

# Study and Analysis of Effect of Online Education Due to Covid-19 on Student Performance and Evaluation

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**Abstract-** It was the goal of this study to conduct an online survey to get information about the experiences of teachers and students in online classes. In light of the present pandemic crisis, the Indian school system has recently implemented an internet delivery method for classes. As a result of COVID19, online lessons have been made mandatory for college and university teachers and students. This poll, therefore, provides an overview of their impressions and concerns. More than 400 students from local colleges and universities were included in the study's sample. The data was gathered using an online survey. For both teachers and students, the following areas are critical: high-quality and timely interaction between the professor and student, availability of technological support, structured online class modules and adjustments to fit practical classes.

**Keywords-** Online education, covid-19, student performance, technology, ICT.

## I. INTRODUCTION

There has been an increase in the use of online learning and classes in many countries around the world. The internet has made education more accessible to everyone. India's education sector has grown steadily over the years.

When it comes to higher education, India has long been a major player. Only recently have universities and colleges in India begun to consider online and distance education as an alternative to face-to-face classroom instruction, despite the fact that online and distance education have existed for some time. The Indian educational system has always relied heavily on the face-to-face classroom approach.

The adoption of online channels of education has been hindered by the familiarity and ease of offline methods and the lack of a need for online channels of education.

Education boards have mandated online classes at the college and university levels due to the current COVID-19 pandemic situation, however. Covid-19 has had a profound impact on education around the world, not just in India. Virtual classrooms have replaced physical classrooms in universities across India and the world.

In India, online education is still in its infancy. Indians have been experiencing both kinds of transition. Nowadays, in addition to traditional classroom instruction, students have the option of attending classes online. In fact, as the number of students grows, so does the demand for this resource. This has prompted educators to put in a lot of time and effort to ensure that students have access to interactive content that is rich in multimedia.

Additionally, it has been found that blogs and wikis have a positive impact on students' collaboration and reflection.

## II. MOTIVATION

University students who take online courses perform better than those who are taught in traditional classrooms, according to recent studies. E-learning techniques have been shown to improve student exam results at Carnegie Mellon University (CMU) in the United States.

As a result, an education system that can quickly adapt to changes in the technological, social, cultural, and political environment is absolutely necessary.

Students may or may not be more motivated as a result of using technology in the classroom. In fact, the student-teacher relationship has become less personal as a result of online instruction. Teaching in an online environment is a requirement for teachers. What exactly are teachers expected to do in order to keep their online students engaged and interested.

Teachers must have a thorough grasp of the underlying motivations of the students they teach. Despite the fact that students enrol in online courses with the goal of completing them, many of them fail to do so. Perhaps student motivation has something to do with whether or not online education is a success.

When it comes to motivating their students, educators should:

- Remind yourself that students need to be naturally motivated.

- Explain to their students the potential applications of the online environment.
- Encourage their students to work together and interact with one another.
- Encourage students to form study groups so that they aren't studying alone.
- Assist students in making new friends by allowing them to interact with other students online.
- By monitoring their students' online activity and providing them with constant feedback, teachers are able to engage with their students.
- Tailor their teaching materials and classrooms to their students' needs and interests.
- Explain the purpose of the designated tasks to students so that they can better engage with the online material.

Students' fear, worry, and nervousness can have a negative impact on their accessibility and motivation, so it's important to be aware of this. They could all be useful in developing new strategic teaching plans that could help lecturers influence the level of motivation in their learners.

"Learners learn more using computer-based instruction in comparison to traditional classroom methods," according to Wlodkowski Interactivity may be a contributing factor to this, according to some researchers. Higher levels of cognitive engagement and persistence are achieved as a result of this. The success of elearning methods in higher education can only be measured by the effectiveness of delivery, according to research. E-learning initiatives are therefore heavily dependent on the training of employees, which is an enormous challenge.

Many faculty members are hesitant to incorporate technology into the teaching process, as has been acknowledged. The problem is that teachers who aren't well-trained may have trouble using applications. Teachers at higher education institutions must also embrace e-learning technology if it is going to be a success in their classrooms. In order to maintain the quality of courses, new educational approaches must be implemented.

Even though the hardware and software are important, lecturers should be trained not only on how to use them, but also on how to adapt to a wide range of formal and informal teaching methods and techniques.

In order to accommodate students of varying learning styles, the instructor crafts the course material using a variety of pedagogical approaches.

A variety of methods can be used by lecturers to communicate the purpose of assessment. Tell students why they should be interested in the task at hand. To help students prepare for their future careers, consider tying the assignment to real-world examples of best practises. Identify the task's learning objective.

To achieve a desired outcome, students must meet the performance standards outlined in these objectives.

- Give advice on how long it will take to complete the task
- Boost the student's self-confidence and motivation by providing preparatory exercises that they can practise.
- To help students better understand their online exercise goals, all of these factors should be considered.

Assessments can be either formative or summative, depending on the nature of the course. Students' awareness can be gauged most effectively through a summative assessment at the end of the course.

"Homework, tests and class discussions" are examples of the student's performance or achievement, but learning "is fugitive, recordable only at great cost and inconvenience" in many classroom activities. Module assessment can be simplified by using e-learning tools, which allow for an interactive approach to course evaluation, which makes the task more manageable.

