

## THE DRAWBACKS AND POSITIVE SIDES OF E-LEARNING IN EDUCATION SYSTEM OF INDIA

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### ABSTRACT

The pandemic situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight, resulted in closure of academic institutions for nearly one and half years. For this, the face-to-face academic relation has been changed into online mode of teaching. Many academic institutions that were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to online teaching-learning. The challenges of online learning includes that some students without reliable internet access and technology struggle to participate in digital learning. The students living in the poor economic status cannot afford the cost even and it is the main drawback. Thus there is a gap between students from privileged and under-privileged background to afford all the necessity of e-learning. The education become more problematic for the special children in pandemic. But beside this, e-learning has been shown to increase retention of information, and take less time. For those who do have access to the right technology, there is evidence that e-learning can be more effective as it requires 40-60% less time to learn than in traditional classroom setting, students can learn at their own pace.

**KEYWORDS:** Pandemic, virtual education, merit, demerit, learning platforms.

### INTRODUCTION

The virus infection in Wuhan city of China is caused by a member of Coronaviridae family

named as Coronaviruses (CoV-2). The disease was diagnosed first time in human and become pandemic since December 2019, and so named COVID-19 (Kashid et al., 2020). Coronavirus or SARS-CoV2 is one of the major pathogens that primarily targets the human respiratory system. The virus causes Severe Acute Respiratory Syndrome (SARS) which are much resembles with SARS-CoV1 and Middle East Respiratory syndrome corona virus (MERS-CoV) Syndromes. The disease is characterized by cold, mild fever, headache, and some other respiratory complication, including death in severe condition. Based on the large number of infected people that were exposed to the wet animal market in Wuhan City, it is suggested that COVID-19 is most likely of zoonotic origin i.e. transfer of infection from animals to human (Rothan and Byrareddy, 2020). The virus is transmitted to human from their host animal like Bat, Camels, Cats, and Civet (Wu et al., 2020; Zhou et al., 2020). Many deaths of human including male, female and children have also been reported with COVID-19 disease (Li et al., 2020). In India, 2701604 cases and 53023 deaths, Pakistan 289215 cases and 6175 deaths and Bangladesh 282344 cases and 3694 deaths have been recorded till 17 August, 2020 (Karim and Ahmad, 2020). Awareness tools and preventive/ treatment strategies include many resources including online, and offline trainings are developed and distributed to tackle the disease by government agencies like WHO, Ministry of Health and family welfare at regular intervals (Karim et al., 2020).

## EDUCATION IN PANDEMIC

While countries are at different points in their COVID-19 infection rates, worldwide there are currently more than 1.2 billion children in 186 countries affected by school closures due to the pandemic (Anonymous, 2020c). India is a populous country, it is important for Indians to be aware of the basic modes of prevention that can diminish the spread of the coronavirus infection. The most vulnerable group in all individuals constitutes school age children (WHO, 1996). In particular, public living areas such as dormitories and schools are very risky environments in terms of hygiene problems and infections (Kitis and Bilgili, 2011). These all resulted in closure of academic institutions in this pandemic situation. For the last nearly one and half year the face-to-face academic relation has been changed into online mode of teaching. The COVID-19 has resulted in dramatic change in education system, with the distinctive rise of e-learning, teaching is undertaken remotely and on digital platforms.

The pandemic situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight. Many academic institutions that were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to online teaching-learning. In pre-pandemic situation educational institutions (schools, colleges and universities) in India are based only on traditional methods of learning, 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 are stuck with old procedures. It can be mentioned that this is the start-ups during the time of pandemic and natural disasters and includes suggestions for academic institutions of how to deal with challenges associated with online learning (Dhawan, 2020).

A changing education imperative is the result of COVID19. It is clear that this pandemic has utterly disrupted an education system that many assert was already losing its relevance. The move to online learning is to be the catalyst to create a new, more effective method of educating students. While some worry that the hasty nature of the transition online may have hindered this goal, others plan to make e-learning part of their 'new normal' after experiencing the benefits first-hand. Even before COVID-19, there was already high growth and adoption in education technology, with global edtech investments reaching US\$18.66 billion in 2019 and the overall market for online education projected to reach \$350 Billion by 2025 (Anonymous, 2020c). Whether it is language apps, virtual tutoring, video conferencing tools, or online learning software, there has been a significant surge in usage since the COVID-19.

## THE DRAWBACKS OF E-LEARNING

This online mode of learning has many merits and demerits. The main demerit is the access of digital learning among the students. This access is compulsive to overcome the gaps of traditional mode of learning, but as India is a vast country with wide socio-economic status it is quite obvious that there is a distinct demarcation between our effort and result. The challenges of online learning includes that some students without reliable internet access and/or technology struggle to participate in digital learning. The students living in the poor economic status cannot afford the cost even and it is the main drawback.

