

# Challenges and Opportunities of Teaching and Learning in Higher Education with Special Reference to COVID-19 Pandemic: A Global Perspective

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## Abstract

More than 200 countries and almost 1.5 billion students have been impacted by the pandemic COVID-19, which had far-reaching and significant impacts on educational systems all over the world. The most obvious impact of the pandemic has been the closure of schools and universities, causing one of the biggest tech revolutions in educational history to arise. Social exclusion and restrictive movement regulations had a significant impact on traditional brick-and-mortar educational methods. Numerous investigators have highlighted their results on teaching and learning in numerous ways in the fallout of the pandemic that started in Wuhan, China. Different higher educational institutes turned off their face-to-face teaching-learning procedures. This unanticipated transition in the instructional method raised new challenges and opportunities. Even though there were many hindrances for teachers, universities, institutions, and the government regarding novel learning approaches, the pandemic provided chances to build a foundation for digital learning. Innovative and new instructional approaches and evaluation methods were used promptly. The current study aims to present a complete assessment of the challenges and opportunities of teaching and learning in higher education during the COVID-19 pandemic.

**Keywords:** Covid-19, Challenges, Opportunities, Higher Education, Teaching and Learning

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## Introduction

The COVID-19 pandemic had a devastating impact on the world population. The novel virus was first identified in Wuhan, China, in December 2019. Nations throughout the globe warned their people to take precautionary measures against the spread. Different public health measures such as sanitizing hands, wearing face masks, maintaining social distance, and staying away from large gatherings and celebrations have been adopted. Lockdown and stay-at-home measures have been taken to restrict the virus from spreading further (Sintema, 2020).

On March 24, 2020, Prime Minister Narendra Modi announced a nationwide lockdown (The Times of India, 2020). After a sigh of relief from this pandemic, unfortunately, in the last quarter of 2020, India faced another strong wave with a new mutant coronavirus and then the third wave in 2021. As a result, many colleges in India temporarily closed their on-site classes. Further, several universities decided to provide online classes to students. This abrupt shift in academic activities left everyone involved perplexed. Education in general and higher education in specific terms across the globe needed prompt reassessment. The issue which still remains a key concern is that to cope with the COVID-19 problem, institutions and students involved in higher education must use online teaching resources (Bao, 2020). COVID-19 made it obligatory for higher education institutions to make a transition in learning from the traditional chalk-and-talk method to online mode (Bao, 2020; Dilucca et al., 2020; Wang et al., 2020). Higher education institutions, ranging from bachelor's degrees in humanities, social sciences, and all technical degrees, began to provide online programmes to their students. The transition has been relatively simple for autonomous/deemed and private institutions, but more challenging for government institutions.

Many universities stated that they successfully reached 90% of students by establishing online facilities. However, some universities openly admitted that the transition to a new teaching technique made communication difficult due to the unavailability of resources. During the shutdown, institutions explored a variety of methods to keep the courses going, including recording classes and making them accessible to them on YouTube, Facebook, and many other online platforms. Students who had internet access can study; nevertheless, for others, it was a challenging effort (Ary & Brune, 2011). The other option was to take live or online classes. Institutions needed to have stable high-speed internet connections, suitable infrastructure, and relevant software tools to reach students through live classes. Online mode of learning is greater than just a professor delivering a

lecture over a gadget. The online teaching approach encounters many challenges while attending live sessions due to faculty and student inexperience and by lacking proper planning and guidance from educational technical members (Wang et al., 2020). Significant drawbacks include the inability to have physical interaction with students and encourage free interactions, dialogues, and guidance, a lack of experience in online teaching, technical issues with internet access of high speed, and gaining knowledge and receiving feedback online. (Sun & Chen, 2016; Arasaratnam-Smith & Northcote, 2017; Claywell et al., 2016).

For both teachers and students, there are no doubt many drawbacks but at the same time taking online classes has numerous benefits as well. Online learning provides teachers with a novel way to teach that includes cutting-edge devices and is accessible to a huge number of students (Appana, 2020). Students have the opportunity to learn how to utilize a variety of online tools and technology in a synchronous or asynchronous mode

The study aims to present a complete assessment of the Challenges and opportunities regarding teaching and learning in higher education with special reference to the COVID-19 pandemic.

#### **Study Method:**

The content analysis method, which is mostly qualitative, has been adopted by the researcher to assess the challenges and opportunities presented by the COVID-19 pandemic to the institutions of higher education in carrying out their teaching and learning activities.

#### **Data Collection and Analysis:**

The data were collected from secondary sources which mainly included Websites, Magazines, Journals, Newspapers, and e-contents.

