms and tools serve as a substitute to traditional classroom situations. (Basilaia et al., 2020). While online learning cannot replace the traditional classroom learning as it has its own advantages. In order to make online learning effective and efficient, the instructors, organisations and institutions must have comprehensive understanding of both its benefits and limitations.

While, the country was gearing up to take on the challenges of online learning through the recent launch of PM e-Vidya by the Ministry of Human Resource Development (MHRD), a

national campaign which will unify all efforts related to digital/online/on-air education. The sudden closure of educational institutions due to the pandemic has led to introduce online learning in a hasty manner by the schools without investing due time to weigh the advantages and disadvantages. It has resulted in the emergence of many challenges and issues such as lack of training by teachers and learners, lack of available educational resources and insufficient digital infrastructure. The greatest challenge is for the learners, as they had to learn new ways to engage and study.

In order to provide quality learning, views of all the stakeholders of the educational institutions including management, teachers, and learner's decisions should be considered. Kopp et al. (2019) gave five common assumptions that are considered more of hindrances to digital transformation of higher education institutions as against contributions to its realisation, and these assumptions are related to (i) change, (ii) pace, (iii) technology, (iv) competences and (v) financing. These have similar implications for school education.

According to Branch and Dousay (2015), effective online learning is a byproduct of cautious design and planning of instruction with the application of organised model for design, development of instruction. They further argued that in the absence of the cautious design,

development process can lead to the rejection of contemporary online education experience. It will be taken as emergency remote teaching rather than an effective way of online education (Bozkurt and Sharma, 2020; Vlachopoulos, 2020). Therefore, it is asserted that required measures have to be ascertained for maintaining the quality of learning and for making learning a smooth process. During these challenging times, many initiatives were taken such as introduction of suggestive alternative calendars to schools, which not only included generic guidelines about the subjects but also suggested specific use of different technological and social media tools.

In order to meet the current demands and challenges of the new circumstances, the National Education Policy (2020) also urges to optimise the existing digital platforms and ongoing ICT-based educational initiatives to be optimised and expanded. Here, the important point to be kept in mind is the equitable reach of technology to all, so that equal participation can be ensured.

Hence, it was needed to conduct a study to find out the perspectives of the secondary learners, their parents and teachers about online learning and to understand the challenges and issues related to online learning will help to understand the situation and provide concerted efforts to provide quality education to all.

This study tries to throw light on various aspects such as

administration and management, technological infrastructures, pedagogy, and social context. This is important because if one could analyse the implementation of online education technology in any given institution or framework, the administrators of the relevant institution have to make decisions about how to support the adoption of this technology and maintain it on an ongoing basis, and pedagogy completely changes as the teachers and learners are physically distant and in social context. NEP 2020 also asserts to conduct such pilot studies which could throw light on the ground realities. Keeping the above in mind, this study tries to answer the following questions: whether the learners are interested to take online education? What was the availability of digital infrastructure the learners had? How did they adjust to this new platform? What will be the role of the parents as learners are away from their physical classrooms?

DESIGN OF THE STUDY

The study was conducted to find out the perceptions of various stakeholders including students, teachers and parents about the shift to online education during the pandemic. Hence, the nature of the study is descriptive survey research which helped in providing an in-depth understanding of the present situation.

POPULATION AND SAMPLE OF STUDY

The population of the research included all learners, teachers and parents of learners studying at the secondary level in a public school from Distt. Gautam Budh Nagar, U.P. A sample is a small group of units to be selected from a population under study. A final sample of 150 learners from Class IX of a senior secondary school were selected through random sampling and 30 teachers teaching at secondary level were included in the study. For the perception of the parents, one of the parent was included as a final sample, i.e., 75.

TOOLS USED IN THE STUDY

Two online questionnaires were created using Google Docs, one for teachers and other for learners to get their opinions. For the parents, a separate questionnaire was also developed.

The teacher's questionnaire consisted of details such as sociodemographic information, online education training, familiarity with the use of ICT and faculty's perceptions of teaching online effectiveness. On the other hand, the students' questionnaire consisted of students' perceptions of online learning's effectiveness, familiarity with the use of ICT, structure and nature of online classes and advantages and challenges of online learning. Questionnaire used the likert type scaling for recording the responses. Likert scales have probably become the most popular attitude scale format for measuring

public opinion on any issue. (It is an attitude scale, and is not appropriate for measuring behaviours (Likert, R. 1932).

For parents, the questionnaire basically focused on their views about online learning, and nature of support they provide.

The questionnaires were sent to the experts in the field for content validity before collecting the final sample.

For data collection, the questionnaires developed were sent through emails to the teachers and students. The responses from the parents were also collected by sending the questionnaires through email. A friendly reminder was sent to potential respondents to ensure the highest possible response rate. Questionnaires with incomplete information or missing data were excluded from the analysis.

