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# **E-LEARNING- TEACHING: A NEW AGE CHALLENGES**

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# Abstract

The global spreading of corona virus has drastically changed the sight of the social interaction. The education sector is highly affected by this pandemic situation. One of the first attempts for precaution was the closuring of schools and colleges. This abrupt change is definitely a big challenge for students, teachers, parents. All education related exams has been postponed for an uncertain time schedule. Teaching through e-learning has becomes the new normal. It is keeping everyone busy with worksheets, video lectures, assignments through ICT. The KVS has deployed it's SWAYAM PRABHA PORTAL. Some institute have adopted the zoom app, Google classroom, and so on to overcome this new challenge. Private edu-tech companies link BYJUS. SCHOOLGURU, EDUPART have been hired. Through the e-learning system, teachers are sharing learning materials in virtual classes. They are uploading various types of documents, e-books, videos to support learning. The school management system also provides a portal for parents that can be accessed from anywhere. Although there are many benefits of e-learning, but it has its own challenges. Lack of peer connection, absence of opportunities of collaborative learning, teacher supervision and the most important, being lack of opportunities for hands-on-learning in complex subjects such as mathematics and sciences are some of them. From the sociological point of view, the pace of e-learning teaching varies from urban area to semi-urban/rural area because of infrastructure challenges. This study has in brief shown the various challenges, opportunities for the educational institutions. Outlook for the future is uncertain, however education institutions in association with the Government sectors, big private sector enterprises should engage themselves to plan strategies to overcome the challenges discussed in this study. This study is based on qualitative data collected from various e-journals, articles, books,

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government published online documents, white papers.

**Key Words:** COVID 19, e-learning, distance learning, virtual universities, ICT.

### INTRODUCTION

In 2020, the Novel Corona Virus or COVID 19 outbreak has being an unique challenge for the whole world. India, our country is also not excluded from the savage of COVID 19. The first preparation & awareness program was implemented by Government of India, which is lockdown in several states. COVID19 pandemic is first & foremost a health crisis. Due to the speed spreading of COVI D 19, especially the education sector has been highly affected. Globally, over 1.2 billion children in 186 countries are not being able to access into the school system. But education system should not be hindered. So, many technical specialists, policy makers, education specialists are being engaged to overcome this crisis.

E-learning is one of the important avenues for the evolution of the educational technology. Only the traditional system of education is not being able to cope up with the present COVID 19 crisis. So, e-learning, open & distance learning, virtual universities may support the traditional education system to overcome this crisis in education sector.

### THE CONCEPT OF E-LEARNING

Learning methodology utilising information and communication technology (ICT) to promote educational interaction between students, lecturers, & learning communities can be considered as e-learning. There are diverse ways to classify the e-learning, such as computer- based and the internet- based e-learning.

According to Algahtani(2011), the computer-based learning comprises the use of hardware and software generally that are available for the use of ICT. Computers are used instead of the traditional method by providing interactive software as a support tool. The internet-based learning according to Almosa(2001), is a further improvement of the computer-based learning and it makes the content available on the internet. The blended learning offers mix of traditional method and internet-based method.

### E-LEARNING MODEL

# ROLE OF E-LEARNING IN TEACHING LEARNING PROCESS

In 21<sup>st</sup> century, education system is rapidly transforming from conventional method to technology based method. Today's students want relevant, interactive self-paced learning, personalized content. E-learning has the ability to fit the students in with this new opportunity. It is the medium which will provide quick delivery of lessons to the students. It also helps to get a higher degree of coverage to communicate the message in a consistent way for their target audience. In this study the focus has been to discuss in detail on the relevance of e-learning in k-12 education system, higher education system, different learning skills development processes.

### In K-12 Education System

The education model of k-12 schools are changing rapidly everyday. It is estimated that the investment for e-learing in K12 category may be is on track for \$325 billion in the next five years to enhance the effect of virtual learning. Schools are taking initiatives to implement the E-learning into the school curriculum beyond the conventional classroom. E-learning in schools are focused on two branches, like the problem-solving approach and practical supplementation. Gamification, game based learning has enabled students to learn and hone their skills, specially for analytical subjects like mathematics. For special children, Government has taken several initiatives to accommodate their needs into digital world. They are benefited by e-learning courses, because they can access the learning process from home environment, which is effective for them.

