



India's Electronic Education: Post COVID-19 Lockdown in India

Presented By

Dr.Ankita Gupta

Associate Professor, Economics Department, M.G.Kashi Vidyapith Varanasi.

ABSTRACT

This paper attempts to study the nature of the modern education process in India where diversity is seen economically, financially, socially and geographically not only in culture and ethnicity but also in purchasing power and affordability of the Indian people. The imposition of lockdown due to Covid-19 spread in India which has continued till today, promoted the e-learning process facilitated by digital instruments like Laptop, Smartphone, flash drives etc with the aid of several apps like Zoom, Skype, Google Meet etc. Institutes and enterprising teachers try to market e-learning among their students. For A-level and B-level cities its good and sounds very elite. However the areas with low connectivity and those belonging to underprivileged sections or living in far-flung areas that cannot afford data plans and other gadgets and drives it's another divide. These students are staring at the electronic divide that this new turn of digital education has brought them. As destined to be the electronic media inequality is staring and creating class privileges so the real world and the virtual one all have class privileges. So, while many universities and colleges are conducting online learning sessions, students from disadvantaged families or living in remote areas might not have access to Telegram, iCloud or, indeed, the internet even in the best of times. The paper uses secondary data from the published Government sources and websites and other data from cited papers. It is a descriptive study. This discussion paper brings forth the limiting aspect of Electronic Education various limitations the Digital Education has landed us on. An attempt is being made to explore the electronic divide that exists in India and bring to the discussion the infiltration of internet and, its use, applicability to the day to day needs of education by the people in India; also the initiatives under the ambitious Digital India Program is highlighted in the paper to find out India's progress in transforming itself into a digital society.

Keywords: Electronic Education, Digital divide, Education, Classroom education, Internet

I Introduction

Interactive: With electronic education, classroom teachings have become more fun and interactive. Children have become more attentive. They view, listen and talk on the screen which makes their learning all the more effective. Here, sounds and visuals go hand-in-hand which is straightforward for the kid to understand. Attention to details: Interactive Online presentations or practical sessions in educational content through interactive screen time help the scholars to pay more attention to details which enable them to complete their activities on their own. Quick completion: Using tabs, laptops or notepads, rather than pens and pencils, motivates children to finish their tasks quickly. Vocabulary: Active online screen time helps students develop language skills. By reading eBooks or accessing study materials online, they learn new words and expand their vocabulary. User-friendly: The best thing about electronic education is that it is user-friendly. You can very well access your syllabus wherever you are. You can learn on the go. Even if you miss certain classes, you'll access the category notes and download files from the varsity website.

II Review of literature

The term “digital divide” was introduced by Larry Irving, Jr., former US Assistant Secretary of Commerce for Telecommunication and Communication within the mid-1990s so as to focus public attention on the existing gap in access to information services between those that can afford to get the pc hardware and software necessary to participate within the global information network, and low income families and communities who cannot (Cohen, 2011). The global digital divide refers to differences between countries in terms of access to ICTs. ICT access inequality is named because the first order digital divide and ICT use inequality is named because the second order digital divide (Jin & Cheong, 2008). Wilson (2004) defines the digital divide as “an inequality in access, distribution, and use of data and communication technologies between two or more populations.” The digital divide problem has geographic, demographic, and socio-economic dimensions (Yuguchi, 2008). There also are philosophical and sociological sides of the digital divide due to a possible missed opportunity on the a part of many people to get desirable jobs and enhance their lives by using computers and therefore the Internet (Friedman, 2001). The digital divide refers to unequal patterns of fabric access to, usage capabilities of, and benefits from computer-based information- and communication technologies that are caused by certain stratification processes that produce classes of winners and losers of the knowledge society, and participation in institutions governing ICTs and society (Fuchs & Horak 2007). Vicente and Lopez (2008) analyzed Internet adoption in the new member states and candidate countries of the European Union and concluded that younger individuals are the most likely to use the Internet in all the countries. Friedman (2001) finds that the Internet penetration rate among young residents is substantially higher than that among elderly residents in both developed and developing countries. Loges and Jung (2001) in their study reported significant differences between old and young Americans in Internet access.

