

## **ANALYZING THE TRANSITION OF CLASSROOMS INTO TECHNOLOGY ENHANCED LEARNING ENVIRONMENT FROM VIEWPOINT OF THE STUDENTS**

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**ABSTRACT:** Recently we have faced the era of most terrifying pandemic ‘COVID- 19’, which have changed our lifestyle and the way of our working. It has affected every sphere of our life. Education system was badly disrupted by the pandemic. But human has found out some ways with the help of technology by which life and its related activities can be carried out smoothly. The objective of the present study is to find out the perception of the secondary and senior secondary students regarding the level of comfort, confidence, motivation and satisfaction in learning with the help of **technology enhanced learning environment**. The study is important because it finds the issues to be resolved in technology driven teaching-learning so that technology can be used more efficiently to teach the millions of the students out of schools worldwide. The study is descriptive in nature. There are 45 students are selected for the data collection with the purposive sampling method, and a survey questionnaire is prepared for the data collection. The results show that there are 27.8% students are neutral to feel comfortable with online mode of learning, whereas 28.9% are disagreed that they feel themselves motivated to learn, 25.9% are neutral that they feel themselves confident, 34.8% are disagreed that they are satisfied by the technology enhanced learning environment.

**KEYWORDS:** Technology enhanced learning environment, perception of the students, and transition of learning

### **1. INTRODUCTION**

We all know that time is a dynamic entity. This is an ever-changing process, where all humans and other beings always experience various incidents and situations. Sometimes we also have to face some terrifying situations in this ever changing and dynamic cycle of the time. Recently we have faced the era of most terrifying pandemic COVID- 19, which have changed our lifestyle and the way of our working. It has affected every sphere of our life. Education system was badly disrupted by the pandemic. (De Giusti, 2020) “The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents.” But human has found out some ways with the help of technology by which life and its related activities can be carried on smoothly. In the field of the education too technology has made it possible to provide education to the children in the period of the pandemic. (Moore & Kearsley, 2012) “Distance education is a process of planned teaching learning that occurs in a different place from the normal learning setting and requires communication and a special corporate organization via technologies.” But the task was not easygoing for everyone. On the one hand technology made the process of teaching and learning possible for the teachers and students but in the other hand both were facing many issues and challenges to make it happen. (Mukhtar et al., 2020) “The advantages included remote learning, comfort, accessibility, while the limitations involved inefficiency and difficulty in maintaining academic integrity.” In this paper the researcher is trying to find out the views of the students regarding the learning in this technology enhanced learning environment. This study is important because it finds out the challenges and difficulties of the students during online learning, so that improvements can be implemented for the future use. With the implication of the improvements the process of online learning can be made more efficient and practical. Every difficult time teaches us some important lesson of the life and it teaches us how to live our life even in difficult situations too. In the past we have observed that the learning process was disturbed many times because of bad or harsh weather conditions or because of pollution but now we have the solution, technology enhanced learning environment has provided us the opportunity of education by online mode. Besides of this the technology enhanced learning environment will also help to those children who are not able to attend the schools physically.

## **2. LITERATURE REVIEW-**

1. (Francis, 2021) says that “ During the shifting of the traditional learning to digital learning teachers were facing various challenges such as- technical glitches, decreased participation of the students, unachieved learning outcomes and lack of competency among teachers.”
2. (Yusnilita, 2020) The study of NopaYusnilita says that “Online learning provide students practical and flexible way in learning, it also make them more creative and active. Online learning gives them some benefit in learning. The study reveals the benefits of online learning for the students. Students find it interesting, practical and cheap, and they feel themselves confident and believe that high quality learning can take place in online mode too.”
3. (Gopal et al., 2021) Say that “The aim of the study is to identify the factors affecting students’ satisfaction and performance regarding online classes during the pandemic period of COVID–19 and to establish the relationship between these variables. This study was conducted for business management and hotel management courses in India.”
4. (Khalil et al., 2020)conducted this study for medical students of Saudi Arabia and reveals that “Synchronized online classes were well-accepted by the medical students. This represents significant and promising potential for the future of medical education. The principles of the online learning model and learning outcomes should be rigorously and regularly evaluated to monitor its effectiveness.”
5. (Dhawan, 2020)says in this study that “ online learning is like a panacea in the time of COVID-19 crisis. The study reveals about the strengths, weaknesses, opportunities and challenges of the online learning. Online methods of teaching support and facilitate learning–teaching activities, but there is a dire need to weigh the pros and cons of technology and harness its potentials.”

