

THE ROLE OF E-GOVERNANCE IN EDUCATION SECTOR OF INDIA DURING THE NATIONAL LOCKDOWN 2020

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ABSTRACT

Education illuminates every step of the journey to a better world. Access to inclusive and good quality education is crucial for every child to unlock their learning ability and the wider benefit of education. In 2015, the international community included a goal on education, Sustainable Development Goal 4, among the 17 sustainable development goal. It is our moral imperative to ensure the right of every child to the proper education of high quality. In December 2019 the emergence of Corona virus has sent shockwaves to almost all sectors, particularly the health, economic, and education sector. COVID-19 has affected human lives, the family atmosphere and the pace of social and economic development, all of which have resulted in incalculable loss of sustainable development (Gao and Yu 2020). The petrifying and the extreme impact of COVID -19 in the education sector makes our goal for comprehensive and equitable quality education even more urgent. India has the world's second-largest school system after China. According to UNESCO(United Nations Educational, Scientific and Cultural Organization)report, more than 1.5 billion children are being left behind due to school closure aimed at preventing the spread of COVID19¹. There is no alternative of e-governance in this area for the fastest possible pace. The benefits of e-governance in education sector are better efficiency, faster access, increased transparency, lower cost and to some extent the penultimate one, is of concern in social distancing practices in these unprecedented times of Pandemic. This paper aims to describe the role of e-governance in education sector and examine the effect of COVID-19 on schooling and learning opportunities for children.

Keywords: E-education, COVID-19, DIKSHA(Digital Infrastructure for Knowledge Sharing), SMILE (Social Media Interface For Learning Engagement), E- PATHSHALA, etc.

INTRODUCTION

The revolution in internet has changed the lives of people. Now people want to do their routine work online such as shop online, do business online, make friends online, learn online, etc. The Development of the online education model has crossed the long way with the development of the IT sector of India. In the global education sector, India holds an imperative place. The definition of education is redefining and empowering the people. Education is not only about knowledge, it means discipline, development curiosity, creativity, etc. It helps to break the circle of ignorance and poverty. As it well said by the Rabindranath Tagore

“Education means enabling the mind to find out that ultimate truth which emancipates us from the bondage of dust and give us wealth not of things but inner light, not power of love. It is a process of enlightenment. It is divine wealth. It helps in realization of truth.” In 2019, there were 39,931 colleges in India and 967 universities in 2021. But now education has changed from traditional to modern. There are so many factors that have affected directly and indirectly the education sector. The pestilence of COVID-19 has perturbed the whole economy. This has led to recalibrate the education policy of India. So, to protect from the exposure of virus, the government of India's mission E-governance joined with Digital India. The government has

¹ <https://en.unesco.org/covid19/educationresponse/globalcoalition>.

declared the new online education policy for an indefinite period. The Ministry of Human Resource Development has announced few initiatives to assist lecturers, scholars and students in their pursuit of learning like DIKSHA(Digital Infrastructure for Knowledge Sharing) platforms, Swayam Prabha TV channel, On Air- Shiksha Vani, Daisy by NIOS for differently-abled etc. Few initiatives that have been initiated by state such as: SMILE (Social Media Interface For Learning Engagement) in Rajasthan, Padhai Tunhar Duvaar (Education at doorstep) in Chhattisgarh, Unnaya (Bihar) and so on. Unaffordability to buy necessary devices, lack of internet connectivity and electricity in rural areas and remote areas are the major concern during the pandemic. India has a wide range of cultural diversity. There is a lacuna of socio-economic among people. To resolve these disparities various state government like Orissa, Madhya Pradesh has distributed textbooks at children's doorsteps. To make equality and accessibility, the Union government has declared a new education policy in 2020.

LITERATURE REVIEW

Every disruption has come up with many opportunities as well as challenges. As of 10 May 2020, the pestilence of the COVID-19 pandemic has outbreak in 215 countries worldwide and many of them has declared the lockdown. The pandemic has changed the lifestyle of every person. Every sector has been facing the problem and the academia sector was one of the first to be shut down its activities. In India, the lockdown was announced on 25th March 2020 to fight against COVID-19. Consequently, the activities of the academia sector were halted in 2020[27]. Hence, UGC (United Grant Commission), the apex body of higher education has declared certain guidelines to ensure Universal accessibility to all learners, Quality education, Uniformity. Due to the pandemic, there has been a surge of the webinar and online learning sessions on numerous topics. Recently, the present situation is demanding the engrained of the optometry Education system in India from traditional to Brick- Mortar system. **Rajhans et., al (2020)** have elucidated the study on the impact of COVID-19 on the education sector. The structured questionnaire was constructed and

