



Impact of covid-19 pandemic with respect to paradigm shift in Indian higher education

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Abstract: The human civilization had never experienced such a turmoil situation in last hundred years before the outbreak of Corona Virus Disease 2019 (COVID-pandemic). COVID-19 pandemic has impacted different sectors of India, viz. economy, entertainment, religion, sports, transport and employment etc. Education is not an exception of that. Educational institutions (schools, colleges, and universities) in India till early 2020 were based only on traditional methods of learning, that is, they follow the traditional set up of face-to-face lectures in a classroom. Although many academic units had started blended learning, still a lot of them were stuck with old procedures. The sudden outbreak of the deadly disease called Covid-19 caused by a Corona Virus (SARS-CoV-2) shook the entire world. The World Health Organization declared it as a pandemic. This situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight. In Indian context at least 320,713,810 students of different levels of education are affected out of which at least 34,337,594 students belong to higher education sector. Due to COVID-19, different aspects of Indian Higher Education sector witnessed drastic changes. In this paper the paradigm shifts in Indian higher education sector and their future prospects are discussed with some suggestive remarks in conclusion section.

Key Words: COVID-19, Higher Education, India, Paradigm Shift, E-learning.

1. INTRODUCTION:

COVID-19 has impacted life as we know it in every shape, form, and manner. Its impact, economically, psychologically, and above all, physiologically is of astronomical proportions, all across the globe. Since the COVID - 19 pandemic has disrupted the normal lifestyle of people across the globe, the virtual world has come to the rescue. Amongst many institutions schools have also shifted their base to virtual platforms to conduct classes online. Teaching and learning in the times of COVID 19 pandemic need to be revamped in order to follow norms of social distancing. Therefore, online classes are a necessity now.

COVID-19 pandemic has impacted different sectors of India, viz. economy, entertainment, religion, sports, transport and employment etc. Education is not an exception of that. On 16th March, 2020, the Union Government declared a countrywide lockdown of schools and colleges. As a result, the regular academic activities like teaching, learning and evaluation processes were forced to be paused. By September 2020, at least 826,802,660 learners affected by COVID-19 worldwide out of which at least 23.4 million students are from higher education sector (Report of United Nations Educational Scientific and Cultural Organization - UNESCO). According to the Global Monitoring Report, 2020, published by the UNESCO, during the height of school closure in April, 2020, at least 91% students across the world were out of school due to COVID-19 pandemic.

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Table 1: Students affected by COVID-19 in India

School Type	Female	Male	Total
Pre-primary	4,557,249	5,447,169	10,004,418



Primary	72,877,621	70,349,806	143,227,427
Secondary	63,983,667	69,160,694	133,144,371
Tertiary	16,739,686	17,597,908	34,337,594

Source: Compiled from UNESCO report (en.unesco.org/Covid19/education-response)

2. Indian Higher Education Sector: A paradigm shift due to Covid-19 pandemic:

Due to COVID-19, different aspects of Indian Higher Education sector witnessed drastic changes. The paradigm shifts of these aspects are discussed below.

a) Admission Process

June – August are tough time for the students of India as they write entrance examinations, make choices to apply for which course in which college or university or make plans for studies abroad. But due to countrywide lockdown of educational institutions, about more than six months, the admission system to higher education institutions is fractured. The higher education institutions in India offer mix type of admission procedure, i.e. both online and offline mode. Though so many institutions of technical education offer online admission, but most of the colleges and universities of general education, i.e. Bachelor Degrees or Master Degrees of Science, Arts and Humanities and Commerce to which most of the students from rural areas or small towns take admission, provide offline mode. Due to COVID-19 pandemic situation, all of the higher education institutions across the country have changed their admission mechanisms from offline to online mode. But lack of online infrastructure created huge problem to both aspiring students seeking admission and institutions providing it.

The national level entrance tests, viz. National Eligibility Test (NET), Joint Entrance Examination (JEE) and National Eligibility cum Entrance Test (NEET) could not be conducted in time causing significant problems in smooth running of the admission process to medical, engineering and other courses. The institutions which could not be able to meet the challenges of online admission process faced the scarcity of adequate number of students.

b) Curriculum Development

Keeping the view of online teaching learning process in mind, curriculum should be developed accordingly. Importance will be on to switch over to digital text books or e-learning materials from printed text books or materials. Curriculum experts should plan an integrated curriculum mostly inclined towards online teaching. Curriculum load should be minimized and only essential components of curriculum should be incorporated in curriculum development process. Aside from integrating the content, some educational systems are also contemplating to reduce the curriculum content. They want to teach content that is “essential” and remove content that is not (Cahapay2020).

