



The challenge of covid-19 pandemic and the response of higher educational institutions in India

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Abstract

The purpose of this article is to examine the impact of the covid-19 pandemic on Higher Educational Institutions (HEIs) in India. The first-hand experience of teaching online in the covid-19 pandemic along with conceptual and theoretical issues of online education has been explored in this paper. Online education can be a tool to improve access to higher education as well as can also be used for improving the quality of higher education. Like traditional face-to-face classroom teaching, it also has multiple issues. Paper has tried to explore the perspectives of different stakeholders regarding online education in Higher Educational Institutions (HEIs).

Keywords: covid-19 pandemic, the Indian education system, higher educational institutions, online learning, blended learning

Introduction

The educational scenario of all over the world has been turned upside down by the covid-19 pandemic. Educational institutions used to be a place to learn through interaction, deliberation, discussions, and debates. Classrooms used to be crowded, and teachers will always be running from one classroom to others. There will be chatter in the classrooms, noise in the corridors, hangouts in the canteens on any normal day of college or the university. Things have changed. And this change is not pleasant either for faculty members or for the student community. Even the UNESCO Director-General Audrey Azoulay opined ‘‘Never before have we witnessed educational disruption on such a large scale’’ (*Disrupting the Education Paradigm | | Microsoft EDU*, 2020).

There are disturbances and in fact chaos, as far as teaching-learning is concerned. Condition is very bad in the rural primary schools (complete disruption of educational activities), and it is not good even in urban private schools where the majority of students are from comparatively economically better-off families. The educational scenario of Higher Educational Institutions (HEIs) is quite peculiar in the Covid-19 pandemic. After the outbreak of the virus, the colleges and university campus were closed in panic and hostels were vacated. Regular face-to-face classes have been cancelled, and examinations have been either deferred or cancelled. The covid-19 pandemic has engulfed the joy of learning and experiencing the most fruitful period of human life in the most brutal way possible. Human history has witnessed the spread of several diseases, epidemics and pandemics but, never in the history of human civilisation, had the teaching-learning process gone through such kind of drastic changes. Covid-19 pandemic has forever changed the course of human history. The education system needs to adapt to this change. Sooner we adapt to changes the better.

This paper is an attempt to explore the experiences of online education in the covid-19 pandemic. This paper is anchored on the theoretical framework of online education and the experiences of teaching bachelor and master degree students in online mode in covid-19 pandemic by my colleagues and me in one private university in northeast India.

The panic, havoc and adoption of new methods

UNESCO has reported that the most educational institutions world over have switched to online education. In this context, a pertinent question arises: Is online education an ad hoc solution to face-to-face classroom teaching? Many attempts have been made by prominent universities in the past also to use online methods to impart quality education. Many renowned universities over the past decades are gradually embracing the new technology and moving their programmes online and doing away with face to face classroom teaching (Bao, 2020) ^[1]. All major Universities of the world whether it is Harvard, MIT, Yale, Oxford and Cambridge etc. are moving in this direction (Picciano, 2006) ^[9] (Bao, 2020) ^[1]. Switching to Online teaching requires planning, preparation, training and continuous innovative pedagogical efforts. And this requires heavy investment in infrastructure development in the campuses for systematic and organised online education like the development of recording facilities, online lecture delivery studios with sound proofing and editing facility etc. The high speed internet service which should be stable and reliable is the additional requirement for successful online programs. The combined effort of the university administration and teachers is equally important to tap the online educational opportunity. Initially online education also requires heavy investment because both infrastructure development for online education and the training of teaching staff is required for switching over to online education. If universities and other Higher Educational Institutions(HEIs) have not invested in development of recording facilities, high speed internet facilities, sound proof lecture delivery studios, editing facilities, multimedia resource development etc then the online plan ends right here. (Chen *et al.*, 2020) ^[3]. In the Indian context, this is the stage where all Higher Educational Institutions got stuck when lockdown started after the outbreak of the covid-19 pandemic. They neither had recording facilities on campus nor access to any dedicated online teaching platforms to be used from home by teachers (all educational institutions took recourse in free online video conferencing and file-sharing services like Google classrooms, Google meet, Zoom app etc.). And the

most important thing...the internet service. The country is well known for its slow, unstable and unreliable internet service. And this internet service is also available to the majority of teachers and students only through mobile internet service providers (only a few students and faculty members have access to broadband and other high-speed internet facilities at home). In fact, there is a sizable population of college-going students especially from the rural areas who still don't have access to either laptop/desktop or mobile devices or any internet facility (this case is still persisting in India when Chinese mobile devices have already flooded the Indian market).

