

The Effects of the COVID-19 Pandemic on the Educational System

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Abstract—*The global impact of pandemic COVID-19 can be seen in every industry. This has a negative impact on India's and the world's education sectors. It has imposed a global lockdown, which has had a negative impact on students' lives. Learners were unable to transfer schools/colleges, and all educational activities in India were halted. The COVID-19 epidemic has shown us that change is unavoidable. It has acted as a spur for educational institutions to grow and use platforms using previously unexplored technologies. To wash away the possibility of a pandemic, the education sector has been striving to survive crises with a fresh method and solving the issues.*

Keywords: COVID-19, Education, Impact, platforms.

1. INTRODUCTION

Online learning and classes are becoming a bigger element of the education system all around the world. Education has become more convenient and accessible to everyone thanks to the internet. In India, the education industry is constantly expanding. When it comes to higher education, India is one of the world's largest markets. Though online and remote courses have been for a long time, the adoption of the online way of taking classes at universities and colleges, as opposed to the traditional face-to-face classroom approach, has only been considered in the last few years in India.

When it comes to India's educational system, the face-to-face classroom method has traditionally been the most popular. The adoption of online channels of education has been hampered by familiarity and convenience of use of offline techniques, as well as a lack of demand for online teaching methods. However,

in light of the current COVID-19 epidemic, educational boards have mandated the delivery of online classes at the college and university levels. Covid-19 has resulted in a significant shift in the educational system, not only in India but throughout the world. Virtual classes have taken over at universities across India and around the world, eliminating actual classrooms. In India, online education is still in its early stages [1].

The World Health Organization declared COVID-19 a pandemic on March 11, 2020. This epidemic began in China's Wuhan city and has spread to a number of countries.

The pandemic has slowed the rise of nations where novel coronavirus cases have been reported. Countries are implementing various methods, such as lockdown, to reduce crowding. Non-attendance at work, school closures, suspension of transportation services, and so on [2].

2. IMPACT OF COVID-19 ON THE EDUCATION SYSTEM

State governments began closing schools and colleges across the country to combat the spread of the new coronavirus. It was announced as a temporary measure to prevent the crowds in the second week of March. The government initially declared the suspension of schools for a month, but the time frame was steadily extended, and it is unclear when they will return[3].

3. IMPACT OF COVID-19 ON SCHOOLS

The structure of learning and schooling has been changed by the closing of schools. To begin with, it had an impact on teaching and assessment methods. Only a

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few private schools use online teaching methods, and they are few in taking online programs. Children at those schools take classes online. Low-income private and public schools, on the other hand, have been closed down and do not have access to an eLearning solution. It is interfering with kids' ability to learn. The change in teaching approach has caused a slew of problems for parents[4].

4. IMPACT OF COVID-19 ON HIGHER EDUCATION

The closure of universities has had an impact on university students' learning. One immediate solution is required to ensure continuation in institutes and universities. The online teaching style is used to keep the class running smoothly. Universities use learning management software and open-source digital learning solutions to run online classes. University closures have had an impact on university students' learning. To assure the continuation of institutes and universities, one immediate answer is required. To keep the class on track, the instructor uses an online teaching technique. Universities provide online classes using learning management software and open-source digital learning solutions [5].

The data and information used in this study were gathered from a variety of national and international sources on the COVID-19 epidemic. Information was gathered from different reliable websites. The impact of COVID-19 on the educational system is discussed in some papers and e-contents.

During Covid-19, the Indian government took educational initiatives. The union government declared a statewide lockdown of all educational institutions on March 16, 2020. All secondary and higher secondary school examinations in India have been postponed by the CBSE. The CBSE has issued amended guidelines for test centers to conduct exams with a minimum space of one meter between students taking the exam and a class size of no more than 24 pupils.

In response to the problem of colleges and institutions closing, the Indian government, as well as state governments and corporate companies, have adopted appropriate measures. The Ministry of Human Resource Development (MHRD) has made a number of measures to help students continue their education, including online portals and instructional channels available via Direct to Home TV and radio. Students

use popular social media tools like WhatsApp, Zoom, Google Meet, Telegram, Youtube live, Facebook Live, and others for online teaching and learning during the lockdown. The MHRD's ICT project (eBroucher-<https://mhrd.gov.in/ict-initiatives>) is a one-of-a-kind portal that brings together all digital resources for online learning.