#### In Higher Education System

India has the second largest number of online learning course enrollments with more than over 1,55,000 students . In the present context, virtual learning environment plays a pivotal role in higher education sector. Many colleges and universities have taken initiatives to deliver not only the course content but also the registration, counseling procedures through online mode. From the recent trend of higher education, MOOC or Massive Open Online Courses has come up as one of the important part of virtual learning. MOOC is very much effective to ensure the accessibility, flexibility for the completion of courses for free or at a reasonable cost.

Distance learning is involved solely by synchronous and asynchronous learning method. Synchronous learning method provides the accessibility of interaction between teachers and students at the same time beyond the limitation of geographical boundaries. On the other hand, asynchronous learning refers to the interaction between student teacher at different time irrespective of their location. So, MOOC has opened up the opportunities in front of the students as well as the teachers to explore their creativity, innovation to promote the online learning models.

Blended learning is another prominent trend in higher education. It suggests the different delivery methods like collaboration software, web based courses, computer communication practices with conventional face-to-face mode of learning.

## E-LEARNING IN COVID 19 CRISIS AND CHAL-LENGES

In the last week of March 2020, the central government of the country advised to close down all schools and colleges temporarily as a measure to content the spread of Corona Virus. This has created an unprecedented situation which has impacted school admission, board exam, tests of various universities. As the situation has not improved the schools and universities have started using more information and communication technology for teaching and assessment. The situation has definitely transformed the conventional teaching model to one given by technology. This disruption in the delivery of education is pushing policy makers to figure out how to drive engagement among students by ensuring inclusive e-learning solutions

However, only a few private schools and colleges have been able to adopt online teaching methods which include use of e-learning, webinars, learning management systems, MOOC. In India, a large number of educational institutes are completely shut down for not having the access to ICT infrastructure. Because internet is still a luxury in rural & semi-urban areas.

E-learning does not cover the certification / degree programs. There is a lack of awareness among the teachers and students community about the availability of existing e-learning. Also it takes time to migrate from conventional education system to e-learning mode. The cost implications for implementing e-learning are still higher considering it includes animations, graphic designing, varied software and hardware and access to the internet. The new age video conferencing mechanism has opened a new avenue of learning. However, the cost associated with it includes cost-related to server platform, audio-visual equipments, and cost for maintenance are barring it to be a popular solution for most higher education institutes.

A multidimensional strategy is now necessary to be formulated and needs to be effectively implemented to manage the crisis to build a resilience education system in the long run:

1) Immediate measures are to be taken to ramp up the internet infrastructure of the country. Open source digital learning solutions and cloud based learning management systems should be adopted, so that teachers can conduct teaching online.

2) SWAYAM, Massive Open Online Courses and initiative by MHRD to encourage faculties to develop online courses, and for students to access them, SWAYAM PRABHA initiative to view digital courses on television, national digital library, e-pg Pathsala to get free e-books and curriculum, SODH-GANGA to access research thesis of the scholars of Indian Institute should be popularised and massively used to reach wider audience.

3) With the rapid increase of mobile in-

ternet users in India which is expected to reach 85% households by 2024, penetration of internet in reasonable expenses in the rural & semi-urban areas is not a distant dream .This can change the schooling system and increase the effectiveness of learning and teaching , giving students and teachers to access mobile based learning management system.

4) Strategies are required to prepare to create a pool of resources who are equipped with educational technology knowledge to prepare for the evolving demand supply trends across the globe.

5) It is also important to reconsider the pedagogical method in school and higher education by creation of e-learning in regional language for k-12 category. The Indian education system which is most diverse and largest in the world which has more than 15 lakh schools, and 50000 higher education institutes needs to integrate classroom teaching with e-learning platforms.

### CONCLUSION

As of 2015, India is already the second largest market for e-learning after the united states .Yet, the e-learning industry is still in its infancy in this country. We are just at the beginning of radical changes in the education sector to increase reach of e-learning in smaller towns and rural areas through online learning. According to a recent McKinsey Report, the digital India initiative of the government of India will ensure infrastructure improvement for digital learning.

The recent crisis during the COVID 19 situation has shown the importance of use of the digital tools for teaching and learning. The ICT provides great opportunity for school and higher education system to ensure that learning does not get impacted during the pandemic situation. This article has sought to discuss the present challenges during the COVID 19 crisis for educational institutions in India. It emphasizes the advantages of e-learning, discussed the existing challenges, possible solutions of those challenges, suggests the need for effective implementation of e-leaning options to ensure the full benefit reaches to teacher-learner community.

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