### **Objectives**

To find out the perception of the secondary and senior secondary students regarding comfort level, confidence, motivation and satisfaction with learning in technology enhanced learning environment.

## **3. METHODOLOGY**

### **Type of the Research**

The present study is a descriptive research study, because the objective of the study is to find out the answer of ‘what’ instead of ‘why’. It deals with the question: What is the perception of the secondary and senior secondary students about the transition of traditional learning to technology driven online learning?

### **Sampling**

Researcher used non probability sampling and chosen purposive sampling technique to select sample only from the secondary and senior secondary classes.

### **Participants**

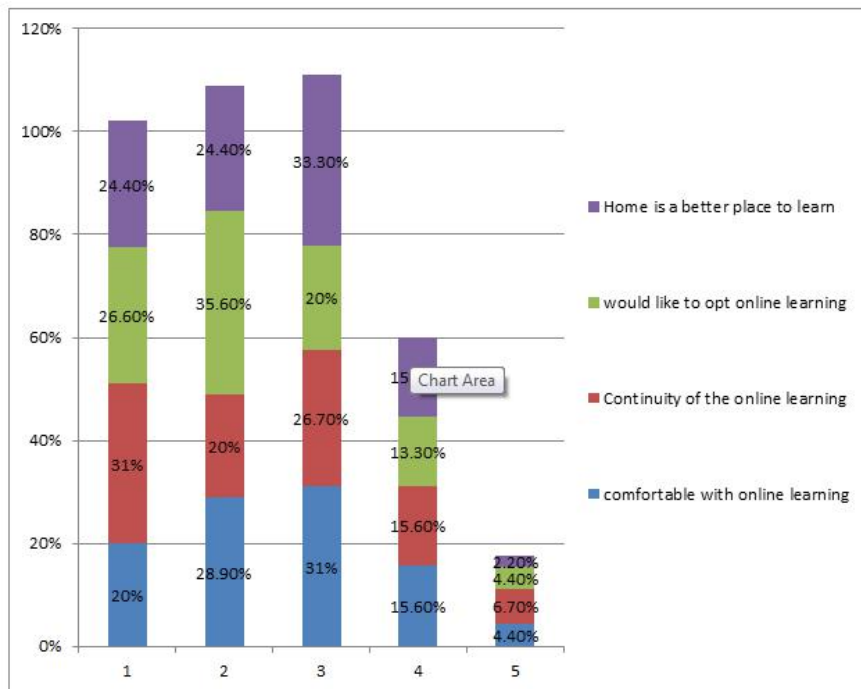
45 students from the secondary and senior secondary schools of Delhi/NCR have been selected for the presents study.

### **Data Collection Tools**

Survey method of data collection has been applied for the data collection.

