

# The Effectiveness of Online Learning on Students: A case study on COVID-19 Lockdown

<sup>1</sup>Mr. Ramesh Chandrasa, <sup>2</sup>Ms. Pooja P R

<sup>1</sup>Assistant Professor, <sup>2</sup>PG Student

<sup>1,2</sup>Institute of Management Studies

<sup>1,2</sup>Davangere University, Davangere, Karnataka, India

<sup>1</sup>Email: drrcmay@gmail.com, <sup>2</sup>Email: poojapr5796@gmail.com

**Abstract**—COVID-19 pandemic is a health crisis. In order to continue teaching and learning practices in educational institutions during this period of COVID-19 lockdown, our education system has resorted to online mode of learning, which is an imperfect yet quick solution to the crisis. The present study is focused to know the perception of students towards online learning and their mindset in COVID-19 lockdown. The main objective of this study is to know the effectiveness of traditional learning and online learning of students. We have also made an attempt to know the effectiveness of students towards online learning. The sample involves 100 responses of students from Karnataka state who are attending the online classes during COVID-19 lockdown. In study we have used descriptive statistics with simple mean and standard deviation and t- test is used to analyze the hypothesis. From the study, it is found that, most of the students utilizing their time for an online learning during COVID-19 lockdown. It is also found that, online learning is not efficient as a traditional learning method.

**Keywords:** COVID-19, E- learning, Global Pandemic, Internet technology, Online education, Traditional learning.

## I. INTRODUCTION

Learning is a process of acquisition of information, ability and performance through study, experience, or being taught. Therefore learning is eventually viewed as one of the principle mainstays of society change. These days, technology has clearly made our lives easier. That implies internet technology has been considered as a significant mode for many features of our lives including academic learning.

A traditional learning is based on formalized teaching whereas online learning is based on electronic assets. The utilization of electronic gadgets and web is significant parts of online learning. Online learning also known as e-learning is a network enabled system where an educator shares his/ her with huge number of students at the same or distinctive time.

COVID-19 pandemic is a health crisis. Many countries have decided to close schools, colleges and universities. The professions of the current year's college graduates may be seriously influenced by the COVID-19 pandemic. Because of lockdown of educational institutions, many students have encountered significant showing breaks in the last piece of their examinations, they have encountered significant breaks in assessments and they are probably going to graduate at the beginning of a major global recession. Because of this, the educational institutions were decided to made online classes for the students. Now the teaching is moving online on an untested and exceptional scale, students assessments are also moving online with a great deal of experimentation and vulnerability for everybody.

## II. REVIEW OF LITERATURE

*Anna Sun and Xiufang Chen (2016)*, they primarily focused on how theories, practices and assessments apply to the online learning environment. The purpose of their study is to provide practical suggestions for those who are planning to develop online courses so that they can make informed decisions in the implementation process. They examine the online environment over time, its evolution, and the technologic impacts on online education. In online teaching, they focused their attention on the relationships between cognitive and teaching presences to determine the best and most desirable practices and strategies for online pedagogy. Throughout the entire review study, they found that one of the primary challenges in online education is to develop a sense of community in the online environment. This study reviewed the rapid advancement of technology and how it has greatly impacted on online education.

*Saiju Aravind (2020)*, the COVID-19 pandemic has forced governing bodies and school managements to look to digital learning as the only workable solution, still, the entire education ecosystem is grossly underprepared. The global pandemic will have set in motion a lasting impact on the trajectory of digitized learning, making it not only a go to tool in times of need but absolutely indispensable in the world of teaching and learning. While COVID-19 outbreak is bringing about a revolution in health and hygiene while trying to break the chain of the pandemic, the educational space is faced with a challenge of not letting there be an interruption.

*Akash Singhal (2020)*, online learning provides a gateway for the young minds to indulge in learning despite the lockdown which keeps them productive and helps them not loose connect with the subjects. This is an era of transformation despite the harsh times and the education industry is on the verge of being completely altered for good. There benefits of adopting online learning services today will have a very positive and powerful impact on our future.

## III. NEED FOR THE STUDY

From the above review of literature it is found that there is a need to examine the effectiveness of online learning on students. There is also a need to undertake a study to examine the mind set of students in COVID-19 lockdown and analyze the different impacts of online and traditional learning on students.