RESULTS

The analysis of the data was done through percentage analysis; the analysis is presented under five headings:

Perception of Learners towards Online Education

From the analysis of the responses from the sample group of 150 students, it was found that around 62 per cent of learners agreed that closure of the schools was necessary as a controlling measure to prevent the loss due to COVID-19 pandemic. It was found that about 56 per cent of the learners had never attended

any kind of online classes before, hence it was clear that for nearly half of the respondents it was a new experience. The results of the survey also indicated that majority of the secondary learners (around 46%) were not interested in taking online classes due to fear of technological and other constraints which they faced. The learners also raised their desire for meeting their peers and teachers for an interaction, which they are unable to do because of the pandemic situation. Following statements by the learners reflect their feelings:

“We cannot see a teacher, can’t talk to friends face-to-face.”

“We miss the school atmosphere and cannot play with friends like in the Physical Education class.”

The above statements highlight the disadvantage of using technology as a primary medium that breaks direct communication between the learner and the teacher, so the human touch is lost. Song et al., (2004) has also highlighted that learners feel that lack of community, technical problems, and difficulties in understanding instructional goals are the major barriers for online learning.

In this study, the other group of learners (46%) who were interested in online learning, could be innately motivated and therefore were relatively less affected in their learning as they needed minimum supervision and guidance. While the remaining 54 per cent of learners consisted of the group who either faced difficulty in learning

or required adult supervision. There were also a group of learners, who were academically competent, but their economic background put a hindrance in the access and affordability of online learning.

Hasty decision to start online delivery of education has brought into notice the inadequate customisation of technology and the psychological principles of learning. This calls for a well thought strategy to strength online delivery of education through customised teaching which takes care of the new needs that have emerged in this scenario.

With the constant use of technology, the socioemotional development of the learners is getting impacted, which may have a long-term effect on their personality. The above results also highlight the importance of schools in raising psychosocial skills which have an impact on the life of learners, both outside and inside schools. Since learners have now been taking online classes, spending additional time on virtual platforms, it has left them vulnerable to online exploitation.

When parents were asked about their willingness to send their children to school after reopening, 95.7 per cent of parents said they were not interested in sending their ward to school. The fact is evident that parents are concerned about childrens' health and safety and they are not willing to send their children to school. Therefore, the schools will have to continue online teaching,

which in turn sends a clear signal that schools have to be better prepared for learning which is more interactive and meaningful. The schools have to devise a mechanism where all the aspects of personality are developed, though it is a challenging task but it is important too.

b) Familiarity and Readiness with the Use of ICT for Teaching and Learning

This pandemic has reaffirmed the importance of ICT in education. Learning at all levels of education is the ability to continue, even when physical interactions in educational institutes is not possible. In this situation, it becomes imperative that both teachers and learners have to be familiar with the different technologies and their use in order to effectively achieve the goals of learning.

Hence, the study started with the assessment of the extent to which teachers and their learners were prepared for school closure and to examine how frequently they were using technologies in the classroom before the crisis came. The results showed that on average, around 66 per cent of teachers were using ICT in their teaching and 56 per cent learners of were using ICT for either developing or completing their projects or class work. It was also found that around 72 per cent of teachers had undergone trainings for using ICT for teaching, but it was limited only to the use of computers and smart boards. Hence, technology

was used as a supporting medium in classroom learning.

Capacity to adapt and innovate are the qualities needed to respond to any crisis. Responding to how both teachers and learners took up this challenge of adopting the use of technology from supporting medium to primary medium. Almost all the teachers and learners reported the use of online platforms such as Google Classroom, Zoom, virtual learning environment, social media and various forums like Telegram, Messenger, WhatsApp. Teachers even reported that initially there was little inhibition, only for sometime in terms of using them but very soon they became quite confident in using these platforms. They made pragmatic use of technology to ensure that learning can happen remotely, which highlights teachers' capabilities to adapt and their professionalism too. Further, they even suggested that it can be resumed even after face-to-face teaching resumes to provide additional resources and enrichment to the learners.

Further, it even highlights key role of the Principals of schools in fostering collegiality and collaboration among teachers.

There was an increased collaborative participation reported by the teachers which developed a collaborative culture within the school and among the teachers. School principals and teachers continuously facilitated the dissemination of useful information, instructional material

and resources among themselves. This developed a mutual professional support and effective use of online resources.

c) Availability of Proper Technical Devices

For the successful implementation of online education, the primary need is to have a proper gadget like mobile or laptop or personal computer to access the online classes. When learners were asked about which devices were they using to access their classes, following results came out as given below in Table 1.

