

# Role of Technology vis-a-vis Covid-19 Pandemic

**Dr. Amit Gautam<sup>1</sup>, Preeti Rajpoot<sup>2</sup>**

<sup>1</sup>Assistant Professor, Faculty of Education, Dayalbagh Educational, Institute, Agra

<sup>2</sup>Research Scholar (NET-JRF), Faculty of Education, Dayalbagh Educational, Institute, Agra

## Abstract

Covid-19 is now become a global Pandemic, with high transmissibility and social connectivity is proving a boon to its spread. Covid-19 first appeared in china in January 2020 and now spread over 210 countries around the world. It has virtually lockdown the world. Everyone life is getting effected by this Pandemic. Globally government coordinating with peoples to overcome with this Pandemic. The only potent measure against the virus as of now is Social Isolation and Social Distancing and Technology is playing important role in maintaining distance. Now a day's technology is like a supporting system. Technology has made possible to work from home, our School & College is sifted from classroom to our Bedroom and various technology Equipment's became supporting tools for our healthcare section. Through digital platform, authorities can provide official trustworthy and timely information and advice about covid-19. Digital Data and Artificial intelligence can help diagnose and monitor the infectious virus and even receive Telemedicine. Block chain technology will become important, necessitating design and regulatory research. The number of gig workers and the gig economy is expected to grow, raising issues of delegation of authority, collaboration, encouragement, and aspects of work overload and presenters. Throughout the COVID-19 pandemic, people have become increasingly reliant on technology to learn, live, and stay connected. This paper helps in highlighting the role of Technology in this Covid-19 outbreak, how Technology is helpful in Education Sector and Health Care Section to fight with the Pandemic. How technology help human to survive the coronavirus outbreak and how we deal with recurrence of such health scares.

**Keywords:** Covid-19 Pandemic, Technology

## Introduction

COVID-19 is a highly transmissibility disease caused by the novel severe acute respiratory syndrome coronavirus 2 (SARC-COV 2). Corona is a single stranded RNA and this virus is belonging to a corona viridae family. The first cases of corona was identified in china in the beginning of Dec 2019 and since then is has been spreading out all over the world with an evident to human to human contact and this Pandemic turned out to be the biggest health crises in our history. In India first COVID -19 cases is recorded in January 2020 and science then the cases is rising rapidly day by day. So, to fight with this virus and be aware with this pandemic, digital technology is playing important role. Over past few months, we have seen that how technology can help to fight against this outbreak .However technology cannot directly prevent the virus but it can help in preventing the spread of virus, educate us, warn us and empower those on the ground to be aware of the situation and noticeably lessen the impact. Today it has become possible to test several innovative approaches to pandemic responses with converging technologies like mobile app to connect with other, robotics, high speed internet. Technology is also

helping our Education Sector to connect with the students. New technology is also helping our health care workers. Doctors are using Innovative Technology to track covid-19 patients. Robots & Drones are used to help the patients and track the movements of people. This paper outlook provides a framework, how digital technology is helpful in COVID-19 pandemic management. How it is helpful for education sector and how world has adapting and integrating technology for finding drugs, planning, testing, contact tracking, quarantine and health care.

### **COVID -19: Bringing a change in the Education System**

Every phase of our life is affecting by this Pandemic and the world of Education is no Exception. For every students online lecture is become the new classroom where discussion is taking place, Parents became the teacher to make hold of their kinds study and every house is a school where all activities taking place. No matter how strange this might look but this is the today's actual picture. And this is how COVID -19 is bringing changes in Education System. Covid-19 has become a catalyst for education system to think innovative to search innovative solution to reform our education in short period of time According to UNESCO Institute of statistics, the covid-19 pandemic has led to the closer of school in 188 countries, affecting more than 1.5 billion students and 63 million primary and secondary teachers worldwide. Covid-19 brings changes in our education system it reminds us that a huge transformation is needed in our education.

### **From thinking digital to being digital**

For years we are thinking about digital education but all are not ready until covid-19 took hold. The shift of digital learning is troublesome but now it became necessary to come forward and adopt this digitalization. Covid-19 have raised the Red flag in the education industry and pushed its way two digital development. Online classes have become the most suitable solution to secure a continuous rise in education. Online platform like zoom, Hangout, WebEx, YouTube etc. offers students to learn from home. Choosing a video solution and these online platform help educators to organize live stream classroom session and contact to their students directly. Mobile apps took one step forward and help massive engagement between students and teachers via live streaming classes and online tutorial.

