

# Digital Education : Post COVID Era



## Editors

Piyush Jotania  
Rajkumar Nanaware  
Aarti Arya

Yasmin Ashraf  
Shruti Chavhan  
Ujjala Singh



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# A REVIEW ON CHALLENGES OF ONLINE TEACHING IN HIGHER EDUCATION DURING COVID 19 PANDEMIC

Ms Dilima Siga  
Research Scholar,  
RGU

Prof. P. K. Acharya  
Dept. Of Education,  
RGU

## ABSTRACT

*The world is witnessing the wide effect of covid19 pandemic, which has led to the emergency lockdown of various sectors of development, affecting immensely the higher education. With this, the entire existence of teaching- learning process in higher education has shifted from real teaching to virtual mode of teaching. The sudden transformation in the way of teaching learning process has more popularized the importance of digital education that brought forward the trend of using online teaching among the teachers of higher education to facilitate continued learning despite the emergence of this unprecedented occurrence. The present paper focuses on the basic challenges in executing online teaching effectively in higher education during Covid19 pandemic in the areas concerning: online teaching experiences; connectivity and access to technology among the teacher and the learners. The study concludes with some suggestive measures along with the highlights for the future investigation.*

*Keywords: Online Teaching, Higher Education and Covid19 pandemic*

## INTRODUCTION

In the history of human race the world has always bounced back no matter whatever unprecedented consequences they have been through and this time it's COVID- 19 which "stands for" coronavirus disease or novel corona virus or "2019- nCoV" (Bender, 2020), said to be originated from the Wuhan city of China in 2019 although various speculations are still prevailed. A Corona virus is linked to Severe Acute Respiratory Syndrome Corona virus 2 (SARS-CoV) as similarly found to be fatal (Meng, Hua, & Bian, 2020). Because of its susceptibility, the World Health Organization (WHO) on March 11, 2020, has declared the outbreak a global pandemic in news brief by WHO, Director-General. This deadly virus has affected the entire aspects of human existence worldwide, millions of people are affected.



lives have lost and the various sectors of development hampered causing the world leaders to announce lockdown, which has affected the higher institutions immensely and in order to cope with the set back around 188 countries (Toquero, 2020) underwent adapting online education, with the idea of "Let COVID-19 not stops you from learning which emphasized in developing Open Educational Resources (OER)" [MHRD and UGC, 2020, Govt. of India] same has initiated worldwide that transformed more the very perspective of digitalization in educational arena by altering the trend of face- to- face teaching to virtual mode of teaching in higher education. This paper is concerned with the sudden challenges of online teaching in higher education for effective disbursement of web- based learning during global COVID- 19 pandemic.

## THE CONCEPT AND BACKGROUND OF ONLINE TEACHING

The concept of online teaching is nothing but teaching that take place-using internet, which is actually a virtual mode of teaching. The history of online teaching date back its first correspondence courses in 1800s said to be using parcel post to reach students who could not be on a university campus (Kentor, 2015). Gradually, the communication technologies emerged, modified and the use of radio waves, television, caught the track toward educating the masses. Though online learning was emerged in 1982 yet, in 1998, the first fully online programs were founded in New York University Online, Western Governor's University, the California Virtual University (Miller et al., 2004) and Trident University ([www.bbb.org](http://www.bbb.org)).

By the time online teaching in India somehow had the hold, the program of audio broadcasting began in 1992 through Doordarshan network but it was only one-way communication in its recorded form. On September 20, 2004, a geostationary satellite named EDUSAT provided the virtual two ways video- conferencing (Aggarwal, 2014) and the rest, we are already witnessing today. "Right from 2005 and present the focus is on mobile learning and social networking the educational characteristics emphasizes interactive distance courseware distributed online through learning management systems with social networking component; learning that is facilitated via a wireless device; learning with portable technologies where the focus is on the mobility of the learner." (Herrington, Reeves et al., 2005; Mortera-Gutiérrez, 2006; Nicholson & McDougall, 2005; Pilla, Nakayama, Nicholson, 2006). This indicates the masses have now mature enough to receive digital education. This is 21<sup>st</sup> century and we can assume almost as the advent of 5<sup>th</sup> industrial revolution were the importance of virtual being has emerged because of prevailing Covid19 pandemic, as it has transformed the ways of teaching and learning and set the promising ideas more in favour of shifting from real to virtual mode of teaching. However, at the same time additional challenges paved a gap between the effective transaction of learning and the learners. Teachers especially in higher education were expected to meet the end of the students in broader perspective as learners are in their reflective state of thinking. However, unfortunately, despite the flourishing digitalization globally, there are certain basic challenges faced by the teachers of higher education in executing effectively the online teaching- learning process.



## CHALLENGES OF ONLINE TEACHING IN HIGHER EDUCATION

The investigators have tried to pinpoint the basic challenges faced by the teachers of higher education based on the present context.

