

**A study on effectiveness of Remote learning during COVID 19 in
Higher Educational Institutions.**

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ABSTRACT:

The fear of spreading of COVID 19 brought many changes in the fields of economy worldwide. Higher Educational Institutions were one among them. In order not to break the chain of teaching and learning Educational Institutions switched forcefully from conventional platform to digital platform. Since the shift is sudden not all the teachers and students were digitally skilled and equipped with all technical requirements, Remote learning became a challenge to learners. In order to explore further the challenges faced by the students a study is conducted among undergraduate students. A questionnaire was administered among the students and responses were analysed. The study aimed at understanding how effective Remote learning is and various opportunities and challenges associated with it. The study also helped in identifying some of the issues students faced in the process of remote learning.

Keywords: Remote learning, e-learning, Digital platform, Higher Education Institutions, COVID19, Pandemic, Information Technology.

1. INTRODUCTION

The fear of spreading of COVID 19 brought many changes in the fields of economy worldwide. Higher Educational Institutions were one among them. In order not to break the chain of teaching and learning Educational Institutions switched forcefully from conventional platform to digital platform. Since the shift is sudden not all the teachers and students were digitally skilled and equipped with all technical requirements, Remote learning became a challenge to learners. Remote learning is a field of education that depends on Information technology, and instructional systems that plan to provide learning to students who are physically not present in a class room setting. Instead of attending courses personally, teachers and students communicate at times of their convenience and choosing and exchange printed or electronic material through any suitable technology

1.1 Meaning:

Remote learning is, simply put, where the student and the educator are not physically present in a traditional classroom environment. Rather, instruction is disseminated through technology tools such as discussion boards, video conferencing, and virtual assessments. It is an attempt to recreate the in-person, face-to-face classroom over the internet.

Remote learning provides an opportunity for students and teachers to remain connected and engaged with the content while working from their homes-Dr. Kecia Ray

What makes remote learning difficult when compared to virtual learning is, virtual learning is a more official, established mode of online learning whereas remote education involves teachers and students who are not accustomed to education that takes place online. It is typically used during scheduling conflicts, illnesses, or, pandemics like COVID19.

1.2 Remote learning in a Pandemic

Educational Institutions around the world reacted to COVID-19 by closing schools and colleges and rolling out remote learning options for their students as an emergency response. Since remote learning is learning from a distance which is made possible by online modes of education, the effectiveness depends upon the supportive infrastructure maintained by the administrators, teachers and the learners.

How does it work?

The teacher or the institution establishes a virtual connection with their students through an online class program such as Google Classroom .Here, the teacher posts assignments, assigns reading, collects student work, provides feedback, and more. Students' login daily to the virtual classroom according to the Time table and schedule given by the Institution and complete assignments, listen to lectures, or participate in activities. Therefore, the effectiveness of remote learning depends on the availability and accessibility of infrastructure like laptop, tablet, smartphone, desktop with uninterrupted internet connectivity. Also, technical skills are required by both the teacher and the learner to make remote learning successful.

1.3 Literature review:

- Noah Mutter 2020: The effect of remote learning on students 'LIVES

A study was conducted on how remote learning situation has increased stress levels and decreased the quality of their education. Data was collected from the survey based on how students viewed the quality of remote education and its effects on their stress levels. Students believe that the education they received was less than that of traditional education.

- Luke Sicard 2020: The effect of remote learning on students.

The purpose of the study was to discover some of the effects remote learning had on students in order to find better. In order to collect the data a survey was sent. The study observed that remote learning had a negative effect.

- DerarSerhan 2020: Transitioning from face to face to remote learning.

The purpose of this study was to investigate students' attitude towards use of zoom in remote learning. It was observed through this study that using zoom improved learning.

- Guilherme Lichand 2021: the impacts of remote learning in secondary education.

The transition of remote learning could lead to dramatic setbacks for school's enrolment and learning outcomes, especially in developing countries. Estimate the effects of remote learning on secondary education using differences-in-differences strategy that contrasts variation. Results show that the social costs of keeping schools closed in pandemic are very large.

