Obstacles to eLearning During COVID-19: In Accordance with Students Eyeshot

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Abstract

Online teaching-learning resources were seen as extra e-learning tools that may enhance teachers' and students' teaching-learning experiences when the COVID-19 broke out. The COVID-19 pandemic has, however, made online instruction a vital component of the educational apparatus. To ensure ongoing educational services during COVID-19, the academic community worldwide has embraced an online learning environment. The adoption of the online mode was not without its difficulties, despite the many opportunities it presented. This was because many educational stakeholders were ill-prepared for the complexities of the process, which left them facing many unanticipated obstacles.

This paper focuses on the difficulties students have when pursuing their education through online teaching-learning, primarily in light of the aforementioned changes to the educational system during the COVID-19 epidemic. The issues raised in this study view the online teaching-learning process as a stopgap measure rather than a replacement for traditional classroom settings. Additionally, the current study attempts to provide some ideas for removing the obstacles to online teaching and learning, taking into account that these tools are an essential and irreplaceable component of the current teaching-learning environment.

An unforeseen humanitarian crisis has come about as a consequence of the abrupt COVID-19 pandemic. The only practical solution for maintaining the teaching-learning process' continuity during this existential crisis was technology-based online learning. Prior to the emergence of the deadly virus, technology-based virtual learning, the use of e-learning resources, and virtual platforms were thought to be complementary and helpful ways to enhance the traditional teaching-learning process. Nevertheless, with the advent of the virus, these methods have become essential for continuing education.

One could argue that the use of online learning platforms and reliance on online instructional materials has perhaps increased during the COVID-19-induced lockdowns. As a result, virtually all academic institutions have embraced online instruction to maintain consistency in the teaching-learning process.

Keywords: Cyber Security, Data manipulation, E-barriers, Student of e-Generation

Introduction

The ease, flexibility, and affordability of online teaching and learning are only a few of the advantages that come with it (Dhawan, 2020). To start, there are other perks as well. Virtual education is environmentally sustainable and offers a diverse array of educational options for a spectrum of students.

Furthermore, online education can provide customized learning options that can meet the requirements of various student populations. Online learning strategies have also made it easier to access educational resources. The lectures can be easily accessed by students and allow for self-paced learning because they may be recorded, saved, and shared. To further enhance teaching-learning and make it more engaging for students, a variety of cutting-edge pedagogical techniques can be applied to online instruction. In addition to facilitating meaningful student-teacher contact through live chat and messaging in virtual classrooms, online learning has made it possible to receive prompt feedback on assignments.

Technology integration in the classroom has proven to be a difficult endeavor for both educators and students. Both teachers and students have faced difficulties as a result of the abrupt switch from the conventional face-to-face teaching-learning paradigm to technology-based virtual learning. Teachers now have more stress and work because of the abrupt switch from offline to online learning (Rapanta et al. 2020). Information and communication technology (ICT) integration into education offers teachers and students a variety of options and opportunities, including self-paced learning and accessibility to a wide range of courses and learning resources. However, ICT integration in education necessitates a certain level of technical knowledge and skills, which may present challenges when learning online (Mahyoob, 2020). According to Subedi et al. (2020), students experienced difficulties with restricted data packs for their online lectures in addition to disruptions from internet and electrical problems during their online classes. Given their seeming ease and familiarity with digital technology, Parkes et al. (2015) referred to today's learners as "digital natives."

Additionally, prior to COVID-19, some teachers—particularly senior teachers—were noted to be highly resistant to implementing technology. Nevertheless, during the COVID-19 period, the majority of teachers, including seniors, progressively warmed up to the idea of using technology as a virtual teaching and learning tool. It might be argued that COVID-19 has acted as a catalyst for the use of technology, since many educators have embraced virtual teaching and learning environments and have reported good results (Shenoy et al. 2020).

Objectives
1. To research the challenges that students with COVID-19 faced when attempting to learn online.
2. Provide tenable advice on how to handle the obstacles that students encountered when attempting to learn online during the COVID-19 pandemic.