The immediate closure of Higher Educational Institutions in India led to a situation where out of compulsion, college and universities had to adapt to the online teaching as per the guidance of University Grants Commission (UGC, New Delhi), Union Government and the respective State Governments. The sudden closure of educational institutions was, initially, welcomed by both students and their parents. Some got panicked by the outbreak of the pandemic, and for some, it was a kind of unexpected holiday which they enjoyed in the beginning. But, once the online teaching-learning process started in different colleges and universities, it was a total mess. Neither faculties had ever used these tools to teach, nor did students had any faith in this kind of teaching methodology. Especially the guardians of college and university students were very concerned with this new development.

In the online teaching-learning process, different methods have been tried throughout the world. In India, switching over to online teaching was no doubt, a struggle for both faculties of the college and universities as well as for the student community. Even in the US, UK and China, the immediate sending of university students back to homes and closure of all campuses enhanced the virtual delivery of different courses. But, in this process, a number of problems popped up. It is like the education sector has taken 30 years leap at a stretch.

In the last two decades, immense development took place in the field of information and communication technology. And their uses in educational institutions as a pedagogical tool have also been discussed. Academics saw great potential in these technological developments for the expansion as well as quality enhancement of education. There have been increased levels of sophistication and effectiveness in several schools that have embraced digital learning (Murphy, 2020) [7]. But, the education system will be made dependent on online platforms, and the internet service was never thought off. There is a firm belief that technology will reshape universities by 2030. "Though the online system of education is viewed as relatively new, according to research, in the future, it will just be as effective as school-based methods/face-to-face classroom teaching" (Murphy, 2020) [7]. The education system was forced to adapt to online education without giving a second on finalising the nuances of online education. The necessity of this change is obvious and can't be challenged. The problem lies in the manner of switching over to online education. The entire higher education sector has been pushed into experimenting online learning within a shorter period and that too, with an unprecedented scale. This development in the education sector (especially in the higher education sector) is going to have a long-lasting impact. It is going to transform the traditional university

education and even the open and distance education system. Nevertheless, the education system got a chance to embrace the new online technologies which would have been ignored in the normal situation. It is a fact that we have poor internet service, few students have laptops and desktops, and the majority of students are using their cheap mobile phones to continue their education in the covid-19 pandemic. Still, as an academics majority of college and university professors felt that this system has many positive aspects also. Majority of professors have felt, in online education, students have more control over their studies. We are moving from the banking system of education (Freire, 2018) [6] towards more student-centred education.

Additionally, it has also been reported that successful online students tend to be more organised than regular on-campus students. They are the self-starters. They take the initiative and accomplish their respective work without much help and close supervision of their teachers (Picciano, 2006, 2015, 2017) [9, 10, 11]. But there are visible drawbacks in this system as well. Many students have reported that they are frustrated with online education as there is a frequent interruption in their studies due to bad network, noise from the background (yelling kids and family chat chats in the surrounding). They are unexposed to this kind of teaching-learning method and are unable to cope with the subject matter. Students complain that they get flooded with numerous PDFs, PPTs, DOC files, and are also facing problem in interacting with their teachers and asking questions.

The tryst with technology

Online education can make quality education accessible to a large number of students at low cost. In a poor and rural country like India, where the majority of students are living in rural and remote areas, the importance of online education is therefore obvious. Online courses are flexible in timing. It is suitable for the urban working population as well as for youth of rural agrarian set up. It helps learners to make use of online resources at the time and place of his choice. There can be different pedagogical innovations. Teaching can be done in only in online mode, or it can be done in blended mode. For a learner's perspective, the blended mode is going to be more fruitful. He/she can have experience of regular course when he will be attending classes in the university/college campus, and he/she can continue his education when they are outside the campus in online mode. Online education is going to be a great tool for new skill development, career development, renewing the skills, enhance the horizons. The problem lies in the manner of adoption online methods during the lockdown period to continue the educational activities.

After the lockdown, the schools, colleges and universities were closed without much preparation. For the sake of the continuation of academic activities, online avenues were explored. In rural areas, there is a complete disruption of education due to lack of available mobile devices/laptop/desktop with students. Teachers were also not prepared for this system. Though in the urban areas and especially in college and universities, the efforts were made to continue educational activities using online methods. The educational system in India adopted the online methods of teaching due to seer compulsion of the covid-19 pandemic. But, in the west and China, different schools and Higher Educational Institutions had already started using online methods in the

combination of regular classroom teaching much before the lockdown. For them, the lockdown was not a crisis as such as it was the case in the Indian scenario. The teaching-learning process continued in these institutions with less difficulty in the lockdown period. But, for the majority of Indian educational institutions, lockdown came as a big blow for all educational activities. Teachers had never used online platforms to teach in their whole academic career. Adapting to online teaching method itself was a big challenge. The poor infrastructure facilities like slow and unstable internet service, non-availability of laptop/and desktop to large number students etc. became an additional problem while switching over to online teaching.