Education system creates hope digital education has created more of hype given the constraints it faces. To better understand how Digital Learning benefits education today, it's helpful to look at its past. Elliott Maisie coined the term “eLearning” in 1999, marking the first time the phrase was used professionally. In the years since, digital-Learning's reputation has gone from strength to strength. It is generally assumed that such diversity might impact on their ability to function in the changing environment and to prosper. At university level it has been found that even if students are offered access to ICT and the opportunity to build computer and information literacy skills, that stills seems to be a divide when putting these skills to use.(Behera,j.k, p.139).The Cs of success in the internet economy formulated by Rao (2000) provide a classification that is strongly oriented to technological and economic dimensions such as-

III Comparing the post and pre education delivery-

Electronic education has led to unrestricted access of study material supported with audio-visuals. The normal teacher-centered methods of teaching and task-based approaches to learning focused more on memorization. However, the chalk duster functioning has given thanks to touch-screen audio visual method of learning which we call electronic-education. Classroom teaching has become more and more interactive nowadays with the utilization of digital methods like PPTs, video presentations, e-learning methods, practical demos, online training and other digital methods or platforms.

Disadvantages of electronic education for education itself-

Firstly, it's expensive. We see that the majority International schools and schools that have digital education are much more expensive than the regular schools. To possess digital education means, you would like to possess a correct infrastructure not only at schools but also at homes, particularly affordable broadband. Online learning requires far better time management and glued schedules. The most important disadvantage is it reduces creative abilities: objectivity of study material on internet easily reduces the children's own creative abilities and thwarts the essential purpose of data creation. Last but not the smallest amount, logging on doesn't mean that your child is merely trying to find study materials. There are numerous things which a toddler might encounter that aren't good for him. Digital education has its pros and cons. So, students got to be properly guided by their parents and teachers whenever they're getting to use the web technology.

EMERGING TRENDS OF ELECTRONIC EDUCATION

Education sector has seen many stages in its evolution. From Guru-Shish ashram system of conducting the category in open garden under the trees to closed class room lectures, distance learning, online learning modes, presentation sort of teaching with the help of LCD touch-screen projector to online notes and therefore the recent addition thanks to pandemic Covid-19 is instant Whatsapp messages is that the among the teachers and their students. Whatsapp has gained the status of being authentic formal means of communication among the scholars and therefore the academicians. Screenshots have begun the business of the many of the photocopy outlets operating within many school and college premises. Indian subcontinent comprises of diverse population belonging to varied ethnic and cultural groups and therefore the divide of haves and have-nots, this is often now the foremost visible difference that creates an immediate impact on the Indian education system is that the diversity in purchasing power and affordability of the Indians. Kids are looking and grasping up during a very different world than that of their parents. Cell phones,

computers, YouTube, Netflix, and Face book are embedded in their daily lives. Even toys are digital, and lots of are

Table 1: Age wise distribution of India's internet users in 2014

Age groups	%age of internet users
15-24	37
25-34	38
35-44	16
45-54	6
55 and above	3

Source: Deloitte Report, 2015

Table 2: Age wise distribution of India's internet users in 2016

Age groups	%age of internet users
Up to 35 years	74
35 years and above	26

Source: India Statistics

programmable

Age is one of the demographic factors affecting digital divide in India. From the above two tables it is evident that there is a growing digital divide in the country between young and old population. In 2014 and even in 2016, the divide is not reducing as can be seen that internet users are more in age groups of 15-24 and 25-34 years age groups in 2014 in comparison to internet users in age groups of 35-44 and above. The divide is prevalent even in 2020.

1. Electronic classroom/Flipped Class rooms a growing Trend: A complete revolution in the way we learn today has been brought by Technology. Teaching in the classroom can capture the students and the full strength in the class by digital screens, thus facilitating each child to get the same base content and input from the teachers. This feature of digital era has increased the Student engagement as it combines various instructional styles. Each student gets in contact to world-class education, which is not easy to impart by the traditional white chalk and black board teaching. This new learning is more interesting, personalized and enjoyable. With this technological inclusion in the school teaching the students feel studying as enjoyable, easy, competent and above all interesting. The aim of a teacher however should be to create such an atmosphere which makes every student want to study.

2. Video based learning: Video-based learning as a part of digital marketing has geared up in Indian Education Sector and has made education engaging, entertaining and exploring. It enables learning with a pedigree of learning out of leisure with creativity, fun and entertainment on cards via the wonderful Apps.

3. Key outcomes of Electronic learning are E-Learning should be more focused on knowledge creation rather than merely on knowledge acquisition. As knowledge and information are the integral part of this century .Developing collective cultural practices, physical learning is important as learning takes place between people and their cultural surroundings.