concluded that COVID-19 has demanded a new education system in India[27]. In this crisis, the optometry educators of India have adopted the situation easily according to the guidelines of UGC(United Grant Commission). Similar research has been done by **Dawadi et., al.(2020)** in Nepal. Nepal is a low-income country. As with other low-income countries, Nepal has a huge discrepancy among its citizens in socio-economic and literacy background. It was suggested that to minimize this gap, there is an urgent need to establish a national platform with a depository of Course-wise lessons, E-books, Learning material, et cetra.,[10]. Services providers(like local and national level) need to expand their areas so that the rural or disadvantage section of the population can get the access of services. Due to the pestilence of COVID-19, most activities have got to seize. Initially, people have started staying in their homes to protect themselves from the pernicious virus. Hence, the most institution has shut down and provided e-learning facilities. Furthermore, **Sawangchai et.,al.(2020)** have identified the effect of ICT(Information Communication Technology), Quality of E-information, entrepreneurial E-learning education. The questionnaire was structured to collect data[28]. It is stated that ICT(Information Communication Technology), E- information quality, E-service have positively affected the E-learning activities. It is suggested that universities should implement the management framework in E-education to increase the level of satisfaction in students.

OBJECTIVES

- To identify the benefits of E-education
- To ascertain the influence of COVID-19 on education sector.

RESEARCH METHODOLOGY

It is systematic process of finding solution of problems. It is main aim is to acquire knowledge by an investigation, a recording, and an analysis of evidence.

Research Design: It is like a draft of research. It describes the methods and the techniques that are chosen by the researcher. Exploratory research design has been used by the researcher

to better understand the topic and the major problems.

DATA COLLECTION

Secondary source: Secondary data is collected through various journals, bulletins, reports, published research papers, official records of various financial institutions, further newspapers, and books.

Digital Infrastructure of Education in India

Before the unprecedented times of Covid-19, no one guessed that the face of the Indian education system can change in such a big way. Remote learning become the lifeline of education system and digital technology offer opportunities that go well beyond a stop gap solution in pandemic. Despite the lockdown, digital technology ensures the continuity of learning through online classes, video recorded lectures etc. According to ASER 2020 enrollment of students in government school increased.

Children's School Enrollment Pattern Affected by COVID-19 Pandemic

Medium	ASER 2018						ASER 2020					
	BOYS			GIRLS			BOYS			GIRLS		
	GOVT.	Pvt.	Total	GOVT.	Pvt.	Total	GOVT.	Pvt.	Total	Govt.	Pvt.	Total
Std 1-2	57.9	42.1	100	65.1	34.9	100	61.1	38.9	100	66.7	33.4	100
Std 3-5	62.7	37.3	100	71.2	28.8	100	65.6	34.4	100	73.3	26.7	100
Std 6-8	65.8	34.3	100	73.3	26.7	100	68.3	31.7	100	77	23	100
Std 9 and above	64.6	35.4	100	68.9	31.2	100	69.7	30.4	100	72.7	27.3	100
All	62.8	37.2	100	70	30	100	66.4	33.6	100	73	27	100