Indian Higher Educational Institutions took recourse to two methods to go online.

- Non-live online teaching
- Live online teaching

The platforms which have been used for the non-live online teaching are

- a. Google Classroom
- b. Microsoft team
- c. Moodle cloud (in very few institutions it has been used)
- d. Email groups
- e. Whatsapp groups
- f. Telegram channel/groups etc

The platforms which have been used for Live Online teaching are

- a. Zoom online video conferencing app
- b. Google meet video conferencing app
- c. Skype video conferencing app
- d. Microsoft team
- e. Face book live
- f. YouTube live etc

As the covid-19 pandemic forced the entire education system to shift to virtual learning mode, it had a toll on both individuals and institutions. Since the whole country is under lockdown, online education was the best bet. In the Indian context, online education is a mix of existing cultural conventions like using the existing reading material and course books, and the new modes of teaching like using PDFs, PPTs, animations, audio-video resources, and the online lectures through different platforms like Zoom app and the Google meet app etc. After the lockdown, college and university teachers started setting up accounts on various online video meeting apps as Google meet, Zoom app, Skype app. They also used other tools like Google classroom, WhatsApp groups, and Telegram groups etc. to cover the syllabus of their respective courses. These online tools helped students to have on-demand access to educational content related to their specific course, that too, from the secure comfort of their homes.

Majority of college and university teachers felt few advantages of online teaching as well. The most important aspect is adjusting the teaching-learning process into the existing schedule of the teacher as well as the learners. This aspect of online teaching has been found very helpful in the lockdown period. Teachers could take the classes at a convenient time. Study materials and notes were provided to the student through different medium like Google classroom, the WhatsApp group, the Telegram groups/channel etc. which students could make use of based on

availability and internet facility. Some of the teachers made even video lecture. They uploaded it on different platforms like Google classroom, Facebook, and YouTube so that student can access the lectures when they have better internet facility (due to poor and unstable internet speed attending live class was difficult for many students who went to rural areas after the lockdown and closure of educational institutions). It is obvious to understand here that, delivering educational material and lecture was not easy in this period. In a poor and predominantly rural country like India, switching over to online education is not that easy. The UNESCO has reported, "Half of the total number of learners — some 826 million (82.6 crores) students — kept out of the classroom by the Covid-19 pandemic, do not have access to a household computer and 43 per cent (706 million or 70.6 crores) have no internet at home, at a time when digitally-based distance learning is used to ensure educational continuity in the vast majority of countries." ("Coronavirus Lockdown | COVID-19 Widened Educational Divide," 2020) [4].

Both the educational planners and the academicians know that in India, both teachers and students lack digital skills. Teachers are facing an immense problem in adapting to online teaching. For a large number of teachers using even email services and the mobile phone was not so easy till the enforcement of lockdown. Once, the lockdown was imposed, and colleges and universities were forcibly shut down, faculty members of Higher Educational Institutions (like that of any primary and high school teacher) were left with no option to adapt to changed circumstances and start teaching online. But, unquestionably, they were unprepared and had little or no command in using online methods of teaching. The syllabus and courses of different higher educational institutions were not made for online teaching or e-learning. In this circumstance, teachers were left with two options:

1. Provide the required study material for the course; and
2. deliver online live/recorded lectures

The immediate measure was to provide study notes to the students in the form of PPTs, PDFs or even blogs. Later on, teachers learnt about different other platforms through which online lecture can be delivered. Google meet and Zoom app emerged as the most popular online lecture delivering mediums (Google made its services free for the covid-19 pandemic and zoom app was already providing 40 minutes free online meeting services). Neither Higher Educational Institutions in India had their own learning management systems/online teaching platforms nor had they subscribed to services of any private service providers. Using open-source online platforms was the only option left for teachers and even educational institutions.

The pedagogical concerns

Online teaching requires a meticulously developed curriculum which can be taught on online platforms with ease and comfort. Delivery of lectures, discussions and even study materials provided to the students should be done keeping in mind the need of the students. In this process, multiple technical and curricular factors need to be taken into consideration. When educational institutions start using online methods of teaching, then the previous experiences of teachers and the learners should be taken into account. In online teaching, teachers should have confidence on the

medium, i.e. online platforms, and he needs to develop the pedagogy to be used for the course based on his abilities, technical expertise with keeping the comfort of learners in mind. The local context of the learners is equally important, like the cultural aspects as well as infrastructure resources available to the students. The scheduling of classes, time slot and location of students etc. should also be given due importance at the time of course design.