The following are the MHRD's digital projects for secondary and higher education during COVID-19: [6]

1. **Diksha portal** contains curriculum-aligned e-Learning content for students, teachers, and parents, such as video lessons, worksheets, textbooks, and assessments. The content was generated by more than 250 instructors who teach in several languages under the supervision of the country's national boards of education (CBSE) and the National Council of Educational Research and Training (NCERT)[7].
2. **NCERT's e-Pathshala** is a multilingual e-Learning software for classes 1 to 12. In many languages, including Hindi, Urdu, and English, the app contains books, videos, audio, and other content intended for students, educators, and parents. NCERT has uploaded the number of books for classes 1 to 12 in several languages on this web page.
3. **The National Repository of Open Educational Resources (NROER)** portal offers a variety of resources in many languages for students and teachers, including books, interactive modules, and videos, as well as a variety of STEM-based games.
4. **Swayam** is a national online education platform with 1900 courses encompassing school (grades 9 to 12) and higher education (undergraduate and postgraduate programs) in a variety of areas such as engineering, arts, social sciences, law, and management.
5. **Swayam Prabha** offers 32 DTH TV channels with educational programming available 24 hours a day, seven days a week. These channels may be seen everywhere in the country with a DD Free Dish Set Top Box and Antenna[8].
6. **e-PG Pathshala** is for postgraduate students. During the lockdown, postgraduate students can use this platform to access e-books, online courses,

and study resources. The value of this platform is that kids can use these resources without having to use the internet for the entire day. IP address: <https://epgp.inflibnet.ac.in>.

7. **ZOOM** Many people prefer it for videoconferencing because of its well-balanced features. The user interface is straightforward and easy, and it integrates with “Outlook.” One-click meetings may be started from computers, mobile devices, and tablets. It is simple and quick to set up[7].
8. **Google MEET** is a popular video conferencing software due to its accessibility, affordability, superb inbuilt video conferencing functionality and strict security safeguards. It’s easy to set up virtual conferences for up to 250 participants, and it’s available on Android, iOS, and Chrome [9].
9. **Google Classroom** is a free online learning environment. Google Classroom is a section of “Google for Education,” which is aimed at higher-education teachers and students. It’s been available as an add-on service in G Suit’s basic, business, and enterprise versions since 2018. The most significant advantage is that it is simple to use and accessible to anyone.
10. **Microsoft Teams** is a collaboration tool developed by Microsoft. Microsoft Teams offers a platform that allows users to move between chat and video conferencing in real-time, as well as native Mac features. Android, iOS, and Chrome are all supported. You can plan a video or audio meetings with a single individual or a group of people, as well as webinars and large meetings with up to 10,000 people.
11. **GoToMeeting** It is one of the most widely used online meeting programs. It has a lot of features, and even the free plan includes a meeting. GoToMeeting is a straightforward platform with a straightforward user experience.
12. **Say Namaste** is an Indian app that was created by an Indian company. It was previously only available in an online version, but it is now also available for cellphones. The app is simple to use and provides a positive user experience. One meeting room is set aside for video conferencing. A code must be produced before a meeting can begin, and it can be communicated via email or chat box.

5. POSITIVE IMPACT OF COVID-19 ON EDUCATION

Though the emergence of COVID-19 has had a number of detrimental effects on schooling, Indian educational institutions have acknowledged the challenges and are doing their best to provide smooth support services to students during the pandemic. The Indian education system now has the possibility to evolve from a traditional system into a modern one. The following are some of the positive effects that can be evaluated[8].