Review of Literature

According to o'Brien et al. (2009), distance education is now simple thanks to rapid advancements in technology. A computer connected to a network allows one to learn from anywhere at any time, in any rhythm, and with any means. This ability is shared by most terms used to describe learning, such as online learning, open learning, web-based learning, computer-mediated learning, blended learning, and m-learning (Cojocariu et al., 2014).

Lack of appropriate learning attitudes, inadequate learning resources, increased student participation in the classroom, a lack of self-discipline, and unsuitable learning environments at some of their homes during self-isolation present difficulties for both teachers and students (Brazendale et al., 2017).

Sun and Chen (2016) examined 47 published papers and research about online teaching and learning that have been done since 2008 using a qualitative content analysis approach. The main focus of their research is on the application of ideas, practices, and assessments in the context of online learning. Well-

designed course materials, stimulating interactions between teachers and students, well-prepared and fully supported teachers, the development of an online learning community, and the quick development of technology were some important components needed for effective online instruction (Sun & Chen, 2016).

According to Lederman (2020), the COVID-19 pandemic forced educators and learners to accept the digital nature of the online teaching-learning process. Bao (2020) was possibly one of the first researchers during the pandemic to explain how colleges have been switching from traditional classroom instruction to virtual instruction because of the exponential rise in COVID-19 cases. The instructors have been using social media, video conferencing software, and online educational platforms to offer course material (Aguilera-Hermida, 2020). Teachers can exchange notes and multimedia resources with students on online learning systems like Blackboard and Google Classroom, enabling them to continue their regular studies. Through educational portals, students can turn in tasks, and teachers can monitor their progress.

Online lectures and discussion sessions have been greatly facilitated by the use of videoconferencing platforms like Google Meet, Zoom, and Microsoft Teams. As a matter of fact, these platforms often include multiple helpful features and allow slideshows. Course materials have been made available via the official websites of several universities and other higher education establishments (Chatterjee & Chakraborty, 2020).

According to Misra et al. (2020), a number of nations had substantial online education infrastructure in place prior to the global pandemic. Even so, not all colleges were ready to switch to fully online instruction. Empirical research indicates that pupils learn more effectively in a traditional classroom setting than they do virtually (Bojovic et al., 2020). Students miss having access to a library and the support of their colleagues in labs and classrooms (Aguilera-Hermida, 2020). On the other hand, students feel that continuing their study throughout the epidemic was made easier by online learning (Mishra et al., 2020).

According to a review of the literature, there are advantages and disadvantages to online learning with regard to infrastructure availability, current conditions, and content delivery. For Indian kids from affluent backgrounds, the practice of learning online is not new. Some people choose to learn online using platforms such as Coursera and edX in order to broaden their horizons and improve their education. Some students were obliged to stop studying online as a result of the current pandemic crisis because of a number of social, economic, and infrastructure-related problems. These problems include inadequate or nonexistent Internet access, a lack of a computer, laptop, or mobile phone, an unsuitable learning environment, etc. The majority of the higher education students in the study's sample are those who were compelled to switch to an online learning environment.

Research Questions and Hypotheses

The current study looks at the impact of abruptly switching from a physical to an online learning environment. These are the research questions that were developed for the study.

● RQ1: How did the pupils feel about online learning? What were their thoughts?
● RQ2: What effects has online learning had on students from various categories, especially the underprivileged, such as OBC, SC, ST, rural, and female students?
● RQ3: Will the various socioeconomic classes in society experience less discrimination as a result of online learning?

The data gathered will be used to examine the following hypotheses that have been put forth.

H1: The abrupt transition to an online learning environment had varying effects on different societal segments.

H2: A portion of the population lacked the necessary infrastructure for online education.

Methodology

This study will be based on an e-survey method.

Data Manipulation →

- **Primary Data**: For this study, primary data is collected through e-record of multiple educational institutions.
- **Secondary Data**: For completing this research, secondary data was generated through news articles, magazines, e-journals, etc.
- **Study Area**: To study the impact, e-survey was conducted through the e-record of various educational institutions across India.

