Economics of Online Teaching- Learning During Covid-19 Pandemic

DR. SHARMITA NANDI
Navyug Kanya Mahavidyalaya,
Lucknow-India

Abstract:

The COVID 19 pandemic impacted various spheres of human life. One of the most profoundly affected areas was education. The sudden shift to online mode of teaching-learning, created an upheaval in the world of education. The demand for mobile phones, computers and laptops and net packs saw a big surge. The switch and consequent adjustments, though unsettling at first, was adapted to by teachers and those students who could afford the necessary tools as teaching aids, but a vast majority of students were left completely at sea. Such a big financial demand at a time when unemployment had peaked adversely affected education for the masses and was traumatic for students who were deprived. Some of the students who did join online, did not pursue classes regularly due to various causes, thereby impacting the quality of learning seriously. Practicals were an area of great concern. Students felt the need to be in a physical classroom to be able to learn better.

This paper, using qualitative methodology, attempts to prove that the economic impact of the pandemic has created a big divide in the world of education between those who could afford to buy tools necessary for continuing to study via the online mode and those who could not, and this has been a life altering cause for many. It also argues that the quality of teaching-learning does not improve through online methods of education only. Physical access to schools and colleges is a must.

Keywords: *Online education, economic impact, deprived, quality, divide*

1. Introduction

Education for all in India is a haloed objective. Policy makers have for long been seeking to achieve the goal of making education accessible throughout the length and breadth of the country, but it has often remained elusive. After sustained efforts, incentives and publicity, we could inch closer to our target of ensuring that by 2030 children would at least have access to primary education. This United Nations Sustainable Development Goal seemed quite within reach. As we were just beginning to breathe a little easy seeing children and youth enrolling in sizeable numbers and parents showing willingness to send their children- particularly girls- to study, came the biggest shock to mankind this century-COVID pandemic. Life and lives were thrown out of gear as never before. The same was witnessed across the globe. Mortality rates spiked to record highs as millions died all over the world. Employment took a big hit, as thousands lost their source of livelihood, as workplaces shut down. The world became one big ghost-town as lockdowns were imposed everywhere to contain the spread of the pandemic. Heart wrenching scenes were witnessed in overcrowded hospitals as also in crematoriums and graveyards. Incomes declined in a vast number of households, as families struggled to make ends meet. In this scenario, education took a big hit.

2. The Big Switch

As authorities all over the world-imposed lockdowns, everything came to a grinding halt. Markets, industries, schools. colleges, universities, offices, travel, and everything, except extremely essential services were shut down overnight and remained so for a long time, everyone was struggling to

Dr. Sharmita Nandi [Subject: Economics] International Journal of Research in Humanities & Soc. Sciences [I.F. = 5.98]

Vol. 9, Issue: 8, August: 2021
ISSN:(P) 2347-5404 ISSN:(O)2320 771X

manage the crisis while trying to maintain their psychological wellbeing. School and college going students had to bear the additional shock of losing the opportunity to be able to go to study in their institutes. According to the World Bank (quoting UNESCO 2020 data), even in the early stages of the lockdowns, as early as April,2020, around 1.6 billion K-12 students in over 190 countries were deprived of in-person schooling due to the pandemic. Add to this number the number of students in higher education deprived of going to study in colleges and universities, the numbers are mind boggling. Though some countries bravely began opening schools as things began to ease a bit, but then came the worse second wave and everything again had to be stopped to save lives. According to the World Bank reports, as of October 2021, 32% of countries worldwide either fully or partially closed schools. The longest closures were seen in South Asia, Latin America and the Caribbean. And this prompted the Big Switch from in-person (offline) education to virtual (online) classes.

The education scenario changed dramatically, as schools, colleges and universities switched to online education to prevent disruption in studies of the students. E-learning became the new buzzword. From preschoolers to students pursuing professional studies as well as teachers, everyone had to suddenly, and mostly without preparation start using the digital platform for learning-teaching. E-learning involves remote learning, using digital means. This change in the mode of exchange of knowledge, brought with it a host of repercussions.

Although, digital education was already in the market for quite some time before the pandemic, and the business was good. World Bank data suggests that global edtech investments was valued at US$18.66 billion in 2019 itself. But, it was considered to be an alternative method of acquiring education, especially meant for adult students who were looking for higher education skills Long before the lockdowns due to the pandemic, many universities had started offering Massive Open Online Courses (MOOCs) to further increase the knowledge base of students. The pandemic and the lockdowns imposed in response to it saw a big surge in e-learning – across age groups and classes. This move came with its own set of woes.