Thus there is a gap between students from privileged and under-privileged background to afford all the necessity of e-learning platform. This gap is seen across countries and between income brackets within countries. For example, whilst 95% of students in Switzerland, Norway, and Austria have a computer to use for their

schoolwork, only 34% in Indonesia do, according to OECD data. In the US, there is a significant gap between those from privileged and disadvantaged backgrounds: whilst virtually all 15-year-olds from a privileged background said they had a computer to work on, nearly 25% of those from disadvantaged backgrounds did not (Anonymous, 2020c). While some schools and governments have been providing digital equipment to students in need, such as in New South Wales, Australia, many are still concerned that the pandemic will widen the digital divide.

The difference in the capacity to update with this new normal education system pushed a group of students in a corner. They found themselves a neglected sector when they are not having the privilege to go for e-learning. In scenario is very common in India with so many people living in village have no- or bad- internet facility. The poor economic status of people also causes same problem, even more bad situations. This situations badly affected the students and youths psychologically. The result is additional positive depression and anxiety screening. These impacts on mental health are more pronounced in young people below 25 years of age.

The education become more problematic for the special children in this pandemic situation. Special populations are experiencing high anxiety and depression, including LGBTQ, caregivers, students, veterans/active duty, and people with chronic health conditions. This isn't just affecting people with anxiety and depression, but other mental health conditions, too. Among psychosis screeners in May, more than 16,000 were at risk, and the percentage at risk (73%) also increased.

### **THE POSITIVE SIDES OF E-LEARNING**

But beside this the e-learning has a positive

way also. Research suggests that online learning has been shown to increase retention of information, and take less time. For those who do have access to the right technology, there is evidence that learning online can be more effective in a number of ways. Some research shows that on average, students retain 25-60% more material when learning online compared to only 8-10% in a classroom. This is mostly due to the students being able to learn faster online; e-learning requires 40-60% less time to learn than in a traditional classroom setting because students can learn at their own pace, going back and re-reading, skipping, or accelerating through concepts as they choose.

The effectiveness of online learning varies amongst age groups. The general consensus on children, especially younger ones, is that a structured environment is required, because kids are more easily distracted. To get the full benefit of online learning, there needs to be a concerted effort to provide this structure and go beyond replicating a physical class/lecture through video capabilities, instead, using a range of collaboration tools and engagement methods. Since studies have shown that children extensively use their senses to learn, making learning fun and effective through use of technology is crucial.

### **ONLINE LEARNING PLATFORMS**

In response to significant demand, many online learning platforms are offering free access to their services, including platforms like BYJU'S, a Bangalore-based educational technology and online tutoring firm founded in 2011. Tencent classroom, meanwhile, has been used extensively since mid-February after the Chinese government instructed a quarter of a billion full-time students to resume their studies through online platforms. Lark, a Singapore-based collaboration suite initially developed by ByteDance as an internal tool to meet its own

exponential growth, began offering teachers and students unlimited video conferencing time, auto-translation capabilities, real-time co-editing of project work, and smart calendar scheduling, amongst other features. Some school districts are forming unique partnerships, like the one between The Los Angeles Unified School District and PBS SoCal/KCET to offer local educational broadcasts, with separate channels focused on different ages, and a range of digital options. Media organizations such as the BBC are also powering virtual learning; Bitesize Daily, launched on 20 April, is offering 14 weeks of curriculum-based learning for kids across the UK with celebrities like Manchester City footballer Sergio Aguero teaching some of the content (Anonymous, 2020c).

#### **GIRLS' EDUCATION IN PANDEMIC**

The current global pandemic COVID-19 has hit everyone hard, especially school-aged children and students around the world. And this effect is more pronounced in girls, as of the 1.6 billion students out of school, 743 million are girls. Research data revealed that 91% of the world's student population affected by current school and university closures and it has adverse impact on students. With the transition from the classroom to online

platforms, a discrepancy in education access between boys and girls are observed: in low- and middle-income countries, boys are 1.5 times more likely to own a phone and 1.8 times more likely to have access to the internet than girls. We are forgetting the fact that the virus doesn't follow geographical boundaries, ethnicities, age or ability or gender.

#### **CONCLUSION**

COVID-19 has impacted education, students, and teachers in different ways globally. Education is important in every form as it is the key in improving a family's, communities, and country's economy and workforce. It is interlinked with many other social issues and plays a key role in pulling communities out of poverty and increasing the economic power of low-income countries. It has intrinsic benefit in improving a person's quality of life. Effects of online learning on teachers shows that teaching during the pandemic is very difficult and is very tough. As in online platform a teacher many times cannot reach all students due to many reasons. But a teacher must not forget their responsibility: education for all, education is key, education is a right and closing the gender gap begins with schooling.