Table 1 Source: : Annual Status of Education Report (Rural) 2020

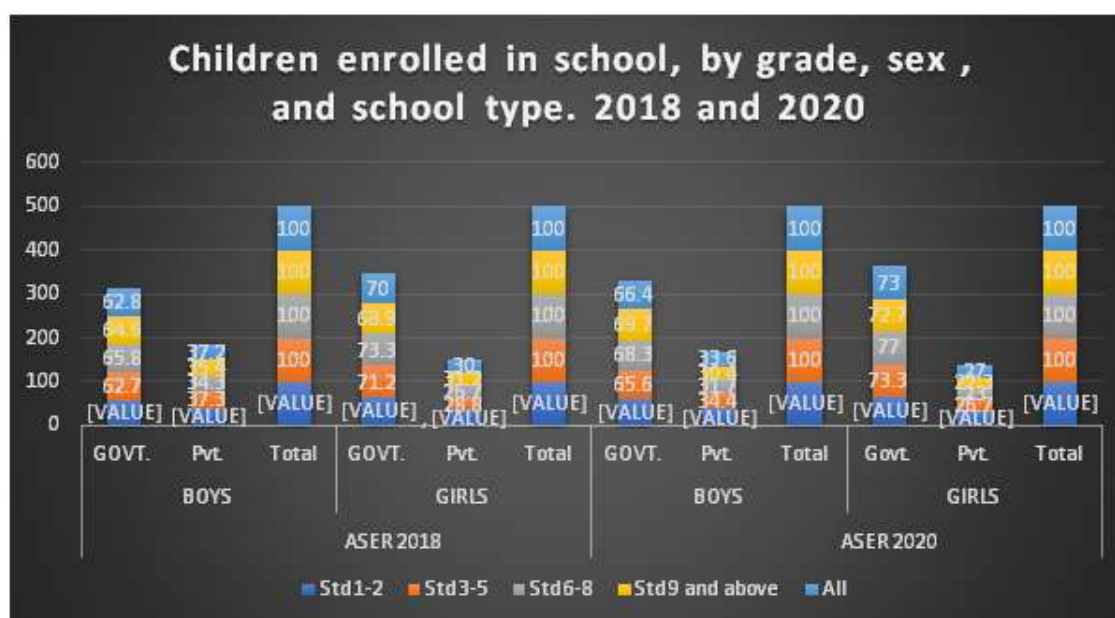


Figure 1 Source: Researcher's own construction

This chart indicates that there are so many students who have shifted from private to government schools. The reason may be the

financial crisis in households or permanent shutdown of the school due to the pestilence virus.

Table 2 Source: : Annual Status of Education Report (Rural) 2020

Household resources	% Children			
	ASER 2018		ASER 2020	
	Govt	Pvt	Govt	Pvt
Smart phone	29.6	49.9	56.4	74.2
TV	54.8	72.5	56	71.9
Motorized Vehicle	39.1	62.5	43.5	64.7

Percentage of Enrolled Children with Selected Assets Available at Home.

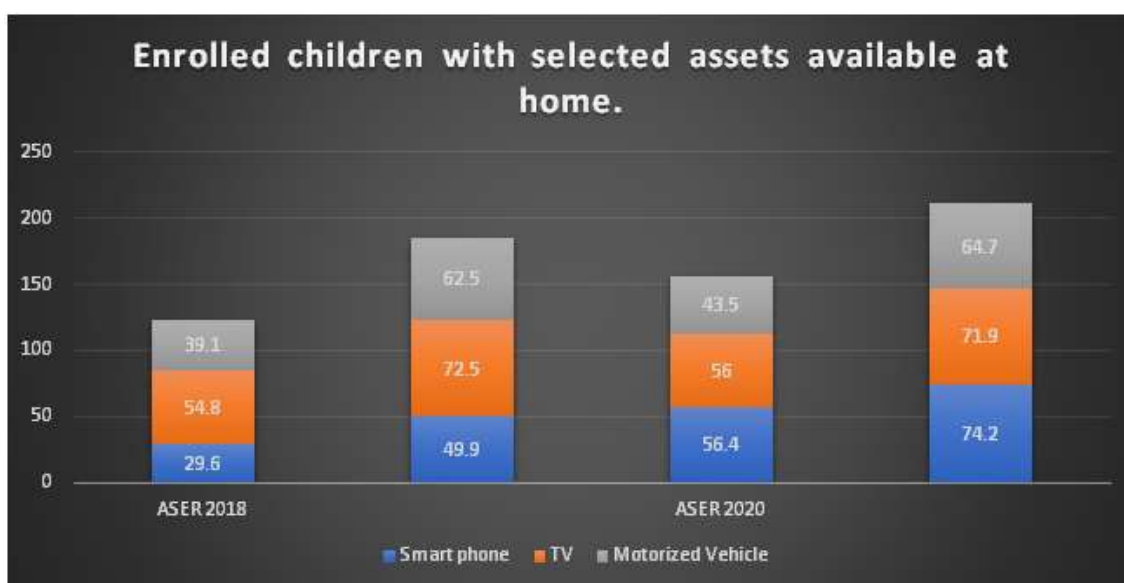


Figure 2 Source: Researcher's own construction

The chart indicates the percentage of assets used in E-education. Due to the pandemic, all the schools and colleges were shut down in March 2020. To run all the functions in India everything has been put online. To learn online, Students have purchased the assets to get the online classes. The chart shows that 1 in every 10 households has bought an android to support

their children's education. Those who did not have an android phone at home, they have taken it from their neighbor.

