IMPLEMENTATION OF E-LEARNING A CHALLENGE IN INDIAN CONTEXT

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ABSTRACT:

COVID-19, the situation has endangered the normal life of the people of the World. No one knows where it will end and when we will return to normal life. The only way to keep the education system afloat in this difficult situation is through e-learning. India wants to move forward in the same way as the rest of the world. However, there is a need to think about what is possible for India in the developed countries of the world. Especially in India's e-learning infrastructure. The main purpose of writing this paper is to review how well India's infrastructure is ready to continue the e-learning system. Based on various Govt. and privet data it is seen that, for the large number of students, the Indian technology infrastructure is quite low. Implementing and sustaining the education system through new system (e-learning) by filling the infrastructure gap is a challenge. It is hoped that instead of formal education system (Face to face) will be managed through the e-learning method by overcoming this difficult challenge.

Key Words: E-learning, Infrastructure, Implementation, Technology.

INTRODUCTION:

The whole world is facing deep problems today, cause of COVID-19 pandemic. Scientist of whole world working day night without any rest for antibiotic to protect human beings. We do not know when we will go back previous life. So many scientist of the world indicate that, in the coming days, human civilization will have to move forward with the COVID-19 pandemic. This critical situation every aspects of human beings lifestyle are fully stopped. Nevertheless, life cannot stop for a long time. Every aspect, related of our life reopens slowly by so many ways. Education is

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one of the most important aspects in our life as well as society. Educational institutions are close from March 2020, due to COVID-19 outbreak and lockdown. Now question raised that maintaining social distance how to possible to continue education again. Answer comes, the way to continue education by e-platform, that is technology based e-learning. Although e-learning starting few years ago so many developed countries reputed universities and some Indian universities as a supplementary education.. No doubt, e-learning is an excellent platform in education. However, here is a question; a country with a huge population like Indian is possible e-learning? To fulfill huge student's needs, Is Indian infrastructure is ready for e-learning? All the faculties related to education, students, parents, are ready to adopt this new situation? It will take some time to learn in technology instead of the way (classroom formal teaching) the large number of students in India is accustomed to e-learning. However, the problem is not here. Main problem is Indian socioeconomic condition and technological infrastructure. The big challenge is to keep the education system running through e-learning by solving all the problems.

E-LEARNING:

Electronic learning or e-learning can as effective as or more effective than live instruction. A learning system based on formalized teaching but with the help of electronic resources is known as e-learning. Instead of formal classroom use of computer and internet, based e-learning is effective. By using electronics elements, it is possible to transfer of skills, knowledge and delivery of education is made to a large number of recipients living in different places at the same or different times. In the past e-learning was not acceptable, but now the rapid progress in technology and the advancement in learning systems, it is now embraced by the masses. Because of the technological revolution, electronics devices have become readily available to people, that is Smartphone, Tablets and other devices. These devices now have an importance place in the classrooms for effective learning. Electronic educational materials like optical discs or pen drives are gradually replacing hardcopy of educational documents. Gradually the e-library is developing. Now knowledge can also share via the internet (email, voice call, charting ,twitter, Facebook, What Sapp etc.), which are easily accessible in 24/7, anywhere any time.

ADVANTAGES OF E-LEARNING:

E-learning has completely transformed the way in which learning is imparted to students. Unlike traditional chalk and board method of teaching, e-learning makes learning simpler, easier, and more effective (*Gupta Sunil 2017*). Here are some features of e-learning that make advantageous to students. 1) Online learning accommodates everyone's needs. 2) Lecture can be taken any time anywhere. 3) Offers access to updated content. 4) Quick delivery of lessons. 5) Saves time and money. 6) Consistency. 7) Effectiveness. 8) Less impact on environment. 9) Leads to better relation. 10) Offers personalization.

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E-LEARNING INFRASTRUCTURE:

In today's world, e-infrastructure is the key element for the development of a society. The term "infrastructure" is contextual in its meaning. In e-learning context "e-learning infrastructure", "technical infrastructure", and "ICT infrastructure "all convey a range of meanings. For the inclined, "infrastructure" often describes a bottom "layer" of an architectural description or diagram, indicating network hardware components, communication processes, services and protocols. However, for others, it can also serve as a label that includes the "applications layers" or even more broadly, the entire platform required to deliver services (DEST-2004).

The successes of e-learning will come only when all the students have access to education if the e-learning infrastructure is good. Set up e-learning infrastructure only need three basic things that is **Hardware, Software and Support team. In hardware;** Server, that will be dedicated or cloud server, User Database and Concurrent Users, It will depend on the organization that, how many users will be accessing and how many may access the serer at a time and configured server. Bandwidth, to help user's access e-learning courses seamlessly. Other Server configuration i.e. core processor for fast processing of request, RAM for quick response time, and a hard-disc with enough space to upload e-learning courses and store training information in the database. **In Software;** Learning Management System (LMS) is the main software to upload the entire course and enroll users. **In Support team;** Team selection, Administration Training for solving any problem and maintaining server. Also others e-learning infrastructure, Computer, printers, smart Classroom, Electric and good internet service is important element.

CHALLENGES OF E-LEARNING:

The Covid-19 pandemic has exposed how rooted structural imbalances are between rural and urban, male and female, rich and poor, even in the digital world (*Kundu.P -2020*). It is still difficult to predict when school, college, universities will reopen. In this circumstance to maintaining social distance e-learning is only way of education instead of physical classroom. Education administration, advised teachers to continue class through virtual lectures like Massive Open Online courses. There are indescribable problems in introducing education system through e-learning both teacher and students. The main challenges to introducing e-learning are.

