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COVID-19 PANDEMIC AND E-LEARNING: CHALLENGES AND OPPORTUNITIES

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ABSTRACT

E-Learning refers to computer based learning that involves the use of information technology, information and communication technology, internet, CDs, DVDs, technology applications such as audio and video tape, television, PDF etc. E- Learning enables a person to work from his/ her own place as it is flexible. E-learning has been adapted as a way of use of information technology in educational institutions and becoming an integral part of the learning process. The covid-19 pandemic has been badly disrupted in the education system in India. To eradicate this serious issues of educational disruption due to the covid-19 pandemic, the only way to establish a consistent structure for the next course of action is to transition to e-learning, where both teachers and students need to turn to a digital platform. So, the present paper is an attempt to study about the opportunities and challenges of e-learning during covid-19 pandemic which will help students, teachers as well as parents to understand about positive and negative effects of digital learning during this period. It will also help readers to gain a brief knowledge about how online learning assisted the word education system from crashed and helped students to continue their study without any great loss.

Key Words: Covid-19, E-Learning, Pandemic, Challenges, Opportunities.

INTRODUCTION

Covid-19, which was declared by World Health Organization (WHO) on March 11 as a pandemic, has affected worldwide covering more than 4.5 million peoples (Jena, 2020). It is a transmissible virus that spread all over the world which affected not only people but also all strands of world economy. It has brought an earthquake to the economy of the world with making a vast impact on education sector also (Joshi, Vinay & Bhaskar, 2020). The first case on covid-19 in India was exposed on 30 January of 2020 in Kerala who had a travel history from Wuhan of China and with this the tragic journey of the people of India during covid-19 pandemic had started. Then the first phrase of lockdown (1.0) was announced by India's Prime Minister on 25th March of 2020. In all the lockdown phrases starting from 1.0 to 5.0 all the educational institutions were completely shut down and during this period no educational institution was allowed throughout the nation to open and start their educational activities. Thus, covid-19 pandemic impacted significantly on the education sector of India.

According to UNESCO report (as cited in Jena, 2020) as per the data obtained during 1st week of June, 2020, the pandemic has affected nearly 68% of world's total student population and it has impacted about 1.2 billion of students and youths across the world by closing schools and universities. To protect people and reduce the spreading of the pandemic all the educational institutions around the world were temporarily closed by the governments and these institutions were forced to switch to e-learning using available online educational platforms.

E-learning is the alignment of two words 'E' and 'Learning' where 'E' means electronic and learning means to gain experiences from various situations using our senses and apply them to adjust in our lives. The formal learning system with the help of electronic platforms is known as e-learning where computer technology and the internet is the main component of it (Aboagye et al.; as cited in Maatuk, Elberkawi, Aljawarneh, Rashaideh & Alharbi, 2021). It also refers to computer based learning that involves the use of information technology, information and communication technology, internet, CDs, DVDs, technology applications such as audio and video tape, television, PDF etc. E- Learning enables a person to work from his/ her own place as it is flexible (Dhamija, 2014; as cited in Maatuk, Elberkawi, Aljawarneh, Rashaideh & Alharbi, 2021). When spread of covid-19 reached its high pick everywhere of the whole world, the traditional system of education was replaced by E-learning considering the seriousness of the situation because social gathering in educational institutions is a big opportunity for the virus to spread among public. E-Learning is the best option available to ensure that epidemics do not spread, as it guarantees spatial distancing despite the challenges and studied figures, which indicate that students are less likely to benefit from this type of education (Lizcano et al. 2020). Many scholars also supported online teaching process as it saves time and effort for living in unsociable places from universities where they are registered (Ms & Toro, 2013). E-learning is the most trustworthy areas for divulging education using educational tools and communication media. It is the helping facilitated by information and communication technology. The government has supported

various E-Learning programs to develop various tools and technologies to uphold e-learning. A large number of internet users are accessing the internet from their smart phones, tablets, laptops, PCs, etc. rapidly (Sahu, 2021). Nowadays, E-Learning is stimulated by various social media platforms, Massive Open Online Courses (MOOCs), YouTube etc. and hence, different educational institutions, public, industries etc. taking the opportunities to use these resources to share information and learn from each other (Gutierrez, 2014). The government of India has taken several initiatives through the Ministry of Education and University Grants Commission (UGC) which launch E-learning platforms for students. The newly shaped National Education Policy, 2020 (NEP, 2020) also has included so many initiatives in the policy for a greater improvement of technology based learning (Sahu, 2021).

