ROLE OF DIGITAL LEARNING IN MADHYA PRADESH GOVERNMENT COLLEGE DURING COVID-19 CRISIS SITUATION: CURRENT SCENARIO

DR DEEPAK KUMAR SHRIVASTAVA
PUSHPENDRA ARYA

Abstract:

Novel corona virus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, Hubei, China, and has resulted in an ongoing pandemic situation.

Like many other industries, the education sector has been severely impacted by the COVID-19 pandemic. 165 countries had closed schools nationwide, impacting over 1.5 billion children and youth, and still great uncertainty as to when schools will reopen.

However, these days, there are many free (or low-cost), easy-to-use digital communication tools that allow for a range of remote learning solutions. Nowadays, teachers, students and families are still grappling with the immediate task of conducting online classes and remote learning, in the confinement of their homes. Therefore, this review article pondered on what are the options available, and challenges before education sectors and student to continue their academic activities uninterruptedly. Furthermore, response of education sector to Covid-19 situation, Government measures to ensure continuity of

education, education & technology joint services, and effectiveness of e-learning were delineated.

Keywords: Covid-19, Education, E-learning, Government measures.

Introduction

Covid-19 has been influenced the all sectors but more impressions are found in education and especially on libraries it may be public or academic. In India before Covid there is no road map for online resources and online learning too. The top countries with maximum number of reported deaths are Italy, Spain, United States of America,France and United Kingdom. With respect to the recovered patients list, China isat the top of the list followed by Spain, Germany, Italy, Iran and the United Statesof America.

Figure 1 Is the library continuing to place orders for New materials/resources during the library closure?

Common symptoms include fever, cough, fatigue, shortness of breath,and loss of smell and taste.6-9 However, the majority of cases result in mildsymptoms, some progress to acute respiratory distress syndrome

(ARDS) possiblyprecipitated by cytokine storm,10multi-organ failure, septic shock, and bloodclots.11-13. There is also still great uncertainty as towhen schools will reopen. Thankfully, these days, there are many free (or lowcost),easy-to-use digital communication tools that allow for a range of remotelearning solutions. For now, teachers, students and families are still grapplingwith the immediate task of conducting online classes and remote learning, in theconfinement of their homes.15The review article focuses on what are the optionsavailable, and challenges before education sectors and student to continue theiracademic activities uninterruptedly.

2. Response of Education Sector to COVID-19 Situation

Ten cent 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.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, which is now the world's most highly valued ed tech company.

Figure 2Education Sector to COVID-19 Situation

Lark, a Singapore-based collaboration suiteinitially developed by Byte Dance as an internal tool to meet its own exponentialgrowth, began offering teachers and students unlimited video conferencing time,auto-translation capabilities, real-time co-editing of project work, and smartcalendar scheduling, amongst other features. To do so quickly and in a time ofcrisis, Lark ramped up its global server infrastructure and engineering capabilitiesto ensure reliable connectivity.

3. Government Measures to Ensure Continuity of Education

Government ministers have recently been scaling up multimedia approachesto ensure learning continuity around the world.For all countries, avoiding thedisruption of child learning to the extent possible is the first priority, and theyare introducing or scaling up existing distance education modalities based ondifferent mixes of technology.

In India, Karnataka state Government has requested the Centre for Doordarshan(DD) channels for school education in these times of COVID and beyond. Itwas accepted by DD channels classes have begun for High School students inDoordarshanChandana from 9 am from the month July 2020.

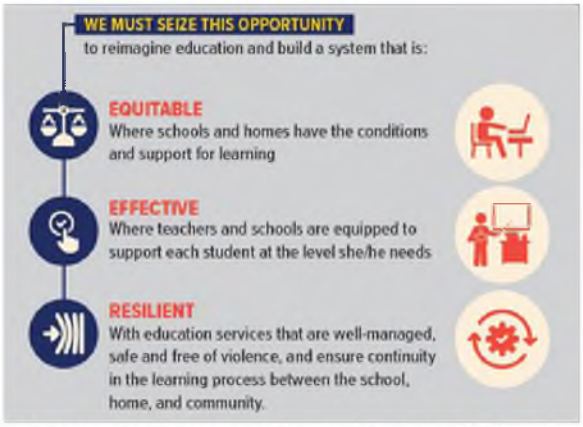

Figure 3Government Measures to Ensure Continuity of Education

Classes wereconducted for eighth, ninth and tenth standards till Aug14, 2020 and each class in this 'Sethubandha' session was held for 30 minutes. Classes were conducted ineach subject from 9 am to 5.30 pm and all the Head Masters of Schools have beendirected to send the time table to the students through WhatsApp. Those whocannot view the programme in Chandana, arrangements were made to educatethem through 'Makkalavaani', 'Jnanadeepa' and 'Deeksha' portals.17

4. Education and Technology Join Services

There have already been some examples of recent joint efforts between theeducation and technology sectors for realizing the potential of technology ineducation.China is an example where the pandemic brought the Ministry ofEducation and the Ministry of Technology together to ensure that Chinesestudents continued learning when classes were disrupted due to the coronavirus Outbreak.

Figure 4Education and Technology Join Services

"The response of China's education system to the COVID-19 emergencyis remarkable, in terms of depth of the remote learning facilities being madeavailable, and of the scale required to cover needs," said Marielza Oliveira,Director of the UNESCO Beijing office.The UK Department for Education in 2019published a strategy to help education providers and the technology industry. Thecomprehensive publication includes sections on developing digital capability andskills, promoting digital safety, improving the Department of Education's digitalservices, and more.15

5. Effectiveness of e-learning

For those who do have access to the right technology, there is evidence that learningonline can be more effective in a number of ways. Some research shows that onaverage, students retain 25-60% more material when learning online comparedto only 8-10% in a classroom. This is mostly due to the students being able to learnfaster online; e-learning

requires 40-60% less time to learn than in a traditionalclassroom setting because students can learn at their own pace, going back andre-reading, skipping, or accelerating through concepts as they choose.