The Big Divide

The sudden and unplanned shift to virtual classes led to a clambering for tools that would enable access to classes. In many countries classes shifted online, then came back to in- person offline classroom teaching and again shifted back to digital platforms when in the second wave of the pandemic, infection rates rose drastically. Mobile phones, tabs, computers, internet services, uninterrupted supply of electricity and other such requirements witnessed an unprecedented rise in demand. But the demand came only from those who could afford them. Poorer nations were the worst sufferers. While the rich and upper middle-income countries already had a pre-existing infrastructure and technology in use, making the switch more seamless, the poor and the lower middle-income nations were confronted with the colossal task of putting together all these facilities instantly, where inadequate services existed. For instance, about 40% of the countries in Sub-Saharan Africa did not have any facility for remote learning. Most developing nations had to come face to face with the stark reality that most of their students could not afford to buy mobile phones or computers for continuing their studies. Most areas of these countries lacked internet access. Countries like India saw massive movements of migrant labourers from their places of work; that had suddenly shut down, leaving them to fend for themselves; to their native lands. Remote villages lacked network services, which along with inadequate means to buy equipment needed for study made matters worse. Many a parent sold off the only asset they had- be it a cow or a small piece of land- to buy a basic smartphone so that their children may continue their studies. Low-income families had to scrape together money to do the same. It was not enough to get a phone. Payment had also to be made for data plans. This led to children being forced to abandon regular studies. Thus, it forced such students to fall behind their peers due to limited or no access to education. When studies are suddenly abandoned in times of crisis, children are often forced into child labour, married off early or exploited Such setbacks leave a lifetime

impact, because education is strongly linked to health, job prospects later and income. It aggravates the divide between the deprived and the privileged. This gap was not unique to India. It was seen across countries and the gap was particularly noticeable between income groups. As, the OECD data showed, while 95% students in high-income countries like Switzerland, Norway and Austria had computers to use for their studies, only 34% students in Indonesia had such access, leaving the rest to struggle to continue their studies. Even in a country like the USA, nearly 25% children belonging to economically disadvantaged groups lacked computers to pursue their studies during lockdown, unlike their privileged peers. As the World Bank rightly stated, '*What was once a digital divide for some is now a digital chasm for many*'

The disadvantaged families bore the brunt of the pandemic induced lockdowns. Not only was this section affected economically due to closure of most avenues of work where they were employed, with the exception of agriculture, but most were migrant workers working in places away from their homes. There was a mass exodus of such workers moving towards their villages, often on foot due to lack of means of transportation. Families, naturally, included children. These families, like the rest of the world, suffered massive fatalities, often losing the earning members of their households. Thousands of children were orphaned. Education became a luxury they could do without in these times. Often, these families prioritized sending youngsters to work and bring home money to run the shattered households, rather than sending them back to school, when they reopened. Drop-out rates spiked during this period. Thus, innumerable children, were forced by circumstances to abandon their studies and start supporting their families having younger siblings and invalid adults- this was the opportunity cost of educating children.

Those children of disadvantaged groups, who stayed back home, could not afford the luxury of buying mobile phones to continue their education which had now gone digital and was being offered remotely. Educational institutions in some countries made arrangements to provide paper-based take-home packages of learning material for such children, but most were ill prepared to face a sudden crisis. Some counties quickly rallied to use their radio and television services to disseminate knowledge based on curricula. This also helped lots of students who lacked access to mobiles and computers. Many families of vulnerable sections went out of their way to arrange for money to buy mobiles, just so their children could catch up with their classes. The pandemic turned smartphones to must-haves from being a luxury. Those in India, who couldn't afford the still prohibitively expensive new smartphones often resorted to buying cheaper second-hand ones. But they often encountered the obstacle of poor internet connections. This resulted in vast disparities in learning from the same source, amplifying existing inequalities. According to International Telecommunication Union, by September 2020, some 360 million young people in low and middle-income countries did not have access to the internet.

Students with disabilities also had to give up their studies in these times. Not only was education compromised for millions of children, but they were also deprived of the one nutritious meal they got every day for free in their schools. Such children usually belonged to households that couldn't afford regular household meals nor medicines, aggravating their already fragile health conditions.

