Chapter 5 Digital Education System During the COVID-19 Pandemic

Anurag Vijay Agrawal

Indian Institute of Technology, Roorkee, India

R. Pitchai

B.V. Raju Institute of Technology, India

C. Senthamaraikannan

b https://orcid.org/0000-0001-6365-6427 Sri Venkateswara College of Engineering, India

N. Alangudi Balaji

b https://orcid.org/0000-0002-2767-0739 Koneru Lakshmaiah Education Foundation, India

S. Sajithra

R.M.K. Engineering College, India

Sampath Boopathi

b https://orcid.org/0000-0002-2065-6539 Muthayammal Engineering College, India

ABSTRACT

In this chapter, the growth and utilisation of digital technologies in the Indian education system during the COVID-19 pandemic have been illustrated. During a pandemic lockdown, all humans live alone in their homes to limit COVID-19 spread. A lot of digital tools have been used in Indian schools and colleges to improve or sustain the teaching and learning processes. However, some impacts and causes have been observed while using new digital platforms during that time. The utilisation of digital tools for the school and higher education systems has been elaborately explained in this chapter. In addition, the future scope and summary of digital technology utilizations have been derived.

DOI: 10.4018/978-1-6684-6424-3.ch005

INTRODUCTION

Questions have been raised over whether the Covid19 epidemic is a digital upgrade or the exile of high-quality education as a result of its disastrous effects on education. In order to understand how governments and international organisations are reacting to the disruptions and reactions generated by the closure of educational institutions, the researcher performed a study on Higher Education Institutions in Bengaluru during the COVID-19 Pandemic. Due to socioeconomic, technological, and other deficiencies, the regulations offered to stakeholders in emerging countries are temporary. This study explores how ICT affects students, teachers, and pedagogy in order to provide a long-term road map for enhancing higher education's quality, relevance, and inclusivity. The difficulties faced by academic stakeholders in urban and rural areas during the Covid-19 pandemic are examined in this paper. The increase in cases and the effects of digitalization on one another are the two main topics. The forced lockdown during the pandemic was regarded as the "New Normal" enabling people to interact socially, work, and learn together. The instructional graph was developed with the use of online video and digital media platforms like YouTube, Tik-Tok, Facebook, Instagram, Google Meet, Zoom, Microsoft, and Skype(Maity et al., 2021).

This study looks at the difficulties that academic stakeholders in both urban and rural areas faced during the Covid-19 pandemic. It focuses on two key components: the increase of instances and how each is affected by digitalization. For individuals to socialise, collaborate, and learn together during the pandemic, the artificial lockdown was referred to as the "New Normal." On the educational graph, people worked together using digital media and video interface platforms including YouTube, Tik-Tok, Facebook, Instagram, Google Meet, Zoom, Microsoft, and Skype. Education is one of the social domains that Covid-19 has had a significant impact on. Due to the need to adapt to new forms of education, employment, and life, people, businesses, and organisations have experienced a boom in digitization that has changed the way that people study from home (LFH). Students now have access to rich resources because to digitization, and this study looks at how digital media affects teaching and learning. It evaluates how teachers and students use digital technologies in their routine classroom activities and academic learning.

State governments and the MHRD are searching for best practises and standard operating procedures for online education as a result of the current pandemic scenario, which has forced several schools to finish their upcoming academic year online. Three out of ten Indians will be in the 18 to 22 age brackets within the next five years, according to Dr. Vinod Bhat, Vice-Chancellor of Manipal Academy of Higher Education, and the present educational system will not be adequate for them. India is currently the most populated nation in the world and is projected to

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-

global.com/chapter/digital-education-system-during-the-

covid-19-pandemic/329328

Related Content

Experiences Using a Free Tool for Voice Therapy based on Speech Technologies

William R. Rodríguez, Oscar Sazand Eduardo Lleida (2014). Assistive Technologies: Concepts, Methodologies, Tools, and Applications (pp. 508-523). www.irma-international.org/chapter/experiences-using-a-free-tool-for-voice-therapy-based-on-speech-technologies/80628

Supporting Communication between People with Social Orientation Impairments Using Affective Computing Technologies: Rethinking the Autism Spectrum

Jonathan Bishop (2015). Assistive Technologies for Physical and Cognitive Disabilities (pp. 42-55). www.irma-international.org/chapter/supporting-communication-between-people-with-socialorientation-impairments-using-affective-computing-technologies/122903

Sensors, Networks, and Clouds

(2014). Enhancing the Human Experience through Assistive Technologies and E-Accessibility (pp. 1-18).

www.irma-international.org/chapter/sensors-networks-and-clouds/109944

Machine Learning-Based Big Data Analytics for IoT-Enabled Smart Healthcare Systems

K. C. Prabu Shankar, K. Deebaand Amit Kumar Tyagi (2023). *AI-Based Digital Health Communication for Securing Assistive Systems (pp. 61-84).*

www.irma-international.org/chapter/machine-learning-based-big-data-analytics-for-iot-enabledsmart-healthcare-systems/332957

Controlling Computer Features Through Hand Gesture

C. V. Suresh Babu, J. Sivaneshwaran, Gokul Krishnan, Keerthi Varshaanand D. Anirudhan (2023). *Al-Based Digital Health Communication for Securing Assistive Systems (pp. 85-113).*

www.irma-international.org/chapter/controlling-computer-features-through-hand-gesture/332958