Sampling →

Samples are accumulated through the e-record of various educational institutions. A Google Form with 38 questions has been created to learn more about the 289 respondent's opinions and experiences with online learning during the pandemic.

Study Period →

For this study, COVID-19 period is taken into special consideration.

Tools of Study →

- Likert 3-point scale rating scale.
- SPSS Software
- Chi-Square Test Toolkit (P-value)

Data Analysis →

For the requirement of this study, data are collected from e-records of various institutions across PAN India and thus analyzed.

Results and Discussion

171 (59.16%) and 118 (41.83%) of the 289 replies were from men and women, respectively. With respect to caste, the General Category (n = 192, 66.43%) and Other Backward Class (OBC) (n = 67, 23.18%) accounted for the majority of the responses; scheduled caste and tribe members each contributed only 15 responses.

Standard Table: 1

Socio-Demographic Variables		Frequency	Percentage
Gender	Men	171	59.16%

	Women	118	41.84%
Caste	General	192	66.42%
	OBC	67	23.18%
	Scheduled Caste	15	5.19%
	Scheduled Tribe	15	5.19%
Device used for e-learning	Laptops	38	13.15%
	Tablets	4	1.38%
	Desktop Computers	2	<1%
	Smartphones	245	84.77%

While only 38, 4, and 2 students (13.15%, 1.38%, and <1%) used laptops, tablets, or desktop computers for online study, the majority of students (n=245, 84.77%) used smartphones. The fact that over 76.12% of students participated in online learning through mobile Internet usage suggests that wi-fi connectivity is either unavailable or less popular. (**refer the table above**)

Table 2:

Particulars	1	2	3
Participation in online learning	211 (73.01%) P=1.347	69 (23.87%) p=17.02	9 (3.12%) p=35.558
Price of high-speed internet is an obstacle to online learning	178 (61.59%) p=1.449	9 (3.11%) p=26.119	102 (35.3%) p=48.077
Having hands-on experience in a real classroom might not translate to an online setting	167 (57.78%) p=3.967	69 (23.88%) p=17.02	53 (18.34%) p=0.019
The future will have a balanced mode of learning — both digital and traditional classroom.	206 (71.28%) p=0.644	6 (2.07%) p=31.053	77 (26.64%) p=12.019
Having online material from online lectures	212 (73.36%) p=1.519	58 (20.07%) p=5.916	19 (6.57%) p=20.942

Note: Significant at p < 0.01; p indicates Chi Square Test Points (p-value)

- **1 = Yes**
- **2 = Maybe/Occasionally**
- **3 = No**

Of the students who replied, 211 (73.01%) stated they participate in online learning most of the time, while 69 (23.87%) indicated they participate occasionally. There were only 53 (18.34students, respectively, who attended online classes very infrequently or never. This demonstrates unequivocally that students had little trouble getting started with online learning.

Of those who responded, 167 (57.78%) agreed that having hands-on experience in a real classroom might not translate to an online setting. 69 e-learners, or 6.57%, were unable to make a decision. Based on their comments, most students believed that learning online gives them more hands-on experience.

Just 19 students (6.57%) reported not having received online material from their lecturers, out of the total 270 students (n = 270, 93.43%). About 58 pupils (20.07%) responded they may have got the resources but instead they had captured their instructors' lectures on tape.

According to a chi-square test, there is no significant correlation between the type of course and the degree of satisfaction with online learning ($\chi2$ (9, N=289) chi-square point=26.119). Nonetheless, there is a correlation between students' satisfaction levels and residence locations (rural, suburban, or urban) ($\chi2$ (6, N=289) chi-square point = 31.053, p<.01).

This suggests that privileged urban students are happier than less privileged suburban and rural students. It suggests that societal division brought about by online learning has occurred. This finding demonstrates hypothesis H1, according to which various societal segments experienced varying degrees of influence, is supported.

E-Material Preference and Satisfaction

Students were found to favor online movies and e-notes over e-books as supplemental materials for online learning (see Pie 1).