## IV. OBJECTIVE

- To study the perception of students towards online learning
- To study the mindset of students in COVID -19 lockdown.
- To study and analyze the effectiveness of classroom learning and online learning of students.

## V. HYPOTHESIS

*Ho*: Traditional learning has less significant impact on the students than the online learning.

*H1*: Traditional learning has less significant impact on the students than the online learning.

## VI. SCOPE OF THE STUDY

Study is confined to know the effectiveness of online learning on students. Study is focused on the students who are attending the online classes during the COVID-19 lockdown. This study is geographically chosen for districts in Karnataka state.

## VII. RESEARCH METHODOLOGY

In this research exploratory research design is used and descriptive research approach has been adopted to present the data acquired in a designed, perfect and summarized manner. Secondary data is collected from various data books and articles from internet, and well-structured questionnaire was prepared in that open ended and closed ended questions along with the Likert scale have been incorporated in the questionnaire. A survey was conducted in the different areas in Karnataka, and the sample of respondents included students who were aged 16 to 28 years. In this research study, a convenience sampling method of non-probability sampling technique has been adopted and the samples have been drawn from 100 respondents. The Primary data were collected effectively with the help of the self-administered questionnaire.

Basic statistical tools and t-test Analysis with the help of SPSS version 26.0 have been used in this study for analyzing the primary data. t- Test helps us to determine the effectiveness of online learning and traditional learning in this study. The t-Test was tested to determine whether the null hypothesis will be accepted or rejected.

## VIII. DATA ANALYSIS AND INTERPRETATION

## A. Age:

	N	Minimum	Maximum	Mean	Std. Deviation
AGE	100	18.00	28.00	21.8900	1.58844
Valid N (list wise)	100				

Source: Primary data

TABLE 1:AGE

*Interpretation:*Table-1 reveals respondents at different age groups; total number of the respondents for the study was 100 majority of the respondents fall under age group 18, followed by the maximum age is 28 respondents.

## B. Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid FEMALE	56	56.0	56.0	56.0
MALE	44	44.0	44.0	100.0
Total	100	100.0	100.0	

Source: Primary dataTABLE 2: GENDER

*Interpretation:*

Table-2 reveals, Age group wise classification is very important in study. The majority of the respondents, i.e., fifty six (56%) are male, followed by two forty four (44%) respondents are female.

*C. Educational Qualification:*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Post- Graduation	52	52.0	52.0	52.0
Under- Graduation	48	48.0	48.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 3: QUALIFICATION

*Interpretation:*

Table-3 reveals, respondents has different levels of education qualifications. The majority of the respondents, i.e., forty eight (48%) are completed post-graduation, followed fifty two (52%) respondents are completed under-graduation.

*D. How you are utilizing your time in COVID -19 lockdown?*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Reading books	14	14.0	14.0	14.0
Preparing for exams	15	15.0	15.0	29.0
Online learning	62	62.0	62.0	91.0
Other	9	9.0	9.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 4: TIME UTILIZING IN COVID-19 LOCKDOWN

*Interpretation:*

Table-4 reveals, it is found that, sixty two (62%) of students are utilizing their time on online learning during COVID-19 lockdown and followed by around fifteen (15%) of students are utilizing reading books and preparing for exams.

*E. COVID -19 lockdown mad you panic?*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	41	41.0	41.0	41.0
Yes	59	59.0	59.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 5: COVID-19 LOCKDOWN MADE THEM PANIC

*Interpretation:*Table-5 reveals, it is found that, fifty nine (59%) of respondents have agreed that COVID-19 lockdown made them panic and followed by forty one (41%) students they not feel panic in COVID -19.

F. COVID -19 LOCKDOWN IS REALLY MADE STRESS IN YOUR FAMILY?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	30	30.0	30.0	30.0
Yes	33	33.0	33.0	63.0
Valid Some extent	26	26.0	26.0	89.0
Can't say	11	11.0	11.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 6: COVID -19 LOCKDOWN IS REALLY MADE STRESS

*Interpretation:* Table-6 reveals, it is found that, fifty nine (59%) of respondents have agreed that COVID-19 lockdown made stress in their family and followed by thirty (30%) of respondent not felt stress in lockdown.

F. The COVID-19 lockdown is more of an opportunity than a crisis?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	49	49.0	49.0	49.0
Valid Yes	51	51.0	51.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 7: THE COVID-19 LOCKDOWN IS AN OPPORTUNITY OR A CRISIS

*Interpretation:*

Table-7 reveals, it is found that, fifty one (51%) of respondents have agreed that COVID-19 lockdown is more of an opportunity than a crisis and followed by forty nine (49%) of respondents have felt that COVID-19 lockdown is a crisis.