LACK OF DIGITAL INFRASTRUCTURE:

The major challenge of remote learning is disparity in access – from electricity and internet connections to devices like computer and smart phones. India's technological infrastructure is very small in terms of huge population. It is not possible to fill the shortage of classroom teaching in schools, colleges and universities. A report by **Quacquarelli Symonds** pointed out connectivity and signal issues as the most prevailing problems faceted by students while attending online classes and the infrastructure in terms of technology in India has not achieved a state of quality, so as to ensure sound delivering of online classes to students across the country. It is seen that both the state and private players have not yet managed to overcome technical challenges, for instance, in providing adequate power supply and ensuring effective connectivity as the data reveals. "Although, due to

the outbreak of COVID-19 the world had witnessed a massive shift from the traditional Face to Face (F2F) to online platform as a model of delivery of classes. Due to lack of proper infrastructure, a shift to a total reliance on the online platform for the delivering of lectures seems to be distant dream.

According to the report, it is found that, in order to use internet at home, 72.60% of respondents use mobile hotspot, 15% PC use home broadband, 9.68% PC use Wi-Fi dongle and 1.85% PC have poor to no internet connectivity. The data revealed that amongst the respondent who use home broad band, over 3% PC forced cable cuts, 53% PC faced poor connectivity, 11.47% PC faced power issues and 32.53%PC forced signal issues. when it comes to mobile hotspot, 40% PC faced poor connectivity, 3.19% PC faced power issue and 56.81% pc faced signal issues.

According to the key indicators of household social consumption on education in India report, based on the 2017-18 **National Sample Survey**, 24% of Indians own a Smart phone; only 11% of households' possess any type of computer. Only 24% of Indian households have an internet facility. While 66% of India's population lives in villages, less than 15% of rural Indian households have internet (as opposed to 42% of urban Indian households). A mere 13% of people surveyed (aged above five) in rural areas- just 8.5% of females- could use internet. The poorest households cannot afford a Smartphone or computer. If we see state wise then, 4.6% in Bihar, 23.5% in Kerala and 35% in Delhi householders access computer. In states like Delhi, Himachal Pradesh, Haryana, Punjab and Uttarakhand access internet more than 40% of householders and other hand Odisha, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh and West Bengal householders' access internet less than 20%.

As per the **Internet and Mobile Association of India report, in 2019,** while 67% men and 33% women access internet. In rural area 72% of men and 28% of women access internet.

Access to electricity is crucial for digital education, both for powering devices as well as internet connecting. As per **Soubhagya Scheme,** almost 99%of homes in India have a power connection. But the picture is less bright if we look at the quality of electricity and the no of hours for which it is available every day. **Mission Antyodaya**, a nationwide survey of villages conducted by the **Ministry of Rural Development in 2017-18,** showed that 16% of India's households received 1-8 hours , 33% received 9-12 hours and only 47% received of electricity more than 12 hours a day.

According to Tappan Kumar Basu, Former professor of IIT Kharagpur and Co-founder of NPTEL, says that the internet connectivity is not only problem. "In many places, even regular supply of electricity is not available. Moreover, most Indians can't afford a basic gadget to access online education" he believes online education can only be provided at the advanced level in certain research subjects for students in universities. India has a long way to go before e learning becomes valuable for all.

TEACHERS AND LEARNERS' MENTALITY:

The challenges for teachers too. It is not possible to change the way teachers and students have been accustomed so far in one day. With the advancement of technology, teachers need to be made more efficient in managing technology. If the teacher teaches properly by using the

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technological resources, then the students will be emotionally prepared for e-learning. However, I can say from my personal experience and observation that, maximum old and middle generations teachers are not capable to handling technology and use of e-learning effective resources.

Learning demands a conductive environment. Not all students, maximum students have no quit space for learning at home. Only 37% of householders in India have one dwelling room. On the other hand, most of the students use mobile for the purpose of entertainment, like Facebook, what Sapp, you tube etc. They are less browsing educational site than the other site. Changing this mentality and encourage them to use technology in educational purpose, it is important to available and interesting e educational resources.

SOCIO ECONOMIC CONDITION:

India's socioeconomic status is not prepared to adopt the new educational platform e learning. India's biggest problem is over population that is above 130 crore. According to the **World bank collection of development indicators**, compiled from officially recognized source- Rural population (% of total population) in India was reported at 65.97% in 2018 and (% of urban population) 24% living in slums. Accesses to electricity (% of rural population) 7763% . Individuals using the internet (% of population) 34.45%. **NABARD all India rural financial inclusion survey (NAFIS)**-Shows that average agricultural households income was Rs. 8931/ month and non-agricultural households Rs. 7269/month in 2016-17. **According to NSSKI(75/25)** (2019-18) report, it was seen that, 4.4% rural and 23.4% urban households having computer and 14.9% rural and 42%urban households having internet facility. **According to MHERD** report 9.17 crore students received Mid-Day Meal (MDM) in 1.35 lack school across the country. According to Global Hunger Index 2019: India is raked 102 of 117 countries in the World. This is the socio-economic picture in India, which is so painful.

ANALYSIS:

The above infrastructural and socio-economic problems point to the face that e-learning is a dream in Indian education system. In order to make the education system technology dependent, it is necessary to first analyze and solve the direct and indirect issues related to education. If this can be done then it is possible to establish a technology based e-education. Otherwise, the dream of introducing technology based e-learning education system will not be successful.

CONCLUSION:

Nothing is impossible. No matter how difficult the problem is, people are used to overcoming it. This epidemic has torn people's lives to pieces. Just as it is bad thing, this epidemic has taught society a lot. Like others aspects of life, it has provided an opportunity to revolutionize education. Taking advantage of this opportunity, the education revolution will take place through the development of infrastructure and socio-economic conditions. This is a challenge to every part involved in education. I hope that we will take up this challenge and win.

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