

Review Article

Impact of e-Learning from Students and Teachers Perspective amid Covid-19 Pandemic in India

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Abstract

The Covid-19 lockdown has severely affected the Indian education system. Nearly 290 million students in India have been out of School since March 2020 and worldwide nearly 94% student population (UN Report 2020) got impacted due to school closure. Ensuring learning continuity the government of India introduced several online free learning modules for students.

Educational Institutions conducted online teaching and examinations session amid Covid-19 pandemic. ASER [4], an annual survey body in India reported that 38.2% children did not had access to smart phones while 11% children got smart phones post lockdown to help their studies. Both ASER and IMF (73), report highlight inadequacy of smart phones and internet connectivity as major hindrance for online education in India.

We conducted a survey amid Covid-19 to examine the impact of e-learning from students and teachers point of view. Survey questionnaire were designed to study the advantages, disadvantages, challenges, and opportunities of e-Learning. The Survey infers that online teaching provides opportunities to students to have educators and study materials of their choice, provides safe environment at home amid Covid-19 crisis.

Survey also revealed that 73.2% students disagreed to e-Learning process, 61.4% students faced difficulties related to eye irritation, headache, network issues, lack of practical knowledge against theory syllabus. 62.3% students agreed that offline mode is more effective.

Amid many loopholes and challenges of this e-learning technology, e-learning came as an antidote in these exigencies of shutdown.

INTRODUCTION

The outbreak of SARS COV2 virus in early 2020 caused a huge impact on each and every sector of human life. It was originated in Wuhan, China which dramatically changes everything. The WHO on 11 March 2020, declared it as a pandemic of Covid19. It spreads from human to human and therefore to reduce the spread of this deadly disease governments around the world imposed a nationwide lockdown. Covid19 pandemic has significantly disrupted the growth of countries where the cases of novel corona virus are reported. According to World Bank and International Monetary fund report, the world has never seen the level of contraction of the economy in last 80 years as happened in the current year. More than 100 million peoples may have entered to extreme poverty [50].

India is also suffering from the pandemic. In order to control the spread of disease government has taken various measures such as on 22 March 2020, first Janta Cerfew was announced, followed by the complete lockdown of 21 days by Prime Minister of India. And later on this lockdown extended further. The immediate impact of the pandemic is lack of entry of students to their schools and colleges. The educational institutions were closed. As a result about 290 million students alone in India has

been out of school from 22 March 2020 until now. According to ASER [4] (Annual Status of Education Report), which is an annual survey that aims to provide reliable estimates of children's schooling status and basic learning levels for each state and rural district in India, has in a recent study said that many young children have not joined schools and there is a sharp jump in out-of-school children in the 6-10 age group. This has gone up from 1.8% (2018) to 5.3% (2020) and among all children up to 16 years from 4% to 5.5%. One of the main reasons of that is may be because of the inability to afford education. Even in developed countries the situation is same.

In order to continue the education of students, alternative methods of teaching and learning evolved quickly by many schools and colleges which led to serious problems for students, especially for the lower income families student. Both ASER and IMF report highlight that availability of smart phones for learning is inadequate along with the internet connectivity issues. Indian Government has started educating students via different modes. For example, TV, radio sending study material through some application etc. Online learning had very limited impact in India. The ASER survey states that 38.2% children did not have access to smart phones; the 11% children got their smart phone post the lockdown to help their studies. Students from poor families

and rural areas suffered the most. The most of the students are out of schools. Work must start on bringing them all into schools. We must aim 10 years of education for all children. Focus should be on girl child as they are likely to be out of school in disproportionately larger numbers. The distance learning method was used in a hurry and not with full preparation. We can use the experience of distance learning to improve the knowledge and learning of children. This is very crucial. The National Education Policy may start getting implemented from the next session or after that. This means focus on early education. The government must plan for it quickly and start work.

The Objectives of the Survey

The main objective of the survey was to examine and understand the impact of online learning on students and teachers. Students and teachers never used this form of education. The study did not want to confirm or deny any hypothesis. The study is based on the analysis of the feedback the participated students and teachers.

