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COVID-19 and Education in India

Samit Paul

Samit Paul is Assistant Professor, Finance and Control. Indian Institute of Management Calcutta (IIM-C). He has completed his fellowship from IIM, Lucknow in the area of Finance and Accounting. His primary research interests lie in the area of market risk management, volatility modelling and portfolio management.

The recent crisis of COVID19 has produced undreamt new normals in whatever we pursue in our day to day life. On March 11, 2020, the World Health Organization (WHO) has declared the novel coronavirus a "pandemic". As of 07 August 2020, the spread of this “pandemic” has severely affected 213 countries and territories raising 19,308,752 confirmed cases of infection and 718,597 deaths, globally[10]. In case of India, this tally stands at 2,033,847 and 41,685 respectively. The onset of such outbreak has forced people to stay at home and maintain social distancing while avoiding close contact with others. It has compelled the world to experience and weigh the costs and benefits associated with countrywide lockdowns and domestic as well as international travel restrictions. Prominent impact of such restrictions is mostly evident in the education sector as this sector has experienced lockdown for the longest duration. Hence, it is of much interest to understand the coping mechanism adopted by the education sector to combat this unprecedented situation that has adversely impacted the economics of education.

As per the recent calculation by UNESCO[11], schools that are still shut down due to imposed lockdown affecting almost 106 crore learners across the globe. In India, number of such affected learners count nearly 32 crore. Therefore, a significant change in the education sector is inevitable to keep the sector surviving. As a result, the 'study from home' concept has suddenly become a popular practice and the basic modus operandi of this sector demands massive transformation. The distinctive rise of e-learning has been found to be one indicator of such change. In online mode, teaching is being performed remotely using digital platforms. Thus, it avoids the issue of close contact quite successfully. Moreover, researches have demonstrated that online learning has added value in the process with increased retention of information, lesser scheduling time and savings of set up cost. Some studies have shown that students usually retain 25-60 per cent of learning imparted online compared to 8-10 per cent of what provided in a classroom setting. This is due to the fact that during the process of e-learning students

[10] https://www.worldometers.info/coronavirus/
[11] https://en.unesco.org/covid19/educationresponse

can learn at their own pace, re-visit the discussion, skip or accelerate through concepts as they prefer. Apart from tech companies, schools and colleges are developing innovative pedagogy to make the online environment conducive for learning for the younger generation. No doubt, this involves extensive effort from learners, educators and support providers (i.e. tech companies). However, it can be considered as an initial investment which may reap enough future benefits.

Digital wave in Education

Popularity of digital platform and usage of its content has been experiencing an increasing trend in the field of education even before the COVID era. The Chief Researcher at Metaari, Mr. Sam S. Adkins has stated: "*A breathtaking $18.66 billion flowed to Edtech companies around the world in 2019. To put this in perspective, investments in 2018 and 2019 combined far outstrip the total combined investments made to all Edtech companies for the entire twenty-year period between 1998 and 2017. There are interesting patterns in the recent investor behavior.*" Spread of COVID-19 provides further impetus in the adoption of online technology in global education. The significant surge in application of videoconferencing tools, virtual tutoring and language apps has made analysts projecting an investment of $350 billion by 2025. In India, online education market is expected to grow by $14.33 billion during 2020-2024. Bangalore-based company, *BYJU'S*, has become world's largest Edtech company when it recently raises a whopping $540 million. In response to the overwhelming demand, *BYJU'S* has started providing free access of their services. Since the time it has announced free live sessions on its Learn and Think app, *BYJU'S* has experienced 200% increase in its user base. And, the story is no different for other Edtech companies. For example, *Great Learning* has recorded 150 per cent revenue growth while *Toppr* has witnessed 100 per cent spike. Similarly, *Vedantu* and *Unacademy* have also experienced extensive growth in watching time, collection and revenue. More interestingly, while companies in different sectors are trimming their workforce to cope up with the situation, Edtech platforms such as *Dronstudy*, *Simplilearn*, and *UpGrad* are planning to create at least 3,000 new job opportunities within a year. Another interesting fact has been evolved over the period of this pandemic. Besides Edtech companies, several other business firms which are not primarily operating in the domain of education have come up with online education innovation. One of the prominent players in this domain is Google which has launched several web based applications such as *YouTube Learning Destination* and *Teach from Home Hub* to foster online education. One of the Google spokespersons, Mr. Satya Raghavan, has commented: "*The COVID-19 outbreak has forced us to think and execute learning in an online environment, at scale and with speed. YouTube learning hub and Teach From Home are part of our first response to help educators and students in maintaining teaching and learning continuity*." Even the established news media channels, e.g. ABP News, have started telecasting education programs to facilitate this new mode of imparting education to the greater mass. Thereby, the education sector which is expected to be significantly affected by the

extended countrywide lockdown, has unleashed an enormous potential to grow with completely transformed environment.

