Effective Teaching Practices for Success During COVID 19 Pandemic: Towards Phygital Learning

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Following the outbreak of COVID 19 in February 2020, Indian universities were shut down and used digital platforms to teach their students since then. Drawing from Kolb’s Learning Theory, John Dewey’s theory, Jack Mezirows transformative learning theory, and Jean Piaget’s theory, the authors in this paper offer a viewpoint on some of the practical teaching practices which can be adapted in business schools in India to be successful in this emerging blended or phygital environment. Using a Community of Inquiry (CoI) framework, the authors reflect on the effective teaching practices based on their own experience, theoretical knowledge gained from an exhaustive web search of various databases of the period, particularly from February to August 2020. The authors performed a careful manual content analysis of the selected research papers. They concluded seven principal teaching methods to create an effective blended environment for students and faculties in Indian business schools: a) reframing virtual spaces in India through online knowledge repository and virtual labs b) using reflective thinking for andragogical and pedagogical Indian approach c) Indian teachers’ readiness to offer various genres of courses on demand d) reinforcing resilience in Indian schools through meaningful participation and conflict resolution e) purposeful learning and inquiry-based learning for Indian students f) experiential learning through an inclusive online pivot in India g) useful apps are discussed to reach out to Indian parents community. These initiatives can influence academicians, educationists, podcasters, and the entire teacher fraternity to design an efficient and adequate teaching plan for the student community in India.

Keywords: digital learning, experiential learning, effective teaching methods, blended learning, phygital learning, reinforcing resilience, business schools, COVID 19 pandemic

INTRODUCTION

COVID 19 is an infectious disease caused by a newly discovered virus, “Novel Corona Virus” (Dhawan, 2020). This virus has now become an unparalleled worldwide sensation due to three major reasons: widespread contamination of elevated mortality rate and considerable delay in the formulation of the vaccine. All this has led the government to implement mammoth measures (Chaturvedi et al., 2020). Great efforts are in place to ensure social and physical distancing by convincing the public to stay at home. These endeavors are primarily directed to break the infection chain and ensure a reduced burden on the civic-health machinery. While the onus of all the trouble was laid on the medical facilities, the changes that have been adopted are massive. This has resulted in
subsequent commercial and communal defeats. The consequential fiscal and communal exercise of social distancing has led to some major policy changes in the functioning of higher education guided towards “online pivot” (George, 2020). For the first time in the history of the Indian education system, there has been a shift from a face-to-face teaching model to a completely online one (Zimmerman, 2020). The extensive use of digital media is in place. Teachers across the section of the society variably or invariably have had to quickly get used to the online mode of teaching guided towards a digital mindset (Victoria, 2020). The student community is also deeply affected. They have had to let go of their campus life, stay indoors, and attend online classes (Chaturvedi and Pasipanodya, 2019; Govindarajan and Srivastava, 2020). Some researchers believe that students who adopt an online learning mode are slightly more receptive than those who “prefer to learn in a traditional face-to-face environment.” However, some other researchers proved that the blended teaching mode yields the best results (Means et al., 2013). The teaching community remains cynical about the success of online teaching and learning pattern. A study conducted on complete reliance on online mode of teaching based on the Technology Acceptance Model (Davis, 1989) has revealed that students and faculty share common concerns regarding the availability of the Internet, student-teacher engagement, and incessant workload (Wingo et al., 2017). In line with this, the Unified Technology Acceptance and System Success (UTASS) model was proposed, which said that system quality, social influence, and facilitating conditions positively impact students’ behavioral intention towards e-learning systems (Chaturvedi et al., 2018; Zhang et al., 2020). Fundamentally speaking, the entire student and teacher community must bridge a gap quickly from the offline mode of teaching to complete online mode. This is without a choice for either of them as large sums of money are involved. All this has taken a huge toll on the admissions of students in the Universities. The future of educational institutes remains erratic across the section of the society variably or invariably have had to figure out which direction a human head face. Having a computer able to figure out which direction a human head is facing provides many practical applications. For instance, it can be used to map a 3D object in 3D space. By predicting this, we can determine the direction a human head face. Having a computer able to figure out which direction a human head is facing provides many practical applications. For instance, it can be used to map a 3D object to match the direction of the students in the classroom to have the best visual effect on their minds for learning purposes (Liu et al., 2021). Also, in a case study experimentation of Peking University’s online education during COVID 19, few specific instructional strategies were presented to summarize current online teaching experiences for university instructors who might conduct online education in similar circumstances. For instance, online effective delivery mechanism, adequate support provided by faculty and teaching assistants to students, and high-quality participation for better student learning can be followed for better learning experiences (Bao, 2020). The authors have

HOW INDIAN BUSINESS SCHOOLS WOULD ADAPT TO THIS VIRTUAL TEACHING?