#### **Teaching and Learning Strategies for Higher education**

The COVID-19 outbreak, lockdown, and social distancing precautions resulted in the global suspension of institutions meant for education in general and higher educational institutions in particular. Transitioning from a brick-and-mortar classroom situation to online learning has been a novel experience for both educators and educands, which was necessary since there were few or no alternative choices. A paradigm change occurred as a response to educators' attempts to give high-quality instruction using different online platforms. Virtual learning, distance education, and open learning proved to be redressal for this unparalleled worldwide pandemic. The educational system and educators embraced "Education in Emergency" using numerous online channels and adopted a system for which they were unprepared. It was necessary to assess and help staff and students while adapting to the new changes. E-learning infrastructure was key in assisting higher education institutions in clearing the way for student learning throughout the pandemic (Subedi et al., 2020).

There were almost no issues for the learners with flexible mindsets but those with rigid mindsets faced different problems at different times while receiving the online classes. Online learning does not have a single solution model. Each subject has its own set of prerequisites, and there are many to select from. Online learning must be course and age-specific (Doucet et al., 2020). Students with special needs can also take advantage of online platforms as these facilitate their taking part in learning, with limited movement, in an online mode (Basilaia & Kavadze, 2020).

Higher education institutions were shuttered in response to the pandemic that broke out in almost every corner of the planet. This had an unexpected crippling impact on learners, parents, and educators all around the globe. While authorities, health care workers, and health agencies did everything possible to prevent further spread, educational institutions also worked hard to ensure that all students receive a top-notch education during these challenging times. The universities had a clear vision for embracing online teaching and learning, and it pushed staff and students to take the necessary steps in this direction. Some teachers, for instance, believed that involving all stakeholders in the new online mode of teaching and learning by the MHRD, UGC, and universities in India was a wise decision taken at the appropriate time, which relied on the need to shift in attitude among administrators and teachers and to adopt a more technology-based teaching mindset. For designing educational courses, training, and skill development programmes, teachers have been utilizing a variety of interactive platforms like Microsoft Teams, Canvas, Google Classroom, and many more in a coordinated approach. This is a potent method for developing problem-solving, reflective thinking, and self-directed learning skills (Petrie, 2020). Videoconferencing (Google Hangouts Meet, Zoom, Slack, Cisco, WebEx) and customizable cloud-based learning management systems like Elias, Moodle, Big Blue Button, and Skype are being used in virtual classrooms.

#### **Challenges in Teaching and Learning**

Due to the abundance of websites and online educational resources, both learners and educators often encountered issues while utilizing or accessing them. Some challenges have been identified and emphasized by

different researchers in the following manner:

E-learning has problems regarding access, economy, customization, learning methodologies, continuous learning, and the education system, according to Murgatroyd (2020). Access to digital gadgets and maintaining a consistent connection to the internet were significant challenges in many countries. On one side online learning tools were out of reach for many economically disadvantaged students in developing countries on the other side online education increased the time duration that students spent on screens. A large number of the student population experienced psycho-emotional problems at home, making it challenging for them to interact properly (Dominguez-Salas et al, 2020). As a result, physical classroom interaction and self-regulated learning have emerged to be vital for students.

Learning is mostly unaffected for students who are intrinsically motivated as they need very less guidance and supervision than those who are weak in studies. Some academically talented but financially strapped students cannot access or afford online education. Online learning necessitates parents to support their children academically as well as economically. In times of pandemic, specially-abled students need additional care and support.

Sintema (2020) reported that there is a probability that academic achievement levels among students may be declined for both internal and external tests due to the reduced physical contact classes and a lack of interaction between the learners and educators when having difficulty in learning. Keeping the higher education institutions closed not only affected the internal and external exams but the whole examination process was suspended in several countries. Due to the fallout of COVID-19 and restricting measures, several university-level tests, recruitment exams, and entrance exams got deferred not only in India but across the globe.

Evaluating students online is a very hectic job, as it involves a lot of hard work to put on for doubt-free assessment on part of educators, learners, and parents. During online exams technical glitches and interruptions are obvious and students can easily cheat and get a benefit. Having a large student population, many higher education institutions did not implement adequate similarity index tools. The best online homeschooling techniques have yet to be identified (Petrie, 2020). When away from their usual school schedule, students deal with negative economic, social, and psychological effects. As a result of taking many of their classes online and spending more time on screens, these students are more vulnerable to online abuse. They are at a greater risk of cyberbullying and other harmful content. Due to the suspension of class work and strict precautionary measures majority of the parents voluntarily allowed their wards to use the gadgets for learning purposes and to stay in touch with the outside world. However, it may have negative repercussions as the majority of the students do not have proper knowledge about cyber crimes.