In the Indian context, the issue of gender is most important. The kind of environment and enthusiasm we see in the regular face-to-face class is often absent among female students when they are attending courses from their homes. It is the result of both economic factors as well as cultural factors. Especially the grownup female members of Indian families are expected to help their mother in household chores when they are at home. When lockdown started the majority of parents considered it a holiday for girls and they were encouraged to help their mother when they are at home. As a result, female candidates were either irregular in their online classes, or they were tired and distracted when they were attending online courses. Therefore, it is important that while developing an online course, its curriculum and teaching methods should be different from that of regular classroom courses. The online courses should be developed using a rapid iterative design method like an action research design, so that course development, effective teaching of the course, evaluation etc. can be modified as per the needs and requirements of the learners based on their feedback (Carliner, 2004^[2]; Picciano, 2002, 2006)^[8, 9]. This process needs to have continuous evaluation system for students and not a regular end-semester examination or the annual examination. The continuous evaluation system will be helpful in “fine-tuning” the course. The teacher can develop a course, and through the progressive refinement of different stages of teaching, it can be moulded as per the need of the students. In online education, the active participation of the teacher and especially students is the key factor. A passive student and the traditional approach of the teacher can make online teaching a disaster. It is imperative on the part of the teacher to make the course interactive, engaging, innovative using examples, illustrations, case studies, multimedia resources etc. In online education, lecturing like a regular classroom is going to be monotonous and dull, which will lead to high drop-out rate from the course. In the physical classroom situation, teaching-learning is done differently from that of online methods. In a physical setting, interaction is more dynamic. Classes are the site of learning, socialising, teasing, laughter, and even getting scolded by the teachers. All of these aspects of classroom process get minimised in the online teaching practice. In the online classroom, the onus lies with the teacher to make the conversation interesting so that the attention of students can be maintained throughout the class. In the Indian context, online teaching-learning is no doubt, always going to be challenging. Coping with the basic issues like poor/unstable internet connectivity and India’s notoriously undependable power supply while delivering online lecture itself is a big challenge. The assignment submission and evaluation, project and dissertation work, and the online examinations etc. make the task of the teacher humongous in the online education system.

The road ahead

The open and distance learning, which used to be on the periphery of the university system in India, will also get a boost in the post-covid-19 situation. The area had a niche in the education sector, but the inclusion of online methods will make the process of online and distance learning more acceptable. Why is it so? It has been felt that online students have the advantage of time, cost and accessibility. Open and distance education programmes is definitely going to overcome its traditional drawbacks by enriching their existing programmes and also by the development of new academic programmes using more technological inputs/online platforms etc.

The covid-19 pandemic has forced us to ponder on certain issues

- Will, the adoption of online teaching methods as a response to covid-19, is going to spur the growth of online learning, especially in the Indian context?
- Will the educational institutions, especially the higher education institutions, embrace online methods of teaching either in a blended mode of teaching or as a sole online teaching method?
- What kind of impact will it have on educational planning and policymaking in India?
- Historically the attitudinal inclination of students and their guardian has been in favour of the regular classroom courses. In the post-covid-19 situation, will there be any change in the attitude of students as well as their guardians towards online and blended education methods?
- In the post-covid-19 situation, it is obvious that big tech companies and even new startups are going to tap this newly developed space of online education. Will governments, both at the central and at the state level take some initiative in this direction?
- There is already a widespread digital divide present between the developed world and the developing world, the economically developed areas and the impoverished areas, and the urban area and the rural area. In this situation, will the online education widen the gap present between the “haves” and the “have nots”?

Conclusion

The future is uncertain in this phase of the covid-19 pandemic. The pandemic has already crippled the economy and the education system of the country. It has posed a serious problem to the education system. People are getting infected every day. Government and health care system is struggling to cope with the increasing number of cases. In this situation, the reopening of campuses is going to be a risk. The educational system and especially the higher education system need to adapt to the new normal. Online education is the best bet in this uncertain period. Higher Educational Institutions (HEIs) can become little more pragmatic and continue imparting education in hybrid/blended mode. In the blended mode, students should be allowed to visit the campuses for doubt clearance sessions, tutorials, project and dissertation guidance etc. The regular teaching of the course needs to continue in the online mode. Teachers can use both the live lecture delivering methods as

well as non-live online teaching platforms like Google classroom, chat groups etc. The present crisis has shown a certain positive impact on system and individuals as well. Both teachers and students have become more tech-savvy. They became familiar with different apps and online platforms. Along with academic learning, there have been some technological learning, as well. The online teaching and learning is our defence mechanism against the spread of the virus but, if teachers and students master the specific skills of effective and efficient online education, the crisis can be converted into an opportunity.

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