The authorities may envision a bright future. The management may take this vision to the next level by putting it into practice. However, ultimately it is the teaching fraternity (Faculty members) who would have to work at the ground level to change (Bates, 2000). When it comes to distance learning courses, the primary concern is regarding the infrastructure and internet support from the Institution, quality of lectures as they will be delivered online (Bao, 2020). The research of the adoption of a complete online teaching mode is yet in its nascent stage to recommend anything. Hence institutions have a significant role in lending proper and timely support to adopt a complete online teaching mode. For instance, the exciting research in Computer Vision focuses on predicting the pose of the human head in an image. This describes the object’s rotation in 3D space. By predicting this, we can determine the direction a human head face.
highlighted some benchmarking teaching methods in the following sections of the paper to extract some learnings imparted in Indian business schools in India for the effective pedagogical methods amidst COVID 19. The research objectives of the paper are mentioned in the following section.

**RESEARCH OBJECTIVES**

The main objectives of the paper are as follows

1. To present some successful teaching practices that can be/are followed in Indian Business schools amidst COVID 19.
2. To understand the challenges that came with adopting technology by both students and faculties amidst COVID 19.
3. To conclude, some principal teaching methods based on existing theories of learning from literature to create an effective blended environment for students and faculties in Indian business schools amidst COVID 19.

**RESEARCH METHODOLOGY**

This study had reviewed several online research articles published, newspaper stories, conference papers, working papers, and books using manual content analysis. It was a cross-sectional analysis where the authors searched various electronic databases in March and then again in June 2020 with no language restrictions. The authors also searched the WHO research database on COVID-19 with the term “school,” which only resulted in one article that was not considered more general than specific to our topic. Therefore, the authors searched again using the keywords such as “teaching practices during COVID 19,” “adoption of technology in higher education during COVID 19,” “learning AND teaching pedagogy during COVID 19,” “Indian business schools AND COVID 19,” “digital learning during the lockdown,” “online teaching during a pandemic,” “education policy during COVID 19” and “phygital learning during the shutdown” and the combinations of these words. All authors performed data management and cleaning. All three authors triple screened (by S.C., S.P., and MV) the articles on title and abstract. The authors excluded viewpoint papers, systematic literature reviews, and studies on other viruses and other languages. The selected research papers were not limited only to India but also from the United States, United Kingdom, and Europe to gain an international view of the topic. As the authors analyzed the papers already written, there was no need to get the formal ethical clearance for citing them. The key themes identified and discussed included “online teaching practices during COVID-19,” “blended mode of teaching in higher education,” and the “shift towards online teaching during COVID 19.”

All full-text downloaded articles identified were reviewed by S.C. The authors maintained to keep highly cited articles out of all downloaded articles for the present study. The authors did not try to rate the quality of studies included in this paper. The authors also included findings of some preprint articles and peer-reviewed articles. Most of the articles cited are from renowned publishers like Elsevier, Emerald, Sage, Springer, Taylor and Francis, and Wiley. The different database searches identified 100 articles, of which 30 full-text articles were assessed, and eighteen were included in this paper. No relevant articles were returned searching the WHO Global Research Database on COVID-19. The search on medRxiv resulted in 20 preprint articles, out of which one was included in the review. In total, 30 journal articles, ten books, eight conference papers, and one working paper were included in this review (see the flowchart **Figure 1** below).

**Emerging Teaching Practices Discussed**

The world technology connotes different meanings to faculty members engaging in different subjects. For example, a teacher of mathematics and a philosophy teacher will have their ways to use technology for teaching their subjects. The word technology is often used in common parlance to digital devices, online and blended systems, scientific artifacts, tools, and other facilitating objects (Brown and Sammut, 2012). At times, technology also refers to engineering procedures that assist in the creation of new gadgets. It is now commonly used even in the arena of teaching (Elen and Clarebout, 2006). Few members of the teaching fraternity who are comfortable using the latest technology for teaching can be termed as those set of individuals who are welcoming the change in the gamut of teaching (Gershon, 2017).