E material Preference

- Online Video · E-notes · E-books · Miscellaneous
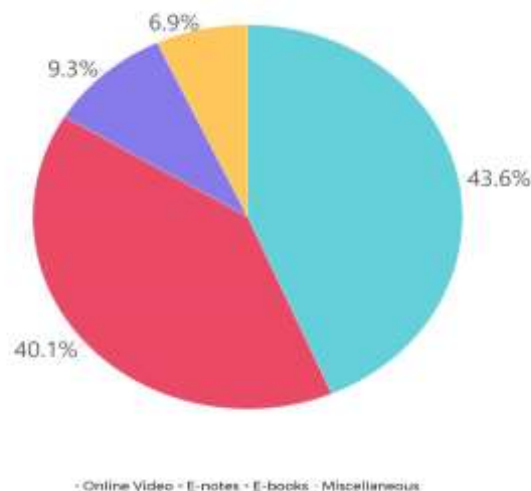
Table 2 Summary of Responses to Statements n (%)

Statements	1	2	3
Online learning is impeded by the cost of high-speed internet access.	107 p=0.45	119 p=0.482	63 p=0.001
Attendance rate of online classes during the COVID-19 pandemic.	106 p=0.584	124 p=1.362	59 p=0.275
Obstacles because of sharing devices.	162 p=20.041	102 p=0.837	25 p=23.061
All students should have free access to top-notch video conferencing equipment provided by the government.	131 p=2.482	105 p=0.398	53 p=1.636
Online class schedule's interference with the student's family members' daily routine	108 p=0.333	87 p=5.449	94 p=15.051
Online classes are stressful.	71 p=16.321	133 p=4.076	85 p=7.547
Note: Significant at $p < 0.01$; p indicates Chi Square Test Points (p-value)			

Note:
- 1 indicates very often/strongly agree,
- 2 indicates occasionally/neutral,
- 3 indicates never/strongly disagree.

When asked if the online class schedule interfered with their family members' daily routine in any way, most students said that it had either produced a minor issue (n = 108, 37.37%) or never caused a problem (n = 94, 32.53%). Upon conducting a chi-square test on the same set of responses, it was discovered that while the responses were connected to gender ($\chi2$ (4, N=289) chi square point=13.531, p=.009), they were independent of caste ($\chi2$ (12, N=289) chi-square=9.6776).

The test results indicate that female students needed to modify their household tasks in order to attend lessons virtually. Furthermore, although this does not explicitly point to infrastructure problems, it can suggest that female students do not own a device for using to access online courses, which could be related to a lack of infrastructure. Consequently, these findings might corroborate H2, which claimed that some societal segments lack the infrastructure necessary for online education.

Table 3 Responses to Yes/No Items n (%)

Statements	1	2	3
Online learning tools and resources are easy to use	159 p=0.671	48 p=1.421	82 p=0.012

Online learning model will replace classroom teaching	126 p=3.55	70 p=2.965	93 p=1.205
India is prepared for online education at all educational levels	162 p=1.134	53 p=0.281	74 p=0.976
Note: Significant at p < 0.01; p indicates Chi Square Test Points (p-value)			

Note.
- 1 indicates Yes;
- 2 indicates No;
- 3 indicates Maybe/Not sure.

Easy Usability of Tools

Online learning resources were deemed user-friendly by 159 respondents, or 55.01% of the sample (see Table 3). When the yes and somewhat replies were pooled and a z-test was run, the test's outcome indicates that most people thought online tools were user-friendly (z=11.4, p < .01).

Online learning model will replace classroom teaching

Only 15.22% of respondents thought that online instruction could replace traditional classroom instruction, while 53.29% of respondents thought that online instruction could not replace in-person instruction. Of the respondents, 9.00% were unsure. Table 3 shows the breakdown of respondents' opinions.

The majority of respondents' capacity to comprehend the material and acquire subject-related skills may be hampered by the constraints of online learning.