The content related to new normal of post COVID-19 era or different health related issues for contagious diseases, etc. may get a place as compulsory subjects in higher education. Project works and different approaches that promote self learning may be emphasized in the process of curriculum development. Blended methods of teaching will be emphasized in curriculum transaction of post COVID-19 era.

c) Teaching-learning Process

According to Bhatia & Agarwal (2020) with the advent of this pandemic globally, traditional campuses with physical infrastructure support have been replaced by private spaces allowing extensive use of technology, internet and social media. This has led to reduced teacher-students face to face interactions, discussions leading to remote delivery with student centric individual learning and development of customized tools and contents addressing varied needs of the students.

In India, due to countrywide lockdown to control the spread of COVID-19, all the educational institutions were closed in the middle of March, 2020. At least 34,337,594 number of students of higher education were worst affected due to closure of face-to-face teaching learning process in India. Gradually, India began to use radio, TV and online platform for education continuity. The Ministry of Human Resource Development (MHRD) and University Grants Commission (UGC) have made several arrangements by lunching of many virtual platforms with online depositories, e-books and other online teaching/ learning materials, educational channels through Direct to Home TV, Radios for students to continue their learning (Jena, 2020). The different e-conferencing tools like Zoom Cloud Meeting, Google Meet, Skype, Webex Meet, Microsoft Teams, Hangouts, Jio Meet, YouTube live and Facebook live are used to conduct online classes. Teachers and students improved the use of electronic media for sharing information by making use of WhatsApp, Google drive, Telegram, Twitter, etc. (Jena, 2020). Some of the initiatives taken by UGC and MHRD to provide learning experiences and help to carry out research works by the students of higher education are- *e- Gyan Kosh*, *Gyan Darshan*, *Swayam*, *e-Adhyayan*, *e- Pathya*, National Digital Library of India (NDLI), *e-Yantra*, Free/ Libre and



Open Source Software for Education (FOSSEE), *e- Shodh Sindhu*, *Shodhganga*, *VIDWAN*, National Educational Alliance for Technology (NEAT) and *SAKSHAT*, etc. In future teaching learning process will be blended with both face to face teaching learning process (if possible by maintaining physical distance) and e-learning. But offline learning shifted to online mode will be more prioritized.

d) Evaluation Mechanisms

Closure of educational institutions due to countrywide lockdown has negative impact on assessment and evaluation of students' progress. External examinations of the higher education institutions were postponed and internal assessment were cancelled. It was not possible for the higher education institutions to conduct on campus examinations. Postponement and cancellation of examinations created frustration and helplessness among the students as their career and aspirations to occupation were worst affected. In this regard UGC notified a guideline on 29th April 2020 and a revised one on 6th July 2020. In case the situation does not appear to be normal in view of COVID-19, in order to maintain "social distancing", safety and health of the students, grading of the students could be composite of 50% marks on the basis of the pattern of internal evaluation adopted by the universities and the remaining 50% marks can be awarded on the basis of performance in previous semester only (if available). The internal evaluation can be continuous evaluation, prelims; mid-semester, internal assignments or whatever name is given for student progression.

e) Research Activities and Professional Development

COVID-19 has both positive and negative impact on research activities undertaken by the scholars worldwide. Due to lockdown, the scholars whose works are field based could not go to collect data or related information. Those who are dependent on library works could not access library facilities as libraries are closed. The scholars who belong to rural areas or remote places neither having electricity nor internet facilities faced big troubles in carrying out their research works. Research works or projects undertaken jointly have been hampered to a great extent. Lab based scientific research works could not be conducted also. In this context, UGC on its guidelines issued on 29th April 2020 mentioned-

"Like teaching, research has also suffered during the lockdown period as the laboratories are closed. It would be appropriate that during the period of lockdown, laboratories are maintained by the research staff/ teachers of the concerned department(s) on rotation basis, without violating the norms of "social distancing". However, the universities may take appropriate decision to allow PIs/ Ph.D. scholars and Post-Doctoral Fellows to maintain labs/ conduct research, with strict compliance of the guidelines/ directives issued by the appropriate authorities/ Governments from time to time (p.4)".