- Dr. Wahib Ali 2020: Online and remote learning in higher education institutes

This study reveals that universities worldwide are moving more and more towards online learning or E-learning. It also reveals from the resources, staff readiness, confidence, study accessibility and motivation. The aim of the study how higher education institutions has faces with the challenge of how to maintain continuity of teaching and learning Findings in collaboration with pertinent literature on the influence of technology in conceptualizing pedagogy and practice.

1.4 Objective of the study

- To know the effectiveness of remote learning in HEIs.
- To know the challenges faced by the students during remote learning.

2. Research Methodology:

2.1 Sources of Data:

- Primary data is collected through administering a questionnaire to students from various educational institutions.
- Secondary data is collected through internet, magazines and online journals.

2.2 Scope and limitations of the study:

- The study is limited to the students of Hyderabad city.
- The study is limited to the responses collected during the pandemic COVID 19,2020-2022.
- The responses received don't claim the completeness and total accuracy in its findings. Hence biased results are likely to creep.

3. Data Analysis and Interpretation:

3.1 Respondents Profile:

1(a) Table showing: **Gender**

Options	Frequency	Percentage
Male	30	48.4
Female	32	51.5
Total	62	100.0

Source: Primary data

Analysis: The above table shows that out of 62 respondents 30 are male forming 48.4% and 32 are female students forming 51.5% of the total responses.

Interpretation: Majority of responses are from female students.

1(b) Table showing: **Education qualification**

Options	Frequency	Percent
Secondary education	3	4.8
Intermediate	5	8.1
Under graduation	52	83.9
Post graduate	2	3.2
Total	62	100.0

Source: primary data

Analysis: The above table shows 83.9% of the students are from under graduate, 8.1% of students from intermediate, 4.8% of students from secondary education and 3.2% of students from post graduate.

Interpretation: It is observed that majority of the students i.e 83.9% are from under graduate courses. That means majority respondents were from HEIs.

3.1.1(c) Table showing: **Age group**

Options	Frequency	Percent
14-18	4	6.5
18-21	49	79.0
21 above	9	14.5
Total	62	100.0

Source: primary data

Analysis: The above table shows that 18-21 age under group students actively participate in remote learning i.e 79.0%, 21 above age group students participate 14.5%, 14-18 age group students participate 6.5%.

Interpretation: The majority of the students i.e 79.0% students are from 18-21 age group.

3.1.2 Table showing: **Over all feel about remote learning**

Options	Frequency	Percent
Poor	3	4.8
Below average	8	12.9
Average	22	35.5
Good	20	32.3
Excellent	9	14.5
Total	62	100.0

Source: primary data

Analysis: The above table shows 35.5% of students felt remote learning is average, 32.3% of students felt good, 14.5% of students felt excellent, 12.9% of students felt below average and 4.8% of students felt poor

Interpretation: the survey was conducted to know the overall feel about remote learning, majority of the students felt average.

3.1.3 Table showing: **Access to a device**

Options	Frequency	Percent
Yes	46	74.2
Yes, but it doesn't work well	13	21.0
No, I share with others	3	4.8
Total	62	100.0

Source: primary data

Analysis: The above table shows 74.2% of students has an access to a device, 21.0% of students has a device but it doesn't work well and 4.8% of students doesn't have device.

Interpretation: the survey was conducted to know how many students have an access to a device. Majority of the students i.e. 74.2% has an access to a device.

3.1.4 Table showing: **Time spent in remote learning**

Options	Frequency	Percent
1-3	22	35.5
3-5	19	30.6
5-7	12	19.4
7-10	6	9.7
10+	3	4.8
Total	62	100.0

Analysis: The above table shows, the time students has spent on remote learning. 35.5% of students has spent for 1-3 hours, 30.6% of students has spent for 3-5 hours, 19.4% of students has spent for 5-7 hours, 9.7% of students has spent for 7-10 hours, 4.8% of students has spent for 10+ hours.

