# Impact of Pandemic on Education Sector

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## Abstract

Recent Carona Virus (COVID-19) outbreak in the world created a tragic impact on a global scale. Due to massive, rapid, and universal spread of this disease resulted in death, destruction and lockdown of many countries. Lockdown, although a small preventive measure, has helped control the spread of disease to a certain extent. This has made huge impact on all the sectors of every country. All the sectors are hard hit, education is one of them. It is estimated that 290 million students got affected due to this pandemic. Faculties and students like others are forced to stay home. Many schools, colleges, universities curriculum completion, projects, examinations, practical schedule collapsed. Even though e-learning, ed-tech, cloud learning is available, many institutions and organizations were caught off-guard to cope up with this kind of global crisis. There are thousands on organizations, which are miles away from implementing technology in education field. This paper talks about steps that can be taken by the institutions to bring technology in teaching. Tools that can be used by educational institutes in case of such global crisis or situation need to be. Measures can be implemented by institutes so that it is able to continue teaching without any issue.

**Keywords:** Carona, COVID-19, Epidemic, pandemic, online education, technology.

## Introduction

Twenty first century has made a remarkable change in our daily life. We have been overwhelmed by technology. This includes use of internet, web, social media, and audio-visual media, which have become integral part of our daily routine. Money and military makes any country powerful. Countries in the world are divided in two groups; one having plenty of resources and other having limited resources. There are hundreds of issues in the world, which are affecting human race. Issues like water, famine, war, epidemic, terrorism, diseases, and food shortage. Lack of will to co-operate and share resources has widened the gap between the countries. Till now there was no common enemy, now we have one called as COVID-19 Pandemic.

Let's understand a few medical terms:

## What is Epidemic?

Epidemic is an outbreak of disease that spreads quickly and affects many individuals at the same time. An outbreak can occur in a community a geographical area or several countries. In other words epidemic is any problem that goes out of control at the same time, and it keeps spreading actively. Example: Spanish flue, Plague.

## What is Pandemic?

An epidemic occurring worldwide, or over the wide area crossing international boundaries and usually affecting large number of people. Example: Carona (COVID-19), Ebola, H1N1 Influenza.

## History of Pandemic

Small pox, cholera, dengue, HIV, AIDS are some pandemic crisis world has faced. Each pandemic incidence has affected human life and economic development. 1918-1919 Influenza pandemic killed more than twenty million people in the world. It is considered to be the most destructive pandemic in the world history. In recent years or in twenty-first century has seen six large scale pandemic

outbreaks like 2009 Influenza H1N1 virus, was responsible for 18,000 death. In 2014 Ebola virus killed around 11,000 people.

## Pandemic Impact of Carona

The magnitude of Carona pandemic is shocking. As on 18 April 2020 The corona virus COVID-19 is affecting 210 countries with 23, 04,277 cases and 1, 57,976 fatalities. This pandemic has put tremendous pressure on health care sector and affected agriculture, economy, tourism, family life, personal health and education sector. In short, it has destabilized and paralysed the world. In India hospitality industry is projecting revenue loss of 30,000 crores. Aviation industry is expecting loss of 8,200 crores. Slowdown in global economy due to spread of this virus is likely to cost One Trillion Dollars. UN estimates that about 2.4 million jobs would be gone globally due to this pandemic. All this will lead to a serious social and economic crisis around the world.

## Pandemic Impact on Social Life

Pandemic has a made a tremendous impact on our social life. Complete lockdown of a country has created both positive and negative impact. Positive impact is, it has helped scale down of the spread of virus in the society and country. Negative impact is it has put an Over Burden on health facility providers and health service providers as well people who are engaged in emergency services and law enforcement.

Lockdown resulted shutting down of all the shops, retail stores, rail, road and air transportation, malls etc, creating non-availability of essential items to all citizens. Loss of people and non-trade, non-manufacturing, is putting countries on economic crisis. In simple term pandemic is responsible for destruction of human life and livelihood.

## Pandemic impact on Education

Conventional education providing organizations with alternative solution got badly affected. Carona Pandemic was an eye-opener for many academic institutions. Now this will bring change in the field of education.

Lecture-based teaching is common in academic institutions across the globe. Many organizations are not able to cope up with idea of integrating technology in teaching as an alternative. Organizations will have to invest on new technology. Non willingness faculties to learn and adopt technology has been the main reasons for not moving towards digital learning.

COVID-19 has triggered chain reaction to look for existing solution alternative in a short period of time. Example — use of Google Classroom by schools. Currently, there is a digital divide, as a result there is a lack of spreading education at grass root level. To provide e-learning or ed-tech, availability of resources like electricity, internet, data centres, and internet service provider are absolutely essential. A skilled man power is also required to execute this work. Despite issues many countries are taking step to spread education at grass root level. For economically weak countries Cloud computing is a cost effective solution to provide online education to all.