G. Online learning made you to more comfortable than traditional learning?

	Frequency	Percent	Valid Percent	Cumulative Percent
No	83	83.0	83.0	83.0
Valid Yes	17	17.0	17.0	100.0
Total	100	100.0	100.0	

Source: Primary data

TABLE 8: ONLINE LEARNING IS A COMFORTABLE

*Interpretation:*

Table-8 reveals, it is found that, eighty three (83%) of respondents have agreed that online learning is made them more uncomfortable.

*H. Hypothesis Testing:*

*Ho:* Traditional learning has less significant impact on the students than the online learning

*H1:* Traditional learning has less significant impact on the students than the online learning

## ONE- SAMPLE T-TEST

	N	Mean	Std. Deviation	Std. Error Mean
Total Online learning effectiveness	100	19.1800	5.24622	.52462
Total Impact of traditional learning	100	39.0400	4.54366	.45437

TABLE 9: ONE-SAMPLE STATISTICS

## ONE-SAMPLE T-TEST

	Test Value = 0					
	T	Df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Total effectiveness of online learning	36.560	99	.000	19.18000	18.1390	20.2210
Total effectiveness of traditional learning	85.922	99	.000	39.04000	38.1384	39.9416

Source: Primary data      TABLE 10: ONE-SAMPLE TEST

*Interpretation:* From the above table it is depicted that, the t value is (36.560 & 85.922) and the sig. value is 0.000 less than 0.05 hence it can be concluded that, alternative hypothesis is accepted and null hypothesis is rejected because, Online learning is less effective to the students and traditional learning has more significant impact on students than the online learning.

## IX. FINDINGS

- 62% respondents of the students utilizing their time for an online learning during COVID-19 lockdown
- 51% respondents of the students have agreed that COVID-19 lockdown was more of an opportunity than a crisis
- 83% respondents of the students are not comfortable with the online learning.
- From the study, it was found that online learning is not efficient as a traditional learning method.
- The network issues are posing major challenges to success of online learning

## X. SUGGESTIONS

- As per the survey many students facing network issues, Government and university has to provide alternative solutions for rural background students. Providing free internet facility.

- Most of the students are comfortable with classroom teaching and they felt more impactful learning method. Online learning is not an alternative method for students.
- Students urge towards learning is classroom teaching and its creative thinking process will be igniting to their minds.

#### XI. CONCLUSION

This article has described a new instrument of leaning and its effectiveness. Students clear cut perceptions about online course are generally not as effective as traditional classes, but they are certainly better than no classes. A substantial research there is a strong evidence to suggest that online learning is a least effective as that traditional learning. The present situation online classes are allowing students to access lessons and exercises and interact with teachers in ways that would have been impossible if an epidemic had closed schools even a decade or two earlier. So we may be skeptical of online learning, but it is also time to embrace and improve it. In present situation, online classes are generally not as effective as in traditional classes, but they are certainly better than no classes.

#### REFERENCE

- [1] Anna Sun & Xiufang Chen (2016), "Online Education and its Effective Practice: A Research Review", JITE, Volume 15, 2016, pp.157-190
- [2]<https://ccrc.tc.columbia.edu/media/k2/attachments/examining-effectiveness-of-online-learning.pdf>
- [3]<https://elearningindustry.com/traditional-learning-vs-online-learning>
- [4][https://pdfs.semanticscholar.org/a73b/aa6778165b4ab4911d87ab63a7c0fe1402e2.pdf?\\_ga=2.34057185.1548414702.1587478745-1080110602.1586432830](https://pdfs.semanticscholar.org/a73b/aa6778165b4ab4911d87ab63a7c0fe1402e2.pdf?_ga=2.34057185.1548414702.1587478745-1080110602.1586432830)
- [5] <https://tech.ed.gov/files/2013/10/implications-online-learning.pdf>
- [6]<https://sph.umich.edu/news/2020posts/modeling-the-impact-of-lockdown-measures-and-coronavirus-response-in-india.html>
- [7] <https://voxeu.org/article/impact-covid-19-education>
- [8] <http://www.u.arizona.edu/~mdomenic/documents/ResrchPropLearning.pdf>