

Paradigmatic Shift in the Education System in a Time of COVID 19

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ABSTRACT

The rapid spread of COVID-19 worldwide in 2019 – 2020 has had a great impact on educational institutes. Global closure of educational institutions to maintain social distancing and isolation has led to a gap in learning and development. Prolonged closures can lead to interrupted learning, parents' unpreparedness for distance learning, and home schooling, gaps in childcare, unequal access to digital learning portals, increased pressure on education systems that remain open, and probable chances of a rise in dropout rates and social isolation. Most institutions, globally, in the affected areas, are looking for stop-gap solutions to carry on teaching, and the factor significantly affecting the quality of learning is the level and quality of digital access. Digitalization being big evolutionary step, will reshape the entire education system in future. Digitalization has changed the course of distance learning leading to online computer-based learning. COVID 19 pandemic brought about a new paradigmatic shift in learning from frontal education system to online digital learning, thus bringing about a truly new learning experience.

In response to the rapid spread of COVID-19, preventive measures such as social-distancing and self-isolation have resulted in the global closure of educational institutions.⁽¹⁾ Since educational institutes are hubs of social activity and human interaction, their closure has led to a lack of social contact among children and youth, which is essential to learning and development. School closures are critical social distancing tools to mitigate the spread of the disease and avoid an increase of cases, thus reducing the strain on health services. While closures of educational institutes appear as a logical solution to achieve social distancing within communities, prolonged closures tend to produce a negative impact on most students, such as interrupted learning, parents unpreparedness for distance learning and home schooling, gaps in childcare, unequal access to digital learning portals, increased pressure on education systems that remain open, and a probable chance of a rise in dropout rates and social isolation.

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Adverse Effects of School Closures

Currently, school closures appear as a logical solution to attain social distancing amidst COVID-19 pandemic, but if prolonged, can have a negative impact on students.^(2,3) It can result in interrupted learning, unavailability of nutrition, parents' unpreparedness for distance learning and homeschooling, gaps in childcare, high economic costs, unequal access to digital learning portals, the unintended strain on the health-care system, increased pressure on educational institutions that remain open, probable chances of a rise in dropout rates and social isolation. It has also brought to light various socio-economic issues such as student debt, internet access, digital learning, access to childcare, access to health care, food insecurity, homelessness, and disability services. As per the data of 28 March 2020, more than 1.7 billion students were affected by closures of schools due to COVID-19 pandemic.⁽⁴⁾ The current situation has demonstrated the significant need to build resilience among the students to face unpredictable threats such as pandemic outbreak, extremist violence, climate insecurity, and rapid technological change by enhancing their versatility to adverse situations, sound decision making, and creative problem-solving.

Response of Chinese Universities to COVID 19

At the beginning of the epidemic, Chinese universities immediately set up and opened material support channels by gathering the resources of former pupils. Both students and alumni contributed to organizing and donating the study materials to the severely affected Hubei province. To enhance social distancing and isolation, many universities reinforced a delayed start of the academic year. Furthermore, under calls from the Ministry of Education of China, the education institutions executed the digital education platforms to enable online lectures by teachers through systematic training and technical support to continue educational progress.⁽⁵⁾

Education Improvement - Distance Learning and Digitalization

Globally, most institutions in the affected areas are looking for the stop-gap solutions to continue teaching, but the quality of education depends significantly upon the quality and level of digital access.⁽¹⁾ Learning, as of now, is taking a new paradigmatic shift from the frontal education system to online digital learning in the form of online assignments, online lectures, and activities, thus bringing about a truly new learning experience.

The countries lacking access to good teaching in remote areas can bring about education improvement, both via the older and proven technologies such as radio and television broadcasting and also by the use of information and communication technology. Teacher training with digital technologies and applications is also important to implement it effectively.⁽⁶⁾ The deployment of technology is opening up new avenues of learning for all students and changing the traditional notion of classrooms by breaking the geographical barrier. No country, till date, has universal curriculum-linked resources for teaching and learning. Distance education capabilities are also limited. 70 per cent of countries provide

zero to minimal distance education capabilities. Although the rest 30 per cent have better capabilities, yet they have not integrated distance education widely in their curriculum. There is a key need to emphasize the state of distance education. However, the disadvantage is that the students being newly introduced to remote education may opt for taking a future degree online, due to the benefits of distance learning and the affordable options available.⁽⁴⁾