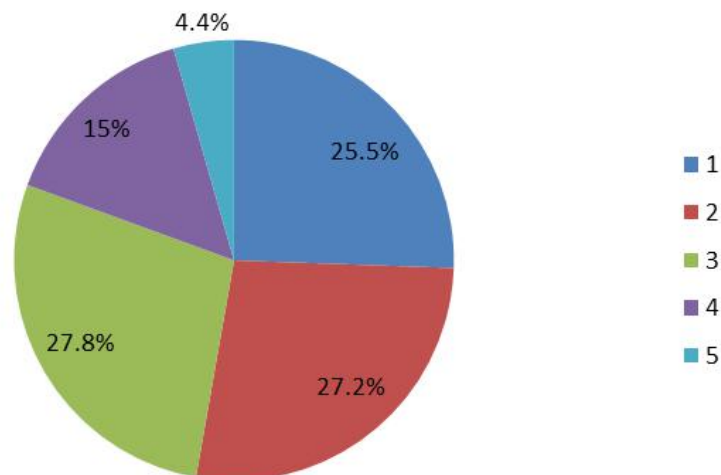
## **4. RESULTS-**

(Almahasees et al., 2021)“Teaching and learning online has a wide range of advantages, yet poses some challenges.”The results of the presents study show the impact of online mode of the learning on some most important factors of the learning. The results have been analyzed on the basis of data collected from the survey. There are four parameters have been chosen by the researcher for the present study; which are comfort level, confidence, motivation and satisfaction. Researcher has tried to find out the perception of the students regarding the utility of the learning with technology enhanced learning environment during the period of COVID-19.



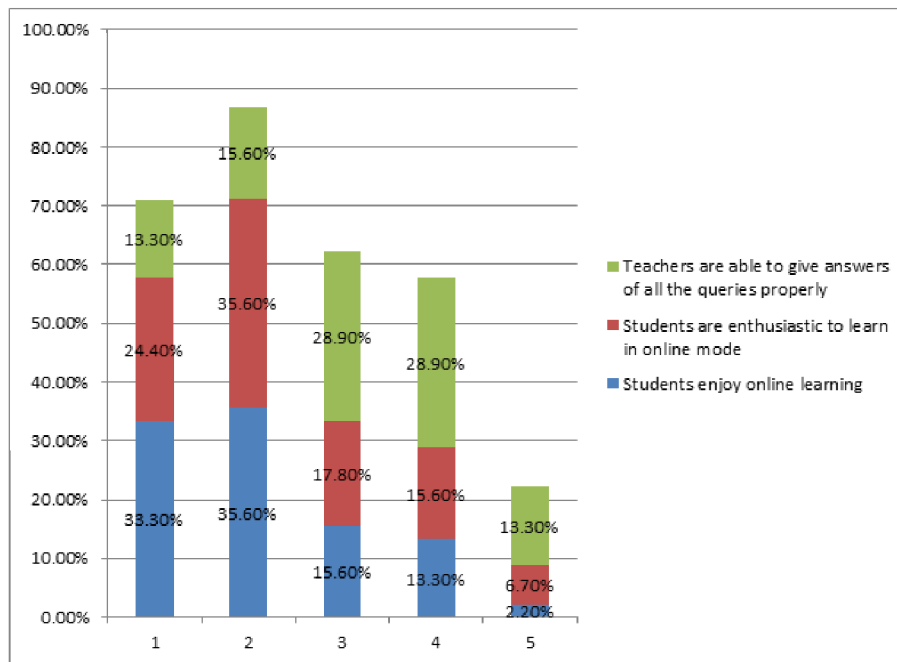
**Figure 1: Comfort level of the student in technology enhanced learning environment**

The first four items of the questionnaire are related to the first parameter that is comfort level. The four colors of the above graph represent the four items. 20% students are strongly disagreeing that they are comfortable with online mode of learning, 29% are disagree, 31% are neutral, 16% are agree and 4% are strongly agree. 31.1% students strongly don't want the continuity of online learning, 20% are disagree over it, 26.67% are neutral, 15.5% are agree and only 6.7% are strongly agree. 26.7% are strongly disagree that they would like to opt online learning mode if they have the choice to choose, 35.5% are disagree, 20% are neutral, 13.3% are agree and 4.4% are strongly agree. 24.4% are strongly disagree that they feel home as a better place for classes, 24.4% are disagree, 33.3% are neutral, 15.6% are agree and 2.2% are strongly agree over it.