Interpretation: the survey was conducted to know how many students has spent their time during remote learning. majority of the students has spent for 1-3 hours i.e 35.5%

3.1.5 Table showing: **Issues experienced by the students during remote**

Options	Frequency	Percent
Mental health issues	7	11.3
Mental health issues, physical health issues ie. Back pain, eyesight etc. Social isolation	4	6.5
Physical health issues i.e Backpain, eyesight etc	43	69.4
Physical health issues i.e Backpain, eyesight etc social isolation	1	1.6
Social isolation	7	11.3
Total	62	100.0

Source: primary data

Analysis: The above table shows, issues experienced in remote learning. 69.4% has experienced physical health issues, 11.3% has experience social isolation, 11.3% of students experienced mental health issues, 6.5% has

experienced mental health issues, physical health issues and social isolation and 1.6% of students experienced social isolation.

Interpretation: The survey is conducted to know what issues students has experienced in remote learning. The majority of the students has experienced physical health issues

3.1.6 Table showing: **Favourable conditions at home for remote learning**

Options	Frequency	Percent
Poor	7	11.3
Below average	9	14.5
Average	25	40.3
Good	18	29.0
Excellent	3	4.8
Total	62	100.0

Analysis: The above table shows favourable conditions at home for remote learning. 40.3% of students felt it average, 29.0% students felt good, 14.5% of students felt below average, 11.3% of students felt poor and 4.8% students felt excellent

Interpretation: The survey is conducted to know whether students felt peaceful or not while remote learning. The majority of the students felt it average i.e., 40.3%

3.1.7 Table showing: Effectiveness of remote learning

Options	Frequency	Percent
Not at all effective	9	14.5
Slightly effective	12	19.4
Moderately effective	32	51.6
Very effective	6	9.7
Extremely effective	3	4.8
Total	62	100.0

Analysis: The above table show effectiveness of Remote learning.51.6% of students felt moderately effective, 19.4% students felt slightly effective, 14.5% of students felt not at all effective,9.7% of students felt very effective and 4.8% students felt extremely effective.

Interpretation: The survey is conducted to know whether students felt effective remote learning or not. Majority of the students felt i.e., 51.6%moderately effective.

3.1.8 Table showing: **Facilities provided by the institutions**

Options	Frequency	Percent
Not at all effective	5	8.1
Slightly effective	18	29.0
Moderately effective	20	32.3
Very effective	15	24.2
Extremely effective	4	6.5
Total	62	100.0

Source: primary data

Analysis: The above table shows, effectiveness of Remote learning.32.3% of students felt moderately effective, 29.0% students felt slightly effective, 24.2% of students felt very effective, 8.1% of students felt not at all effective and 6.5% students felt extremely effective.

Interpretation: The survey is conducted to know whether students are offered by the resources learning or not. Majority of the students felt i.e., 32.3%moderately effective.

3.1.9Table showing: Device students used

Options	Frequency	Percent
Laptop	24	38.7
Desktop	2	3.2
Tablet	5	8.1
Smartphone	31	50.0
Total	62	100.0

Source: primary data

Analysis: The above table shows the device students has used for remote learning. 50% of students used smartphones,38.7% students used Laptops, 8.1% of students used tablet and 3.2% students used desktop

Interpretation: The survey is conducted to know which device was mostly used by the students while remote learning. The majority of the students, i.e.,50.0% of the students used smartphones

3.1.10 Table showing: **Teachers are helpful in the process of remote learning**

Options	Frequency	Percent
Yes	34	54.8
No	12	19.4
Maybe	16	25.8
Total	62	100.0

Source: primary data

Analysis: The above table shows, how many teachers were helpful during remote learning. 54.8% of students are helped by teachers. 25.8% of students are helped by teachers and 19.4% of students are helped by teachers.

Interpretation: The survey is conducted to know how much students are helped by the teachers. 54.8% of students are helped by teachers.

3.1.11 Table showing: Comfortable with remote learning

Options	Frequency	Percent
Yes, absolutely	15	24.2
Yes, but I would like to change few things	29	46.8
No, there are quite few challenges	11	17.7
No, not at all	7	11.3
Total	62	100.0

Source: primary data

Analysis: The above table shows, how many students are comfortable with remote learning. 46.8% of students said "yes, but I would like to change few things ".24.2% of students said " yes absolutely ", 17.7% of students said "no there are quite few challenges", And 11.3% of students said "no not at all"

Interpretation: The survey is conducted to know how much students are comfortable with remote learning. The majority i.e.,46.8% of the students said yes, but they would like change few things.