Challenges In the Virtual Learning Environment:

The Viewpoint of The Student

1. **Adaptability Concern**: It has been noted that students were initially not as prepared to use online teaching and learning. Both teachers and students found it difficult to transition from a long-established traditional form of instruction to a fully technologically oriented virtual learning environment. Some students' non receptive behavior may be caused by a variety of factors, including a lack of technical knowledge, a lack of smart device availability, a lack of wifi or limited internet data packs, a device's inability to support the apps and software needed for online classes, problems with techno stress, etc.

2. **The Inability To Go To Lectures On A Daily Basis**: In comparison, students have lost out on a lot of lectures during the epidemic. They were more attentive, engaged, and consistent in the past when they attended Department of Education offline classes. The traditional classrooms gave them a setting that went beyond teaching and learning and allowed their minds to expand beyond the textbooks, but in an online environment, just finishing an online course is a massive undertaking. Because of this gap, a student's personal motivation is the only factor that determines how regularly lessons occur.

3. **Minimal Interaction**: Since they believe they have little time to discuss topics in class, students' interactions with each other regarding their comprehension gaps have been greatly reduced.

4. **Lack Of Access To Publications And Works By Eminent Scholars**: Students aren't permitted to use the institution's library or other facilities. In the upcoming semesters, one student stated, "our research work will undoubtedly be affected by the lack of books, writings, and other works by great scholars."

5. **Low Self-Motivation**: One may argue that students have faced challenges in transitioning from a long-standing traditional mode of learning to online learning platforms. Students often become disinterested in online learning when they perceive it to be complicated. It might be difficult for students to stay motivated and finish a work with all of their passion when learning online.

6. **Absence of Social Interaction**: While meaningful and successful teacher-student interactions are seen to be a sign of a positive learning environment, they are absent from online classes. We now understand that schools not only serve as places for education but also as hubs for positive social interaction. Many students may have feelings of isolation as a result of the absence of social interaction, and they often get disinterested in online learning.

7. **Technical Issue**: Many students in underdeveloped nations like India lack the essential technological resources needed for online learning, like a reliable internet connection, smart gadgets, and continuous electricity (Subedi et al. 2020). Students find it challenging to fully participate in or even attend online classes as a result. Technical difficulties might also arise for students using virtual classrooms or other platforms that need a fast internet connection.

8. **Time Management Issues**: It has been noted that some students in online classrooms struggle to manage their time well in addition to other academic responsibilities. They need extensive help to keep up their progress because they are not experienced with online learning. Students enrolled in online classes must be able to properly manage their time through a curriculum that is methodically prepared and online practice sessions that are connected to various classroom activities.

9. **Difficulty Understanding Practical Subjects**: When subjects such as school internships are not implemented in a real classroom setting, they lose their real significance. As a result, all of the knowledge in the subject is based on the students' imagination and the observations they made in class.

10. **Digital Eye Strain**: There are several health problems associated with studying on a screen, including headaches, migraines, wet eyes, and fatigue.

11. **Domestic Duties**: One female student wrote, "I mean nobody cares that I am attending the class on the phone; if I am at home, it could not be a class on the phone."

12. **Lack of Seriousness**: In traditional classroom settings, we make advance plans and attend lectures in accordance with those plans. However, in online learning environments, our house is ultimately a cozy place, and as the saying goes, "A place where nothing grows." This has somewhat destroyed our ability to have a serious outlook on life.

13. **Informality Persists**: Since obtaining an education is a very important duty, many educationists advocated for the establishment of a formal setting through schools, colleges, and other institutions in order to support this task as effectively as possible. The formality of the teaching-learning process has been eliminated by the online setup as background noise and other easy distractions are always there.

14. **Low on Affordability**: The lessons run from 8:00 am to 2:00 pm, which means that a lot of data is needed. As a result, net packs are frequently purchased (Subedi et al., 2020). Despite the availability

of sufficient materials, the educational process is somewhat compromised, thus these classes have a low cost-benefit ratio and are not very affordable.

15. **Know How**: The majority of students lack the knowledge necessary to utilize Google Meet, the Zoom app, and other platforms.