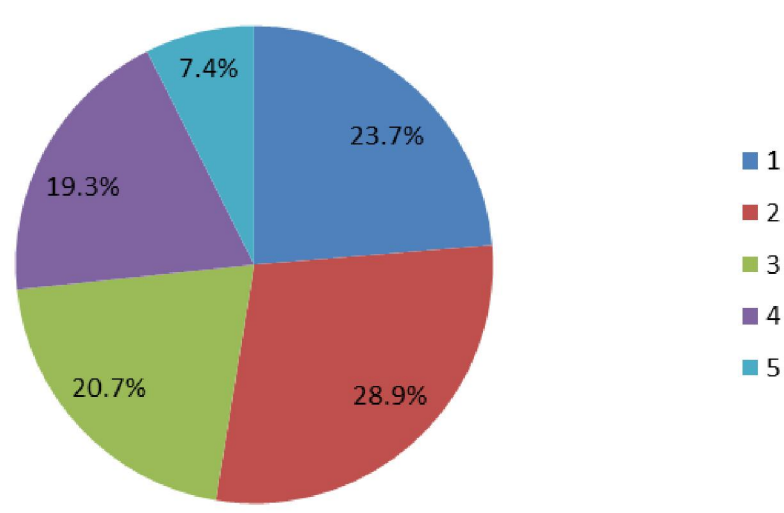
**Figure 2: Combined analysis of the four items of the first parameter (comfort level)**

After adding all responses of four items of the first variable, the consolidated percentage was calculated for the better understating of the views of the students regarding their comfort level with learning in technology enhanced environment. The results show that overall, 25.5% students are strongly disagreeing that they are comfortable with online mode of learning, 27.2% are disagree, 27.8% are neutral, 15% are agree and only 4.4% are strongly agree. In other words, we can say that majority of the students (27.8%) are neutral about the comfort level of online learning mode.



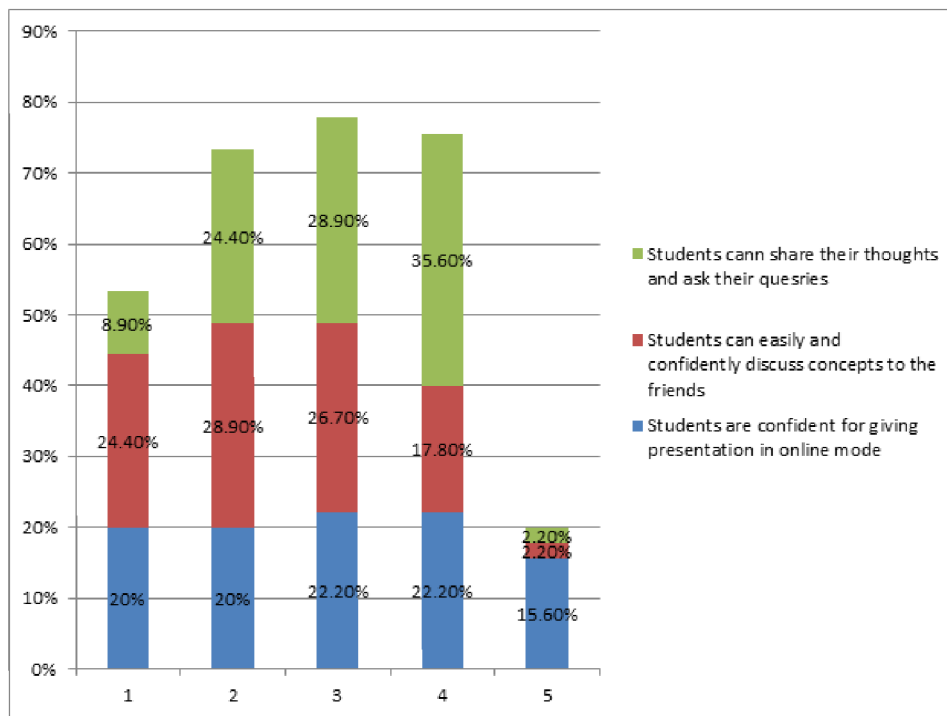
**Figure3: Motivation of the students in technology enhanced learning environment**

