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**E-LEARNING IN COVID-19 LOCKDOWN  
(A CASE STUDY OF PRIMARY SCHOOL STUDENTS IN MORADABAD CITY)**

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**ABSTRACT**

The COVID-19 pandemic led to the adoption of severe measures to counteract the spread of the infection. Social distancing and lockdown measures modify people's habits, while the Internet gains a major role to support remote working, e-teaching, online collaboration, gaming, video streaming, etc. All these sudden changes put unprecedented stress on the network. In this paper, we analyze the impact of the lockdown enforcement on the Primary school students in the city of Moradabad, Uttar Pradesh and the adoption of e-learning tools and platforms by the schools and students. This research paper is an effort to understand the response of the students from primary classes (1 to 5) towards the new concept of online/ E-learning process.

Keywords : Lockdown, E-learning

**INTRODUCTION**

On 24 March 2020, the Government of India under Prime Minister Narendra Modi ordered a nationwide lockdown for 21 days, limiting movement of the entire 1.3 billion population of India as a preventive measure against the COVID-19 pandemic in India. It was ordered after a 14-hour voluntary public curfew on 22 March, followed by enforcement of a series of regulations in the country's COVID-19 affected regions. The lockdown was placed when the number of confirmed positive coronavirus cases in India was approximately 500. Observers stated that the lockdown had slowed the growth rate of the pandemic by 6 April to a rate of doubling every six days, and by 18 April, to a rate of doubling every eight days. As the end of the first lockdown period approached, state governments and other advisory committees recommended extending the lockdown. The governments of Odisha and Punjab extended the state lockdowns to 1 May. Maharashtra, Karnataka, West Bengal and Telangana followed suit. On 14 April, Prime minister Narendra Modi extended the nationwide lockdown until 3 May, with a conditional relaxation after 20 April for the regions where the spread had been contained. On 1 May, the Government of India extended the nationwide lockdown further by two weeks until 17 May. The Government has divided the entire nation into three zones—green, red and orange—with relaxations applied accordingly. The coronavirus pandemic has upended our world. The academic calendar all over the world has been disturbed. Caught in the maelstrom, some parts of the urban Indian education system has turned towards delivery of education via the internet — or online education. The



NCAER Skills Report 2018 discussed the immense potential of online learning, albeit as complementary to more traditional methods. In the current situation, online education is turning out to be a substitute to traditional modes. Online education has emerged as a success story of the lockdown.

Undoubtedly. Schools have been working on e-learning methods to reach out to more students; the lockdown period has certainly brought a lot more clarity on how feasible this is. Under the proposed new education policy by National academic Advisory boards and Monitoring agencies, the target is a 50 per cent higher gross enrolment ratio than at present. In the conventional classroom format, India are lacking in hard infrastructure like classrooms and teachers, and the target is difficult to achieve. But online and distance learning options can bridge this gap swiftly. The UGC, in 2019, had announced that institutions [should] register with it for online courses, and several institutions had already begun the process. More should now get encouraged to do so.

In the city of Moradabad where students face the same world wide Covid 19 Pandemic Lockdown, schools are not leaving any stone unturned so as to attain the basic curriculum of the primary classes students. And students also are very much exited to have the online/ e-learning classes at the luxury of their cozy homes.

This research paper is an effort to understand the response of the students from primary classes (1 to 5) towards the new concept of online/ E-learning process.

### **LITERATURE REVIEW**

The researcher has reviewed a lot of literatures related to the e-learning and some of the works were very recent and hade a wonderful insight about the e-learning during the Covid-19 lockdown around the world. Following are some of the extracts from these works:

**Dr Abhilasha Sharma** in his research “**A relationship study of kindergarten students during lockdown in context of human development and technology adopted**”, described the study about role of human development of a child and technology adopted during the Conovoid-19. This paper studied the role of e-learning technology in building up of human development of little champs with various research test. It concluded that most important human development of the kids is related to the special e- technology adopted during this lockdown period. India, pre-school education is provided by private schools and government ICDS (Anganwadi) centers. In addition, there are some ECCE (Early Childhood Care and Education) centres running under SSA (Sarva Siksha Abhiyan) and some pre-schools are attached to government as well as private schools. According to the estimate given by the Seventh All India Education Survey (NCERT, 2005), there are 493,700 pre-primary institutions in India, out of which 456,994 are in rural areas.



**Prof. Dr. Srisakdi Charmonman, Prof. Vo Ngoc Dieu and Prof. Niek van der Linden**, in their paper titled, “**Applications of Internet of Things in E-Learning**”, discuss IoT in eLearning and instructional design, training employees on IoT technology, six skills for IoT applications, Internet of Learning Things, IoT potentials to transform education, and IoT to improve student performance. They concluded that IoT in e-learning is progressing very fast and so, all parties concerned should search Google regularly to find up-to-date information to study for the benefits of themselves, their organizations, and their countries.

**Dr. Shankar P. Kadam** in his paper “**E-Learning A Modern Futuristic Education System**”, has described in detail the need and process of e-learning which is ever evolving and is very much the need of the hour keeping in mind the unprecedented situation like the present Covid-19 lockdown.

**Prof. S. Rodchua** in the paper “**Effective Tools and Strategies to Promote Academic Integrity in e-Learning**”, explored the possibilities of using various e-platforms and online tools to enhance the learning experience of the students at various academic levels, he also researched upon integrating the e-learning into the regular curriculum of various academic boards also.