Moreover, such individuals are the ones who are the pioneers in adopting this new digital teaching pedagogy across the globe. The theoretical framework which can be used to understand the online teaching and learning process is the Community of Inquiry (CoI) model (Refer to **Figure 2**), which consists of three critical factors: Social element, Cognitive element, and Teaching element (Garrison et al., 2000). It is the interactions of all three elements of the model that facilitates the educational experience for participants, as illustrated in **Figure 2**. Based on this model, Social Presence is understood as the ability of participants to project their characteristics and therefore presenting themselves as real people. Cognitive Presence is defined as the “extent to which the participants in any particular setting can make meaning through sustained communication” (Garrison et al., 2000). Teaching Presence is composed of the design of the educational experience and the creation of sound knowledge to better society (Garrison et al., 2000).

**Reframing Brick and Mortar Practices in Virtual Spaces: Reflections From India**

In 2006, Chau and Lam talked about unique teaching ideas to suit the age-old “brick and mortar” universities shifting to the online mode of teaching. Currently, India is in the initial stage of adopting an online teaching mode, and we are marching ahead with small but firm footsteps. One such breakthrough in online teaching was achieved through MOOCs (Massive Open Online Courseware) in India. Because of its immense benefits, MOOC is now acknowledged across the globe. It can successfully substitute the face-to-face teaching mode with online teaching by
enhancing the pool of wisdom and facilitating blended teaching and learning environment. These online classes can be categorically classified under two heads, synchronous and asynchronous, based on the conduction of the classes. Synchronous mode refers to the type of learning where students and teachers are present at the exact location and at the same time for teaching and learning. This comprises in-person classes (where teachers and students are present in the same classroom), online meetings and live streaming of classes or demonstrations on Zoom, MS Teams, Google meet, and other platforms (Calongne, 2008). Precisely it is a "real-time" type of learning where a group of learners is engaged simultaneously. Hence, it enables collaborations amongst the students and teachers to ask doubts and get them resolved on the spot. For example, webinars, online classrooms, and video conferences are examples of synchronous classes. Asynchronous mode refers to the universal form of teaching and learning that does not happen simultaneously or in the same classroom. The students are not present in the class at a prescribed time. However, they have access to the previously recorded lecture videos of their teachers in addition to online study materials (Hsiao, 2012). Students can respond through emails and any social media network. The teachers generally record their classes. This recording is made available to the students; it is a learner-centered approach, where the students can undertake any course without fulfilling the criteria of being present at the same time and exact location as the tutor. For instance, blogs, youtube videos, and online lectures are examples of synchronous classes. In line with this, the Indian institutes have also experimented with several experiential learning tools, e.g., uploading recorded videos of faculties, creating online discussion forums for students, asking students to upload their self-made videos, and embedding the research into the course curriculum (Mishra et al., 2020). Kolb’s Learning Theory from the literature also emphasizes the “conversational learning” approach, which enabled learners to make meaning and convert experiences into knowledge through the exchange of
conversations (Kolb et al., 2002). The major challenge lies with the practical courses that are difficult to deliver online. One of the institutes in India created virtual labs where experiments were demonstrated through video conferencing (FutureLearn, 2020). Another issue was the support for students in remote areas with limited access to high-quality teaching and less knowledge of the English language (Flack et al., 2020). Several tech companies such as BYJU’s worked towards this digital divide and create apps that support live classes and localized language for such communities. However, more needs to be done to cover the digital divide for these communities (Brundha and Chaturvedi, 2021).