The next 3 items of the questionnaire are related to the motivation of the students that how motivated they are to learn by online mode. The three colors of the above graph represent the three items of the questionnaire. 33.3% students are strongly disagreeing that they enjoy the online mode of learning as physical mode, 35.6% are disagree, 15.6% are neutral, 13.3 % are agree and 2.2 are strongly agree. 24.4% students are strongly disagreeing that they feel themselves enthusiastic to learn with online mode same as physical mode whereas 35.6% are disagree, 17.8% are neutral, 15.6% are agree and 6.7% are strongly over it. 13.3% students are strongly disagreed, 15.6% are disagreed, 28.9% are neutral, 28.9% are agree and 13.3% are strongly agreed that teachers are able to motivate them to learn by giving answers of their doubts and queries properly during online class.



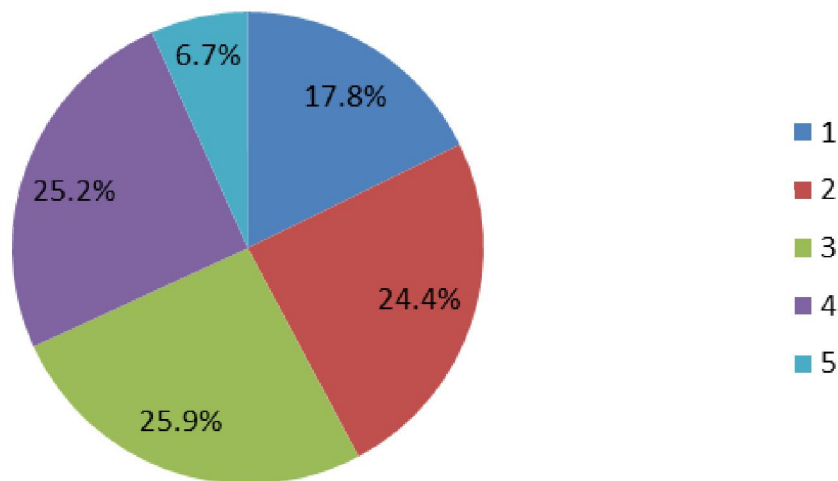
**Figure 4: Combined analysis of the second parameter (motivation)**

By combining all the responses of the three items of the second variable motivation, the combined result has been calculated. The result show that overall, 23.7% students are strongly disagreeing that they feel themselves motivated to learn with online mode of learning, whereas 28.9% are disagree, 20.7% are neutral, 19.3% are agree and 7.4% are strongly agree over it. Overall, after analyzing the consolidated responses, we can say that majority (28.9%) of the students are disagree that they feel themselves motivated to learn with online mode.



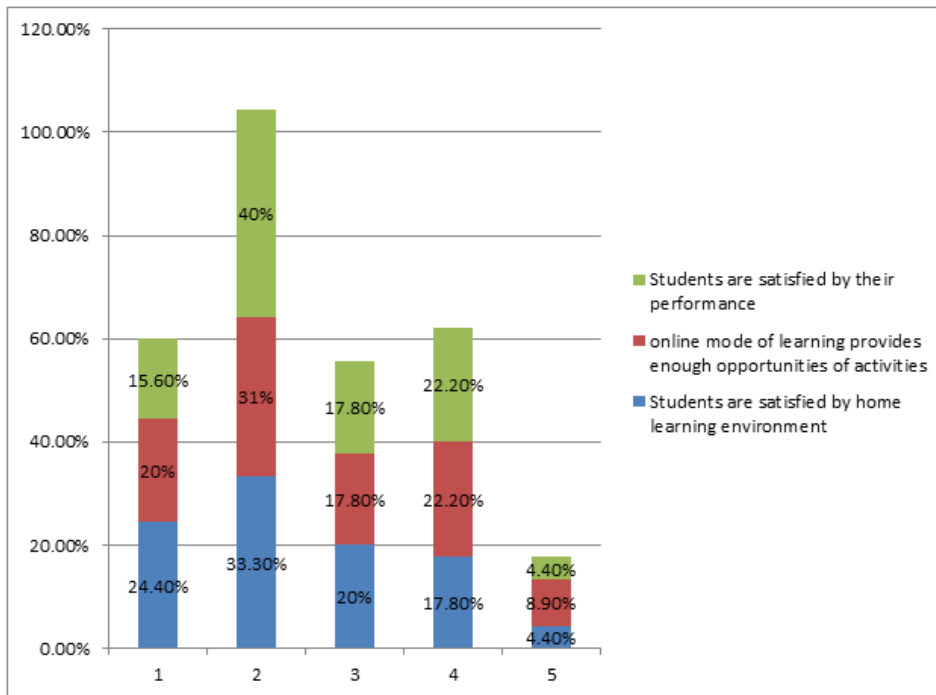
**Figure 5: Confidence level of the students in technology enhanced learning environment**