Children's Engagement with Learning Materials and Activities

School Type	Traditional		Broadcast		Online	
	Text Book	Work Sheet	TV	Radio	Videos/ re-recorded class	live online classes
Govt.	59.5	34.1	20.2	2.8	18.3	8.1
Pvt.	60.1	38	18.4	2.3	28.7	17.7
Govt& Pvt.	59.7	35.3	19.6	2.7	21.5	11

Table 3 Source: Annual Status of Education Report (Rural) 2020

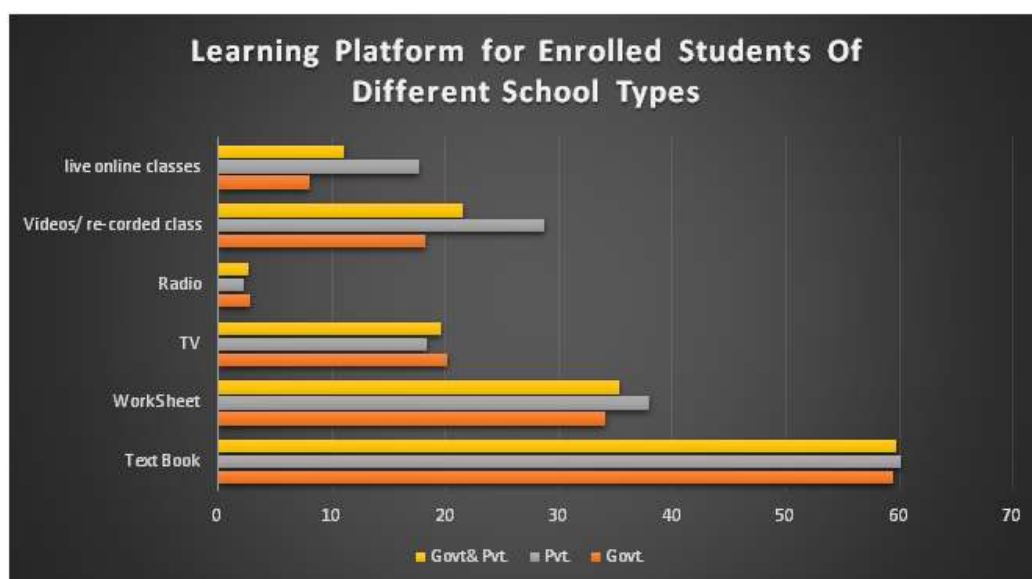


Figure 3 Source: Researcher's own construction

The chart shows the different source of education in different type of school during COVID Times. Data shows that traditional education methods are still used more than modern methods. Children of private schools were more likely to attend online class and recorded lessons than government school.

ONLINE LEARNING RESOURCES

There are some of the following resources developed by the Government:

➤ **DIKSHA** (Digital Infrastructure for Knowledge Sharing)- DIKSHA is the 'one nation; one digital platform' for school education for grades 1-12 launched in september 2017. It can be accessed through a web portal and mobile application containing 80,000 e-content in multiple Indian Languages. During lockdown these contents have been accessed nearly 215 million times.

Website: <https://diksha.gov.in>

➤ **SWAYAM PRABHA** – It has 32 DTH TV Channels which telecast high quality education content 24/7 for class 9-12 and higher education. It has 5 existing channels share 4 hrs daily soon the channels will increase from 5 to 12. Swayam Prabha DTH channels are meant to support who do not have access to the internet. During lockdown even private DTH operators are telecasting these courses.

Website: <https://www.swayamprabha.gov.in>

➤ **E- PATHSHALA** – It is a web portal and mobile app initiated jointly by MHRD, CIET and NCERT and launched in november 2015. It has 1886 audios, 2000 videos, 696e-books and 504 flipbooks for grade 1-12 in English, Hindi and Urdu language and it also hosts resources for teachers, parents, researchers and educators.

Website: <http://epathshala.gov.in>

➤ **NATIONAL REPOSITORY OF OPEN EDUCATIONAL RESOURCES (NROER)**: It is a initiative of MHRD, CIET, NCERT, GOI. It has best quality education content in different language. A total of 19705 files including 5934 documents, 1453 interactives, 2956 audios, 2582 images, 6780 videos in different languages.

Website: <https://nroer.gov.in>

➤ **NATIONAL INITIATIVE FOR SCHOOL HEADS' TEACHERS'HOLISTIC ADVANCEMENT (NISHTHA)** - It is a web portal or mobile app and was launched under the centrally sponsored scheme of Samagra Shiksha in 2019-20 for "improving quality of school education through integrated teacher training". It has capacity building of 4.2 million teachers.

