Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 7, July 2021: 14415-14422

Challenges Faced by Higher Education in India During Covid-19 Pandemic and its Way Forward

[1]MADHU SHARMA

[1]Associate Professor,
S.D Kanya Mahavidyala, Mansa

ABSTRACT

Almost all sectors had been impacted by the COVID-19 pandemic onslaught. Face-to-face class and laboratory activities required physical interactions and in its absence, higher education was one of the areas which had been most severely impacted. Higher education institutions (HEI) were obligated to cease face-to-face classes once it was determined that the virus can be transmitted through proximity with the infected person, direct contact with surfaces in the immediate area with infected people or things used by infected people (WHO, 2020). As a result, the colleges and universities hurried to build virtual and remote teaching programmes. In this article, we discuss the challenges posed by Covid-19 in the higher education and possible remedial measures required from the perspective of government agencies, institute administrations, teachers and students.

Keywords: Higher Education, Covid-19, Virtual Teaching Remote Learning, Remedial Measures

METHOD

This study is based on the writer's informal conversations with colleagues and students, class experience, observations during virtual presentations, assignments, and a review of related literature using the dynamics of online teaching. The conclusions and recommendations given here are based on the writer's personal experiences as well as research in the respective field.

1. INTRODUCTION

The sudden outbreak of COVID-19 was declared a public health emergency of international concern by the World Health Organisation (WHO), due to the unexpected and alarming continuously rising numbers of confirmed cases worldwide (WHO, 2020). The spread of Covid-19 created a hitherto unforeseen event that brought almost all sectors of economy and daily life to an abrupt halt across the world. A lockdown was imposed, social distancing was practised, activities and gatherings were cancelled, and public spaces were shuttered. The education sector was no exception and colleges had to be closed as part of the effort to bring the pandemic under control. In response to these precautionary steps, the Ministry of Education issued an emergency plan, mandating an immediate and urgent transfer to remote teaching in order to assure the continuing delivery of education to pupils in the current circumstances (MOE, 2020). Emergency remote teaching, as defined by Hodges et al., 2020,

is "a brief change of instructional delivery to an alternate delivery method due to crisis circumstances." Higher Educational Institutions (HEIs) had to completely stop the in-person classroom teaching. Many institutes with residential facilities had to get the hostels vacated. As the pandemic continued, it was not possible to stop the teaching process indefinitely. Consequently, the higher education went through a highly rapid transition resulting in online teaching. Many institutions lacked guidelines and clear policies on the virtual mode of teaching; several issues came to the fore, such as what to teach, how to teach, the role of teacher and student, the workload of a teacher, the teaching environment, and the implications for educational equity, among others. Inadequate information-technology related infrastructure, a lack of teachers' and students' expertise with online instruction, changes in working hours due to COVID-19 for some part-time students, and the general inconvenience of working from home have all been brought to light by remote education. In the following sections, we discuss the concerns and challenges encountered in the transition faced by institutions in India.

2. EMERGENCY SHIFT TO REMOTE LEARNING AND TEACHING

As social distancing measures were implemented due to pandemic, the institutions were forced to make an impromptu and unplanned shift to online teaching in order to keep teaching and learning activities going. The practicality and quality of distant learning were influenced by a number of interconnected elements, including technical infrastructure and accessibility, distance learning competencies and pedagogies, and opportunities related to the shift to distance/online learning and the field of study.

2.1 Technical Infrastructure and Accessibility: Shifting to online teaching and learning required infrastructure for online access. Some higher educational institutions (HEIs) were unable to shift towards online teaching because their students did not have access to the internet at home, particularly in rural areas. When lock down and social distancing measures were implemented, teaching and learning were completely interrupted. In such a situation, completion of academic year by the concerned students became highly unlikely (Naik et al. (2021). On the other hand, a second group of learners of HEIs were from urban areas with high internet penetration. Although such institutes and their students had relatively much higher access to internet infrastructure, many institutions faced constraints in terms of the technical infrastructure or resources needed to optimise remote learning (Girard et al., 2021). There was a divide between students who had access to the internet and the ones who did not, making it difficult to provide equitable possibilities for students to complete their academic year within the same institution. Many institutes made an attempt to overcome this issue by providing access to study material to the students in order to help them complete their courses as per required schedule. For instance, Delhi University's Rajdhani College sent study material to students through speed post under the 'Utthan' initiative. (Agha, 2020).