20% students are strongly disagreeing that they feel same confident and excited in online class as offline class to give any presentation or participating in any activity, whereas 20% are disagree, 22.2% are neutral, 22.2% are agree and 15.6% are strongly agree. 24.4% students are strongly disagreeing that they can easily and confidently discuss the concept with their friends in online mode, 28.9% are disagree, 26.7% are neutral, 17.8% are agree and 2.2% are strongly agree over it. 8.9% students are strongly disagreeing that they can share their thoughts and ask their queries clearly in online class, 24.4% are disagree, 28.9% are neutral, 35.6% are agree and 2.2% are strongly agree over the statement.



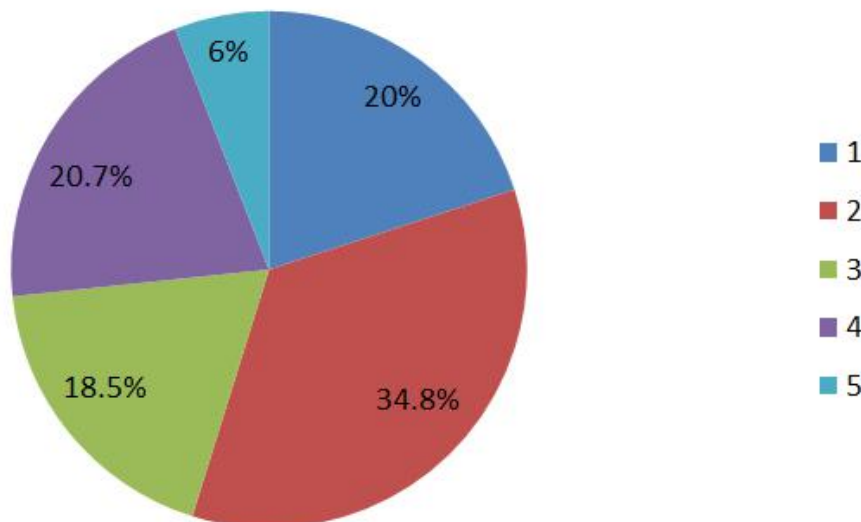
**Figure 6: Combined analysis of the third parameter (confidence)**

Overall, 17.8% students are strongly disagreed that they feel themselves confident in online mode of learning, 24.4% are disagree, 25.9% are neutral, 25.2% are agree and 6.7% students are strongly agreed. After analyzing the results, we can say that majority (25.9%) of the students are neutral over the statement that they feel themselves confident during online mode of learning.



**Figure7: Satisfaction in the studies of the students with technology enhanced learning environment**

24.4% students are strongly disagreed that they are satisfied by the learning environment at home, whereas 33.3% are disagree, 20% are neutral, 17.8% are agree and 4.4% are strongly agree. 20% students are strongly disagreed that online learning provide them enough opportunities of activities, 31.1% are disagree, 17.8% are neutral, 22.2% are agree and 8.9% are strongly agree over the statement. 15.6% students are strongly disagreed that they satisfied by their performance in online learning, 40% are disagree, 17.8% are neutral, 22.2% are agree and 4.4% students are strongly agreed over it.