**Prof. R. Talwar** in his paper “**advantages of e-learning in contemporary education**”, has analyzed the wonderful advantages the e-learning process has for both the students as well as for the teacher, the barrier of classroom can easily be overcome and effective learning can be adopted.

## **RESEARCH METHODOLOGY AND DATA ANALYSIS**

### **Objectives Of The Study**

The researchers have the following objectives in mind while working on this research:

1. To understand the effectiveness of major e-learning options available.
2. To understand the quality of content which is provided through e-learning platforms.
3. To understand various bottlenecks during e-learning process faced by the faculties and students.

### **Hypothesis For The Study**

Following are the hypothesis devised by the researchers:

**H<sub>01</sub>**: There is not much effectiveness of e-learning process adopted by various schools for primary class students.

**H<sub>1</sub>**: There is considerable amount of effectiveness on e-learning process adopted by various schools for primary class students.

**H<sub>02</sub>**: Content delivered over e-learning platforms are of very poor quality.

**H<sub>2</sub>**: Content delivered over e-learning platforms are of very good quality.

**H<sub>03</sub>**: There is very high degree of bottleneck in e-learning process.

**H<sub>3</sub>**: There is not much noticeable bottleneck in e-learning process.

### **Research Sample**



Researcher has used simple random sampling to take sample of 100 students from Primary schools (from class 1 to 5) of Moradabad city where online classes and e-learning process has started during the Covid-19 lockdown

**Testing of hypothesis**

For the purpose of gathering appropriate data, researchers have asked 3 questions in likert form to the respondent, these questions are as follows:

1. Rate the effectiveness of the online (e-learning) process currently you are learning from on the basis of likert scale (1 representing Least Effectiveness, 5 representing most effectiveness).
2. Rate the Quality of content provided / available during the online (e-learning) process currently you are learning from on the basis of likert scale (1 representing worst quality, 5 representing best quality)
3. Rate the difficulties (Bottlenecks) of the online (e-learning) process currently you are learning from on the basis of likert scale (1 representing Least Bottlenecks, 5 representing most Bottlenecks)

Following responses were obtained and analyzed in SPSS

**Table 1 : Descriptive Statistics**

	N	Mean	Std. Deviation	Minimum	Maximum
Effectiveness	100	3.84	.992	2	5
Bottleneck	100	2.22	.848	1	4
Quality	100	3.75	1.038	2	5

**Table 2 :Effectiveness**

Response	Observed N	Expected N	Residual
2	11	25.0	-14.0
3	25	25.0	.0
4	33	25.0	8.0
5	31	25.0	6.0
Total	100		

**Table 3 : Bottleneck**

Response	Observed N	Expected N	Residual
1	22	25.0	-3.0
2	39	25.0	14.0
3	34	25.0	9.0
4	5	25.0	-20.0
Total	100		

Table 4 : Quality

Response	Observed N	Expected N	Residual
2	16	25.0	-9.0
3	21	25.0	-4.0
4	35	25.0	10.0
5	28	25.0	3.0
Total	100		

Table 5 : Test Statistics

	Effectiveness	Bottleneck	Quality
Chi-Square	11.840 <sup>a</sup>	27.440 <sup>a</sup>	8.240 <sup>a</sup>
df	3	3	3
Asymp. Sig.	.008	.000	.041

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 25.0.

### Testing Hypothesis One

*H<sub>01</sub>: There is not much effectiveness of e-learning process adopted by various schools for primary class students.*

*H<sub>1</sub>: There is considerable amount of effectiveness on e-learning process adopted by various schools for primary class students.*

Referring to table-1 we can see that the mean response provided by the students for Effectiveness of the E-Learning process is 3.84, which can be rounded off to nearest figure of 4, representing higher degree of effectiveness (Table-2). Also from Table-5 we can see P value is 0.008 which is less than 0.05 hence we can say that our Null hypothesis is rejected and alternate Hypothesis is accepted.

### Testing Hypothesis Two

*H<sub>02</sub>: Content delivered over e-learning platforms are of very poor quality.*

*H<sub>2</sub>: Content delivered over e-learning platforms are of very good quality.*

Referring to table-1 we can see that the mean response provided by the students for Quality of Content in the E-Learning process is 3.75, which can be rounded off to nearest figure of 4, representing lower degree of Bottlenecks (Table-4). Also from Table-5 we can see P value is 0.041 which is less than 0.05 hence we can say that our Null hypothesis is rejected and alternate Hypothesis is accepted.

### Testing Hypothesis Three

*H<sub>03</sub>: There is very high degree of bottleneck in e-learning process.*

*H<sub>3</sub>: There is not much noticeable bottleneck in e-learning process.*

Referring to table-1 we can see that the mean response provided by the students for Bottleneck in the E-Learning process is 2.22, which can be rounded off to nearest figure of 2, representing lower degree of Bottlenecks (Table-3). Also from Table-5 we can see P value is 0.000 which is



less than 0.05 hence we can say that our Null hypothesis is rejected and alternate Hypothesis is accepted.

### CONCLUSION

With the analysis it can be seen that the response of students has been very much towards the positive adoption of the E-Learning / Online learning process. The teachers are putting in more efforts to make the online learning more productive and it is evident that the content delivered to the student are pretty much effective and the process has less bottlenecks. The researchers are happy to conclude that the process has just begun and the limits of the E-learning / online learning process has a vast scope in school curriculum.

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