

Pre & Post Covid-19 Pandemic of Post-Secondary/Tertiary Education Landscape

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Abstract

All facets of human life have been impacted by the COVID-19 epidemic, and this includes the academic performance of students in higher education. After China and the United States, India is the third-largest country in the world in terms of higher education. Academic year-end exams and competitive tests were delayed across India during this pandemic coupled with closing down educational institutions for an extended period of time. Every educational institution in India during the epidemic is put on the back foot in this process, from basic school education to higher education at the university level. Finally, the Covid -19 epidemic was severely impacted by India's large population. The pattern of learning has been significantly altered by the switch from traditional classroom instruction to online instruction in educational systems, with both positive and negative effects. This essay focuses on the difficulties that instructors and students encountered during the pandemic. The research article also addresses many technological difficulties.

Keywords: Covid-19, impact, challenges, issues, Students, teachers, technology, internet

1. Introduction

A pandemic that caused a serious health and financial emergency was COVID-19. In addition to the hesitation and conundrum, it has produced unending ambiguity. The pandemic is over, but the changes it caused [1], have fundamentally altered our way of life. For example, the work from home trend, upgrades to medical facilities to better handle similar disasters, a brisk pace of digital transformation [2] and significant changes to education, particularly at the post-secondary level [3][4]. A number of transformations in the landscape of Tertiary Education are:

- ❖ Universities as well as colleges have begun utilising digital platforms heavily to connect with the students' i.e. social media platforms, online news, OTT platforms, etc. They will publish more videos, blogs, and podcasts, conduct webinars for aspiring students, provide virtual campus tours, appoint present students and alumni as ambassadors to connect and communicate with aspiring students virtually.
- ❖ Acceptance of Video conferencing software and applications are used to conduct online group discussions, proctor exams, evaluate internal school exams and assessments, and conduct in-person interviews [5][6].
- ❖ Usage of web conferencing or chat tools by Universities and colleges to guide students and assist them in selecting the appropriate courses that match their goals, competencies and, and capabilities.
- ❖ Higher education schools employ a number of platforms like social media, websites, mobile apps, etc. to announce the list of chosen applicants and send official admission offers via email.
- ❖ Recruitment of students to serve as University campus ambassadors are performed via video or web conferencing who connect, engross, and communicate electronically with novel students regularly.
- ❖ Education's new job should be to help students build talents like resilience, life skills, adaptability, high emotional intelligence, creativity, and critical thinking so they can contribute to society.
- ❖ Increased espousal of blended learning i.e. physical as well as virtual/online classroom [7]
- ❖ Collaborations among different universities from many nations i.e. at National as well as international level are done to work together in the field of higher education programmes. In this scenario, students do a part of the course in his/her parent country while the rest of the course is done in the country to which partnership has been done.

II Effect of Covid-19 on Higher Education [8][9]

COVID-19 has had a noteworthy effect on India's higher education system in four different ways:

- **Encourage to 'Study in India':** Students' aspirations to study abroad have been significantly impeded by the COVID-19 scenario. A few have totally abandoned their ambitions to enrol in foreign universities, while some students have delayed their plans until the following year. Many students find it

unappealing to pay costly tuition to a foreign university and take virtual lessons from India with no guarantee of employment. If Indian institutions can match the demands of students seeking high-quality education, they will have a unique potential to profit from this situation [10].

- **Fewer Enrolments:** Due to the economic downturn and job losses, many parents are finding it more difficult to pay for their children's education during COVID-19, which has resulted in fewer students enrolling in colleges at this time. Additionally, there are fewer opportunities for networking and socialising because the majority of campuses are still off-limits to students. Universities and colleges are under growing pressure to provide value for money as a result.
- **Adapt to Online Learning:** Online education has been indispensable during the pandemic era of Covid-19. The manner in which education is delivered has radically changed during the past few months. Online learning has become the new norm as a result of travel restrictions and several health dangers. While some colleges adapted to the change quickly, others found it difficult because they lacked the necessary technical know-how and infrastructure to convert to teaching online.
- **Progressing role of teachers:** Digitization has been crucial both during and after COVID-19. As a result, the importance of instructors has increased. Even when the students can receive the learning material with the aid of technology, the teachers still give the personalised touch necessary to make the learning experience more active and engaging.

III. Teaching and Learning after COVID-19

A certain number of colleges and universities will merge or close as an outcome of Covid-19. The outbreak will have the greatest impact on the schools with the highest reliance on tuition, especially those that are already experiencing demographic-driven drops in demand [11]. Most colleges and universities that will survive COVID-19 will probably see declining revenue and rising costs.

2. Pre-Covid era Observations about Post-secondary Education

India is not an exception to the coronavirus pandemic's exceptional challenges for higher education worldwide. In a country where higher education is still not widely available, the pandemic has dashed the hopes of a sizable number of students who were planned to pursue higher education in prominent colleges in India and other countries. Students from underprivileged origins and members of the economically underprivileged parts of society have been particularly heavily struck.