Experiential Learning Approach in Creating Virtual Management “Sandbox” in India

The concept of sandbox technology in our paper denotes a cloud or a computer-generated space for teaching. However, the different methodology needs to be adopted for students’ different age groups (adults, middle school students, and kids). This implies the policies and procedures adopted for higher education must necessarily be different for school-level education (Halupa, 2015). Thus, satisfying the needs and requirements of both sets of the audience. The teachers must adhere to an altogether new focus and degree of teaching in the classrooms. The tutor must curb all the obstacles that come his/her way during a teaching in an online platform. For this, the practices of “Experiential Learning” need to be embraced to gauge and then accentuate, strengthen, and communicate the experiences in activities. Experiential learning (E.L.) refers to the procedure that involves “learning by doing,” resulting in gaining specific experience. For instance, a student learns by working in a company during the internship or learning to ride a bike. In this learning, the outcome is based on the involvement in the experience. Prior researchers have contributed several definitions for the E.L., the scope of which is extended to the pedagogies, learning domains, and undertakings (Eyler, 2009; McClellan and Hyle, 2012; Morris, 2016; Beard and Wilson, 2018). The philosophy mentioned above of experiential learning has its roots in John Dewey’s theory. Dewey (1938) emphasized that experience is continuous, and the experiential learning process is of vital importance to adult education. Therefore, E.L. is a procedure that involves immersion and self-direction, resulting in a meaningful experience that helps gain knowledge that can be applied in future contexts. Given the issues of student engagement and impactful learning for the students at the online platform, the faculties have identified ways to implement the experiential learning model (ELM) effectively.

For example, at some universities, the courses were redesigned utilizing the experiential learning module to enable the MBA students to develop presentation skills to enhance their employability. One of the universities used iPads equipped with Panopto’s mobile app, creating an experiential learning opportunity for the physicist students. Students made videos of their role-play interacting with patients uploaded on the video content management system of the university from where they were available to the professors who left feedback for the students. On the other hand, some universities are including Industrial Informatics into their master’s degree curriculum to address Industry 4.0. The pandemic has resulted in the growing importance of Cyber-Physical Systems (CPS) in the industry, resulting in great demand for CPS talent and know-how. The mission of academia is to address the needs of the industry for CPS engineers and develop a curriculum to fill the existing gaps in the qualification of the CPS workforce (Colombo et al., 2020).

Offering À La Carte and On-Demand Online Courses in Indian Business Schools

The pandemic has compelled the education institutes to embrace virtual teaching and learning methodology. This has further pressed the institutes to offer an extensive menu of courses and those in great demand. For instance, mechatronic education and experimental systems have, for example, been developed to facilitate experiential education and enhance the learning process in order to encourage students to think. The Mechatronics systems are designed, implemented, programmed, tested, and used by the students successfully within designed Lab sessions. The developed systems have their learning indicators where students acquire knowledge and learn the target skills through engagement, hands-on experience, brainstorming, and interactive discussions (Habib and Nagata, 2020).

To provide such courses to the students, first teachers will have to learn these courses to further enhance their knowledge in the respective subject. This is in synchronization to Jean Piaget’s cognitive development of experiential learning. Piaget (2008) asserted that learning is a lifelong process of finding knowledge from experience. Some countries like Germany are surveying the teaching fraternity to understand their requirements, abilities, and career enhancement objectives. Subsequently, when the colleges reopened, they were given free tutoring on the curriculums they were keen on. This exercise is intended to meet the distinctive requirements of teachers. However, the primary motive was to provide skill-based courses to all teachers. Later, these teachers were summoned to teach the same skill-based course to the students. This was the practice followed by some countries like Germany. Taking cues from there, India can follow on these lines and offer professionally motivated courses in Indian B schools.

Strengthening Resilience in Indian Schools in Challenging Times

The word resilience means having the ability to have a successful outcome despite being in a challenging situation (Masten et al., 1990). The school authorities and teachers are solely responsible for promoting resilience amongst the student community in these challenging situations. The authors in the present paper have arrived at specific recommendations to foster resilience amongst the student community towards online teaching with the help of studies conducted by Benard (2004) and Henderson and Milstein (1996):

1. It is improving social skills by showing affection and concern towards adults (e.g., instituting absolute optimistic regard, establishing a philosophy of care and mutual admiration, constantly appreciating each others work).
2. Establishing elevated and clear expectations for educational accomplishment and school room conduct
Improving Digital Pedagogical Methodology in India

