

## Impact of COVID-19 Pandemic on Teaching and Learning

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### Abstract:

The education in India was based on traditional way of learning where both teacher and the student were made to be present physically in a room and the teaching, learning process used to take at a scheduled time. The COVID-19 pandemic has created the largest disruption in the education systems in human history, affecting nearly 1.6 billion learners in more than 200 countries. Closures of schools, institutions and other learning spaces have impacted more than 94% of the world's student population. This has brought a very drastic change in the teaching learning method. All the institutes switched from tradition way of learning to digital, mobile and online learning methods. Social distancing and restrictive movement policies have significantly disturbed traditional educational practices. Reopening of schools after relaxation of restriction is another challenge with many new standard operating procedures put in place.

**Keywords:** ICT, Covid-19, E-learning, online learning, digital learning

## INTRODUCTION

The start of the New Year 2020 took an unexpected detour from what people expected. In December 2019, a new virus outbreak started in Wuhan, China; this virus is now known to be a part of the coronavirus family and is referred to as COVID-19 (World Health Organization [WHO], 2020). Coronaviruses are a group of viruses that cause diseases in animals or humans. Infections from this disease can vary from mild to severe symptoms, with most cases being classified as mild or moderate. The outbreak that started in Wuhan, China quickly escalated into a global pandemic, affecting many countries around the world. The World Health Organization (WHO) announced this outbreak as an international public health emergency as of January 30, 2020. The coronavirus is able to spread exponentially from person-to-person through bodily fluids that are expelled from infected individuals. The ability of the virus to spread very quickly has resulted in many countries taking very strict precautions to prevent the spread of this disease. Despite all the strict measures taken, this virus still manages to affect many individuals around the world. In the endeavor to control the covid-19 and limit the rapid spread to protect global societies from death and contracting the virus, governing bodies decided to work together and implement lockdown measures. Therefore, social distancing regulations, self-isolation and wearing personal protective equipment (PPE) were reinforced resulting in the closure of non-essential businesses, organizations, and institutions. This created an impact upon

teaching learning process starting from class I to higher education as they faced physical closures. Many educational institutions ranging from elementary schools to universities have closed, causing a halt to education for many individuals. Closing schools was an important measure taken as previous outbreaks.

Before the occurrence of COVID 19, the educational institutes used to practice the traditional way of teaching. In this method, the learner and the teacher are forced to be present physically in a class room and at a scheduled time the teaching and learning process used to be held with the aid of black board, white board. During this traditional way of teaching, to provide visual aid, projectors are used. Here there was a face to face interaction between the learner and the teacher. The traditional method of educating students used verbal and non-verbal cues to ensure students were actively listening and understanding what was being relayed by the teacher. The written material was distributed to all students who were expected to memorize the teachings and pass the examinations which were held with the physical presence of students under the supervision of teachers. The traditional system of educating students is found to be successful as students obtained the results to continue further education or contribute to society through employment. So this method of teaching students was practiced over centuries till the arrival of pandemic disease covid 19. In 1963 the vocational educational act permitted technology to be used within schools. Since then, information communication technology (ICT) has become supplement to traditional teaching methodologies. The use of ICT within education provided educators with the means of introducing another form of learning to progress learners. Higher education institutions used ICT for distance learning courses to provide education for students who needed the flexibility to continue education. However, the recommended method of teaching student included physical face-to-face interaction, which was suspended due to the coronavirus (covid-19) pandemic.

However during lockdown period the use of ICT initiatives was in peak in order to keep the teaching and learning process undisturbed throughout the pandemic situation. Educational institutes went through a rapid shift towards using ICT facilities to progress student education. Several ICT initiatives were introduced in education field starting from class I to higher education.

### **Introduction of ICT initiatives:**

Earlier before the arrival of COVID 19 pandemic disease, the online courses were found to be very less popular and people were thinking obtaining online degree as less favourable compared to traditional offline degree. People preferred the offline classes and traditional way of teaching methods and regular class, test, examination methods. This thinking made to question the validity of the online education system as the students were paying the same cost for their education through online with lower benefits. As the scenario changed after the arrival of corona virus in 2019 and as the whole world get affected by this covid 19 pandemic disease, the priority in life changed. A new dimension of thinking in the education field raised and importance to online teaching and online courses has been

given.

In traditional way of teaching, when the teaching process is going on, both the students and teachers were made to sit in a class room physically and interact with each other as per the schedule. Where as in online classes and in e-learning methods where ICT initiatives were implemented, there was flexibility in the schedule. The students were able to access the pre-recorded lectures through online platforms and e-learning platforms.

### **E-learning**

Education institution closures resulted in a rapid transition to the use of ICT facilities permitting students to seek education from remote locations. This required appropriate hardware, software and internet connectivity to access learning materials provided by education institutions. This has not been possible for students belonging to lower socio-economic backgrounds due to insufficient funding, thereby constituting to terminate their educational process or deferring the year. Stable internet connection has been a challenging factor for students that have been studying from home, as learning materials provided by the educational institutions can only be accessed through the internet. Therefore, for students residing in rural areas access to the internet has been poor or not available. This has impeded upon their ability to acquire knowledge; particularly as electronic teaching pedagogies all involve a stable internet connection. Educational institutions used effective and efficient communication methods to ensure their students are connected to them and other peers to provide some form of support. This is implemented through the use of ICT facilities and electronic learning platforms.