SIGNIFICANCE OF THE STUDY

The waves of the pandemic have enforced various fundamental changes in the functioning system of education particularly in general and higher education. Higher education is characterized by access, equity and quality where well-planned and special designed course is useful to bring desirable changes in the behaviour and cognitive structure of the learner. There are so many studies have been conducted on online learning to assess its effectiveness. But, only a very few studies concentrated on the impact of online learning on students' perceived learning in higher education in this crisis of covid-19. It is also crucial to know the extent to which different factors influence online learning. It is significant to study about opportunities and challenges of online learning also. This study highlights the key challenges and advantages of e-learning and provides the information based on secondary data for the researchers, professionals, practitioners and the decision makers.

OBJECTIVES OF THE STUDY

- To study about the advantages and opportunities of E-Learning during the covid-19 pandemic.
- To identify the challenges and obstacles of E-Learning during the covid-19 pandemic.

REVIEW OF RELATED LITERATURE

Mahyooob (2020) reported a study on challenges of e-learning experienced during the covid-19 pandemic on 184 learners. The aim of the study was to evaluate the learners' new experiences in online education and to assess the viability of the virtual methods of learning. The study found that the main influencing factors that hinders in the path of online EFL learning during covid-19 period are related to technical, academic and communication challenges and it was evident from the study that most EFL learners are not satisfied with continuing online learning, as they could not accomplished the expected progress in language learning performance.

Raheem and Khan (2020) conducted a study on the role of e-learning in covid-19 crisis which aimed to show the significant role of e-learning in covid-19 era. The investigators in the study reviewed about the concept and discussed in the paper on the concept, features and role of e-learning in teaching and learning of English language.

Obeidat, Obeidat and Al-Shalabi (2020) reported a study on the effectiveness of adopting E-learning during covid-19 at Hashemite University. The purpose of the study was to assess the perceptions of the students' regarding effectiveness of the E-learning during covid-19 pandemic at the Hashemite University, Jordan. The sample of the study was 399 students. The result of the study explored a significant association of gender and student's academic specialty with their perceptions of the effectiveness of the E-learning.

Sahu (2021) conducted a study on attitude of undergraduate students towards E-learning during the covid-19 period which aimed to find the level of attitude of undergraduate students towards E-learning, to compare the attitude of undergraduate boys and girls towards E-learning and to find out the difference between the attitude of Arts, Science and Commerce undergraduate students towards E-learning during covid-19 era. The sample of the study consisted of 180 undergraduate students from Arts, Science and Commerce stream which was selected by the investigator by using Stratified Random Sampling technique. The study found an average level of attitude of undergraduate students towards E-learning. The study also discovered a significant difference between attitude of undergraduate boys and girls towards E-learning in covid-19 era as well as significant difference was found among the undergraduate students of Arts, Science and Commerce stream towards E-learning in covid-19 era.

Maatuk, Elberkawi, Aljawarneh, Rashaideh and Alharbi (2021) reported a descriptive study on the challenges and opportunities of covid-19 pandemic and E-learning from the perspective of students and instructors on sample of 155 students (135) and teaching staff (20) in the Information Technology (IT) faculty at the University of Benghazi. The study concluded that students agree that e-learning is useful but sometimes it is difficult to continue due to low quality internet network services. The students' also reported to the investigator that it raises pressure on them while decreases the workload for the teaching staff. The study also showed that according to the teaching staff E-learning is useful for all but it requires financial support as compared to traditional learning.

Zalat, Hamed and Bolbol (2021) reported a study on the experiences, challenges and acceptance of E-learning as a tool for teaching during the covid-19 pandemic among university medical staff which aimed to investigate the factors influencing the acceptance and use of E-learning as a tool of teaching and evaluate their experiences. The sample of the study was 346 medical staff members. The study found that majority of the staff members (88%) were in favor of giving online courses on technological skills and rate of participant agreed on perceived usefulness of E-learning was 77.1%, rate of perceived ease of use was 76.5% and rate of acceptance of E-learning was 80.9%.