During this crisis time virtual reality offers an opportunity to video call with real time experience between student and a teacher. With virtual reality, distance learning tools like Google classroom, Edpuzzle, blackboard etc. can make students and teachers connect with each other in same room by this digital presentation. Teachers teach their students with their experience and guide them during the pandemic time so that learns utilize this time in their learning and technology is helping us to achieve this goal.

### **How our Indian Education system is Evolving?**

We say that necessity is the mother of Invention and in this present time this saying is more accurate. Different new Technology & pedagogies are adopted by the school, colleges for better result. In this situation it became essential for every Educational Academy across the Nation to make most use of Technology. Although Schools & Colleges are making use of video calling app and software to connect with their students at home and also deliver their content material to them. In our country many schools and Institution have already equipped with Technology so solution like use of LMS that is helpful in tracking students' performance, school ERP software is a common sighting in most institution these

days. Online lecture are the most common out of all but Indian Education system has a long way to go work on it. Government is coming forward to work on it .There are various initiatives from the ministry of Human Management (MHRD) like SWAYAM, MOOCs, e-content courseware that is very helpful during this Pandemic time. These resources can be utilized by the teacher, students, researcher at home to broadening their horizon of Learning. . We should adopted immersive technology like augmented reality and virtual reality that is very helpful for students to learn in a better way and make them ready for better future. So we should keep in touch process of Technology and Learning during this Pandemic.

### **Digital Technology Initiatives used in COVID-19 preparedness and health sector**

**Finding vaccine/drugs-** whole world is affecting due to covid-19 it is directly affecting human life. Health department is working to find the proper and effective treatment to prevent this pandemic effectively and technology is helping to make this process faster. AI is helping medical researchers in understanding virus protein structure and playing important role in suggesting components for vaccine. So making a vaccine against the coronavirus involves a variety of technologies and approaches.

**Planning and tracking-** Artificial intelligence is helping in tracking of people and helped in facilitate covid-19 preparedness. To collect real time data on the location of people digital tools such as migration map, and mobile phone apps like Arogya Setu is helping to track the people.

**Clinical management of covid-19-** Doctors using video conferencing, virtual care platforms, digital monitoring, Telecommunicating, to deliver health care to patient to reduce social gathering and their exposure to SARS-COV -2. In China a cloud-based AI assisted CT service is used to detect a identify covid-19 cases .Rapid diagnosis of covid-19 patients is possible with the help of artificial intelligence. Most of the country is using digital technologies for providing care to moderate covid-19 illness in their home and doctors are connecting digitally to the patients.

**Temperature screening-** The key symptoms of covid-19 infections is high temperature and presence of fever. Therefore the government is working for mass temperature is screening throw imaging technologies. At public area like railway station, airport thermal imaging technology has been widely deployed. iThermal is also automatic temperature screening method that us AI to analyze images.

**Robotics-** The use of robots in healthcare is increasing. It is used for surgical procedure and transporting items, and dispensing medication. During this covid-19 pandemic the administration of this robotic technology is being extended. To reduce human to human transmission health care minimize frontline staff exposure to the virus. Mobile UV robots such as UVD Robots and light strike Germ - zapping Robots are being deployed to assist with room disinfection.

### **Lesson Learnt and Way Forward**

While on one hand the covid-19 crisis bring already existing disparities in front of us in the field of education system. Our education system is not fully furnished to fight against these types of crisis. on the other hand this covid crisis work as an opportunity for a government and come up with innovative solution to overcome from these types from the disparity of education sector. We can reach to our learner by social media websites television radio and other technical platforms. Digital government play a significant role during this crisis, it become essential element of communication collaboration and

leadership between policy maker and society during the covid-19 pandemic. This crisis shows that how Information communication technology is helpful in our education system, if it is used in appropriate manner especially in difficult time. Governments need to accelerate efforts to embrace technology, even when the crisis is over (United Nations, 2020). But on the other hand but economic forum felt that an plant and rapid use of online learning- with no training - with little preparation will result in a poor user experience that is conducive to sustained growth, other believe that a new hybrid mode of education will emerge, with significant benefits (world economic forum 2020).

### Conclusion

In fact COVID 19 pandemic is eye opener for all of us that being adaptive to the changes are the best thing to do .It is hard to say whether our life would be as before the Pandemic but we have to face this situation and adopt changes. This applies for all sphere of life, including our work place, or our school, colleges and universities. Technology is supporting us at every phase of this Pandemic and we should adopt it and utilize it for better work. ICT enhanced the effectiveness of the various e-learning initiatives which were used in reaching out to students across the length and breadth of the country during the COVID-19 lockdown period.

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