2.2. Virtual Learning Competencies and Pedagogies: Distance/online teaching and learning necessitated a distinct pedagogy, and it was difficult for faculty to adopt this abrupt and unplanned transition from face-to-face teaching and learning. Teachers' preparedness to take on this challenge varied greatly. Even if continuing education to the best of one's ability could not ensure the same degree of quality as face-to-face education, it was still preferable to no education. Teachers have been used to in-person teaching methods, therefore the sudden shift to online teaching had elicited some reluctance to adopt virtual teaching approaches. Dhawan corroborates that 'accessibility, affordability,

flexibility in learning pedagogy, lifelong learning and policy' remained some of the arguments to be addressed in online pedagogy (2020). The biggest obstacle in suspending class temporarily without stopping learning, was technology infrastructure (Zhang et al.2020). Teachers were anticipated to be able to use online learning platforms instantly during the abrupt transition to online education (Zhang et al., 2020). The faculty, on the other hand, reported a lack of knowledge and expertise in translating offline (hardcopy) materials to online (softcopy) materials and sharing them on online platforms. Due to lack of experience and facilities in online teaching, teachers lacked the skills as well. The transition from Teaching and Learning (T&L) sessions in actual classrooms to online T&L remained quite challenging and arduous for the faculty. Even if the majority of individuals possessed internet-connected devices such as smart phones and laptops, this does not mean they are technologically savvy. Effective lesson delivery was dependent on the capacity to integrate technology, material, and pedagogy based on knowledge and abilities. As a result, these abilities and knowledge were vital for teachers in the times of Covid-19. Koehler, Mishra, and Cain (2013) corroborate that Technology Pedagogy Knowledge (TPK) refers to a teacher's understanding of specific techniques that complement the teaching of the subject matter. Familiarity with such pedagogic methods was the need of the hour.

2.3 Opportunities Related to the Shift to Distance learning: Working and teaching from a distance was once thought to be a wonderful opportunity to learn from one's unique circumstances, and it provided more flexible learning alternatives, such as blended or hybrid learning and combining synchronous and asynchronous learning. As a result of this unplanned and unprepared experiment in distant teaching and learning, the faculty and students have gained as well as tested new tools and methods to enable distance teaching and learning. Consequently, it's likely that a shift in thinking occurred, or that the experience opened up new avenues for teaching and learning. The students believed that this would help them explore the potential of flexible learning and gain acceptance of online learning as a viable option. Some students expected to see more innovation in the field of teaching pedagogies as well as teaching and learning delivery modes. The learning assessment and examination methodologies needed to be revisited to build new experience.

Distance/online learning had proved to be an effective solution for academic institutions, particularly in preventing the spread of corona virus and ensuring the continuation of the learning process. Institutions invested more in technical infrastructure to facilitate the shift from management learning systems to cloud services, as well as the digitalization of administrative activities such as access to documents, resources, and libraries. Virtual classrooms have proven to be an excellent alternative for academic institutions, particularly in terms of containing and preventing the spread of the corona virus and assuring the continuation of academic programmes. As perceived by faculty members and students, distance learning has potential advantages of enhancing ICT (Information and Communications Technology) skills, supporting work and education at the same time, supporting quality education and innovation and allowing learners to learn any time and at any place (Rafae et al.2021). This will eventually improve the options for learners to access lifelong learning opportunities as well as the ability to work from a distance and also develop a more positive attitude toward s working from home.

2.4. The Field of Study: Depending on the field of study, the use of certain technological equipment was another critical issue during pandemic for virtual training. As a result, this challenge with

distance/online teaching and learning has been identified in certain disciplines such as clinical medicine, veterinary studies, and a variety of fields that relied on laboratory access; these are some of the critical fields where hands-on practice cannot be replaced by distance teaching and learning (Zalat et al. 2020). Similarly, students in many creative disciplines, such as painting, music, and craft, were unable to perform adequately while working from home due to lack of access to necessary equipment. It's difficult to carry out more practical components of the curriculum, and the teaching delivered during the lock down was frequently limited to the theoretical aspect of the curriculum only. In the current context marked by social distancing measures, even within institutions where technical infrastructures enabling online teaching and learning were available, and where faculty were willing to adapt to the change in the mode of delivery, the quality of the learning experience would vary greatly from one discipline to the next. Hence, the quality of distance education delivered in an emergency situation varied greatly.