Initially WhatsApp groups were created and operated only to forward the sensational news, audios and videos with good morning and good night messages. But the same media is found to be very effective, meaningful media to share the educational notes, educative discussions and to share education related videos. Using WhatsApp media, the teacher becoming the admin of the group was sharing the notes, e-class videos, assignments and so on.

Interactive video conferencing software was used at the peak level to make the organizations, day to day classes and meetings successful during lockdown period. These media allowed both teachers and students to come to one platform and share the audio and visual education contents. Using this method, students can see their teacher in the same way the teacher can observe students when cameras are switched on to gauge verbal and non-verbal communication, replicating the closest to a traditional situation. The diverse learning materials accessed using ICT provide students with the flexibility to access pre-recorded tutorials that they missed and learn at a convenient time for them. The slow learners can access the pre-recorded tutorials repeatedly and understand the concept very well compared to traditional learning. Students can access learning tools like presentations, texts, associate web links, virtual assessments. Simultaneously they can send emails and take part in live chat sessions, send voice notes, participate in blogs, and utilize social media platforms like Facebook, Twitter, and

LinkedIn amongst others to stay connected. Higher education institutions have utilized interactive video conferencing software like Zoom, Microsoft Teams, Google Meet, and others which possess multiple functions to educate students in a live situation. When students want to ask questions, they can use the hand raise symbol and wait for the teacher to acknowledge a response, students can use emojis to express their emotions and the chat function can be used to interact with other students during the session. To create smaller group discussions, educators have been using the breakout room function through which they can assess knowledge gaps and help students accordingly. Therefore, ICT can drive student interest when utilized in the correct manner, for examples during virtual lectures Teachers have been able to devise virtual polls or questionnaires to consolidate student understanding. Online video conferencing platforms like Zoom, Google Meet, Microsoft Team aim to bridge the gap between in-person and online classrooms. Online classrooms are a blessing for the students as they allowed for better communication between students and teachers as well as provide a more comfortable and slower-paced learning environment. The utilization of ICT through these methods has enabled the continuation of education during the pandemic.

Mobile learning was another e-learning method. The students and their parents can sit together in class and the students with the guidance of their parent can learn the concepts. This benefited the parents to relearn the concepts and revise them once again.

#### **CONCLUSION:**

It is observed that in order to educate the students even during covid 19 pandemic situation, educational institutes strive hard to keep both learners and teachers busy in the teaching and learning process by the introduction of various digital learning methods. This resulted in the increase of online learning. The outcomes are

**Move towards Blended Learning:** COVID-19 has accelerated adoption of digital technologies to deliver education. Educational institutions moved towards blended mode of learning. It encouraged all teachers and students to become more technology savvy. New ways of delivery and assessments of learning opened immense opportunities for a major transformation in the area of curriculum development and pedagogy. It also gives access to large pools of learners at a time.

**Rise in use of Learning Management Systems:** Use of learning management systems by educational institutions became a great demand. It opened a great opportunity for the companies those have been developing and strengthening learning management systems for use educational institutions.

**Enhance the use of soft copy of learning material:** In lockdown situation students were not able to collect the hard copies of study materials and hence most of the students used soft copies of materials for reference.

**Rise in online meetings-** The pandemic has created a massive rise in teleconferencing, virtual meetings, webinars and e-conferencing opportunities

**Enhanced Digital Literacy:** The pandemic situation induced people to learn and use digital technology and resulted in increasing the digital literacy.

**Improved the use of electronic media for sharing information:** Learning materials are shared among the students easily and the related queries are resolved through e-mail, SMS, phone calls and using different social Media like WhatsApp or Facebook.

**Better time management:** Students are able to manage their time more efficiently in online education during pandemics.

**Demand for Open and Distance Learning (ODL):** During the pandemic situation most of the students preferred ODL mode as it encourages self-learning providing opportunities to learn from diverse resources and customized learning as per their needs.

## REFERENCES

- [1] P.Somani, -effectofthecovid-19pandemiconcommunication, *LangLit*, pp.1-14, 2020.
- [2] L.A.Braskamp, -DevelopingGlobalCitizens, *JournalofCollegeandCharacter*, pp.1-5, 2008.
- [3] V.HansandS.Crasta, -Digitalizationinthe21stCentury–ImpactonLearningandDoing, Things, *JournalofGlobalEconomy*, vol.15, no.1, pp.12-23, 2019.
- [4] R.Dugger, -TheVocationalEducationActof1963, *ThebulletinoftheNationalAssociationof SecondarySchoolPrincipals*, vol. 49, no. 301, pp.15-23, 1965.
- [5] S.A.Ali, M.Baloch, N.Ahmed, A.A.AliandA.Iqbal, -TheoutbreakofCoronavirusDisease2019 (COVID-19)–An emerging global health threat, *Journal of Infection and Public Health*, pp. 644-646, 2020.
- [6] <https://www.who.int/health-topics/coronavirus>
- [7] UNESCO, – COVID-19ImpactonEducation, UNESCO, France, 2020.
- [8] P. Somani, –Our World Before, During and After the COVID-19 Pandemic, *LangLit*, pp. 29-35, 2020.
- [9] P.Somani, -TheImpactofCOVID-19onHumanPsychology, in *EconomicsofCovid-19DigitalHealth Education &Psychology*, NewDelh, AdhyayanPublishers&Distributors, 2020, pp. 328-357.
- [10] G.Wikramanayake, -ImpactofDigitalTechnologyonEducation, Conference:24thNational InformationTechnologyConference, Sri Lanka, 2005.