Dios and Charlo (2021) reported a survey research in a Spanish University on face-to-face vs. e-learning models which aimed to discover their perceptions and beliefs about their experiences during the learning process and what they have experienced during this global emergency and period of home incarceration. The investigator selected 100 students from the Primary Education Degree programme as sample for the study. The results of the study showed that 88% students agreed that face-to-face learning model is effective and 75% students reported that direct communication with teacher is a key facet of this model. The study also found that majority of the students i.e. 49% students prefer to continue with face-to-face learning process while only 7% students preferred online learning. 44% students preferred blended learning where theoretical classes could be online and practical classes could be face-to-face.

Polydoros and Alasona (2021) conducted a quantitative study on using E-learning to teach science in covid-19 era at primary education level which aimed to investigate the influence of distance learning on teaching and learning of primary school students in science. The sample of the study was 160 teachers which were selected by using random sampling technique. The study concluded that teachers need training in the use of new technologies and simultaneously there are concerns about the distance learning methodology for the subject of science.

METHODOLOGY

The present study is based on secondary sources and only observation has done to find out the necessary data. The data of the present study was collected from various journals, articles, books, newspapers, periodicals, online resources, and other secondary materials. The analysis of the present study was done objective wise.

INTERPRETATION OF THE DATA

Objective 1: To study about the advantages and opportunities of E-Learning during the covid-19 pandemic.

E-learning played very crucible role during the covid-19 pandemic and due to many benefits to the students, e-learning has now become a very popular and valued among students worldwide. Students have started to be dependent on online methods of learning rather than traditional such as books, research papers etc. Some of the significant advantages of teaching-learning through online mode are as follows-

- a) **It's flexible:** One of the most important advantages of e-learning or online mode learning is that it is flexible in nature which enables the teacher and the student to set their own learning pace. Its flexibility of setting a schedule helps everyone to fit their agenda. So, this common agenda between the student and teacher benefits both parties to receive new responsibilities and have more autonomy.

- b) It's accessible:** Online education enables student to study or teach from anywhere in the world. That means there's no need to follow any rigid schedule and it also saves time and money of both students and teachers. During covid-19 pandemic, while all the educational institutions were shut down and home imprisonment was executed everywhere online learning system was adopted which was considered as the best way to deal with the deadly pandemic.
- c) Ability to gain technical skills:** Due to covid-19 as all the works, services, education etc. were done through online platform; it forced everybody to achieve at least minimum knowledge about technology or using technical devices. It also involves active participation of the learner.
- d) Self-paced learning:** Adaptation of e-learning during covid-19 pandemic assisted students to learn as per their own learning pace. Students find learning is much more effective when they take ownership of the information they are learning (Deslauriers, 2019).
- e) Availability of diverse content:** One of the most significant advantages of using online teaching is that it provides a wide range of diverse content such as cultural diversity, inclusion, curricular content, pedagogy, accessibility, universal design etc.
- f) Cost saving:** E-learning doesn't necessitate learners to travel that save a lot of conveyance money and time consecutively. Also, there is no requirement to put in any special equipment or learning resources for each section of their course. Learners just have to log in to the application at any time which removes the need of time to spend on textbooks or other course materials.
- g) Time management:** time lays a significant role for organization, sustainability and modernization of human life (Batbaatar & Amin, 2021). Due to covid-19, many countries closed their schools, colleges and universities when use of online class was the only choice. Online learning helps to save time of both student and teacher but it requires proper planning and specific routine.

Objective 2: To identify the challenges and obstacles of E-Learning during the covid-19 pandemic.

The education sector has suffered a great deal from the occurrence of covid-19 all over the world. In India also both economical as well as educational structure was almost broke down because of this pandemic. So, online platform had to be adopted by the government to continue works and services as well as education. All the educational institutions and teaching professionals were ordered to adopt e- learning process to continue education of students. But adopting e-learning technology without careful planning was not easy which lead to so many obstacles in front of both students and teachers (Sharma & Singh, 2020). E- Learning had many negative impacts on education which can be discussed as below-

a) **Students:** Students are the center of the whole education system and during the covid-19 pandemic period students were at the top of the list that faced bigger problems as e-learning process was adopted. According to MHRD (2020) students from Ladakh, Lakshadweep, North-East States, Bihar etc. are neither having android and smartphones (as cited in Sharma & Singh, 2020). There is very less amount of ICT infrastructures are available in these places. Students with disabilities faced a lot of difficulties in online classes and students who were studying medical courses or students of science streams were not able to do their practical classes and experiments in labs. Many health related issues, stress, having long hours on smartphones and computer etc. were produced due to online classes (as cited in Sharma & Singh, 2020).