The specific derived objectives of the study were;

- To understand the Status of Education during Covid19 Pandemic.
- To examine the impact of e-learning or online learning from students and teachers perspective.
- To study the advantages, disadvantages, challenges and opportunities of e-learning.

Literature Review on E-learning in Covid-19 Pandemic

E-learning, also referred to as online learning or electronic learning, is acquisition of knowledge which takes place through electronic technologies and media. In other word, "learning that is enabled electronically". Typically, e-learning is conducted on the Internet, where students can access their learning materials online at any place and time. E-learning most often takes place in the form of online courses, online degree, or online programs [95]. The COVID-19 pandemic has created the largest disruption of education system in history, affecting nearly 1.6 Billion learners in more than 190 countries and all continents. Closures of schools and other learning spaces have impacted 94% of world's student population, up to 99.5% in low and lower middle countries (Policy Brief: Education during COVID-19 and beyond – United Nation,2020)It also states that, this crisis has stimulated innovation within the education sector. We have seen the innovative approaches to support education in this crisis of pandemic: from radio and televisions to take-home packages. Distance learning solution were developed thank to quick responses by governments and other private partners all over the world supporting education continuity, including the Global Education Coalition covered by UNESCO. This pandemic causes disruption in education sector widely throughout the world this is from school closures and education disruption due to pandemic all levels of education and training affected this leads to an exacerbation of disparities in learning opportunities, increase dropout anticipated. As Donna J Abernathy said, "Online Learning is not the next big thing, it is now big thing".

Ensuring learning continuity during this Covid-19 pandemic

crisis became the priority for governments. Many countries are using edtech to support access to remote learning during the Covid-19 pandemic. The World Bank is working with ministries of education in several countries in support to their efforts to utilize educational technologies of all sorts to provide remote learning opportunities. In India, in the press release on dated March 21, 2020, the Union Minister of Education (formerly known as Ministry of Human Resource and Development) and former education minister Mr. Ramesh Pokriyal Nishank shared various e-learning platforms which is free for students across the country with the robust motto- "One Nation, One Digital Platform". He introduced DIKSHA Portal, e-Pathshala app, Swayam, Swayam Prabha platforms for free with various learning contents.

It is an hour of need for educational institutions and universities to strengthen their knowledge and IT infrastructure to be ready for facing such crisis. School closures carry high social, educational and economic costs, and disruptions they cause touch people across communities, but their impact is particular severe for disadvantaged persons and their families [20]. The Annual Status of Education Report for Rural India was recently released by Pratham Education Foundation in this report they carried out survey in 26 states and 4 UT's according to this report Only 1/3 of the surveyed student had access to online learning. Only 11% students had access to live online classes 24.3% of student did not receive any material from their respective schools/colleges. About 3% of children were not enrolled in school in 2020. Overall, as per report one of the three children were not involved in any learning activity. It is the matter of concern in India. According to Telecom Regulatory Authority of India, only about 54% of India's population has access to Internet and National Statistical survey shows that only about 20% of the population has the ability to use internet. The Remote Learning Reachability report released by UNICEF state that just 24% of Indian household have internet connections to access e-education, and there is a large urban-rural and gender divide that is likely to widen the learning gap across low, middle and high income families. This report further states that specially girls from most marginalized communities or the low income family do not have easy access to Smartphone for e-education. The UNICEF India Representative Yasmin Ali Haque said that, "Access to digital education is limited and by itself cannot solve the learning gap. Blended approaches are needed involving communities, parents, volunteers to reach children and support their learning in this time". The Purpose of education is to mold a person to be perfect. Education provides the pathways to reach their destiny. Education helps in inculcating social responsibilities as well. The main core of education is to Learn [94]. A lot of issue attached to online education but we cannot ignore the perk of it in times of such crisis [11]. Due to the Covid-19 pandemic, excellence and equity, cornerstones of goods education systems, are being challenged in every part of the world. Our greatest concern is that differences in parental involvement and access to technology exacerbate inequality. At the same time, as in every major challenge, this is an opportunity to improve [88].