Online Classes
For those who could make the switch having access to electronic gadgets-mobile phones, tabs, computers along with internet connectivity, initial adjustment hiccups were witnessed both for the teachers as well as for the learners. Both struggled with problems of online class designing, to selection of platform for classes-Zoom, Google Meet. Classroom, to mode of interaction between teacher and taught, mode of delivery-lectures, presentations, interactive sessions and others- like the time of such classes- to not cause excessive screen time for students, while at the same time teaching the syllabus completely, technical support, network connectivity issues, loss of classes due to ill health

of students and teachers. assignments and assessments, criteria for promotion of students and other issues. A major drawback was practicals for the students. All of these issues, reduced learning outcomes for students.

Online tutorials and edtech education solutions boomed in this period. Some companies began offering free access to their servers, unlimited video conferencing time to teachers and students, auto translation facilities, calendar scheduling, etc. Synchronous conferencing platforms like Zoom and Google Meet allowed experts from anywhere in the world to join conferences and seminars. YouTube was used extensively to relay such events live to a large number of scholars in different parts of the country and the globe. Recordings could also be made to enable scholars to watch them at their convenience any number of times. Virtual field-trips and virtual laboratories became popular. Radio and Television were used widely to reach students with course content delivery. In India, teachers were encouraged to create e-content and upload them on portals like Inflibnet, and on college and university websites so that students could get subject content for studies as they could not buy books during lockdown. This was of immense help to scholars. When the situation eased a little and schools and colleges reopened with COVID appropriate protocols, most institutions began offering a hybrid mode of instruction. They allowed students to attend classes online and offline, as per their convenience. This came to be referred to as the HyFlex model. Thus, education came to be offered in more than one way. According to a John Hopkins, World Bank & UNICEF study in 2021, while 53% of high income countries delivered learning exclusively through internet, as they were equipped with good internet connections and students had access to mobile phones and computers; more than 85% of upper middle income countries used two or more modes to take classes; only 9% of lower-middle income countries used only the internet to offer learning strategies; and 100% of low-income nations opted to provide education using a variety of methods-three or more,

Business for some
When educational institutions began conducting remote classes online, in response to the lockdowns imposed to contain the spread of the pandemic, there was a surge in the sales of electronic items like mobile phones, tabs and computers. Majority of the customers were students and teachers. Online sales were also very high as shops were closed during total lockdown, and later when markets were permitted to reopen for a few hours in the day. people avoided going to stores; apart from this, people could find lucrative deals online. Market surveys in India revealed that parents usually opted for cheaper and mid-range mobile phones for their wards to study. A big proportion of poorer families arranged for second- hand and refurbished mobile phones for their wards. The sale of accessories like, headphones and earphones also increased The pandemic saw an unprecedented and unforeseen spike in the digital sector.

A study conducted in India by NCERT, using a sample of 18,188 students of classes 8-12 from Kendriya Vidyalayas, Navodaya Vidyalayas and schools affiliated to CBSE and over 16000 parents and principals revealed that more than 80% of students depended on mobiles for learning. Half the students said they did not have access to textbooks and 30% said that intermittent or absent internet connectivity hindered studies.

As on October 2020, total telephone connections in India had risen to 1171,72 million, out of which 1151.73 million were mobile connections. The tele density had reached 86.37%. Rural tele density stood at 58.85%. The number of internet subscribers had increased to 776.45 million. Needless to say students and teachers comprised a bulk of the users. There was an up to 10% increase in internet traffic for telecom service providers. Buying mobile phones for studies was only half the battle won for the underprivileged, the cost of data plan was also a burden.

Business of numerous edtech providers surged during this time, In India, Byjus added 20 million new users in just 4 months as against the first 40 million in 4 years. Many courses saw a jump in online enrollment. up Grad saw a growth of 63% in its' revenue from enrollment for its MBA programme. Online education and education technology firms could well have been the biggest beneficiaries of the pandemic.

Online vs in-person education

COVID -19 pandemic and lockdowns saw a dramatic shift in the way learning could be imparted. In-person education system going on for centuries was totally disrupted and a massive, unplanned move was made to remote learning, particularly online learning. A new hybrid model of education emerged. High income countries, already equipped with advanced technology, could switch easily, without causing much disturbance to learning. The rest of the world, faced problems ranging from mild to severe. For poorer nations, all difficulties were compounded. Lack of access to equipment, internet, technology, and training to participate in digital learning, the gaps between the haves and the have-nots widened tremendously.