Nevertheless, the effectiveness of online learning varies amongst age groups.

The general consensus on children, especially younger ones, is that a structuredenvironment is required, because kids are more easily distracted. To get thefull benefit of online learning, there needs to be a concerted effort to provide this structure and go beyond replicating a physical class/lecture through videocapabilities, instead, using a range of collaboration tools and engagement methodsthat promote "inclusion, personalization and intelligence", according to DowsonTong, Senior Executive Vice President of Tencent and President of its Cloud andSmart Industries Group.

Figure 5 Gamification inE-Learning

Since studies have shown that children extensively

use their senses to learn,making learning fun and effective through use of technology is crucial, accordingto BYJU's MrinalMohit. "Over a period, we have observed that clever integration ofgames has demonstrated higher engagement and increased motivation towardslearning especially among younger students, making them truly fall in love withlearning", he says.16

Conclusions

In conclusion, this Covid-19 pandemic situation made clear that the importance ofdisseminating knowledge across borders, companies, and all parts of society, andonline learning technology can play a pivotal role here,and hence it is onus uponall of us to explore its full potential.

References

1. Bikdeli, B., Madhavan, M. V., Jimenez, D., Chuich, T., Dreyfus, I., Driggin, E., Nigoghossian, C. Der, Ageno, W., Madjid, M., Guo, Y., Tang, L. V., Hu, Y., Giri, J., Cushman, M., Quéré, I., Dimakakos, E. P., Gibson, C. M., Lippi, G., Favaloro, E. J., … Lip, G. Y. H. (2020). COVID-19 and Thrombotic or Thromboembolic Disease: Implications for Prevention, Antithrombotic Therapy, and Follow-Up. Journal of the American College of Cardiology, 75(23), 2950–2973. https://doi.org/10.1016/j.jacc.2020.04.031

2. MayoClinic. (n.d.). Coronavirus disease 2019 (COVID-19) - Symptoms and causes. Retrieved August 28, 2020, from https://www.mayoclinic.org/diseases-conditions/coronavirus/symptoms-causes/syc-20479963

3. Hui, D. S., I Azhar, E., Madani, T. A., Ntoumi, F., Kock, R., Dar, O., Ippolito, G., Mchugh, T. D., Memish, Z. A., Drosten, C., Zumla, A., & Petersen, E. (2020). The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health — The latest 2019 novel coronavirus outbreak in Wuhan, China. International Journal of Infectious Diseases, 91, 264–266.

https://doi.org/10.1016/j.ijid.2020.01.009

4. World Health Organization (n.d.). WHO Director-General's opening remarks at the Mission briefing on COVID-19 - 12 March 2020. Retrieved February 26, 2022, from https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-mission-briefing-on-covid-19---12-march-2020
5. Ma, J. (2020). Coronavirus: China's first confirmed Covid-19 case traced back to November 17. South China Morning Post. https://www.scmp.com/news/china/society/article/3074991/coronavirus-chinas-first-confirmed-covid-19-case-traced-back
6. Johns Hopkins University (n.d.). COVID-19 Map - Johns Hopkins. Coronavirus Resource Center. Retrieved August 26, 2020, from https://coronavirus.jhu.edu/map.html
7. Centers for Disease Control and Prevention. (2020). Symptoms of COVID-19 | CDC. Retrieved August 25, 2020, from https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html
8. World Health Organization. (2020). Q&A on Coronavirus disease (COVID-19). https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19
9. Grant, M. C., Geoghegan, L., Arbyn, M., Mohammed, Z., McGuinness, L., Clarke, E. L., & Wade, R. G. (2020). The prevalence of symptoms in 24,410 adults infected by the novel coronavirus (SARS-CoV-2; COVID-19): A systematic review and meta-analysis of 148 studies from 9 countries. PLOS ONE, 15(6), e0234765. https://doi.org/10.1371/journal.pone.0234765
10. Hopkins, C. (n.d.). Loss of sense of smell as marker of COVID-19 infection. ENT UK. Retrieved August 25, 2020, from https://www.entuk.org/sites/default/files/files/Loss of sense of smell as marker of COVID.pdf
11. Ye, Q., Wang, B., & Mao, J. (2020). The pathogenesis and treatment of the `Cytokine Storm' in COVID-19. Journal of Infection, 80(6), 607–613. https://doi.org/10.1016/j.jinf.2020.03.037
12. Cascella, M., Rajnik, M., Aleem, A., Dulebohn, S. C., & Di Napoli, R. (2022). Features, Evaluation, and Treatment of Coronavirus (COVID-19). In StatPearls. StatPearls Publishing.
13. Journal of the American College of Cardiology, 75(23), 2950–2973. https://doi.org/10.1016/j.jacc.2020.04.031

14. Velavan, T. P., & Meyer, C. G. (2020). The COVID-19 epidemic. Tropical Medicine & International Health, 25(3), 278–280. https://doi.org/10.1111/tmi.13383
15. ITU News. (2020). COVID-19: How digital learning solutions are taking shape. Retrieved September 7, 2020, from https://news.itu.int/covid-19-how-digital-learning-solutions-are-taking-shape/
16. World Economic Forum (n.d.). The rise of online learning during the COVID-19 pandemic. Retrieved September 7, 2020, from https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid19-online-digital-learning/
17. Star of Mysore. (n.d.). High School classes on DD Chandana begins. Retrieved September 7, 2020, from https://starofmysore.com/high-school-classes-on-dd-chandana-begins/