Plan of Work (Supplementary Figure 1)

Designing of Survey Questionnaires

Two separate Google Forms with questionnaire was made for students and teachers. Considering responses of students and teachers the impact of e-learning is discussed in discussion part.

Questionnaire Set For Students:-

1. What you think about the entire e-learning process?
 - a. It is helpfulb. Not that much helpful c. May be helpful d. Other
2. Did you have your own device or have used devices of your parents for online classes?
 - a. Yes, I have my own device b. I am using my parents device c. No, I am using my relatives device d I m using my neighbor's device e. Others
3. Which of the online platforms you have used to attend your classes?
 - a. Zoomb. Moodle c. Google Meetd. Other
4. Did you face any problem while using this online platform?
 - a. Yesb. Noc. May be
5. How much duration you were forced to remain for attending your online classes?
 - a. 1-3 hoursb. 3-5 hours c. More than 5 hours
6. Due to increased screen time, have you suffered from irritation in your eyes?
 - a. Yesb. Noc. Sometimes
7. Due to increased duration of online classes, did you suffered from headache or earache?
 - a. I am suffering from headacheb. I am suffering from earachec. Yes, I am experiencing bothd. No
8. Did you faced any internet network issue in your area while attending the classes?
 - a. No, there is a proper network connection at my placeb. Most frequently
 - b. Once in a dayc. Twice in a week
9. Did you attended a continuous series of online lectures?
 - a. Yesb. Noc. Sometimes
10. Did you got anxious from a continuous online classes?
 - a. Yesb. Noc. May bed. Other
11. Was there any comfortable environment in your home for studies during online classes sessions?
 - a. Yesb. Noc. Sometimesd. Other
12. Give your sincere opinion, comparing online mode of learning to offline classroom learning?
 - a. Excellentb. Goodc. Badd. Neither good nor bad
13. Is virtual learning is providing you an adequate amount

of theoretical and practical portion of syllabus?

- a. It provides theoretical portionb. It only provides practical portionc. It provides bothd. None of above
14. How frequently you have attended doubt sessions in online learning classes with your mentor?
 - a. Regularlyb. Sometimes, but not alwaysc. Neverd. Other
15. How much helpful your teachers/mentors have been for you in learning online classes/lectures?
 - a. They are very helpfulb. I managed it myselfc. Other
16. Did you agree, online learning leads to improving your overall performance?
 - a. Yes, it improves my performanceb. May bec. Other
17. Is online learning is stressful, if yes, how much stress you feel while e-learning?
 - a. Yes, it is stressfulb. No, it is interestingc. Other
18. "Your social interaction is getting reduced and get only limited to assignments" Do you agree?
 - a. Trueb. Falsec. May be
19. Tell us about the most interesting activity while learning online?
 - a. It is more effective than traditional learningb. Traditional learning is more effectivec. Both are equally effectived. Other
20. What you think about the effectiveness of online learning classes, how is it effective for you?
 - a. It is more effective than traditional learningb. Traditional learning is more effectivec. Both are equally effectived. Other
21. "E-learning is the only panacea in times of covid-19 shutdown foe education", do you agree?
 - a. Trueb. Falsec. May be
22. Give your opinion about the future of e-learning education system, is it going to replace the traditional way of education?
 - a. Yes, very soonb. Noc. May bed. Other
23. On the scale of 1-10, rate your satisfaction level about e-learning process?

Questionnaire set for teachers:-

1. How covid19 pandemic impacted the Education Sector?
2. Describe your experience of teaching online?
3. Did you have previous experience of teaching online?
4. Is that anything in particular which surprise you about e-learning or teaching online?
5. What you think, what are the loopholes of teaching online?
6. Which platform you used to teach students online?
7. What challenges you faced while shifting from normal traditional face-to-face teaching to new online learning?
8. Due to the current scenario of Covid19 pandemic, did

you think the e-learning system dominates traditional learning in future forever?