b) **Poor technical infrastructure:** Poor technical infrastructure is another major challenge of online learning for connecting the concerned students to this platform. Though online mode of learning doesn't require any huge building, big classrooms, chairs, tables, blackboards etc. but that doesn't mean that there is no need of any infrastructural requirements (Gutte, 2021). But in a developing country like India availability of such requirements is very low.

c) **Limited expertise:** There is few technical staff in most universities to maintain the online education system. All teachers from higher educational institutions are not trained or certified to teach online methods and software (Sharma & Singh, 2020). Lack of proper ICT gadgets, inadequate trained personnel, lack of skilled teachers for using electronic devices, etc. online education system could not provide the best and quality education to students (Tomoh, 2018). The online teaching of a non-qualified teacher cannot reach expectations and learning goals for students (Bhowmik, 2020; as cited in Sharma & Singh, 2020).

d) **Improper assessment:** Assessment is a very vital process in a learning situation through which students mental growth, improvement in learning, their drawbacks, limitations etc. can be outlined. But, after adoption online education system during covid-19 pandemic assessment became more complicated as it was conducted through online platforms (Adedoyin & Soykan, 2020). With online assessment, teachers have limited control over students' work because of which cheating done by students during exam could not be regulated properly by teachers and it was difficult to ensure that whether the assessment tasks given by them were completed by the students themselves or not (Heng & Sol, 2020).

e) **Financial restrictions:** In a developing country like India the cost of ICT equipment was a significant limiting factor in teaching through online mode where a broad target audience has to be covered and making sure that everyone can afford these devices (Tomoh, 2018). Students from low socio-economic status or families were not able to afford broadband connection and pertinent devices such as computers/ laptops, tablets to support their online learning. Instead, they use smartphones to access lessons and learning materials, to complete assignments and take exams (Chea et al., 2020; as cited in Heng & Sol, 2020).

f) **Lack of awareness among parents:** One of the most significant drawbacks of online learning mode is lack of awareness of parents who have less knowledge and understanding about the effectiveness of e-learning. Many parents still feel that the traditional learning mode is better but they don't try to get more knowledge about what is blended learning or what is the effectiveness of blended learning. Most of them even don't know how to run a smartphone or a laptop and also not motivated to earn them properly.

g) **Internet connectivity:** Poor technical infrastructure and connectivity is another big challenge of e-learning as due to narrow bandwidth internet connections and phone-lines are unreliable or slow which creates great problems while teaching in online platforms (Tomoh, 2018).

h) **Frequent load shedding:** Frequent load shedding is a big drawback in the developing countries which creates hinders mainly in online classes. Due to covid-19 pandemic most of the countries adopted online platform to continue study but as this process requires many electronic devices and these devices are run by electricity. Therefore, frequent load shedding creates great problems to continue the learning process smoothly.

i) **Monotony:** Online teaching can be a monotonous activity for both students and teachers as it's a very difficult task for a teacher to keep constant attention of students during online classes. In-person interaction is less in online learning system and only one-way interaction is adopted by the teachers while delivering their lessons which are not effective at all and so, there is a chance to make the class boredom for the students which leads to decrease motivation among the students to learn (Gutte, 2021).

j) **Lack of EdTech and online learning options for special needs of students:** The segment of students who have been completely ignored in the evolution of online learning is students with special needs; Special needs students need a more personalized and hands-on method of teaching. Though technology has improved drastically, it still heavily dependent on the need for an expert or a teacher to be there full-time to guide the student through the tasks. These problems have caused special needs students to fall behind others in their academic pursuits.

CONCLUSION

The study aims to study the problems and opportunities of e-learning during the covid-19 period. While the global pandemic has broken almost the whole economy of the world and the education of students also stopped for long time, online learning was the best solution for continuing education during the pandemic, especially in the tertiary level of education. Nowadays, the challenges to access online learning are not as much of because both learners and teachers have been experienced the tremendous opportunity of knowing and interacting with educational technology tools such as mobile-based learning, computer-based learning and web-based learning (Pellegrini, Mirella, Vladimir Uskov & Casalino, 2020; Byun, Sooyeon, & Slavin, 2020).

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