

# Chapter 4

## COVID–19:

### Building Competencies of Tech Culture in the Indian Education System

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#### **ABSTRACT**

*The coronavirus pandemic posed an imminent threat to modern society. The coronavirus pandemic caused shutdown of many life activities including educational activities. One of the most important challenges that human society needs to address is the education of students whose learning was hindered due to coronavirus pandemic. In India about 32 million learners stopped going to schools and colleges. The education system had no choice but to switch to online learning for ensuring the continuity of teaching-learning during pandemic. This chapter talks about technological competencies (i.e., tools) evolved and embraced by educational institutions of India from elementary to tertiary levels. The study also attempts to address learners' attitudes, perceptions, and preferences for online education by means of a survey piloted among K-12 students in Gwalior, Madhya Pradesh, India.*

DOI: 10.4018/978-1-6684-5326-1.ch004

## INTRODUCTION

The unanticipated outbreak of a deadly infection termed COVID-19 as caused by novel coronavirus (SARS-Cov-2) quaked the world. COVID-19 was declared a pandemic by World Health Organization (WHO) on 11<sup>th</sup> Mar 2020 (DG-WHO, 2020). After becoming a pandemic COVID-19 challenged the human society in all domains especially health and education system. After initially appearing in Wuhan, China, by mid-Jun 2021 COVID-19 infected 217+ countries (WHO, 2020). According to WHO, people infected by COVID-19 had mild to severe respiratory infections symptoms and most people recovered without any medical treatment. But aged people and those already suffering some disorders in health conditions like cancer, chronic respiratory, diabetes etc. can develop severe illness due to coronavirus infections and may cause death.

In India, the first COVID-19 positive was reported in Kerala on 30<sup>th</sup> Jan 2020 and affected has the travel history from Wuhan, China. India reported first death due to COVID-19 on 12<sup>th</sup> Mar 2020 and India observed Janta Curfew for a day on 22<sup>nd</sup> Mar 2020. India again observed 14 hours Janta Curfew on 24<sup>th</sup> Mar 2020, thereafter the 1<sup>st</sup> phase of lockdown was announced by the Prime Minister on 25<sup>th</sup> Mar 2020 for 21 days. Since then, the government of India together with the state governments has taken several steps to curb the spread of the COVID-19 disease including extension of lockdown in many phases and stringent precautionary measures like social distancing, follow-up of instructed quarantine procedure, wearing masks and following other hygiene and sanitation etiquettes (Khachfe et al., 2020).

These measures affected approximately 1.077 billion learners at school level worldwide. As per the news report published at (Print, 2020), total 320 million students, out of which 13 million students of classes 9-12 were severely affected during Mar-Apr 2020 in India.

This chapter discusses (1) Existing technological competencies that proved valuable for Indian education system during coronavirus pandemic, (2) Obligatory and evolved competencies in learners and educators for online learning (3) Learners' perception, preferences for online learning concluded through a survey conducted among K-12 students in Gwalior, Madhya Pradesh, India.

## BACKGROUND

At the outset of COVID-19 pandemic, both teachers and learners were fairly disorganized and were not having any idea to cope up with sudden crisis that compelled closure of the educational campuses (Raju, 2020; Huber and Helm 2020). Before March 2020, physical classroom teaching was considered best pedagogical

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