Website: <https://itpd.ncert.gov.in>

Prioritize solutions to address psychosocial challenges before teaching: **Select the appropriate tools for** connecting schools,

teachers, students and parents and communities should be created for addressing psychosocial challenges faced by students during isolation. **UNESCO(United Nations Educational, Scientific and Cultural Organization)** recommendations: United Nations Educational Scientific and Cultural Organization made some recommendations for E-learning:

1. **Analyze the readiness and select the pertinent tools:** Based on internet connectivity and digital knowledge of teachers and students use of technologies should be selected. This could range between Video lessons, MOOC's (Massive Open Online Course) and digital platforms.
2. **Ascertain Distance learning programmes inclusion:** Decentralization of digital devices from computer labs to families should be undertaken so that economically weaker sections students can access the distance learning device and good internet connectivity.
3. **Protected security and privacy of data:** Students' data privacy should be ensured when the service providers are sharing the educational resources with them by any platform and application.
4. **Lesson plan for distance learning programmes:** School closure duration should be discussed with stakeholders and according to this schedule should be planned for affected zones. Face-to-face learning should be avoided by using appropriate methodologies for learning.
5. **Use a combination of appropriate applications and platforms:** The number of applications and platforms should be limited by bending the appropriate approaches and blend media should be there for synchronous communication and lessor, for asynchronous learning the burden of unnecessary application should be reduced.
6. **Formulate distance learning rules and evaluate student's learning:** Distance learning rules should be defined to both parents and students. Evaluation should be through formative questions, exercises and tests. Students' feedback must be considered after evaluation.
7. **Select the duration for each in distance learning according to student's**

metacognitive activities: Timing for units should be divided according to the student's self-regulation. Time should be decided for live classes. For primary classes, the preferred time for units should be around 20 minutes and 40 minutes for secondary classes.

8. **Create communities and enhance connection:** Communities of teachers, students and parents should be created to facilitate the loneliness, helplessness of learning difficulties. Strategies should be made with the consent of all.

9. **Trained teachers and parents to use digital tools:** Training and orientation sessions should be properly organized for both teachers and parents that how the internet data should be used during live-streaming classes.

10. **Prioritize solutions to address psychosocial challenges before teaching:** Select the appropriate tools for connecting schools, teachers, students and parents and communities that should be created for addressing psychosocial challenges faced by students during isolation.

SUGGESTIONS

1. **For more inclusion, the education system should get wider in its concept. It should include all the learners whether they belong from different background, identity, or ability:** Any person who has the potential and value to the education should be treated equally with dignity.
2. **Target to finance all the areas equally. If millions of are people left behind who do not access education, then there will be no inclusion:** Government should adopt a twin-track approach that provides general funding to make an inclusive learning environment, as well as targeted funding to help the furthest behind as early as possible.
3. **To make E-education inclusion successful, meaningful then consultation with parents and communities must require:** government should do the consultation with communities informing the policy on inclusion in education. The authority of the school should be in touch with the parents' association within or outside the school premises.

4. To make ensure inclusion in education, the universal curriculum should apply: Every learner should have the equal right to access the textbooks and curriculum.

5. To make inclusion in education, the education workforce should motivate, empower, and prepare: The teacher should be prepared and get trained in his field. A diverse education workforce should be formed for providing viable knowledge to all the learners.

CONCLUSION

The COVID-19 pandemic has led to the closure of schools and colleges that trammel the learning of students and hinder the proper assessment of learning. Due to lockdown, the method of teaching has replaced traditional methods with Online methods for maintaining the social distancing. The precaution for a pandemic is called “Social distancing” which has introduced the concept of online learning but data shows that traditional methods are used more than modern methods. Textbooks are the most preferred source of education for students. To run the education sector online, students have to purchase the assets (like tab, computer, laptop, android phone, etc.) to get online classes and in pandemic 1 in every 10 households has bought an android phone to support their children’s education. The COVID-19 outbreak also affects the economic sector due to which many students have shifted from private to a government schools. In private schools, students are more likely to attend live streaming and recorded lessons than government schools. The education sector in India is not fully equipped that can reach every spectrum via digital mode. The unprivileged students are not able to take advantage of online learning. But the Indian government and various stakeholders are trying to cover this problem. Their foremost priority is to develop digital technology and make it reach the grassroots and create an advantageous position for the students. Digital platforms are the need in today’s era for educational institutions to make learning effective and possible for every student and get the students ready for the future digital-oriented environment. How do we see a glass of water: half-full or half-empty? It depends on the mind and thought process of a person. Due to the COVID-19 pandemic, our optimistic mind says

that this time of no teaching can be converted into the time of greatest learning. Technology-based learning is benefitting the students immensely in this unprecedented time.

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