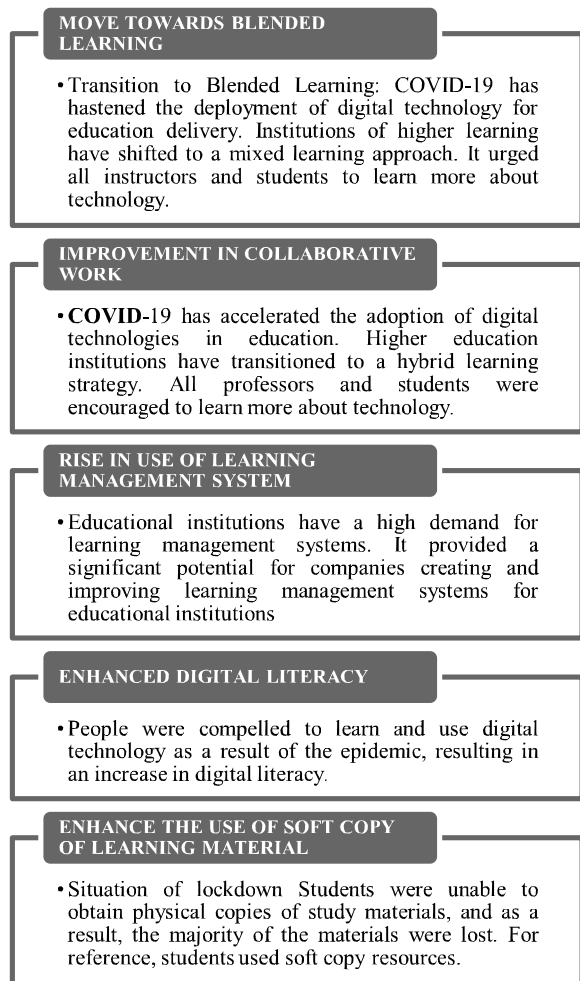


Figure 1: Positive Impact of Covid-19 on Education

6. NEGATIVE IMPACT OF COVID-19 ON EDUCATION

The outbreak of COVID-19 has wreaked havoc on the education system. It has had numerous detrimental effects on education, some of which are listed here [10].

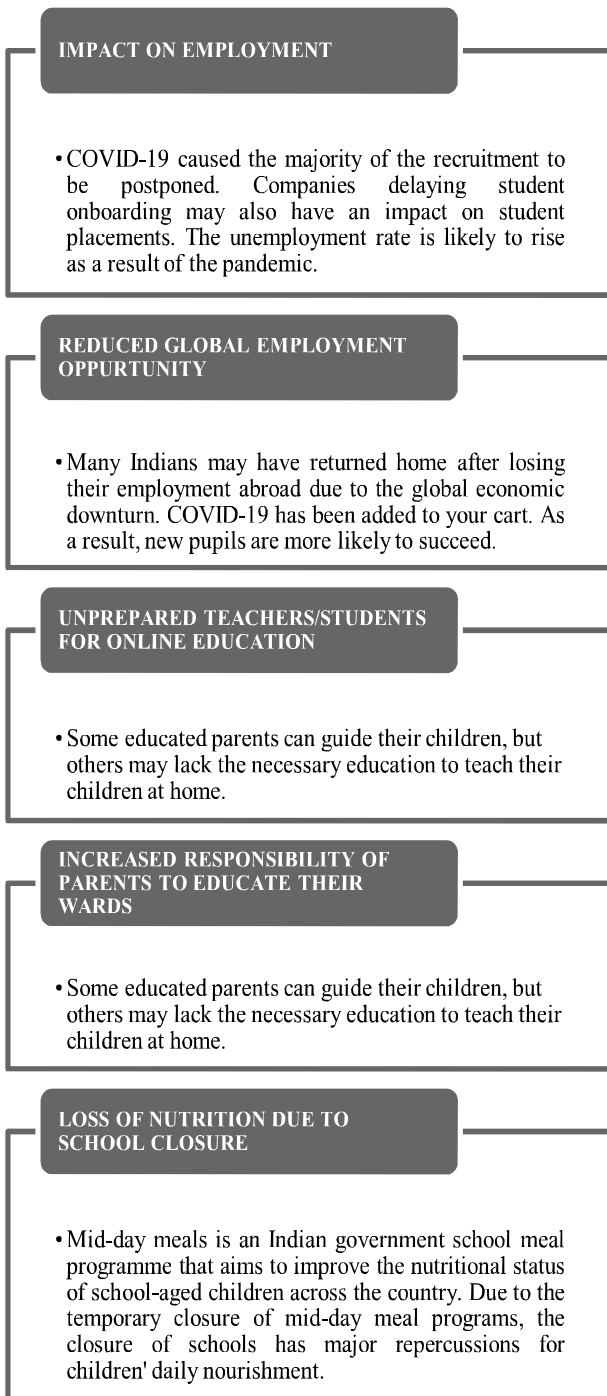


Figure 2: Negative Impact of Covid-19 On Education

7. DATA COLLECTION

The purpose of the survey was to learn more about students' experiences and perceptions of the recently introduced online modality of education. The survey consists of 40 responses and their viewpoint.