### Online teaching experiences

The outbreak of COVID- 19 pandemic has disrupted the normal classroom teaching and made to think the alternate ways to continue teaching- learning process. Before the outbreak, though the various educational stakeholders emphasized the online education practices yet, it was never an entire shift of online teaching in the mainstream of higher education, which resulted into the beginning of new challenges as well as opportunities simultaneously. The increased demand of online learning, the demand of online teaching is natural. It has found that only 9% of respondents to the education survey indicated that prefer to teach online (*Pomerantz & Brooks, 2017, p. 4, 25*). As those who are familiar with teacher- centred methods may experience challenges transitioning to online instruction that emphasize implementation of student- centred pedagogies (*Alexiou- Ray & Bentley, 2015; Gregory & Salmon, 2013*) as because, “some instructors find it challenging to adjust to a new pedagogical form” (*Barr & Miller, 2013, p.12*). As found also that even if they engaged there is, a love- hate relationship with online teaching and learning: they don’t want to do it but think they would be better instructors if they did (*Pomerantz & Brooks, 2017, p7*).

Additionally, *Schmidt et al. (2016)* highlighted that since college instructors often teach as they were taught, they may lack an example of what effective online teaching entails, especially if they never took an online course themselves as students. As in recent times according to *Duffin, 2020* reported that 73% of the students worldwide are not aware of massive online open courses (MOOC) as of in April 2015, the share of students that took a MOOC in the past was still 9% only.

Again, we know that it takes a lot many efforts to design a lesson plan, teaching materials and to create the entire learning toolbox for the learner as said “Developing and teaching online course requires specific sets of skills that faculty must acquire in order to be successful in this new paradigm of learning and teaching (*Howell, Saba, Lindsay, & Williams, 2004*). They have been persistent since the traditional method of teaching, now as because of outbreak the importance of technological skill acquisition and the use of interactive learning resources under the ICT initiatives has emerged more actively that obligated the teachers to attend the online workshops and webinar. With the inadequacy of technical learning and training among the teachers of higher education the questions of providing relevant and rigorous deliver of content, meeting the learning outcome and its reliability will be on rise.

### Connectivity

In this paper the connectivity is all about the connection between network and online teaching i.e., about the technical connectivity. The ABSTRACT noun ‘connectivity’ represents the notion of serving to connect, while the everyday verb ‘to connect’ means to bind or fasten together, to join or unite, to link, or to establish and maintain communication between (*Delbridge et al., 1997*). Network issue has already been the major challenge for the smooth functioning of teaching- learning process in higher education ever since the digitalization of education was introduced, which later become seemed



in a considerable barrier in pandemic era 2020 and even worst where network connectivity become the hurdle to enable the online teaching. Technology issue at present speaks about such connectivity in the Covid-19 situation where institutions are mandated to lockdown poor network connection hampers the online teaching. The feasibility of interactive smart tool is more apparent and effective in a good network connection. In many of the higher institutions especially among the rural community, both teachers and students suffer despite knowing the importance of online learning. As stated, in spite of online learning seeming to be the best ways of learning during the pandemic period, the innovation is hampered by the unavailability of connectivity in some rural context (Dube, 2020). Therefore, even if the teachers are willing to be trained in online instructional tools or to set up any learning initiatives for their students would face difficulty in delivering online mode of learning because of connectivity problem, which would ultimately limit the benefit of online learning.

### Technology among the learners

Another challenge for fair and credible functioning of online teaching is the access to technology among the learners. In the world of virtual interaction if a person lacks the resources or lacks in the skill of use of the digital functioning then the motive of spreading online education will never be achieved. However, it is also not a denying fact that “though students seem to be using different gadgets and are themselves digitally literate yet both teachers and students may not be tech-savvy.” (Kaup, S et al, 2020)

The accessibility of technology has always been the issue among the learners as many of them belong to different socio-economic background which is not equal, the cost of any gadgets, purchasing of antivirus, internet pack, repairing charges etc are so expensive in today's era (also Dube, 2020). Additionally, because of COVID-19 “...most of the parents have lost their jobs and lockdown...” (Dube, 2020) which has worsened the situation even more that taking online classes, orientation for learner about any relevant information are out of question. The poor literacy has also become a challenge among the learner to fight against COVID-19 to get informed about the latest news and benefits for example; in countries like India, govt. has issued a public notice to ‘Aarogya Setu’ for COVID-19 contract tracing, syndromic mapping and self-assessment digital app launched on April 2020 ([www.aarogyaasetu.gov.in](http://www.aarogyaasetu.gov.in)). Moreover, the problem of using online apps and new upgraded gadgets were also found to be difficult to use among the teachers in education, which made them challenging to help the learner as, cited the same in Dube, 2020.