**Figure8: Combined analysis of the fourth parameter (satisfaction)**

The combined results of all the three items of the variable says that overall, 20% students are strongly disagreeing that they are satisfied by the online learning, 34.8% are disagree, 18.5% are neutral, 20.7% are agree and 6% students are strongly agreeing that they are satisfied by the online learning. After observing the data, it can be said that the majority (34.8%) students are disagree that they are satisfied by their learning in online mode.

## **5. DISCUSSION OF THE RESULTS-**

After analyzing the data, it has been observed that the transition of physical classrooms into the technology enhanced learning environment brought various changes in the teaching-learning process. The present study contains four parameters to analyze the students' perception over the learning in technology enhanced learning environment which are- comfort level, motivation, confidence and satisfaction. The study reveals that majority of the students are neutral over the question of comfort level of the students with learning in technology enhanced learning environment and when if we talk about how much students are motivated to learn in online mode of learning, majority of the students are disagreed that they are motivated enough to learn. Furthermore, when we talk about confidence level of the students in technology enhanced learning class, majority of the students are neutral that they feel themselves enough confident for doing academic activities during online class and finally if we talk about how much the students are satisfied by the learning in online mode, we observe that majority of the students are disagree that they satisfied by their studies in online mode of learning. In this way it can be said that indeed the transition of physical classroom to technology enhanced learning environment during COVID-19 period has played a role of panacea for teaching-learning but it has some issues and problems that the students have to face in their studies.

## **6. IMPLICATION OF THE STUDY-**

Hard time passes by teach something new and valuable. As we all know that 'Necessity is the mother of invention'. Our necessities to live, to get education and more gave us the inspiration to find out some new dimensions in all the spheres of the life. Results, in the field of education the technology has made it possible to provide education millions of the children worldwide during the harsh time of COVID-19. We have to remember that the time is an ever-changing and moving process and we also have to keep moving ourselves with the moving passage of the time.(ÖZÜDOĞRU, 2021)"It is necessary to take measures to prevent problems that may arise in such pandemics or in emergency situations." Now the time has come that the education should not be bound only in the 4 walls of the classroom only. During the harsh period of pandemic, we have learnt that education can be given to the children even if they are not able to attend the schools physically. Same as the education can be accessible to the millions of the children who are out of the schools today.(Cook, 2020) "According to NSSO 2014 approximately 15 million children of 6-13 ages were out of school." The implication of the present study is that it tries to explore the new possibilities in the area of the education in technology enhanced learning environment by finding the issues and challenges faced by the students in online classes during COVID-19 period, so that they can be rectified to use more efficiently in the future not only in the harsh time like the pandemic but also in normal time for those children who are abandoned and who are unable to attend the schools.

## **7. CONCLUSION-**

The holistic development of the students is possible only with offline mode of learning. But if the technology driven learning will be utilized with the traditional way of learning, it will be more beneficial for the education process. We have to be prepared for each and every situation.(Mahyooob, 2020)"Some countries switched to online learning immediately because they were already prepared for online learning." There is a need to utilize the opportunities of the education provided by the technology. There is not any technology can replace a teacher and nobody can deny the importance of the schools for the holistic development but technology will enhance the learning experiences of the students and teaching competencies of the teachers if utilized in proper way.(Zalat et al., 2021)"e-learning was underutilized in the past especially in developing countries. However, the current crisis of the COVID-19 pandemic forced the entire world to rely on it for education." The study reveals that the education only by the distance mode can only make the children but not educated. The holistic development of the children can be possible only with physical mode of learning where they can experience the reality of the life and they can learn to share, to play, to laugh, to cry, to adjust and many more things with their friends and peers. But on other hand we cannot deny the importance of the technology in the field of the education. We have to utilize technology for enhancing the learning outcomes.

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