The teaching pedagogies have been transformed with the information and communication technology (ICT) innovations (Konig et al., 2020). For instance, ICT has facilitated the faculties adoption of student-centric practices such as learning through projects (Law, Pelgrum, and Plomp, 2009) that helped the promotion of purposeful learning (Koh and Chai, 2014), inquiry-based learning (Bell et al., 2013) and learning through problem-solution (Walker et al., 2012). Prior researchers have presented strong arguments in favor of ICT as a catalyst for a metamorphosis of the teaching pedagogies (Beauchamp and Kennewell, 2010). The model identifies the interaction between the knowledge of a faculty about the technology, pedagogy, and content for an efficacious utilization of ICT for delivery in a classroom (Herring et al., 2016). There has been much research on the factors that affect the acceptance of technology in education. This includes the adoption of e-learning among the students, e.g., Boateng et al. (2016), Sanchez et al. (2013), Zhou and Xu (2007) and teachers, e.g., Holzmann et al. (2020), Salimaz et al. (2017), Buckenmeyer (2010), Nicolle and Lou (2008), Kotlik and Redmann (2009). However, the COVID 19 pandemic created a situation wherein both the teachers and students had to adopt the technology not by choice but as an essential requirement for the education system’s smooth functioning. The adoption came with many challenges related to the lack of knowledge about the use of technology by both students and faculties, difficulty finding and selecting a suitable platform for online class delivery, cost of the license, and issues related to the infrastructure unavailability of the Internet in remote areas. This pivots the need for research from factors that affect the technology adoption to the factors that would affect the continued use of technology for blended learning and student benefit. Instead, research that can guide the behavioral change strategy for both students and faculties would be needed.

Moreover, the content delivery and examination pattern required a significant overhaul. The uncertainty of events posited a dilemma for the education institutes and policymakers about the pattern of examination. A need-based approach was followed at the school level. Some primary class students were promoted directly to the next class; an online examination was conducted for several higher semester classes and offline exams for those who appeared for the board (secondary and senior secondary) exams. The universities and Business schools majorly adopted online mode for conducting the examinations as the direct promotion could affect the career and placement. As far as higher education is concerned, it seems that the teaching pedagogies would adopt the blended learning and teaching mode for higher effectiveness.

Transformative Learning for Inclusive Online Pivot in India

The introduction of digital tools has enabled educators towards a blended approach for learning; for instance, flipped classrooms providing room for the enhanced classroom experience. Educators are using the technology to develop videos that enrich the digital content, thus enabling them to utilize the free time for other innovations. According to Jack Mezirows (2003), in transformative learning theory, learning begins with an experience called a disorienting dilemma (cognitive dissonance, which happens on realizing that your current understanding of the world does not fit with the current evidence). The abrupt, unplanned, and rapid transition into online learning triggered by COVID 19 has contributed to cognitive dissonance because our educational expectations are called into question. If we talk about India, the central issue was faced by the students who are supposed to undertake practical field training called summer internships, where they are supposed to be trained on the job while working with the corporation. The lockdown and closure of most offices resulted in a lack of opportunity for the student to go through this practical training. Several students got the work from a home internship, but they could not learn or get accustomed to the environment and system in which work is done in a corporate (Srivastava and Chaturvedi, 2014). Some institutes facilitated the students by providing them projects that required in-depth study of the field or industry they wanted to cope with. This helped the students to get prepared for the jobs. However, the kind of “mindset change” a student goes through after and on-the-job training was absent. This posits the need to develop an education system of blended learning with an industry interface embedded within the course for a better experience. Here comes the role of a mentor who accelerates preliminary activities that enhance introspection, face challenges, and includes probes and mutual understandings (Chaturvedi et al., 2019). However, it is ideal to understand the requirements of the students and the demands of the course curriculum and then adopt a suitable teaching methodology that is acceptable and understandable by the majority of the audience at large. In the end, the authors support the notion of Sharp and Marchetti (2020), who said that the natural way should be to choose the correct teaching practice in the present phygital scenario of COVID 19.

The authors point out these examples to take lessons for Indian management schools (Chaturvedi, 2020) where the whole idea of experiential learning through video observation is picking up fast. Moreover, given the difficulties with effective experiential learning with the existing platforms raises a need for the development of e-learning facilities that can be compatible with the extant infrastructure, thus pivoting towards blended learning/phygital learning.

Collaborating With Parents Through School-Wide Online Strategies in India: Apps discussed

As per recent research findings, there has been a substantial drop in the number of parents who believe in the effectiveness of the personalized methods of communication to get informed about student performance, e.g., face-to-face meetings. In India, parents
take an interest in the education of students at the university level, and several universities communicate the performance to the parents through various modes such as phone calls. The findings indicate the increasing adoption of digital methods of communication for getting informed about student performance. This opened a door for a new opportunity and apps such as ClassDojo, Spotlight, Remind. Seesaw developed an interface that allows mobile messages, videos, and other alerts about its activities and student performance. For instance, a university used technology to send texts about grades, attendance, and assignment submission to the parents, resulting in an increase in student attendance by 18% and a decline in the course failures by 39% (Bergman and Chan, 2017).