9. How students are responding to the e-learning or online classes?

10. Which methodology do you use for making your lectures more focused and interesting?

11. Did you find any difficulty while teaching online or while interacting with students?

12. How you deal with technology gap (digital divide) among the students of your class?

13. What are the opportunities of e-learning?

14. Which one you prefer traditional classroom teaching or online teaching?

15. On the scale of 1-10, rate your satisfaction level about e-learning process?

From the responses we received from the online survey through Google Form, the discussion and conclusion are as follows:

DISCUSSION

The result of the survey, "Impact of Covid19 Pandemic on education" includes the different parameters of impact of online learning-teaching through student's and teacher's perspective

respectively.

Impact of Online Learning

Student's Perspective: The targeted population of students was 221. They studied in different class and colleges they belongs to primary, secondary, higher secondary and senior colleges (undergraduates and postgraduates). The respondent students were of different age groups and 67% of them are female while the remaining 33% are male students (Supplementary Figure 2).

The findings of different parameters of student life are as follows.

Academic life of Students: The virus SARS COV2 causes Covid19. WHO declared this as a Pandemic of Covid-19 due to which school and colleges were closed and hence universities shifted their pedagogical process to online learning. For many universities across the world this online learning system is not new for students but for some schools and universities in less developed area and rural area this e-learning is a totally new concept to understand as well as to implement.

From the results of survey we concluded that the academic life of students is good for those students who were digitally literate with appropriate requirements and those students show positive response. But on the other hand, students from the remote area or less developed are faced lot of difficulties due to many reasons and responded in a negative manner to the e-learning (Table 1).

Table 1: Student's Responses related to their academic life.

S.N	Parameters	Inference			
1	Entire e-learning process	Helpful (34.2%) 84 students	Not Helpful (48.2%) 106 students	May be helpful (11.8%) 26 students	Other (1.8%) 4 Students
2	Device for attending online classes	Have Own Device (84.1%) 185 Student's	Used Parent's Device (13.6%) 30 Student's	Used Relative's Device (0.5%) 1 Student	Other (1.8%) 4 Students
3	Online Platforms Used	Zoom (60.5%) 133 Student's	Google Meet (30.5%) 67 Student's	Moodle (0.9%) 2 Student's	Other (8.2%) 18 Student's
4	Did Students Faced Difficulties?	Yes (61.4%) 135 Student's	No (25.9%) 57 Student's	May Be (12.7%) 28 Student's	
5	Duration of Online Classes	1-3 Hours (62.7%) 138 Student's	3-5 Hours (30%) 66 Student's	More than 5 Hours (7.3%) 16 Student's	
6	Network Issue in Area	Yes (36.8%) 81 Student's	No (16.8%) 37 Student's	Most Frequently (36.8%) 81 Student's	Other (9.6%) 21 Student's
7	Theory Vs Practical Portion of Syllabus	Provides Theory Portion (57.3%) 126 Students	Provides Practical Portion (5.9%) 13 Student's	Provides Both (24.1%) 53 Student's	None (1.8%) 2.7%) 28 Student's
8	Doubt Sessions with Mentor's	Regularly (33.2%) 73 Student's	Sometimes (54.5%) 120 Students	Never (10.5%) 23 Student's	Other (1.8%) 4 Student's
9	e-learning improves your overall performance?	Yes (22.3%) 49 Student's	No (0.9%) 2 Student's	May Be (73.2%) 161 Student's	Other (3.6%) 8 Student's
10	Effectiveness of E-learning	Effective than offline learning (8.2%) 18 Student's	Offline learning is more effective (62.3%) 137 Student's	Both are equally effective (25.5%) 56 Student's	Other (4.1%) 9 Student's

Social Life of Students: The social life of students got affected very badly due to covid19 pandemic (Figure 1) which results in lack of self confidence, motivation and leads to anxiety and anger. To make social life of student’s more productive in such situation. One can learn new language or sign language, they can organize their notes, read something which is completely unrelated to their subject, students can do regular exercise or yoga, learn about something they really interested in or student can take a virtual museum tour, learn how to code, learn craft, watch documentaries etc. There are many ways a student can do to avoid stress of social isolation (Figure 2) Also to get the comfortable environment is the big issue during pandemic.