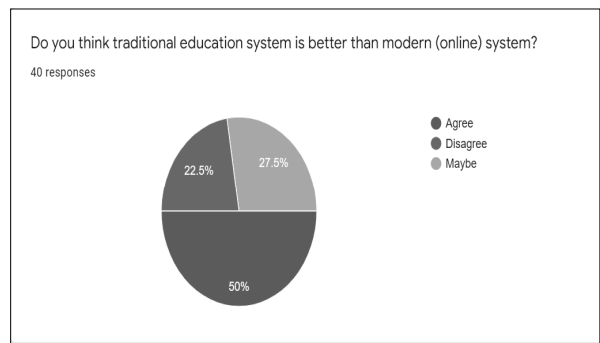


Figure 3: Traditional Education system VS Online System

According to the survey we have conducted 27.5% students think that the traditional education system is better and 22.5% students are against the motion and 50% students thinks it is better approach to the education system.

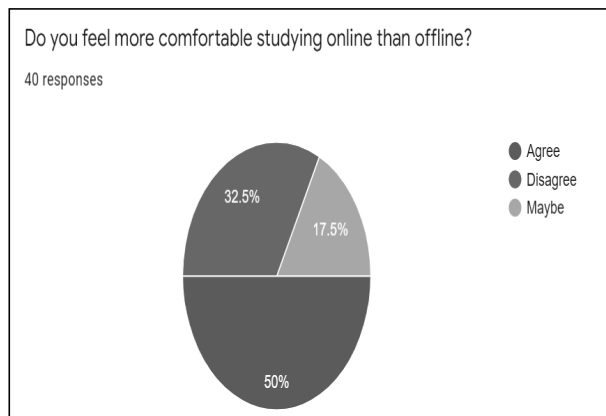


Figure 4: Comfortableness of Education

50% students think that the online system was more comfortable because their time for travelling was saving.

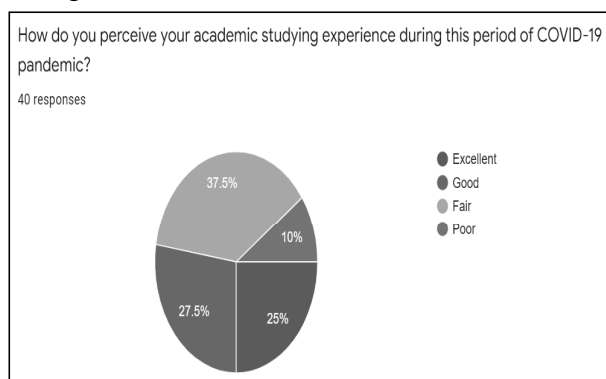


Figure 5: Journey of Education during COVID-19

The journey of students in the field of education under the period of COVID-19 is good for 27.5%, fair for

37.5%, excellent for 25% and 10% poor as per their circumstances.

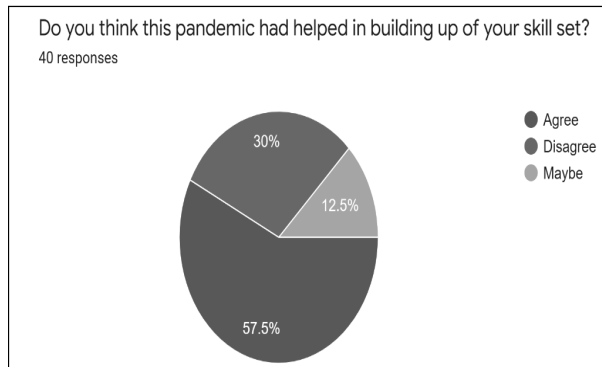


Figure 6: Pandemic helped in building of skills

Pandemic had created more opportunities to build the skillset according to the students will. So the responses they have given with the motion are 57.5% and against the motion is 30%.

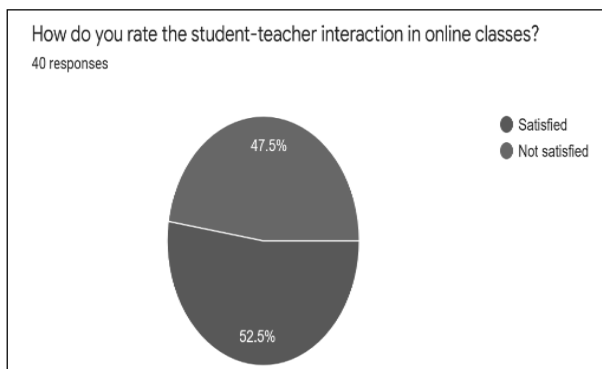


Figure 7: Student-Teacher Interaction in Online Classes

Since the classes were taken online mode so student-teacher interaction has been declined. But teachers have done an amazing job in interacting with students. 47.5% are satisfied and 52.5% aren't.