To change this scenario, public private partnership should grow. If government, educationalist, publishers, technology providers and network operators should come together to create a digital platform. Innovation, ideas, design that are formed due to this crisis will definitely create some concrete solution in near future. All these efforts needs a greater collaboration and mutual understanding between various organizations. They can focus on common goal of providing digital educational platform for all.

5G technology became popular in countries like the USA, China, and Japan. "Learning anywhere any time" became reality. New learning models will assist in-person classroom teaching and learning. Live broadcasting of lecture to virtual reality will be some options used in near future on larger scale.

Due to this pandemic disruption many questions surfaced in the educational field. Questions like how do we educate students? What should we teach students that can help them to stand on their feet? New generation who is using Facebook, Instagram, Snapchat, and WhatsApp can keep them in touch with teachers as well as parents. This generation believes in collaborative work. They are willing to use this approach to solve global issue like climate change. According to World Economic Forum report 65% of today's pre primary children will be working in a job types that do not exist yet.

Following steps are suggested to make children to be better prepared in near future:

a. Get rid of isolation: one to be successful in life has to break the isolation chain. Successful people always cross the boundaries by getting connected to many people. Global collaboration can help resolve the issues.

b. Re-evaluate faculties role: students in twenty-first century can get knowledge, technical skills using mobile, and tablet with few clicks. Faculty need to re-evaluate their role, where, they will help student's growth. Faculty should give a knowledge which is more practical based.

c. Teaching life skills: For young generation living in this dynamic world, flexibility and adaptability skills are essential. Employers need to take into account emotional intelligence, creativity, and communication skills before hiring a candidate.

Due to this pandemic, educational institutes are creating a content for students that can help in remote learning. Many educational institutions are creating content that can be accessed by students across the globe.

According to Organization for Economic Co-operation and Development 421 million students got affected due to closure of school. However, this adverse situation can also have positive impact on education. Initially resources and efforts will be put to create a study material, videos, a system that can handle online learning, and beta run will be done. All the institutes will geared up to go online, when everything is synchronized. Post pandemic the academic institutions has to act quickly to ensure they will be switching to online courses. There is no other alternative, thus ensuring academic activity will be on track despite issues.

Educational institutes needs to pay attention to the following things as before switching to online facility:
1. Need to create a course design that is suitable to run over internet.
2. Give training to all teaching staff on how to create web based content.
3. Give training to teaching staff to be comfortable in front of camera. Many faculties are not willing to give video lectures due to camera copiousness.
4. Training is also needed for teaching staff of new available tools that are required for conducting online lectures. Making them aware of using these tools is necessary. For example, Microsoft meet, zoom, skype, Google Classroom. Etc.
5. Conduct sessions on creating material that is suitable and understandable to students. The created material needs to be evaluated to bring quality in content.
6. Try to test many tools before finalizing tool suitable for all.
8. Have a dedicated server or cloud server and trusted Internet service provider (ISP)

9. Developer team is needed to formulate a web based program to be accessed by registered students.
10. Provide a training video and manual for students to understand process.
11. Create quizzes, assignments, video tutorials, e-books that will give proper guidance.
12. Take into account students who have limitation to access knowledge due to economic, social or technical barrier and provide a solution.

List of Tools that can help to create online teaching material:
Digital learning management systems: -EkStep, Google Classroom, Seesaw, and Skooler.
Systems built for use on basic mobile phones: - Cell-Ed, Funzi, Ubongo, and Ustad Mobile.
Systems that can work offline: -Kolibri, Rumie.
Video conferencing applications: -Dingtalk, Skype, zoom, hangout meet, teams.
Content creation using video: -Squigl, EdPuzzle, Thinglink.

### Conclusions

Advancement in science and technology can predict many things but not all. COVID-19 pandemic is the best example of how virus can create crisis on a global scale. In twenty-first century, technology has given us power to use it as an alternative in crisis. In academics bot student and faculty should keep learning despite issues.

Education is a vast sector. Like other sector it has a global community. War, pandemic, epidemic, natural calamities can occur at any point in time at any place. Technology has enabled us to get connected to people around the world. Creating online educational courses can help students. Knowledge should not be restricted to a country. It is a shareable resource. Despite any calamities human race will keep finding improved solution. Things like Artificial intelligence, machine learning, will help to spread knowledge to all over with more ease. To conclude, education technology will ultimately will gain more advantage than traditional way of learning and teaching methods to overcome global crisis.

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