Another example is about a university that sent literacy tips along with text messages to the parents. The outcome was an increased parent-teacher interaction that increased the literacy scores for students. There is an increase in such apps that are parent engaging; a selected few are presented here with their success stories for learning purposes. B schools can adopt the same to enhance the learning experience for students.

**Class Dojo**
ClassDojo is a popular tool that allows the instructors to provide feedback to the parents on students’ behavior. It allows communication in 35 languages. The parents can also obtain information about their child’s school experience and class through pictures and videos. The app is substantially popular among the K-8 schools and has successfully connected with 15 k new schools since 2019. This app can be helpful if implemented in Indian B schools to give parents community feedback about their children.

**Spotlight**
The Spotlight was developed by Oakland Unified School District (OUSD) in California while looking for means to reach the diverse families in a high-poverty urban district with just 28% of English speakers and above 50 languages spoken over. The video report card application of Spotlight was piloted in three schools in 2015 that 16 schools adopted till the year-end. Spotlight allows the texting of a link to the parents that land them to a personalized video that provides a detailed report on the student performance, including the performance summary in core subjects, areas of improvement, and guidance towards improved learning such as reference of library groups or open-source learning platforms.

**Remind**
Remind is used by Groton elementary school in rural New York to connect with the parents. The instructs can use the app to send personalized and class-wide and school-wide texts to the parents. The instructors send weekly texts about the learning and development of the students that can be translated into above
CONCLUSION

Taking cues from some established theories of learning, the authors furnish unique teaching initiatives in this paper to combat the challenges of online teaching put forth because of the novel COVID-19 pandemic (Refer to Figure 3). Covid-19 exerted several changes in the education system at a broad scale. The pandemic concurs with the increased potential of information technology. The outcome is likely to reconfigure the teaching pedagogies making use of the information technology. While one cannot deny the importance of the offline education system, the future would be directed towards blended learning guided towards online pivots and a digital mindset. When we move towards digital technology adoption for teaching, several issues need attention. First, the development of an appropriate interface for learning and engagement compatible with the extant infrastructure is required, given the financial concerns of institutes discussed in the opening sections. Second, the efforts must be guided towards the continued adoption of technology for education. Third, due to the limitations about the internships that enabled the B school students to learn in a natural working environment, the pathways for effective experiential learning that can also enhance the skillset and employability of students need to be determined. Lastly, techniques to fill the digital divide for all-inclusive learning need immediate attention. The COVID 19 pandemic has guided the education system towards a new paradigm that needs to be explored for effective blended learning. The authors firmly believe that B schools will rise to the occasion and adopt benchmarking teaching practices, leading to effective student-teacher virtual communication in India.

Future Directions

The study provides valuable insights on effective teaching practices in the online mode in the COVID situation. However, there are several limitations of the study that can be covered in future research. The study is limited to higher education in the context of B Schools in India. Future research can be extended to the other courses in various regions to understand the online teaching practices. Moreover, qualitative data collected through interviews with the beneficiaries and participants can provide a comprehensive understanding of the various online teaching pedagogies (Adedoyin and Soykan, 2020). The shift to online teaching is still in the nascent phase, and the long-term implications and effects are still unknown. Future studies can conduct cross-sectional surveys to analyze the potency of the various teaching practices in online mode. It would be interesting to understand what factors would govern the continued use of the blended learning approach even when the pandemic is over.

Limitations of the Study

The study cannot be generalized in the absence of empirical analysis. Hence there exists a scope for further research by including data collection. The inferences drawn from the study can vary depending upon the size and availability of resources with various universities. The study talks about the extended infrastructure required to adopt online teaching methodology but did not throw much light on the methods in which this infrastructure can be developed. The study focuses on the continued adoption of technology for education. However, given that India is a developing nation and not all institutes and Universities have access to the high technology required for the said purpose, it might take some time for the universities to absorb online learning and teaching.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/Supplementary Material, further inquiries can be directed to the corresponding author.

AUTHOR CONTRIBUTIONS

SC and SP contributed to the conception, structure of the paper, and interpretation of available literature. SC contributed to the development of the initial draft. MV reviewed and critiqued the output for important intellectual content. All authors contributed to the article and approved the submitted version.
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