3. CHALLENGE OF ASSESSMENT AND PROCTORING

Assessment of students is the key to ensure learning. Covid-19 has thrown new hurdles towards this element. Students' assessment has been vital to maintain learning in online education. Besides, for teachers, objective, fair, and measurable remote testing and assessing their performance was a challenging task. In higher education, assessment has three key functions: it facilitates learning, establishes accountability, and provides certification.(Archer, 2017; Capsim, 2020). Assessment can also be used to provide a credential for learning the targeted outcomes, ensuring progress and transfer (Archer, 2017) Formative and summative assessments, as well as appropriate feedback systems, are used to facilitate learning in higher education. This entails using assessment data in a diagnostic method to determine competency, gaps, and progress, allowing students and teachers to adjust their learning strategies and teaching tactics accordingly (OECD/CERI, 2008). The assessment of students' learning is an important aspect of online courses that demands specific attention. This involves how teachers create and use formative and summative exams to assess students' progress and learning, as well as how they provide appropriate feedback and maintain academic integrity.

Online evaluations have their own set of inherent benefits and drawbacks. Teachers can assess students online by adopting multiple methods such as online tests, oral vivas and assignment submission. However, proctoring of any online exam is a challenge. While technology has enabled online teaching and made assessment independent of location, it has also provided new means for use of unethical means by students. Lack of preparation on the part of institutions, teachers, and students, especially in terms of effective invigilation, can reduce the overall effectiveness of teaching-learning process (Dhawan, 2021). It sometimes devolved into a game of immoral methods. Teachers found it quite challenging to invigilate pupils on web cameras, so they used to clamp down on the use of unethical means by increasing the difficulty level of their individual topic tests, giving tight time schedules to students, and doing their best to keep the check even if it had to be an open book exam. However, despite these efforts, students in some cases have proven to be far wiser as they made use of their complete knowledge and expertise of technology to negate the teacher's efforts, no matter how valiant and strict they tried to be. As a result, the key challenges of online teaching that need to be solved are proctoring and assessing in distant learning.

4 FINANCIAL IMPLICATIONS

During the period of Covid -19 pandemic economic crisis was referred to as a huge barrier faced by the universities and colleges. There were more than 1.5 billion students in 190 countries who have not been able to attend school physically due to pandemic (Miks, 2020). As such, educational institutions made a dramatic transition from traditional face-to-face learning to remote learning in a very short time period (Kandri, 2020).

Since June 2020, New America and the State Higher Education Executive Officers Association (SHEEO) have been evaluating the economic ramifications of the COVID-19 pandemic-related transition to online education. This addresses concerns about institutional financial sustainability in the case of emergency, fiscal issues resulting from the world of online education, and longer-term changes to the institute's finance model. Private higher education institutions, in particular, but not exclusively, have expressed concerns about tuition fee payments and a potential drop in student numbers resulting in financial crisis. On the other hand, the situation remained quite dismal for the students who were willing to work to support themselves but unable to do so during pandemic situation. They were ready to quit half way due to financial constraints. Finally, the learners predicted a bleak financial future in the long run. The financial fallout from the current health-care crisis and global recession, led to a drop in students' enrolment. Although private colleges faced a revenue shortfall due to a lack of tuition fee, public institutions were equally concerned about a possible drop in public funding as a result of the global financial crisis.

5. IMPROVING CRISIS MANAGEMENT READINESS

A crisis is a situation in which risks and threats manifest themselves in a specific situation. It's difficult to define precise boundaries between crisis management stages, such as where one begins and where another concludes. An organisation must be able to recognise the type of crisis and the level of action required to avoid loss in order to effectively manage it. Different disciplines, fields, and contexts use the term "crisis" in different ways. All members of the university community, including research and project participants, collaborators, and those who attend or work in university-owned facilities and structures, may be affected by a catastrophe. In the field of higher education, crisis has been conceptualized by Zdziarski as "an event, which is often sudden and unexpected, that disrupts the normal operations of the institution and its educational mission, and threatens the well being of personnel, property, financial resources, and/or reputation of the institution" (Zdziarski, Dunkel & Rollo, 2007, p.5).

The impact of Covid-19 put Higher Education leadership in a state of crisis management, requiring swift and efficient decisions. Higher Education courses were forced online as a result of the lock downs, posing significant issues for those involved in the delivery and reception of learning and instruction. "Of all the repercussions brought about by the epidemic, one of the most severe is the influence on academics and higher education," according to Strielkowski and Wang. This global pandemic has the potential for greater ramification beyond the disruption of an academic year, placing economic strain and significant logistical constraints on education. The repercussions of the virus on the global performing arts industry further intensifies the pressure on actor training institutions at Higher Education to protect the students' pedagogic experience. Maintaining the public-facing image and timely communications with academic communities becomes a dominant concern during crisis, and

the effect of Covid-19 will necessitate a long road to recovery for the academia. This experience provides an opportunity for the institution to prepare for future crisis of the similar nature. Although the institutions are still dealing with the urgency of the problem in the short term, it may also be viewed as a unique chance for institutions to learn about crisis management. It could help them become more resilient and agile in the future when faced with unexpected circumstances.