On February 8, 2017, the report on "Issues and challenges confronting higher educational sector in India" is published which was submitted by Dr. Satyanarayan Jatiya, who was the chairperson of the standing Committee set up for Human Resource Development. Institutions of higher education at several locations like Udaipur, Hyderabad, Chandigarh, Thiruvananthapuram, Patiala, Chennai, Bhopal, Vishakhapatnam, and Indore have been considered regarding difficulties faced by these institutions in India. Additionally, the Committee spoke with public sector banks about the student loans offered for postsecondary education.

The key observations and recommendations of the Committee are as follows:

- **Dearth of resources:** State universities and the institutions they are affiliated with manage the majority of enrolment in higher education. However, in contrast, the grants given to these public universities are extremely meagre. Only 35% of the University Grants Commission (UGC) funds are left over after the central universities and the colleges they are associated to have used over 65% of the available funds. The Committee suggests looking into other funding sources for state universities, such as endowments, corporate donations, alumni support, etc.
- **Teacher vacancies:** According to UGC, there are a total of 16,699 professorial positions, 4,731 associate professorial positions, and 9,585 assistant professorial positions in the Central Universities. 35% i.e. 5,925 professor jobs, 46% i.e. 2,183 posts of associate professor, and 26% i.e. 2,459 posts of assistant professor are empty out of the total number of sanctioned teaching positions.

The Committee proposed two explanations for why this would be the case: (i) Young kids may not regard teaching to be an appealing vocation (ii) The hiring process is drawn out and filled with unnecessary formality. Long before a post is open, the hiring process ought to start. To increase the appeal of the teaching profession, teachers should also be supported financially for start-ups and encouraged to take on consulting assignments.

- **Responsibility and accomplishment of teachers:** At this time, there is no structure in place to ensure the efficacy and responsibility of instructors at colleges and universities. In contrast, at universities abroad, the performance of college teachers is evaluated by their peers and students. In this case, a

mechanism for gauging professor performance based on feedback from both students and colleagues should be devised. In due time, additional inputs such as research papers and instructor publications should be added to the performance audit.

- **Lack of employable skills:** It has been noted that technical education students lack marketable abilities. It has been advised to identify skill gaps in various industries and offer training to improve employability in such industries. In this regard, a number of measures have been put out, including Industrial Finishing Schools, Long Term Student Industry Placement Scheme, Industrial Challenge Open Forum, and Industry Institute Student Training Support.
- **Accreditation of institutions:** The Committee observes that the regulatory framework for higher education must be built around the accreditation of institutions of higher learning. To meet the demand for qualified workers in the sector, quality assurance organisations should also ensure the fundamental minimum criteria of technical education. The National Board of Accreditation should act as a facilitator for the progress as well as quality control of education at secondary/tertiary level.
- It is critical to support organisations that rate Indian universities and institutions, including credit rating agencies, respected business associations, media sources, and professional associations. Strong grading policies will support universities' operations and promote healthy competition among them.

3. Analysis of challenges in different categories for Higher Education

During Covid-19, there are lot of challenges and issues in the sector of Tertiary education [6]. The 5 main challenges were:

- ❖ Preparing for the unexpected
- ❖ Conveying effective learning and teaching
- ❖ Strategy to support students in best way
- ❖ Difficulties of a socially isolated campus.
- ❖ Maintaining the educational industry.

3.1 Challenges faced by teachers during Covid-19

With the sudden imposition of lockdown due to Covid-19 pandemic all over the country, the world of education changed overnight. Virtually, students and professors struggled with the dynamic move from physically attending educational institutions to attending classes [6]. It was challenging for everyone to adopt and adjust when the standard model of instruction was replaced by a more unusual one. Due to non-techno savvy teachers for the purpose of teaching, it was a difficult assignment for them to complete. Virtual meeting platforms like zoom and Google meet [12] became the virtual meeting hubs. These new changes were happening in an education system but the backbone of the education system like teachers was not aware of this new technology [13].

During the lockdown, some teachers were teaching only for completing the mandatory online teaching process. But these teachers were not well aware of the online method of teaching.

The digital delivery of education presents difficulties for 84% of teachers, according to a Learning Spiral poll. Nearly 50% of educators struggle with signal problems and data costs. Less than 20% of teachers, according to the survey, were given orientation on how to conduct online classes. The teachers in this study had no prior experience instructing online [14]. Byju Raveendran, founder and CEO of Byju's, claimed teachers were able to learn, unlearn, and relearn during the pandemic. But of all occupations, teaching has received the least respect.

The multiple and simultaneous challenges faced during Covid-19 by teachers on top of the teaching responsibilities are:

- ❖ Teachers faced planning challenges as well as emotional challenges. They were witnessing the pain of the students' children, for whom there were remedies, but they were either out of their reach or forbade from putting those remedies into practise.
- ❖ Teachers were constrained because they had little to no control over the curriculum that was provided to them and were unable to modify it in response to the needs of their students.
- ❖ In addition to their own stress of having to figure this out, the teachers put emphasis in realizing the challenges being faced by the students which created a different layer of challenge and stress for teachers. The teachers felt responsible for trying to care for the students.
- ❖ Teachers found it difficult to see how poorly served were pupils who they knew well and were aware of their weaknesses.