Online education deprived millions of students from studies, widening the education gap between countries and income groups. It discontinued the access to one nutritious meal a day for underprivileged students, worsening their health. For those who could continue with their studies online, a new crop of problems awaited.

Most students interviewed across the globe said that they preferred classroom teaching to online teaching strategies. Ahigh number of students suffered from depression They missed the face-to- face interaction with their teachers and peers. Many suffered from eyesight problems due to long periods spent before a screen. Preparing and submitting assignments was also difficult. Lack of access to physical textbooks was a big hurdle. They missed doing their practicals and the overall experience of being in school and college. Not only were the students' facing difficulties, but teachers too were required to make a quick transition without warning or prior preparation. Most teachers were used to taking physical classes and the change was not easy to say the least. But the world realized soon that hybrid means of teaching-learning was here to stay. Even after the economies reopened cautiously, the demand for e-content and digital methods of learning remained, and it was now becoming mandatory to create and share e-content and educational videos which students could access multiple times whenever they wanted.

Conclusion

Covid-19 pandemic has blurred the lines between classroom and remote education. Multi-mode or Hybrid mode of education is here to stay. The need of the time is to make efforts to ensure that most students, possibly all, can benefit from new technologies related to affordable smartphones and computers, broadband access, along with provision of training to use their potential to the fullest. As Meyer & Wilson (2011) said," Disasters will continue to occur and technologies will likely help us cope with them." We must act together to ensure that the benefits of knowledge and technology are equitably distributed across boundaries and space. A high level of preparedness is needed to deal with such periods of unforeseen crisis.. Students of all age groups are the future of this planet and their wellbeing should be accorded highest priority. In countries like India, though efforts are being stepped up to fill the gaps, yet due to the vast size of the population and the extent of the country, it is indeed a challenge. But we have to accept the challenge and make arrangements now, rather than wait for the next disaster to strike. It should become mandatory for all educational institutions, including universities and colleges to make contingency plans for such events. Technical infrastructure, learning tools, e-books and e-content should be prepared. While doing this, efforts should be made to keep costs in check. Therefor, it is necessary to procure technology that is low in cost and maintenance but is very effective in imparting quality education. Inclusiveness should be the keyword in designing such

strategies. This would demand sustained investment. For investing in education now will raise a more resilient population in the future and a stronger nation and better world.

References

1. Dhawan Shivangi (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis; Sage Journals, Vol.49, Issue 1,
2. Lockee, Barbara B. (2021). Online Education in post- COVID era; Nature research intelligence; nature.com; Nature Electronics, Vol 4, Pgs. 5-6,
3. Mint (24th March 2020). Coronavirus: Internet Service Firms in a Race to keep up as Web Traffic Swells,
4. Munoz-Najar, Alberto; Gilberto Sanzana, Alison Grace; Hansen, Amer; Cobo Romani, Juan Cristobal; Azevedo, Joan Pedro Wager De & Akmal, Maryam (2022). Remote Learning During COVID-19: Lessons from Today, Principles for Tomorrow; Washington D.C.; World Bank,
5. Nature, Editorial (23rd September 2020). Online Learning cannot just be for those who can afford it's technology,
6. Press Information Bureau; Government of India; Ministry of Communications (2020).Year-end Review: 2020-Department of Telecommunications,
7. Rodriguez, Barron; Rebeca, Maria; Cobo Romani, Juan Cristobal; Munoz-Najar, Alberto; Sanchez Ciarrusta, Inaki Alejandro (2022). Remote Learning During the Global School Lockdown: Multi-Country Lesson; Global Education Technology Team; Education Global Practice ; World Bank Group,
8. Sahay, Sanjay (December 2020). Online classes pushed up mobile, laptop sales, Times of India,
9. The Economic Times/ Rise (18th November,2020). How these companies thrived during COVID-19- Dhawan Neha,
10. The Hindu (August,2020). Coronavirus lockdown/over 80% students depend on mobiles for learning.
11. UNCTAD (2021). How COVID-19 Triggered the Digital and e-commerce Turning Point,
12. UNITAR-United Nations Institute for Training and Research (2020). Laptops, Cell Phones, E Games Defied Slump as COVID-19 Dented 2020s Electronic Sales,
13. WIRE (06/04/2020). India Must Treat the Internet as a Public Utility During COVID-19, and After,
14. World Economic Forum (2020). The COVID-19pandemic has changed education forever. This is how,