16. **Absence Of Transparency In The Assessment Process**: Because online tests mostly use telephone exams, teachers may assume that students are not answering questions honestly, particularly when there is a considerable pause between questions. This prolonged silence—which might occasionally be the result of anxiety or thought upon being questioned—is mistakenly seen as cheating. Such teacher preconceptions about their students lead to an evaluation process that lacks openness.

17. **Long Wait Times**: For students with end roll numbers, this becomes difficult. After calling a significant number of roll numbers, teachers grow weary and lose excitement for these roll numbers, which also results in a loss of students and zeal. learners must wait for a long time for a viva call, which lowers their energy level and enthusiasm.

18. **Class or a Narrative**: Teachers in online classes typically don't turn on their cameras, and students normally behave in a similar manner. This also lessens student participation in the classroom, giving the impression that the instructor is lecturing to us about a subject that isn't really that clear conceptually.

19. **Indiscipline**: Due to the extreme distortion of their schedules, students' lack of discipline has been swallowed by the online environment. In this setting, the proverb "Early to bed, early to rise makes a man healthy, wealthy, and wise" seems unrealistic.

20. **An Increase In Virtual Screen Time Causes Depression**: staring at a computer screen all day makes one feel energized, and staring at a screen for extended periods of time causes melancholy. Learning virtually gives you euphoria, which leads to depression in the end.

21. **Lack Of Nonverbal Communication**: One of the most crucial parts of education is the ability to communicate nonverbally, which helps students read between the lines and grasp what is being stated but not said. Additionally, this improves spoken communication. Additionally, since verbal communication is rarely absolute, body language, gestures, and facial expressions play a crucial role in conveying ideas in their truest forms. If we ignore these cues, we undoubtedly fail to grasp the topic in its entirety.

22. **Digital Distractors**: There is a distracted society as a result of virtual learning at home. Students are surrounded by a variety of entertainment gadgets at home, which can be distracting (Brown, 2021). Additionally, it has been noted that a large number of students attend online courses using cellphones, which constantly provide messages from different social networking apps. This can potentially cause distraction for students taking online courses.

Recommendations Considering The Issues Previously Discussed

1. **Get students ready to adjust to changes**: At the beginning of online learning, the technical viewpoint of the students may be covered. Traditional-thinking students need to be supported and made ready to embrace change with an open mind and heart. It is important to provide additional support for technological problems so that students do not become discouraged by them.

2. **Adaptability is essential**: In unusual circumstances, when lives are at risk to maintain normalcy, it's critical to make temporary compromises and adjustments to the situation. In order to control and engage the students in their teachings, teachers need to hone their classroom management skills,

according to Raman & Yamat (2014). They should also get knowledgeable about and pick up some creative ICT integration techniques to support the process of learning and teaching.

3. **Doubt sessions**: The teacher may arrange for doubt sessions to take place after courses are over in an effort to eliminate time constraints and conceptual ambiguities.

4. **Digital library accessibility**: Universities should digitize their holdings and provide students access to the same.

5. **Know your purpose**: It is crucial for a person to understand why they want to learn in order to stay motivated to study under difficult conditions. The response they receive will serve as a trigger for their waning drive.

6. **Virtual social collaborations**: Students can plan their virtual get-togethers on sites like Google Meet and lessen the sense of isolation, just as they can in physical settings where they have lunch breaks or zero periods that encourage interaction.

7. **Having a broadband connection is a good idea**. Students frequently have data packs with defined data limits and rather low speeds; nevertheless, broadband connections are both more affordable and considerably more secure in terms of speed. Additionally, a study by Mahmood (2020) recommends that educators offer students extra time and should be flexible rather than overly rigorous.

8. **Scheduled Planning**: It takes extensive planning to effectively manage time. For example, timetables are used in schools to manage the allotted time for each course. Students can use these planning strategies to efficiently manage their time.

9. **Practical knowledge augmentation**: YouTube videos can assist bridge understanding gaps by providing more practical information. Additionally, the government must make an effort to prepare itself to handle these kinds of issues.

10. **Anti-glare glasses**: Students can utilize anti-glare glasses for their online study to reduce digital eye strain. Also, by choosing enjoyable alternatives, individuals can cut back on the amount of time they spend in front of a screen.