Internet + Protocol Guided Learning

Education through "Internet + Protocol Guided Learning" teaching model involves establishing media sharing platforms such as WhatsApp groups, WeChat groups etc., to convey lectures and resources between teachers, students and parents. This protocol implies a thorough guidance system with well-defined protocol and relevant materials to carry out the online learning programs.⁽⁶⁾ Throughout the pandemic, the school encouraged autonomy and gave protocol-guided task list for the students, who prefer to study at home independently.⁽⁷⁾ The "student-centred" model of teaching transforms the learners' 'passive learning' into 'active learning', through the learning activities.⁽⁶⁾

Role of the United Nations Educational, Scientific, and Cultural Organization (UNESCO)

Concerning the current situation, UNESCO is constantly working towards providing technical distant learning assistances, conducting Webinars, providing national learning platforms, conducting Minister-level virtual meetings, and monitoring the Global number of school closures and the number of learners affected.⁽⁸⁾ In its official website, UNESCO provides a list of educational applications, platforms and resources to help parents, teachers and schools facilitate student learning and provide social care and interaction during periods of school closure. Since educational access is not dictated by access to the latest technologies, the education gap is not severely divided. As of now, although many schools are continuing the classes online, yet many students do not have access to computers or the internet in their homes.⁽⁷⁾

Role of the World Bank

The education team of the World Bank works to assist countries worldwide in managing and coping with the pandemic and promotes immediate to short term remote learning to facilitate learning after the pandemic dissipates. The World Bank is also providing constant support to systemic education reform to ensure the necessary learning environments for children when they return to school to ensure better learning.⁽⁹⁾ Students are being educated remotely using technology through a variety of online courses and electronic textbooks. Educational policymakers and administrators must aim to introduce new learning modes, which can reach everyone, to prepare for emergencies, and to make the system more resilient.

The spread, use and availability of technology are important, as is the availability of online learning materials, as well as devices and the level of internet connectivity at home. The capabilities of students, teachers, and schools

should be assessed to adopt high-technology and low-technology solutions while keeping in mind the various options for distance learning tools such as online virtual lessons, downloadable lessons, mobile-phone, etc.⁽⁶⁾ Therefore, the programs, which can quickly target the needful, are crucial.

Digitalization as an Emerging Educational Reform

'Survival of the fittest', the Darwinian phrase, fits well with the education system, which is undergoing revolutionary changes bringing to light the fittest. The digital learning will open new windows, which will connect the students globally through unbiased and undivided education. Digitalization being big evolutionary step will reshape the entire education system in future. Digitalization has changed the course of distance learning leading to online computer-based learning.^(6,10) An educational trajectory is being followed by the technology while addressing the hindrances that affect learning, teaching and social functionalities. Technology is, therefore, catalysing education reformation.

REFERENCES

- [1] Tam G, El-Azar D. 3 ways the coronavirus pandemic could reshape education. 2020. <https://www.weforum.org/agenda/2020/03/3-ways-coronavirus-is-reshaping-education-and-what-changes-might-be-here-to-stay/>
- [2] Wang C, Cheng Z, Yue X-G, McAleer M. Risk management of COVID-19 by Universities in China. *JRFM* 2020;13(2):36.
- [3] Wang G, Zhang Y, Zhao J, et al. Mitigate the effects of home confinement on children during the COVID-19 outbreak. *Lancet* 2020;395(10228):945-7.
- [4] Mustafa N. Impact of the 2019-20 coronavirus pandemic on education. Wikipedia, the free encyclopaedia. 2020. https://en.wikipedia.org/wiki/Impact_of_the_2019%E2%80%9320_coronavirus_pandemic_on_education
- [5] Zhai Y, Du X. Mental health care for international Chinese students affected by the COVID-19 outbreak. *Lancet Psychiatry* 2020;7(4):e22.
- [6] Cai R, Wang Q. A six-step online teaching method based on protocol-guided learning during the COVID-19 epidemic: a case study of the first middle school teaching practice in Changyuan City, Henan Province, China. *Best Evid Chin Edu* 2020;4(2):529-34.
- [7] Xie Z, Yang J. Autonomous learning of elementary students at home during the COVID-19 epidemic: a case study of the second elementary school in Daxie, Ningbo, Zhejiang Province, China. *Best Evid Chin Edu* 2020;4(2):535-41.
- [8] COVID-19 Educational disruption and response UNESCO. 2020. <https://en.unesco.org/themes/education-emergencies/coronavirus-school-closures>
- [9] World Bank Education and COVID-19. THE WORLD BANK. 2020. Available from: <https://www.worldbank.org/en/data/interactive/2020/03/24/world-bank-education-and-covid-19>
- [10] Stay physically active during self-quarantine. Europe: World Health Organization 2020. <http://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov-technical-guidance/stay-physically-active-during-self-quarantine>