Emotional Life of Students: The Covid19 pandemic and closure of institutions and universities has heavily influenced the emotional well being and thus many students suffered from mental health issues. The continuous series of online classes leads to students suffered from anxiousness (Figure 3). Negative emotions were also noticed among those students who unable to pay their costs of study during pandemic (Figure 4). The centre government, state government, health professionals, institutions, some NGOs should all collaborate on the process of designing timely and efficient psychological and financial support services for students

Physical Health of student’s: Due to online classes most of the students were feeling strain in their eyes (Figure 5) that is increased screen time due to online classes is a major issue with the online learning which leads to many different physical health conditions like headache and Earaches (Figure 6). In order to avoid the risk of physical health problems students should use laptops instead of smart phones and attend online classes by sitting little far away from the screen or they can use blue light eye glasses or lenses. They must take sleep for appropriate

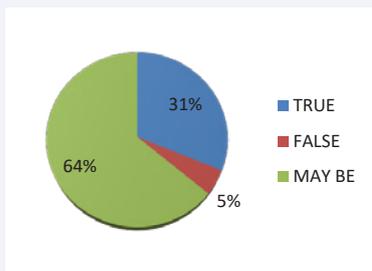


Figure 1 Social interaction of students affected.

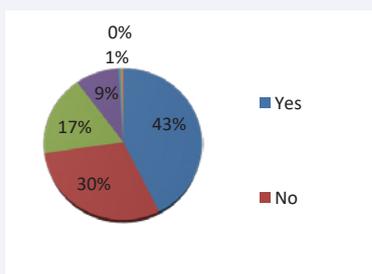


Figure 2 Comfortable Environment in home.

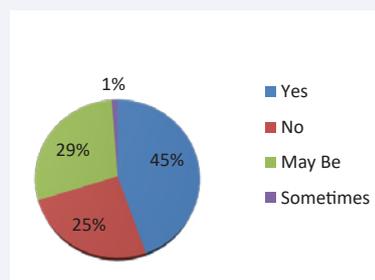


Figure 3 Got anxious from continuous lectures.

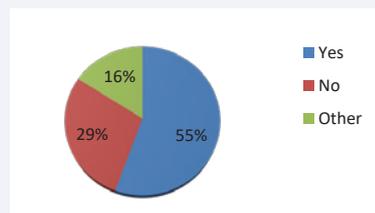


Figure 4 e-learning is stressful.

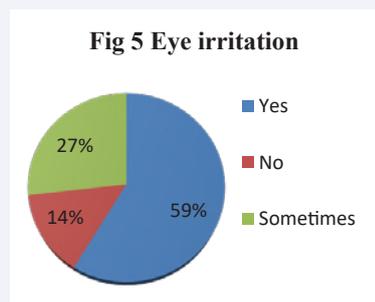


Figure 5 Eye irritation.

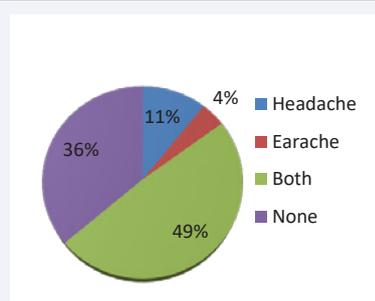


Figure 6 Headache & Earache.

time to avoid other physical problems and also one can use external sound speakers instead of earplugs. Figure 7 depicts the satisfaction level responses from students to e-learning.