6. CONCLUSION & RECOMMENDATIONS

The COVID-19 pandemic affected the economic and educational health of India. The pandemic wreaked havoc on educational institutions. The government and higher educational institutions quickly announced that online classes will be conducted by the institutions. In just a few weeks, entire education systems from elementary to higher education had to entirely restructure their operations to accommodate an online teaching-learning environment (Mishra et al., 2020). Paradigm shift from traditional face to face teaching method to Online teaching posed technical difficulties that affected the efficacy of Teaching-Learning Process (Naik et al.,2021). In a world of digital transformation, disruptive technology innovation, and rapid change in the educational landscape, the higher education system must be prepared to provide high-quality education. Although disruptive innovation was a period of risk and uncertainty, but it was also a time of opportunity, bringing talent and innovation into the educational system. Successful educational innovation and transformation must, however, be based on sustainability, scope, and scale (Carolan et al., 2020). Universities that successfully transition from traditional learning systems should cultivate a participatory culture, involve participants, and promote evidence-based decision-making and transparent outcome assessment. Pedagogical shifts from traditional to online class sessions, personal to virtual instruction, and seminars to webinars have all occurred recently (Mishra et al., 2020). The pandemic's impact will usher in a new period of extreme technological upheaval, with the global higher education sector accelerating its digitalization (Krishnamurthy, 2020). Covid-19's disruptive impacts have provided not only rich chances for reforming HEIs, but also obstacles and challenges in this process, as universities must critically rethink and reorganise their educational offerings to meet this new reality (Carolan et al., 2020).

In the following, we enunciate a few recommendations for the various stakeholders that can potentially transform the Indian higher education ecosystem into a more futuristic avatar and ensure an equitable access to education for the large youth population of India.

Governments at both the Union and the State level need to take enabling steps for access to online education in the remotest parts of the country. For instance, a policy pronouncement can be considered so that each college provides laptops to the higher education students to begin with. Such a scheme could be developed based on need assessment and other criterions factored in at the local levels. At the State level, zone wise, district wise, block wise, in every village of the district level, efforts must be made to reach out to identify resource gap and then it needs to be operationalised in a smart way. Additionally, PPP models, NGOs, & International Developmental Organisations can be roped in to help support ramp up so that, virtual classes could truly become a reality. Although these steps may appear herculean at the moment, only such radical transformations will lead to a real educational revolution and truly usher all Indians into the 21st century.

The above proposed investment in education technology can also significantly contribute towards boosting the economy. The Micro & Small Entrepreneurs in the IT Hardware Solutions Business can

be engaged to develop online teaching tools as per the needs of the local population and deliver the same to the HEIs in that area. This will also generate employment opportunities thus helping the overall economy to inch towards the new normal.

Students form the most important stakeholder group in the education sector. In order to bring in the transformation to online learning and teaching, students themselves can be engaged to bring the technology to the doorsteps of those who need it. For example, students can be engaged in social work at graduate and post graduate level. These activities could well be integrated into their field work assignment and this effort need to be tracked carefully. Delivering online technology to young students also brings in considerations that pertain to their general welfare. For example, use of online teaching and learning tools will need to be tracked and supervision will be required to ensure compliance to all ethical regulations and protect the online privacy of students. In this regard, senior students in the area of social work could be engaged to make their younger counterparts aware of proper utilization of online learning tools. These activities can be complemented by engaging the unemployed, educated youth from the villages as an integral part of this mission.

Further expanding this endeavour to the Aspirational Districts and taking the Digital Classrooms to interior, unapproachable villages will be a challenge; but is an achievable task. Telecommunication companies are already doing significant work in ensuring data and voice connectivity seamlessly. Going further it needs to further install towers in such locations from where the calls drop or buffering could be contained effectively so that uninterrupted educational streaming takes place. In essence, the economically unviable areas need to be made the corridors of internet connectivity. Moreover, political leadership & governance is working tirelessly at fostering newer policy initiatives to boost the economy. If all the hands join collaboratively then nothing could stop us from transforming the Indian higher education sector and develop our human resources.