Indian education system is largely driven by various initiatives of Government of India. Unless Government's intervention is there, it is very difficult to pass on the desired benefits at the grass-root level. Recent digital initiatives of Indian Government play a pivotal role in the growth of e-learning. For instance, initiative like e-Pathshala aims to familiarize the rural population with online education while hosting online resources available for educators, students, and guardians. Similarly, the Indian Government has set up virtual classrooms and labs to promote online remote learning in higher segments of education such as science and engineering with active participation from IITs, IIITs, and NITs. Students of undergraduate, postgraduate as well as Ph.D. level can extract the benefits of these virtual labs according to their requirement. Undoubtedly, these initiatives have catalysed the successful implementation of web based learning and generate a demand for the same from institutions located across rural and urban areas. A senior analyst of Technavio, a global market research firm, has pointed out:

"Factors such as the emergence of cloud computing, and the growing popularity of big data and learning analytics will have a significant impact on the growth of the online education market value in India during the forecast period,"

Challenges and Measures

owever, such transformation is not free of challenges. First and foremost question that keeps on coming is: "*Is this online learning mechanism sustainable?*" This question is even more valid in the context of developing economy like India where very few families have access to computer and internet facility. Mostly, online sessions require laptops or smartphones connected with high speed internet which are not affordable to most Indian families. Therefore, students belonging to families with fewer resources are worst sufferers as they are forced to manage their education with limited family resources. Moreover, this mechanism has deprived students from some other important aspects of life such as spending quality time with friends, regular physical activity, access to healthy meals, and facility of physical and mental health care. Further, students with special needs cannot avail necessary support from institutes. In India, schools ensure required nutrition of students by providing mid-day meals. Needless to say, only ensuring education through online mode and overlooking the other bare necessities due to continued closure of schools will affect a vast majority of children's nutrition intake and thereby, their health. Fortunately, Central and State Governments of India are aware of these challenges. Hence, besides promoting online education as discussed before, they have adopted multiple measures to address these issues. For example, the Union human resources development (HRD) ministry has planned to launch 12 direct-to-home (DTH) television channels exclusively for distance learning. Each of these channels would serve the needs of students from one academic year. Moreover, HRD has already tied up with "Information and Broadcasting" ministry to facilitate airing Swayam Prabha channels on their DTH platform, Tata Sky, and Airtel DTH.

Hopefully, this would be beneficial for students suffering from slow or limited internet connectivity. Union HRD Minister Shri Ramesh Pokhriyal 'Nishank' has said in an interview: "*Now a student anywhere in India can request the DTH service provider for these channels without any extra cost as these are free-to-air channels. Swayam Prabha is a group of 32 DTH channels providing high quality educational curriculum based course contents covering diverse disciplines*". At state level also different initiatives have been undertaken. For instance, many states are successfully delivering mid-day meals to students even during closure. Numerous helpline numbers are provided where telephonic consultations are being provided to take care of physical and mental health of the children. Besides these initiatives, it has been witnessed that public-private coalitions are shaping up while bringing diverse stakeholders together in this sector to act during this crisis.

The Way Ahead

One important message conveyed by different studies on online learning suggests that the effectiveness of such process varies among age groups. Since the younger kids can be easily distracted, some structured environment is required to impart effective learning. Educators need to get out of the practice of replicating physical lecture mode of teaching in online class setting. Instead, they should use a range of collaborations and engagement tools that promote "inclusion, personalization and intelligence". Secondly, making learning fun for the children is essential as the extensively use their senses to learn. According to the speech of BYJU's Mrinal Mohit: "*Over a period, we have observed that clever integration of games has demonstrated higher engagement and increased motivation towards learning especially among younger students, making them truly fall in love with learning*". Finally, Indian education sector needs more budget allocation. Currently, India spends approximately 2.8% of its GDP on school education which is one of the lowest among BRICS countries.[12] According to the report by Parliamentary Standing Committee report, the Department of School Education and Literacy is allocated Rs 59,845 crore this year against a proposed budget of Rs 82,570 crore resulting a 27.5% shortfall. Samagra Shiksha Abhiyan (SMSA), one of the key programs intended for development of holistic school education, has been allocated Rs 38,750 crore in 2020-21 against projected demand of Rs 45,934 crore. Therefore, a conscious and comprehensive effort starting from allocation of resources to building a structural learning environment in most innovative manner is the way forward for developing the future of India.

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[12] https://thewire.in/education/schools-reopening-lockdown