Impact of Online Teaching

Teacher’s Perspective: The result of the survey ‘Impact of online teaching: teacher’s perspective’ consists of different aspects which teachers or professors had to faced during and

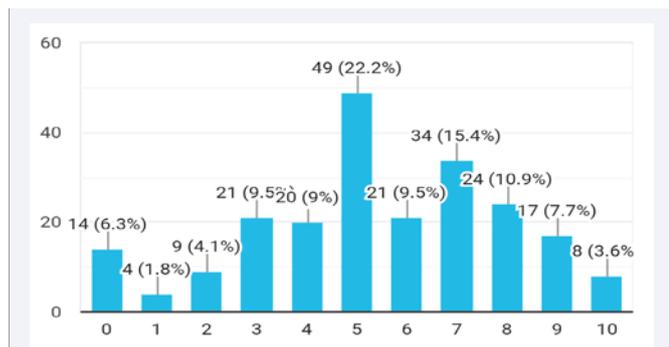


Figure 7 Satisfaction Level of Students to E-learning.

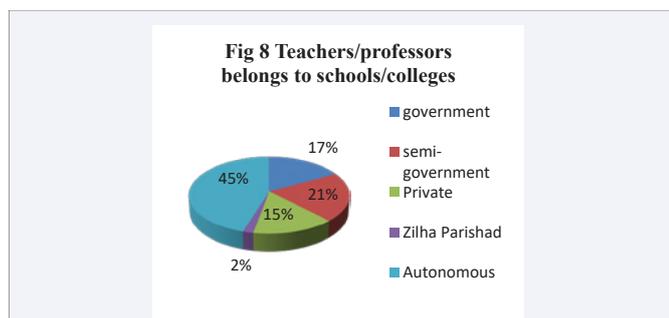


Figure 8 Teachers/professors belongs to schools/colleges.

after the transition from normal traditional classroom teaching to teaching online through various online or electronic platforms. The targeted teachers were 53, they were from different cities, different schools colleges and universities (Figure 8), who teach students from pre-primary primary, secondary and junior college streams (Figure 9). They share their opinions regarding the online teaching. Out of 53 teachers 25 of them were female’s while 28 were male’s. 24(45.3%) teacher/professor were from Autonomous college, 11(20.8%) teachers were belongs to semi government schools and 9(17%), 8(15.1%) and 1(1.9%) belongs to government, private and ZP schools respectively (Figure 8).

Undoubtedly, this covid19 pandemic drastically affected the education system. All the institutions and universities around the world were closed in order to reduce the spread of covid19. The covid19 pandemic badly or gravely affected the education system. As it impacted education sector worse, uncertainty and problems in timely completion of course as well as examinations and hence badly affected the examination results. It closed the doors of education. On the other hand, students were barred from physical teaching. Although online education played a very impactful role but somewhere missed the actual classroom impact where students were not getting environment to study. So, physical classes are much required in education. The major impact of pandemic was on rural area and poor students who were not continuing their education due to less knowledge of exploring in education field rather than exploring other platforms. In addition to that reaching to the deprived classes were difficult for teachers which impacted poor students as they cannot afford the mobile phones for learning online and if students attended online lectures they didn’t understood the

topics very well as they understood in classrooms. This covid19 pandemic has broken the classic mode of teaching, learning and assessment methods. In fact, covid19 pandemic was like ‘heat shock’ stress. At the same time, it is one of the best ever challenge faced by teacher who loved teaching profession. The traditional classroom based teaching and learning in colleges restricted but it enhanced digital based education. When we asked them to share their experience of teaching online they responded that the online teaching was a boon in hard time especially for distant and remotely located students, but unfortunately lack of self responsibility in students and poor internet connectivity made it worse. Most of the students were not able to attend online classes because of limited resources. Those who connected online, more than half of them were not attentive and also they did not receive any response from students. Some stated that they tried their level best but unavailability of devices, interrupted network, problems of continuous watching of little screen, eye souring with radiations, sitting at one place and interacting with students could not give them the normal classroom experience so in short it can be called as semi satisfactory experience.