Table 1

Depicting the various devices used

Technical device used	Percentage
Smartphone	57.98
Laptop	35.83
Tablet	4.89
Desktop	0.65

Majority of the learners (57.98%) were using smartphones to access online learning; they also complained that with a small screen it was many times not possible to concentrate. Since the schools had suddenly decided to take online education because of COVID-19 pandemic shutdown, the learners did not have the proper device to take classes but parents were found to be interested to buy the devices and were firm about not sending their children to school.

Most learners (68%) were using mobile data pack as internet sources and WhatsApp were the main medium

to communicate with teachers and classmates. Hence, with limited training, insufficient bandwidth and little preparation, there was unequal participation in learning going on in the classes.

It was suggested that the educational institutions must take an initiative to educate the parents, teachers and learners about the digital equipment needed for the device and about internet connectivity to make online learning smooth and provide the required training to the teachers about the online platforms going to be used as well as give guidelines to parents.

d) Structure and Nature of Online Classes

When the learners were asked about their preference for number of hours they can study through online mode, around 82.5 per cent of the learners reported that they can spend less than four hours in a day for online classes, which is lesser than the academic time they spend during school in a face-to-face situation. It was also found that the learners were easily getting distracted and they experienced physical discomfort (like pain in their back and neck) while sitting in front of the screen for a longer duration. This implies that there is a need for change in the pedagogy of learning through online mode; the online education must be infused with showing more videos, animation and giving opportunities to learn independently.

Majority of learners (98%) reported that they were accessing the live session of teachers, and they were not able to view the recorded lesson as it was neither uploaded nor shared in the group. But, the learners did say that it would have been better if the recorded lessons were provided to them. The availability of the session by the teachers would have given flexibility to the learners to go through the content again at their own pace; this could have also reduced/solved their queries with respect to the subject. It was also reported that teachers mostly preferred using powerpoint presentation for delivering the academic content. Around 54 per cent of teachers were using powerpoint for the delivery of academic content. Regarding the nature of reading materials, majority of the respondents (73.6%) preferred video content over the supplemented reading materials. Also, the learners found the video programmes to be supplementing their learning better than reading materials.

In order to get full benefit of online learning, there is a need to provide a concerted effort to go beyond replicating a physical class/lecture through a video. Instead, more efforts must be taken to make classes more interactive and interesting; a wide range of collaboration tools and engagement methods may be incorporated which can promote inclusion and personalisation.

Around 59.6 per cent learners shared that they don't get their

Table 2
Showing the responses (in percentage) about the
nature of online learning

Characteristics		Percentage of Responses
Format of Online Classes	<ul style="list-style-type: none"> • Live online classes • Whether recorded lessons were provided • Whether recording of the classes were allowed? • Only PowerPoint was used • Both PowerPoint and white board were used • Only lecture • Classes were interactive 	98% 98.6% (not available) 98% (not allowed) 79.7% 54% 31% 62%
Supplementary Reading Material	<ul style="list-style-type: none"> • Sufficient reading material was provided • Reading material was interesting • Preference to a reading material 	68% 23.2% 26.4%
Supplementary Video Material	<ul style="list-style-type: none"> • Video content was sufficient • Video content was supplemented well to the reading materials • Preference to a video 	86% 84.36% 73.6%

doubts cleared regarding subject topics while in class, while 40.4 per cent of learners shared that they are able to get their doubts cleared during the class. Various methods are preferred for clarifying the queries; 35.5 per cent of the learners said that it is done during the class through live chat while the remaining chose the option for posting their queries either through an email or by using WhatsApp to the teacher. Interestingly, 40 per cent of

the respondents reported that their doubts were cleared by the teacher within a day.

At times, it is a difficult task for teachers to provide a clarification about the doubt on the same day, as they are also quite burdened with the demands of online learning. A lot of teachers' time is spent in planning for their lessons like identifying the online resources (videos, etc.) and even assessing the progress of the learners online. Kebritchi et al.,

(2017) also highlighted that it can be challenging for a teacher to move from offline mode to online mode, changing their teaching methodologies, and managing their time. Also, a greater challenge is to develop content which not only covers the curriculum but also engages the learners.

When the learners were asked to give their opinion about the online assessments, whether they are satisfied with the assessments. About 58.2 per cent of learners reported that they were not comfortable to take online exam. Since, assessment is a critical component of learning as it provides an understanding about individual strengths and the areas to improve upon. Hence, alternative approaches to paper and pencil tests may be chosen carefully, which can help in achieving its pedagogic functions and at the same time, are interesting.

Another important aspect which has an impact on the structure of online learning is the platform used by the teachers to deliver their educational content. Multiple platforms are available, but teachers are using either Google Meet or Zoom for their classes. There is a need for identifying a platform for online learning which is suitable to the requirements of school education. Absence of suitable platform can have an impact on quality standards and control. This problem has to be taken up on priority so that benefits of quality education can be enjoyed by everyone. If online learning has to

be made a part of their 'new normal', then a lot of preparation is needed (Cojocariu et al, 2014). One should not merely focus on the pros attached to the adoption of online learning during the crises but should also take account of developing and enhancing the quality of virtual courses delivered in such emergencies (Affounneh et. al, 2020).