- ❖ For the sake of parents or caregivers for their efforts, teachers would transport materials to students' homes or even conduct errands for them.
- ❖ Similar difficulties are faced by teachers working with English-language learners [15], dealing with parents who were frequently crucial workers, invested in the education of their children, difficulty in speaking English as well as had possibly a good reason to distrust governmental institutions.
- ❖ During this period, English-language learners received worse care than kids from the general population who also received subpar care.
- ❖ In high-demand rural and urban regions, the pandemic made the shortages of special education teachers that already existed worse. The special education teacher works with kids and teenagers who have a range of disabilities. The most challenging situations are frequently presented to teachers who interact with pupils who have disabilities.

3.2 Challenges faced by students

Students who take classes online sometimes stay in their homes or apartments [16]. Access to a peaceful and suitable working environment has an impact on students' learning conditions [17]. Due to the relationship between socioeconomic level and access to a suitable working environment, the inequalities between pupils from various economic backgrounds have become more apparent. In fact, attending college helps some underprivileged kids escape the difficulties of their home life. Many students had to spend the duration of the lockdown in cramped studios, which had an impact on both their mental and academic well-being.

➤ Impact on quality and opportunity

As per the study done by International Association of Universities (IAU), it is reported that the switch from in-person instruction to online instruction wasn't easy. The main obstacles are the availability of technical infrastructure [18], the skills and pedagogies necessary for distant learning, and the specifications for particular fields of study. The quality of online instruction might not always match that of traditional classroom instruction.

Irrespective of the scenario of the physical classes, a teacher's motivations as well as skill in online tools are the factors that too determine the quality of a lesson. While some professors simply upload their Powerpoint lectures or place limitations on student participation, others use cutting-edge techniques to make their lessons more engaging and thorough. The continuity of high-quality education across the board has been hindered by the lack of management methods built by institutions to help teachers improve their numerical abilities.

Less of the higher education's generally good opportunities, such participating in student organisations or working in groups, are also available.

➤ Engagement and workload

Numerous pupils view online education as a source of pain. Some students report feeling disengaged from their academics, frustrated, and having trouble handling their workloads, which appear to have gotten heavier. Even if we wouldn't have noticed it under normal conditions, the routine of everyday life weighs on us. The fact that teachers want the same calibre of work is painful.

Additionally, the study's findings indicated that the majority of pupils did not benefit from ongoing and efficient online teaching and learning during the COVID-19 outbreak because to a lack of suitable facilities and resources. The participation of students in learning in higher education has been hampered by these restrictions.

3.3. Challenges posed by technology i.e. technical difficulties due to Covid -19

Due to teachers' and students' lack of technological proficiency, a number of difficulties have occurred as a result of it. However, e-Learning and blended learning are now the new norm in education thanks to modern technologies [19][20].

- ❖ Online instruction takes longer from the teacher than in-person instruction. In the online mode, teachers do not find proper methods of providing feedback to all students. Teachers have concerns over the laboratory activities since virtual labs are not accessible to all students and not many lab activities can be conducted through virtual medium.
- ❖ Teachers frequently feel less connected to students in the virtual form and find it challenging to build strong relationships with them.

- ❖ Online summative exams still present a significant difficulty even though formative exams are conducted. Online exams are not being given in real life.
- ❖ Teachers must stay current on the newest digital resources available for use in the classroom.
- ❖ Common connection problems like “impossible to connect”, lower bandwidth etc.
- ❖ Students from low-income and other marginalised groups have been particularly affected by the shift to online classrooms and remote learning, which has brought up technological challenges. The rise of digital education has increased student inequality and raised severe challenges with accessibility and equity.
- ❖ Students must have access to technology, a dependable internet connection, and a quiet area in order to study from home. Not all college students, nevertheless, are able to benefit from these advantages.
- ❖ The previously present socioeconomic and geographic disparities between students have gotten worse. For instance, according to the National Conference of State Legislatures, 20% of college students in the US struggle to have access to trustworthy technology, such as working laptops and high-speed Internet connections, in order to pursue their higher education online (NCSL). It has been challenging for students, especially those who reside in remote or rural areas, to benefit from digital education [17].

Conclusion

The Covid-19 epidemic has significantly altered the post-secondary education scene. This study paper focuses on the difficulties faced by students and teachers. However, this transition has been accompanied by a variety of issues, observations, and obstacles. Furthermore, no one was able to address the problems brought on by technology. Inability of teachers to handle technology, suffering of low-income and marginalised students, rural versus urban technological challenges, less attendance due to irregularity of the students, lack of attention by students, technophobia especially among older teachers, etc. are some of the issues that need to be addressed. are the pandemic's key phases (COVID-19). Virtual schooling helped to keep the show continuing despite its unique set of difficulties.

In a word, it can be claimed that the Covid-19 pandemic did not cause the bulk of the issues we are currently seeing; rather, it created circumstances in which some of these issues, which have been persistent for some time, have simply escalated and become more obvious to everyone. Teaching is constantly changing due to new developments in technology and the creation of novel pedagogical strategies. This epidemic also emphasises the need for steps to bridge the digital gap and raise the standard of online education.

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