Online teaching is not a very new concept many institutions and edutech companies were using this online teaching from past few years and students also responded in positive manner because the population of students who studied from this edutech or well established online platforms were generally self disciplined and self motivated but in case of schools and universities many teachers didn’t used this technology before so when we asked about it only 15.1% teachers had previous experience while for most of the teachers i.e. 83% this was totally new experience (Figure 10). In case of online teaching there were many things which was good and bad at the same time and when we asked to share opinion about that was there any particular

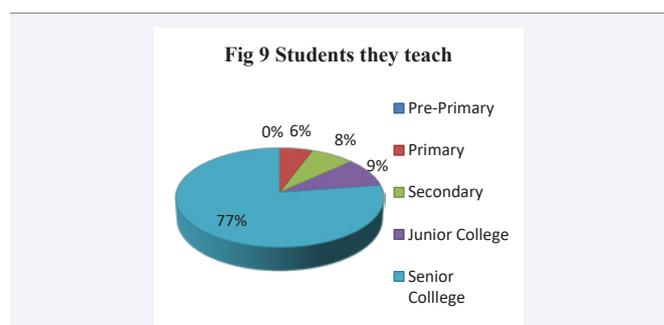


Figure 9 Students they teach.

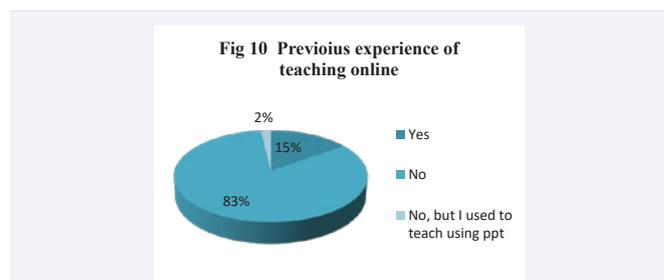


Figure 10 Previous experience of teaching online.

thing which surprised them about teaching online. They responded in positive way that screen sharing and writing on mobile screen to explain some things like drawing web diagrams, tables, changing grammar sentences, underlining the important words and information etc. Through power point presentations various concepts were cleared as visual impact was greater than audio which resulted into increased understanding level of certain concepts.

Online teaching process has various advantages and loopholes. We asked the respondents about the loopholes of teaching online. The respondents responded that the online teaching seems to be one sided affair. Missing students' participation, missing interactive teaching, could not read faces, teachers could not read the immediate reactions on faces. Students miss joyful learning with friends, they missed their classroom learning atmosphere, screen radiation, eye souring problems, interruption of network, expensive for lower middle class and poor families to manage 2-3 children's online education at the same time and also one room families could not afford. So, these are some of the loopholes of online teaching process. The online platforms or application has becomes the integral part of the e-learning-teaching process. There were various platforms which teachers were used to teach student's online when asked about, they responded direct teaching on zoom application by using tripod, mobile, white board and colorful marker pens. Sometimes by sharing(material) screen and writing on mobile screens for explanation, drawing web charts and table charts etc. most of the teachers used Zoom app along with Google Meet, recorded lectures, Microsoft team, etc this platforms teachers were used for teaching online. While shifting from traditional offline learning to online learning many teachers faced challenges (Figure 11).

When we asked about this they stated that many of them were not technocrat so they had to faced a lot of problems for example, presenting the matter of blackboard on PowerPoint presentations especially teaching mathematical derivations and numerical, availability of resources were less, more data consumption, interruption of network, sound clarity, waiting for reply, time bound teaching, electricity power supply interruption, learning new technologies for online teaching. So, overall technical knowledge and glitches were the main challenges faced by teachers. In true international world, traditional teaching became outdated long back. But when we asked teacher's that due to the current covid19 scenario, did they think the e-learning system dominates traditional learning forever. Half of them responded positively while half of them reacted negatively. Also with this new normal e-learning system students reacted in a

mixed way that respondents said that students seemed never to be happy and interesting for e-learning or online learning. Their responses were very poor. They want traditional classroom learning. Some of them stated that only small groups remain attentive while others were just audience and unfortunately face reading factor was missing in this learning process. Generating curiosity about topics, adding animations, asking questions in between and giving reward, discussion, story narration, effective presentations etc teachers did for making their lectures more interesting and focused.