Again, these issues have become more elaborative ever since the rise of COVID-19, which has become barriers in the way to effective online teaching. Moreover, teachers are already seeking to meet the needs of the learner and to make unlearn learn this additional crises pave a huge hole in the virtual world. As mentioned inadequate hardware and software, slow internet connections, learners' illiteracy, lack of technical expertise among the instructors, insufficient orientation for learners, lack of release time for instructors to develop and design their online courses have been cited as barriers to faculty participation in developing and teaching online courses (Nkonge & Gueldenzoph, 2020).



## DISCUSSION AND SUGGESTIONS

Challenges and opportunities have never scooped out of easy cake as long as the human struggle to accomplish a noble cause is concerned, so is the condition in the implementation of digital education and introducing upgraded pedagogic version applies considering that investigators have highlighted above some of the challenges of online teaching during COVID- 19 pandemic. After the analysis the investigators have found that despite many issues it is teacher's readiness, time, intrinsic motivation to seek novelty, zeal to be responsible and looking at the positive aspects of teaching online can make them adapt to the virtual way of teaching and additionally if supported by the concerned govt. and the higher institutions seriously for the effective execution of online teaching giving them the incentives and the freedom to explore for self- reflection as also supported by in the findings of *Shea et al., 2001; Skibba, 2011; Shea, 2007; Sibley & Whitaker, 2015*.

Besides, the investigator finds that it is time to focus more in implementing new pedagogic instructional strategies emphasizing student's self- determined learning called 'Heutagogy,' "because learning online is best done as a self- determined learner, creating personal learning networks that work for you" (*Fred Garnett, 2013*) which is the transitioning from pedagogy to heutagogy (*Boon Hou Tay, 2013*) so that in near future if students find a way to become a teacher then they themselves would be the best example in providing digital learning to guide their future 'ought to be' students. Students in higher education are adult learner and so *Campbell (2004)* argues that the emphasis of online learning in higher education settings is on the development of Metacognitive as well as reflective and collaborative learning. Further, online learning goes beyond planned subject learning to recognize the value of the unplanned and the self-directedness of the learner to maximize incidental learning and improve performance.

So far the connectivity and access to technology for the learner is concerned the use of hybrid or blended learning can be availed by both students and teachers in higher education. The concept of hybrid and blended learning refers to the combination of an online learning environment by gaining the flexibility of distance or outside of classroom learning and face- to- face (F2F) classroom instruction (*Hentea, Shea, & Pennington, 2003*), indicated also in the findings of (*Al-Husban & Shorman, 2020*). In this concern govt. or any other private authorized organization are of concern for a good installation of network connectivity, also a kind of cooperation from educational stakeholder is important moreover, teacher can be more sensitive in making the learner learn in their pace using both synchronous and asynchronous channel effectively emphasizing constant feedback in filling up the gap of learning among the learner. As a teacher, during pandemic or post pandemic these techniques with instant or frequent feedback can use as assistance for both frontier and interior section of learner as supported by (*Kaup, Jain, Shivalli, Pandey, & Kaup, 2020*).

## CONCLUSION, LIMITATIONS AND IMPLICATIONS

In lieu of the present study, the investigators have come forward with various, challenges and discussion providing suggestive measures to boost the learning in higher education at the time of pandemic era. The investigator while analysing highlighted some of the new terms like self- determined learning called Heutagogy which is actually a digital learning and blended learning, in days to come one



can initiate more detail study of the said terminologies and its relationship to higher education post-pandemic as because COVID- 19 has initiated the new paradigm of learning, these concepts are concerned with the transformation of the role of teacher from mere instructor to a guide and facilitator and insisting the teaching fraternity to equip themselves with many technical skills and enforcing to adapt virtual engagement. Additionally, one can go forward to study the student's readiness toward self-determined learning and blended form of learning. There was a time teachers in higher education were helpless assisting the learners worldwide as the sudden lockdown of institution brought chaos in the routine functioning of various educational institutions, but as now even though the pandemic and lockdown is prevailed yet many educational stakeholders worldwide has realized the importance of digital education and has emphasized open educational resources, web- based learning,

Again, the investigators show some limitations, as the analysis of the study is based on subjective viewpoint because of the nature of the paper. More strength could have been given by including varied primary data. In conducting online teaching the challenges investigators mentioned is not sufficient, as administrative role, social role etc could have been included.

Therefore, it is concluded, time has come to move ahead by introducing new paradigm of pedagogy besides, "the use of information and communication technology has transformed student expectations" (Wegmann, & McCauley, 2008) and so of the world as well. Online teaching has the potential to include in the mainstream of higher education despite challenges if cooperation and suggestive measures are taken into consideration by the concerned govt., educational stakeholders, students, scholars along with community seriously with positive note.

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