11. **Leniency**: For students who have extra duties at home, give them some leeway. They can be granted more time to finish their assignments. If individuals are unable to attend synchronous sessions, they must have access to alternative learning activities. & al., Baticulon (2021).

12. **Awareness-building among students**: To help parents cope with this circumstance, parents' awareness needs to be raised to the point where they take their kids' education extremely seriously.

13. **Option for Host Centric Permissibility**: Teachers should implement this strategy to eliminate informality from the classroom. Under this approach, students are only allowed to speak during class if the teacher gives the go-ahead for them to do so automatically.

14. **Awarded data pack scholarships**: In order to enable economically disadvantaged students to complete their education in a suitable manner, the university can segregate their data and provide them with data pack scholarships.

15. **Workshop for application comprehension**: Students who struggle to comprehend how to utilize programs like Google Meet and Zoom can sign up for these sessions.

16. **One workable solution is video graphic viva**: To keep the evaluation transparent, the instructor can switch to viva voce with a video playing, which will satisfy the students as well as the teacher.

17. **Teacher- to- teacher roll number division** in certain situations, instructors can divide a fixed number of scholars among themselves to cut down on long staying periods.

18. **Instructor's camera In order** to meliorate pupil connection instructors should turn on their vids and save the last numerous beats of class for discussion and commerce.

19. **Face the handicap Upholding** discipline in analogous unanticipated situations might be delicate, but scholars should push over their comfort zones and hurdles because, as Shiv Khera (2007) puts it," winners do not do goods the same way; they do goods differently."

20. **Look for other ways** to pass the time while scholars are studying. Education is an essential aspect of life, so it is not possible to dock the time spent on it. Still, scholars can spend lower time on defences when using mobile bias for rest. Rather, they can read fabrication or play inner games.

21. **Use of Emojis and oral Reinforces** While verbal communication is vital; there are limitations to the online setting. Nevertheless, this setup may be made the ultimate of by conveying passions through the use of Emojis and oral reinforces. Also, when the teacher activates his camera, his hand movements and facial expressions convey the true meaning of his unsaid words just as well.

22. **Encourage engagement** with innovative pedagogy According to studies(Harasim, 2012; Cheetah and Augustein, 2015; Zhang, 2020), learners who use innovative pedagogical strategies, analogous as flipped classrooms, online collaborative knowledge, substantiated knowledge,etc., are more motivated, engaged, and suitable of critical study. Therefore, learning through sophisticated pedagogy may contribute to increased knowledge intensity, lower performance, bettered retention, and active engagement (Malhotra & Malhotra, 2021).

Conclusion

The study's conclusions indicate that a significant amount of backing needs to be allocated to the construction of structure and the expression of public programs in order to address issues encountered during the temporary setup of the training knowledge process and maintain it as a stage-alone mode of instruction indeed after the epidemic is over. The ease and forms of knowledge have changed dramatically over time due to the frequency of education, the experience of online knowledge, technological advancements, and the cornucopia of possibilities to learn from professionals. Consequently, new propositions addressing the effectiveness, occasion, and necessity of online knowledge need to be developed. From this study, we can draw the following conclusions.

- the abrupt switch to online knowledge had varying goods on different societal corridor.
- a portion of the population demanded the structure necessary for online education.
- Although discrimination between classes may not live as it does in traditional classroom settings, the Online knowledge terrain will complicate divisions between social classes.
- Scholars in suburban and pastoral areas report lower situations of training satisfaction with online knowledge than they do with in- person instruction.
- Online education restrictions are linked to estate and gender, suggesting that the practice further divides a society that is formerly divided. Since the study was limited to a small sample size, its results might not be applicable for drawing generalizations. The social and profitable backgrounds of the various groups of advanced education scholars who continued their online education throughout the epidemic extremity may have an impact on the results. Nonetheless, the study's conclusions might give guidance to after researchers who want to carry out analogous disquisition with a bigger sample size and develop any models, generalities, or propositions in light of the issues.

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