There were many students who did not have any device or many of them have it but didn't have enough knowledge or internet connection when we asked teachers through this web based survey that how they deal with the digital divide or technology gap among their students. They responded, there were many ways through which teachers reached out those students. For example, through whatsapp groups, they provide them training, they help those students through telephonic conversations, by providing them information, notes, attending them personally, asking them to attend lectures with a friend or relative having Smartphone or digital device or asking them to contact the nearest source of knowledge etc. even though this technology has many pros and cons but it also has some opportunities. We asked respondents about the opportunities of e-learning they said e-learning provides the opportunity to teach and record and make it available to masses through various platforms, anyone can take education from the distant education institutions, learning new features of AI, it has wide opportunities, anyone can even learn from IIT professors without taking direct-admission, content of lecture available all-time. Some responded that having a lot of money to buy costly e-learning devices, being rich to spend some money on medical problems. E-learning should be optional and not the mandatory. It is good to show your progress in science and technology but it affects the physical health progress. E-learning helps to got world knowledge at click, you seem to be smarter (Figure 12).

E-learning has lot of problems with use of it, it has advantages, disadvantages, various opportunities and off course many challenges. By comparing of e-learning with normal face to face traditional classroom learning more than half of the respondent stated that they would prefer traditional classroom teaching while the remaining stated that they don't have any problem with the online teaching and they would prefer blended teaching.

Advantages, Challenges and Opportunities of e-learning

For everything under the sun has advantages and

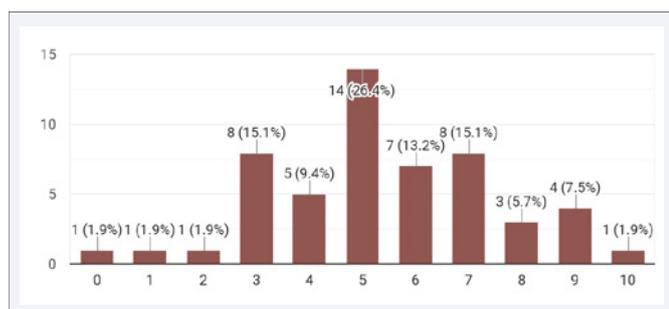


Figure 11 Satisfaction level of teachers to e-learning process.



Figure 12 Word Cloud of e-learning.

disadvantages and so as e-learning. The online teaching and learning in such scenario is the best alternate of traditional face to face learning. There are some advantages, disadvantages, challenges and opportunities of e-learning. They are as follows;

Advantages

- Convenience; Flexibility; Class Availability; Learning From Own Place

Structuring Own Scheduled; Creative Learning; Offers Personalification; Cost Effective; Synchronous Learning (Real time learning); Improves Self-Motivation

One Can Learn from Any Educator; Learning the material of choice

Challenges

- Poor Families Cannot Afford learning Online; Equipment May Cause Distractions

Mid-day Meal Scheme Hampered; Digital Divide; Technology Illiteracy; Unavailability of Devices; No Electricity; No Internet; Lack Of Personal Attention; One Device for Sibling; Network Connectivity Issue Problem; Less Interaction Between Students & Teachers; No Practical Knowledge

Opportunities / Way Forward

- Opportunity to improve; Building Human Capital; Advanced Education; Learning New & Innovative Things; Betterment of Education System; Quality Education

CONCLUSION

• Due to Covid19 pandemic the world has been in lockdown from last couple of months. And hence it badly impacted the status of education.

• In this pandemic situation, to cease educating students is not an option and therefore the institutions come up with the alternative to restart educating students.

• The international organizations, the government and some private authorities collaborate and started educating students through different online modes.

• At the same time, the students and teachers had to face a lot many problems while shifting from offline traditional way of learning to online learning which negatively impacted the mental health of students.

• Students from rural area and lower income families had suffered the most due to digital illiteracy, unavailability of devices, no internet etc.

• Teachers also faced many challenges while teaching online. They discovered many ways to make their class more effective.

• Though it has many loopholes and challenges while using this technology but we cannot deny the fact that e-learning is the antidote in times of shutdown.

• There will be many opportunities associated with this e-learning system which will play key role in building human

capital as well as human development in near future.

- So, we can say that e-learning is the Panacea for education in pandemic.

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