On the other hand lockdown became a blessing in disguise for the scholars whose research works are theoretical. They could get more time to do research works as well as develop different technological methods to be adopted for the work. Scholars as well as faculty members who are interested on academic writings got much time to write and publish their research papers.

The Faculty Development Programmes (FDP) conducted by different institutions specially UGC Human Resource Development Centers (HRDC) under various universities could not organize scheduled programmes, viz. Faculty Induction Programmes, Refresher Courses, Short Term Courses and Workshops, etc. in face-to-face mode and switched over to online mode. afterwards. Seminars became webinars and conferences as e- conferences which were more resilient. Trends are being set for conducting webinars, FDPs and online surveys due to COVID-19. Teachers as well as students became more tech-savvy to share knowledge and experiences. COVID-19 conglomerated academicians across the globe to exchange their knowledge and expertise through different digital platforms resulting to globalization of educational thoughts in true sense.

Besides the main points discussed above, COVID-19 has deep impact on co-curricular activities of the Higher Education Institution (HEI)s, employment opportunities of the students of higher education, national and international mobility of the students, financial crisis of privately managed HEIs and many more aspects of Indian higher education sector.

3. CONCLUSION:

In a single line it can be concluded that COVID-19 forced to switch over Indian higher education system from traditional face-to-face or offline to online mode. This paradigm shift has both negative and positive impacts on Indian higher education sector. No doubt the graph of online education market will be upward. In this context, Bhatia and Agarwal (2020) stated –"As per research published KMPG India and Google it was found that the online education market in India is valued at INR 39 billion in 2018 which is expected to grow almost 10 times to INR 361 billion by 2024 which shows that it would expand by almost 44% during the period 2019 to 2024. This would be possible due to



ease of learning, flexibility in choosing course modules and location to do those courses and availability of large number of options and material available online due to growth of the industry". This is estimation but ground reality may be different. If we analyze the report of AISHE 2018-19, we see that out of 993 universities of India, 394, i.e. 39.67% of universities and 60.53% of colleges are located in rural areas. About 79.8% students are enrolled in UG (Under Graduate) level out of which maximum number of students enrolled in Bachelor of Arts (B.A.) programme. At UG level, the highest number, i.e. 35.9% of students are enrolled in Arts/Humanities/Social sciences. From these observations, it can be inferred that most of the students enrolled in UG courses are from rural background since more number of colleges are located there. When different aspects of Indian higher education, i.e. admission, teaching learning process, examination, etc. are going to be shifted from offline to online mode, these students will suffer most because the students from rural areas are having low economic background. They are not always able to afford to electronic gadgets like smart phones, desktops, laptops, etc.; they may not have sufficient access to internet connectivity and many of them may don't have even electricity supply. The Scheduled Tribe (ST) students, students living in remote geographical areas and students with less technological knowledge will be the worst sufferers. It is seen from the news papers how students are struggling to get network connectivity by climbing tall trees and sitting on the rooftops of buildings.

This paradigm shift will also affect teachers who are not tech-savvy. Of course it will create an opportunity for them to develop their technological skills as well. Blended learning will be the best option during post COVID-19 period's education system. In this regard, the infrastructural facilities of HEIs to be redesigned to accommodate the changing pattern of education during post COVID-19 era and students may be benefited from that. Presently distance enrolment constitutes about 10.62% of total enrolment in higher education sector of India which may be increased in post COVID-19 period remarkably.

It's the high time when teachers can mould and train themselves by allowing individuals to be more flexible as well as more technical in Post Covid-19 environment. The possible ways one can take in order to represent himself as to be fitted with online or virtual classroom are as below:

- By allowing the teachers to be trained by a short-period-course regarding the usage of digital teaching process digital teaching process can be designed smoothly.
- Being themselves prepared for online classes, they have to make plans so that in short span of time they can manage to determine the chapter allowing the students to perceive knowledge about the whole matter in a way where the interaction between students and teachers, between one student and the other, and the exercises on the topic, and taking class tests related to the subject can be executed.
- Those who are differently able students are found not to grab all the resources and opportunities related to online teaching-learning process during pandemic situation, as well as for the long at a great extent. If guardians can involve themselves to cooperate their children, it can solve easily and therefore, directly or indirectly teachers will feel free to apply their teaching methods and lesson plans.
- If learning process is being seen to occupy digital platform, the problem of using computer related to the disability of novice students, seems to be a major drawback. In this issue teachers can help them by taking demo classes on how the learners able to perceive this teaching process.

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