#### **REFERENCES**

1. Anonymous. Rutgers launches genetic testing service for new coronavirus. 2020a; <https://www.rutgers.edu/news/rutgers-launches-genetic-testing-service-newcoronavirus>.
2. Anonymous. COVID-19 and Mental Health: What We Are Learning. 2020b. [www.mhascreening.org](http://www.mhascreening.org).
3. Anonymous. 2020c. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/>
4. Carlos WG, Dela Cruz CS, Cao B, Pasnick S, Jamil S. Novel wuhan (2019-nCoV) coronavirus, *Am. J Respir Crit Care Med.* 2020; 201(4): 7–8.

5. Çelik EY, Yüce Z. Investigation of the Awareness and Habits of Secondary School Students about Cleanliness and Hygiene from Various Variables. *International Education Studies*. 2019; 12(4): 173-184.
6. Danival S. Why are patients fleeing India's coronavirus isolation wards? 2020. <https://qz.com/india/1819659/>.
7. Das D, Shenoy R, Mukherjee M, Unnikrishnan B, Rungta N. Awareness Among Undergraduate Students of Mangalore City Regarding Novel Coronavirus (COVID-19): A Questionnaire Study. *Disaster Medicine and Public Health Preparedness*. 2020. <http://creativecommons.org/licenses/by/4.0/>
8. Dhawan S. Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*. 2020; 49(1): 5-22.
9. Karim S, Ahmad V. Level of Awareness among Staff and Students of Academic Institutions towards COVID-19 in India. *Journal of Pharmaceutical Research International*. 2020; 32(22): 110-118.
10. Kashid RV, Shidhore AA, Kazi MM, Patil S. Awareness of COVID-19 amongst undergraduate dental students in India – A questionnaire based cross-sectional study. *Research Square*. 2020; <https://doi.org/10.21203/rs.3.rs-27183/v1>.
11. Kitis, Y., Bilgili, N. İlköğretim Öğrencilerinde El Hijyeni ve El Hijyeni Eğitiminin Etkinliğinin Değerlendirilmesi. *Maltepe Üniversitesi Hemsirelik Bilim ve Sanati Dergisi*, 2011; 4(1), 93-102.
12. Lei J, Li J, Li X, Qi X. CT imaging of the 2019 novel coronavirus (2019-nCoV) pneumonia, *Radiology*. 2020; 200236, <https://doi.org/10.1148/radiol.2020200236>.
13. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. *N Engl J Med*. 2020; 382:1199–207.
14. Modi PD, Nair G, Uppe A, Modi J, Tuppekar B, Gharpure AS, Langade D. COVID-19 Awareness Among Healthcare Students and Professionals in Mumbai Metropolitan Region: A Questionnaire-Based Survey. *Cureus*. 2020; 12(4): e7514. DOI 10.7759/cureus.7514.
15. WHO (World Health Organisation). Strengthening Interventions to Reduce Helminth Infections as an Entry Point for the Development of Health Promoting Schools. Geneva: World Health Organisation, 1996. (Document Hpr/Hep/96.10).

#### SHORT BIO-NOTE

- Dr. Arpita Chatterjee is Assistant Professor (Stage III) and Head, Department of Botany, Barasat College (Affiliated to West Bengal State University), Kolkata, West Bengal, India from the year 2010 to till date. She is Advisory Board Member and Ethical Committee Member of Barasat Cancer Research & Welfare Centre (formerly Barasat Cancer Hospital), West Bengal, India. She is Secretary (Hony.) and Executive Committee member of BSAGS from 2011 to till date, Advisory Board Member of The Antioxidant Society of India from 2012, and Educational society member of the Greenfield Convent School, West Bengal, India from 2018 to till date. She is the member of Governing Body of Gobardanga Hindu College as University Nominee from 2017-2021, and member of Undergraduate Board of Studies for Microbiology of West Bengal State University from 2012-2017. She is Internal Complaint Committee member of 'sexual harassment of women at work place' of 63 Bn Sashastra Seema Bal, Ministry of Home Affairs, Government of India, from 27th January 2021 to till date. She is the life member of Indian Red Cross Society.

- She was awarded Ph.D. degree in 2008 in the field of Molecular Virology from Calcutta University, and awarded second Ph.D. degree in 2017 from Rabindra Bharati University. She has also awarded Doctor of Science (D.Sc.) degree (Honoris Causa) in 2020 in the field of Molecular Virology from California Public University (USA). She received ICAR Research Associateship (2004) and ICAR Senior Research Fellowship (2002).
- She has over 20 years of research experience in various fields of plant biology, cancer biology and allied health science, molecular virology, and practical implementation of movement therapy in different populations. Till date she has over hundred publications in her credit, including books, book-chapters, articles and journals of national and international repute. She has received many awards from different national and international bodies, and acted as Editor of three journal and reviewer of nine journals.
- Dr. Chatterjee is actively involved in various awareness programmes for cancer and allied health issues, awareness programs for girls' educations and gender equality in education system, environmental awareness programs organized by Govt., non-Govt. and private sectors, and awareness generation program in YouTube. She has delivered numerous lectures as invited resource person, presented papers in different Conferences, Seminars and Workshops, and conducted many seminars as convenor/ coordinator.