3.1.12 Table showing: Satisfied with online teaching

Options	Frequency	Percent
Yes	25	40.3
No	23	37.1
Maybe	14	22.6
Total	62	100.0

Source: primary data

Analysis: The above table shows, how many students are satisfied with the online teaching during remote learning. 40.3% of students are satisfied with online teaching. 37.1% of students said not satisfied with the online teaching and 22.6% of students said "may be".

Interpretation: The survey is conducted to know how much students are satisfied with online teaching during remote learning. The majority of the students said 54.8% are satisfied with online teaching.

3.1.13 Table showing: How parents felt about remote learning

Options	Frequency	Percent
Good	22	35.5
Average	33	53.2
Bad	7	11.3
Total	62	100.0

Source: primary data

Analysis: The above table shows how much students' parents felt overall about remote learning. 53.2% of students' parents felt it average. 35.5% of students' parents felt it good 11.3% of students' parents felt it bad.

Interpretation: The survey is conducted to know how parents felt overall about remote learning. The majority of the parents felt it as average i.e., 53.2% .

3.1.14 Table showing: Students preference of mode of learning

Options	Frequency	Percent
Online learning	16	25.8
Offline learning	46	74.2
Total	62	100.0

Analysis: The above table shows, which mode of learning students are preferring. 74.2% of students are preferring offline learning were as 25.8% of students are preferring online learning.

Interpretation: The survey is conducted to know which mode of learning students are preferring. The majority of the students are i.e., 74.2% are preferring offline.

4. Findings

1. For the present study female students' participation is 51.5%.
2. Overall feel about remote learning, 35.5% of students felt it average.
3. 74.2% of students have access for device for remote learning.
4. 35.5% of the students were able to spent 1-3 hours per day.
5. 40.3% of the students felt average comfortable environment at home.
6. Students doesn't have any great opinion on remote learning.
7. About 69.4% of students suffered by the major issues like backpain, eyesight etc.
8. About 51.6% of students felt remote learning is effective.
9. 53.2% of parents felt remote learning is average effective when compared to offline learning.

10.74.2% of students felt offline learning is better than online learning.

11. About 32.3% of the students responded that resources offered by educational institutions are moderately effective.

12. Smartphone i.e 50.0% is the one which was mostly used by the students during remote learning.

13. About 54.8% of students are helped by teachers in remote learning.

4.1 Conclusions and Suggestions

The survey has taken responses from Hyderabad city only. Respondents are students of various educational institutions. Based on the responses and finding, I would like to conclude that remote learning is not so effective when compared to offline learning. Reasons for the difficulty in learning through virtual mode are economical and technical. Due to this, students faced various issues during remote learning. Some of the institutions both private and public are not completely equipped with technology to provide facilities which make remote learning comfortable. Due to this majority of the students and parents felt offline learning is better than online learning.

In order to make remote learning effective, the following suggestions are made.

1. Make remote learning accessible through offline features by providing hard copies of study material.
2. Distribute physical take-home papers, worksheets and books which helps the students to improve their learning.
3. Educational institutions should encourage parents to make use of community resources.
4. Communication with lectures and classmates should be improved as in remote learning it has become one of the biggest challenges to interact with teachers and classmates. To improve this, educational institutions should conduct weekly session just for interaction of students and teachers.
5. Students usually don't pay attention to remote learning as there are lots of distraction which decreases their concentration level in the class. To overcome this teacher should make the class more interactive by asking questions to the students randomly. This makes learner pay attention to class and feel involved in class.
6. Parents should make efforts in providing suitable environment, support, and motivation to their wards which enables them to concentrate better.
7. Technology which is suitable both teacher and learners should be adopted.
8. To make remote learning effective, teacher should be equipped with skills to use technology and also appropriate tools of teaching.

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