World's major student population has no access to smartphones and also has poor internet connectivity. Lockdown and closure of businesses and shops add to the miseries. High-cost internet package and a huge population is also an obstacle in the way of online learning. As a result, it is very difficult to establish a system that would meet the demands of all students as per their attitude toward learning. Learners and higher education institutions are under a lot of stress. As the economy has been battered by the pandemic, the education sector has also been affected.

### **Opportunities for Teaching and Learning**

Even though there were many instances of hindrances for teachers, universities, institutions, and the government regarding novel learning approaches, but COVID-19 pandemic created new opportunities for individuals who weren't ready or had persistent aspirations to establish an e-learning system. It fostered the relationship between parents and teachers like never before. Online classroom resources and applications which included Google Classroom, Zoom, Telegram, Messenger, and many more were examined and used for the first time. These may be investigated further, and such wonderful learning platforms can provide students with improved information and assistance even when physical classroom teaching has resumed.

It is expected that teachers would provide creative solutions to the challenges posed by online learning. Teachers are actively working together locally to design methods for virtual learning. Doucet et al (2020) reported that as educators, parents, and learners share collective experiences, there is an unprecedented potential for teamwork, new thinking, and enthusiasm for experimenting with new approaches. To promote teaching and learning more interactively many educational institutions make tools and solutions freely available online. In contrast to the conventional classroom environment, online learning has enabled students and teachers to learn and teach in novel ways. The Pandemic has allowed universities to reconsider the old education system. Digital learning has emerged with new trends in teaching and learning. The pandemic gave students chances for mobility and hands-on experience through exchange programs, internships, conference participation, and other activities. To drive learning, research, and teaching, new and novel kinds of collaboration are required. In these hard times, knowledge sharing between institutions around the globe through cooperative teaching, virtual presentations virtual guest lectures, etc provided students with a more global perspective.

## Discussion

UNESCO reported that more than 1.5 billion students remained affected by the pandemic-related shutdown of educational institutions. According to UNICEF research, 23 countries imposed countrywide lockdowns and 40 countries had statewide lockdowns, impacting roughly half of the world's student population. According to the report of UNESCO in India over 320 million students remained affected. Against this backdrop, there was an urgent need to make homeschooling feasible and accessible.

Online education does not permit the use of techniques and methods that are employed in traditional or in face-to-face teaching. Although a variety of methods have been designed for online and distance learning, educators who lack digital skills need appropriate training and professional development to fit themselves with their students. Doucet et al (2020) reported that a vital aspect of online education is the availability of assessments at regular intervals and quick feedback options. In India, it is cumbersome because of the large student ratio, absence of proper online teaching infrastructure, unskilled professionals, and absence of learners' active participation.

During this pandemic, some institutions of higher learning have developed a range of online infrastructures that have been made available free to access. It is difficult to afford and make these online tools accessible to students from all socio-economic disadvantaged groups. Students with special needs need explicit training in addition to assistance and supervision. This group's development is hindered by the inability of many parents and stakeholders to address these demands. This signifies the need to examine and search for the finest options for the educational needs of special children. During the times of pandemic, it was not possible for teachers to evaluate the work of students genuinely as both internal and external exams were conducted at home. In addition, many children were assisted and reinforced by parents in their academic tasks with fluctuating levels of progress. Student assessment is another thrust area, as no suitable standards have been developed and implemented.

## Conclusion

The study assesses the challenges and opportunities of the teaching and learning process in educational institutions pertaining to higher classes with special reference to the covid-19 pandemic. The study suggests that in developing countries, adequate pedagogy and platforms for diverse courses at a higher level need to be further investigated. This includes the identification of the most effective teaching methods, the best technology to use, and the best ways to ensure that students have access to the necessary resources. In many developing countries, the resources are very scarce related to Internet bandwidth, fewer connection points, and data packages which result in restricted accessibility and affordability. This lack of access to the internet has a significant impact on the ability of people to avail educational and economic opportunities. Without access to the internet, people in developing countries are unable to access the same information and resources as those in more developed countries, which leads to a lack of knowledge and skills needed to succeed in the global economy. To ameliorate the situation, suitable policy frameworks are required. There is a need for further study and inquiry into appropriate pedagogy for online educational processes. The need to create tools for genuine evaluations and continuous feedback is a further area of research. The accessibility of educational opportunities for all students of varied socioeconomic levels has been acknowledged to be a challenge, which may need customization by educational tool designers on a priority basis. It's also crucial that a proper intervention by policymakers is done. Considering the current circumstances, all educational systems, including those in India, must engage in developing teachers as per the professional standards, particularly in ICT and effective pedagogy. Further, the area which needs research and development is the involvement of foolproof gadgets to boost the novelty, imagination, and interaction of online education. This would benefit students and help the educational system get ready for upcoming uncertainty.

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