Advantages and Challenges of Electronic learning- Electronic Learning has become very popular with time. The following are the advantages of Electronic Learning:

No Physical Boundaries: Electronic Learning has no location-wise and time restrictions. In case of face-to-face learning, the location limits the group of learners to those who have the ability to participate in the area. But this is not

the case in electronic learning. In electronic learning, there is no physical restriction and the learner can attend the sessions anytime, anywhere according to his/her comfort.

More Occupying: Electronic learning is a more engaging experience as compared to traditional learning. Through digital learning, a course can be designed in a way that makes it interactive and fun through the use of multimedia. Even, the more recently developed methods of gamification can be used to enhance the engagement factor.

Cost Effective: Digital learning is cost effective way of education as compared to traditional learning. This is directed towards both learners and teachers. In digital learning, there is a good chance that you don't have to pay exorbitant amounts of money to acquire textbooks for school or college. As textbooks often become obsolete after a certain period of time, e-learning is definitely a cost effective way of learning because of the reduced cost.

Comfort Zone: Comfort zone can be established in digital learning as you can study at the time that suits you. In case of traditional learning where all the students have to present in the class when the teacher is teaching. The same is not the case which digital education. In digital education, the student can study at the time of his own comfort.

People are moving /adapting towards electronic-learning as the ed-tech firms are providing them the comfort of 'live and interactive' anywhere learning in digital format, through its online programs. With nearly a billion people on mobile phones and over 200 million mobiles connected to the internet, there has been a considerable rise in digital learning.

Someone rightly said, "Electronic learning should be more about the human touch than just machines". The following are the challenges of electronic learning along with the measures to overcome these challenges. Familiarizing of employees towards technology is one of the biggest challenges of electronic learning which, the managers need to work with it. It's a fact that eLearning implementation can create enormous change within a company, so implementers can expect to face some resistance.

Table- 3 %age of Urban and Rural population using internet

Year	Rural	Urban
2013	41.02%	146.96%
2014	43.96%	145.78%
2015	48.37%	148.61%
2016	51.37%	154.01%
2017	57.45%	173.21%

Source: Annual Reports of TRAI

We can easily discern from the above table-3 that the advantage of digital education is heavily tilted in favor of Urban India and the rural India is deprived in yet another sphere. To overcome this resistance certain measures can be taken. Features of multimedia learning enables to prepare the material more engaging easier to absorb in minds of pupils. At the time of refresher, they can easily lay hands on such learning material will when they want. This will enable to complete the learning within a span of time. Effective communication processes: Communication is the key to incorporate a digital Learning Program effectively. Communication will equip to understand and accept your digital Learning program quickly. It is important that, trainees need to know what benefits digital learning offers them, and what are the objectives, among other aspects.

IV Bridging the Digital Divide-

Problems of Digital Divide during this time bounded by a growing need for information skills in the least levels, including School University, workplace and customary life, similarly, there's a rise in outcries to bridge the digital divide. therefore the digital divide concerns far more information to extend the spectrum of skills we address, from an information retrieval skills, knowledge of seeking behavior and teaching on one hand, we therefore have an ICT environment and out cries for information skills concerns for description of the digital divide concerns the difference between those that have access to information (the have's) and people who don't have access to information (have-nots). Capacity Sufficient trained IT professionals to put in and maintain h/w, s/w and networks. Professional information workers those that are belongs to education and professional associations of IT and library information professionals.

Conclusion

This paper has explored the aspects of the digital divide in India. Consistent with the analysis, Internet use has significantly increased in India over time, but, there's still a digital divide in ICT use. Also there's an interesting gap between rural and concrete residents regarding Internet use alongside the users facing problem in reference to connectivity problems. A digitally connected India can help within the overall growth and development of its education among students of all sections and this digital inclusion are often realized through supporting and enhancing elements like basic infrastructure and digital literacy. Initiatives are already taken by the Governmentt but the very fact is on what extent it's penetrated and whether people are becoming benefit or not. Since most of the digital innovations and initiatives are taken post 2014 it'll take some further time to live the progress and achievements of the varied developments under Digital India initiative. Digital India program is that the beginning of a digital revolution and if it's properly implemented then it can really make India digitally inclusive and may lead the country towards growth and development. A blooming young population in India equipped with and having proper access to technology can lead the country towards higher stairs of development.

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