### III. ONLINE SURVEY

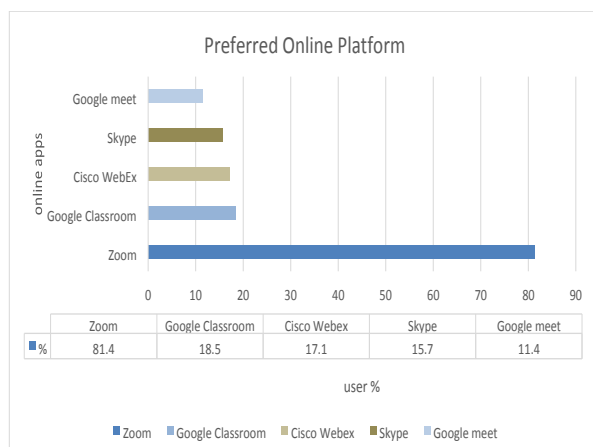
Because of the convenience of online classes and the fact that they could be taken from the comfort of their homes, teachers found them ineffective. Teachers and students were found to be disconnected, and there was a lack of interaction, as well as a lack of ability to engage the group due to technical difficulties.

According to the survey, 39 percentages of the participants questioned the safety and security of online classes. In spite of this, teachers agreed that the opportunity to conduct online classes has given them more confidence and allowed them to experiment with new teaching methods. A lack of job satisfaction was also reported while taking online classes. The lack of computer skills of some students may have hindered their ability to use the online teaching platform to its full potential. Teachers reported a lack of student interest and involvement.

As a result of students making a lot of excuses for why they couldn't attend classes (network issues, poor audio and video quality), it's difficult for the instructors to tell if they're being honest or just trying to get out of attending the classes. During the COVID-19 pandemic, educational technology apps are becoming increasingly popular.

Additionally, the survey inquired into teachers' preferred methods of conducting online classes and assigning work online.

Teachers also reported using Google Duo, YouTube, Moodle, Microsoft Team, Whatsapp, Lark, and Avaya Space as additional platforms.



The majority of students (64.2% of the sample) reported technical issues like poor connectivity, power outages, broadband issues, and poor audio and video quality as the most common problems they encountered while taking online classes. According to the teachers, 37.1 percentages of the students were disengaged and not participating in the class. A lot of excuses and lack of seriousness were reported by students in online classes. Teachers, on the other hand, may become demotivated as a result of this.

Poor attendance was cited by 15.7% of respondents as a problem, along with students not wanting to come to class because of connectivity issues in their hometowns and other factors. Some teachers reported that online teaching was more time consuming because they had to prepare ppts and additional materials for the classes, while others said that the online mode seemed too formal and lacked personal touch and didn't seem lively.

Another problem was the difficulty in determining whether or not students understood what they were being taught. There was also a problem with the ability to monitor and control students' behaviour, lack of work satisfaction, background distractions, time restraints in using online apps, and a delay in starting the class because students took a long time to register.

Another major problem was the difficulty of taking practical classes online. When it came to practical subjects like design, accounting, and math, they found it difficult to take the class according to the teacher.

The teachers were also asked to describe the positive aspects of online teaching that they felt were most important to them. The majority of students (37.1 percentages) thought that online classes were flexible and convenient because they could be accessed at any time, could be scheduled at any time, and made grading and evaluation easier. 22.8 percentage of teachers said that online teaching has improved their teaching skills, made them more technologically savvy, and given them a greater sense of self-confidence. By taking online classes

at home, 15.7 percentages of those surveyed said they were able to save time and travel costs. It was also found to be more organised and less disruptive than face-to-face classes. Innovative tools such as screen share can be used, which encourage the use of graphs and videos in teaching. The content of the classes can be preserved for future reference and use, rather than taking the class again for students who missed the class.

### 1. What do students think about taking online classes?

Online vs. classroom mode and personal factors during online classes were assessed by students in a survey. The survey found that 87.1 percentage of students said they preferred classroom teaching over online instruction. The preference for online classes was expressed by 12.9 percentages of those polled.

## IV. CONCLUSION

There is a lack of regulation of online education in India, which is limiting access to higher education. A teacher or student's level of comfort with an online class's design, structure, level of student-teacher interaction, quality and quantity of class content, and technical support all play a role in determining the success or failure of online education. In order to increase the use of online channels by students and teachers, awareness needs to be raised focusing on the convenience and accessibility aspect.

Students who are dissatisfied with the structure and design of their classes may not be able to learn effectively. With the help of various service providers and support from various colleges and universities, it is possible to make online education more effective and widely accepted in all parts of the country. Teachers and students have raised concerns about the design and methodology of online classes, which suggests that more research and study is needed to provide more detailed information for changes to occur.

College and university administrators should focus on creating a structured and user-friendly environment for online education, one that is accessible to everyone without putting a financial burden on students and teachers. To ensure the success of online classes, it is imperative that teachers receive adequate technological training in the methods of conducting online classes.

However, even though the sample size is small, the data can shed light on the general issues that teachers and students face in online classes.. India's online higher education is still in its early stages of development, so it's important to have a clear understanding of the challenges and expectations of both students and teachers.

According to the survey results, there was a high degree of agreement between faculty and students' views of online teaching. Both reflected and supported each other's views.

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