REFERENCES

1. Carolan, C., Davies, C. L., Crookes, P., McGhee, S., and Rox-Burgh, M. (2020). COVID 19: disruptive impacts and transformative opportunities in undergraduate nurse education. Nurse Educ. Pract. 46:102807. doi: 10.1016/j.nepr.2020.102807
2. Dhawan A, "Anxiety for students, violation of privacy — The problems with online proctored exams", *The Print*, Available at: https://theprint.in/campus-voice/anxiety-for-students-violation-of-privacy-the-problems-with-online-proctored-exams/674355/
3. Eram Agha (2020), Available at: https://www.news18.com/news/india/this-du-college-speed-posts-study-material-to-students-hit-by-indias-gaping-digital-divide-3118673.html
4. El Refae, G.A., Kaba, A. and Eletter, S. (2021), "Distance learning during COVID-19 pandemic: satisfaction, opportunities and challenges as perceived by faculty members and students", Interactive Technology and Smart Education, Vol. 18 No. 3, pp. 298-318. https://doi.org/10.1108/ITSE-08-2020-0128
5. Furiv, UlianaAU - Kohtamaki, VuokkoAU - Balbachevsky, Elizabeth PY - 2021/09/22SP - T1 - Crisis response of higher education institutions to Covid-19 - A case study of two universities: University of Sao Paulo (USP) and Tampere University (TAU)TY - BOOK
6. Girard I., Vanston F., Faud E (2021), Covid-19 and Technical difficulties: the rise of inequalities in higher education, Available at: https://www.right-to-education.org/blog/covid-19-and-technical-difficulties-rise-inequalities-higher-education
7. Hodges, C, Moore, S, Lockee, B, et al. (2020) the difference between emergency remote teaching and online learning. Educause Review 27. https://vtechworks.lib.vt.edu/handle/10919/104648
8. Kandri, Salah-Eddine, (2020) How COVID-19 is driving a long-overdue revolution in education. https://www.weforum.org/agenda/2020/05/how-covid-19-is-sparking-a-revolution-in-higher-education/

9. Koehler, M. J., Mishra, P., & Cain, W. (2013). What is Technological Pedagogical Content Knowledge (TPACK)? Journal of Education, 193(3), 13–19. https://doi.org/10.1177/002205741319300303
10. Krishnamurthy, S. (2020). The future of business education: a commentary in the shadow of the Covid-19 pandemic. J. Bus. Res. 117, 1–5. doi: 10.1016/j.jbusres.2020.05.034
11. McNamara, A. Crisis Management in Higher Education in the Time of Covid-19: The Case of Actor Training. *Educ. Sci.* **2021**, *11*, 132. https://doi.org/10.3390/ educsci11030132
12. Miks, Jason and McIlwaine, John, UNICEF (2020), Keeping the world's children learning through COVID-19, https://www.unicef.org/coronavirus/keeping-worlds-children-learning-through-covid-19
13. Mishra, L., Gupta, T., and Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. Int. J. Educ. Res. 1:100012. doi: 10.1016/j.ijedro.2020.100012
14. MOE (2020) Distance education in Saudi universities complements the educational journey of male and female students, www.moe.gov.sa/ar/news/Pages/un-c-2020-75.aspx (accessed 4 April 2020).
15. Naik, G. L., Deshpande, M., Shivananda, D. C., Ajey, C. P., & Manjunath Patel, G. C. (2021). Online Teaching and Learning of Higher Education in India during COVID-19 Emergency Lockdown. Pedagogical Research, 6(1), em0090. https://doi.org/10.29333/pr/9665
16. OECD/CERI International Conference "Learning in the 21st Century: Research, Innovation and Policy", "Assessment for Learning Formative Assessment", 2008
17. Shivangi Dhawan (2021), Online Learning: A Panacea in the Time of COVID-19 Crisis, Journal of Educational Technology Systems, 49(1), 5-22
18. Wadim Strielkowski, Jing Wang (2020), An Introduction: COVID-19 Pandemic and Academic Leadership, Proceedings of the 6th International Conference on Social, economic, and academic leadership (ICSEAL-6-2019), https://www.atlantis-press.com/proceedings/icseal-6-19/125941002
19. WHO, Scientific Brief (2020), Modes of transmission of virus causing COVID-19: implications for IPC precaution recommendations, https://www.who.int/news-room/commentaries/detail/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations
20. Zalat MM, Hamed MS, Bolbol SA (2021) The experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. PLoS ONE 16(3): e0248758. https://doi.org/10.1371/journal.pone.0248758
21. Zdziarski, Eugene L - Dunkel, Norbert W - Rollo, J Michael (2007), Campus Crisis Management (07)
22. Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. Journal of Risk and Financial Management, 13(3), 1-6. https://doi.org/10.3390/jrfm13030055