Therefore, there is a need to develop an effective and efficient educational system to impart education via online mode. This new system must ensure that teachers adopt and use such digital technologies and other online tools which correspond to learners' needs, their prior competencies and digital literacy of both teachers and learners. It is suggested that there must be regular online training about the availability and effective use of digital resources for pedagogical practice.

e) Enabling the Environment for Home Schooling

The crisis in terms of learning which has emerged due to this prevailing pandemic, it is essential to understand what the conditions were and whether there was a supporting home environment to continue their studies through online mode. Supporting home environment will go beyond merely having an access to the necessary digital device. It would include all the facilitating conditions at home which will help the learner to continue his/her studies without any hindrance.

As per the results of the study, it has already been stated that access to the necessary digital devices is not equally distributed across the population. In particular, learners from socio-economically disadvantaged backgrounds who lack the means to access these devices may be severely affected by the COVID-19 crisis, increasing learning inequalities as a result. Although the absence of face-to-face interactions can be somewhat compensated by the use of online platforms and other technology-rich activities.

Also, the prevailing environment of risk and uncertainty, has an impact on the motivation of learners in a negative way. In this context of learning, the parents have a greater responsibility to act as both a motivator and facilitator of learning. These situations have impacted the emotional state of the learners, hence parental emotional support matters a lot. Also, in the present situation, learners are expected to be independent and responsible for their learning. Therefore, the parents have to continuously encourage their children to be confident and encourage their educational efforts and achievements. Continuous encouragement and support from the parents also displays a strong association with learners' self-efficacy.

It was found that around 61 per cent of learners felt that they were able to pursue their goal of learning independently in these challenging situations, but a great chunk of

49 per cent of the learners believed that they were not so confident to manage learning. The learner's goals for learning were related to the motivation to learn, which means that these learners (49%) were at a significant risk of learning failure.

Another aspect was that about the availability and use of digital devices which is a pre-requisite for any type of online learning. It was found that most learners were using mobile phones, which was often shared with other family members including parents working from home and siblings for home schooling. Also, access to quiet physical space to study at home was a challenge which deteriorated the experience of online learning.

Schools must also aim to strengthen school-parent engagement. For that they must chalk out a plan to provide appropriate information and guidance to parents on effective practices for supporting their children's learning at home.

DISCUSSION AND CONCLUSION

The ongoing pandemic has presented a deep crisis, especially to continue learning in educational institutions. Schools and colleges are shifting to online platforms to catch up with the curriculum. It may be too early to say how learners and teachers will cope with online learning as they figure out the constraints; reorient to address them but the perception and readiness of teachers and learners is an important consideration.

The findings of this study indicated that majority of the learners had positive attitude towards online classes being undertaken in their schools. They reported that online learning was advantageous as it provided flexibility and convenience for the learners. This is reinforced by the study done by Muthuprasad et al. (2021) in which they found that the learners of agriculture preferred online learning.

The study also reported that majority of the learners stated that they can spend less than four hours in a day for online classes and were easily getting distracted as they experienced a physical discomfort (like pain in their back and neck) while sitting in front of the screen for a longer duration. This finding corroborated with the findings of the studies by Song et al. (2004); Allen (2011). It is suggested that long duration of classes must be avoided; it will be helpful in taking off the physical and mental strain. Therefore, short breaks must be given after each class.

Learners preferred well-structured content with recorded videos sent to them, so that it can be viewed later. Hence, it implies a careful mix of resources must be provided to the learners so that they get a variety of stimuli. This will not only engage them meaning fully, but will help them use their senses optimally. It was also suggested that the learners are given opportunity to work collaboratively so that they not

only engage themselves cognitively, but also socially. Petrides (2002) also claimed that it is convenient to work collaboratively in an online group.

They also indicated the need for interactive sessions with quizzes and assignments at the end of each class to optimise their learning experience. However, most learners also reported that online classes were more challenging than traditional classroom teaching because of the technological constraints, delayed feedback and sometimes the inability of teachers to handle the Information and Communication Technologies effectively. Therefore, all these factors should be considered while developing an online course to make it more effective and productive for the learner. It implies to relook at the present pedagogical practices in schools and synchronise them with the present demands of online learning. There is a need to adopt the online tools which are helpful in facilitating collaborative learning.

Apart from promoting innovative personalised teaching-learning platforms, there is also a need to provide the required need-based training to teachers and build the capacity of both learners and teachers to work independently.

The lesson learnt from the COVID-19 pandemic is that teachers and students/learners should be oriented towards use of different online educational tools. After the COVID-19 pandemic when the

normal classes resume, teachers and learners should be encouraged to continue using such online tools to enhance teaching and learning.

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