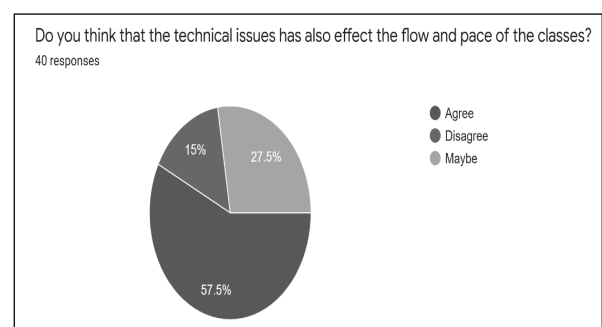


Figure 8: Technical Issues During online classes

57.5% of students' response tells us that technical issues like losing connection or electricity problems have

created a glitch in classes while 27.5% think maybe they have created problems and 15% certainly thinks that technical issue has created problems.

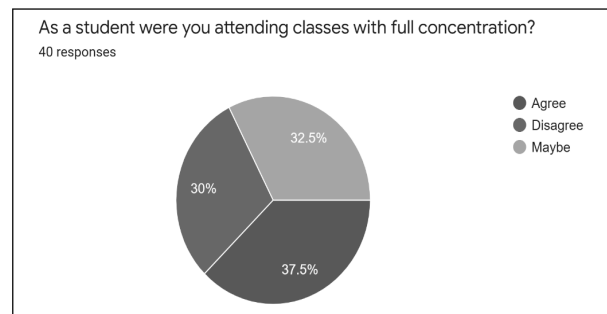


Figure 9: Concentration of students on online studies

37.5% of students have submitted that they were attending classes with full attention and 30% submitted their opinion with disagreement.

Do you think the quality of discussion is high in online classes?
40 responses

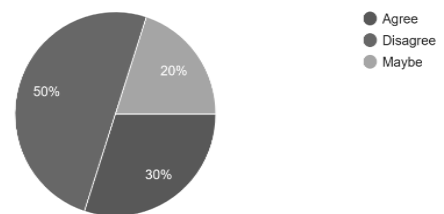


Figure 10: quality of Discussion during online classes

Since the online system lacks in physical interaction so the quality of discussion has been not up to the mark. 50% student's response said that they are against with the motion that they had not had a healthy discussion and 30% thinks they had a quality of discussion.

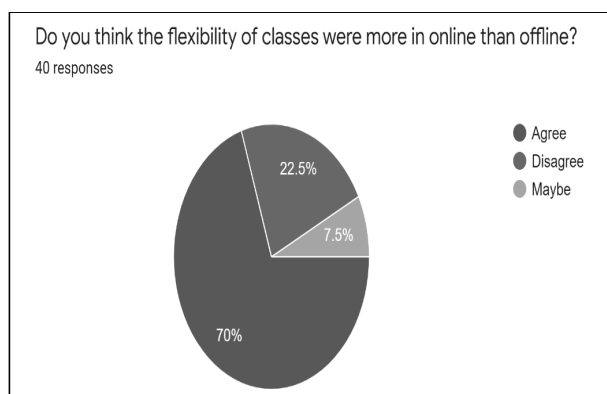


Figure 11: Flexibility of classes during the pandemic

Flexibility in classes was high according to 70% of students' reviews and 22.5% were in disagreement.

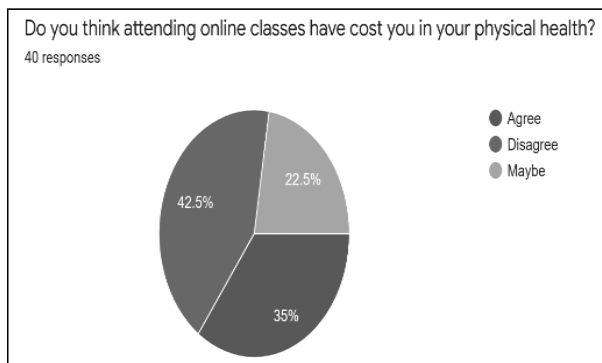


Figure 12: Effect of online classes on physical health

According to the student's review, 35% think that the online system has caused their eye site many problems and 42.5% are disagreeing that the online classes hadn't caused them any physical health.

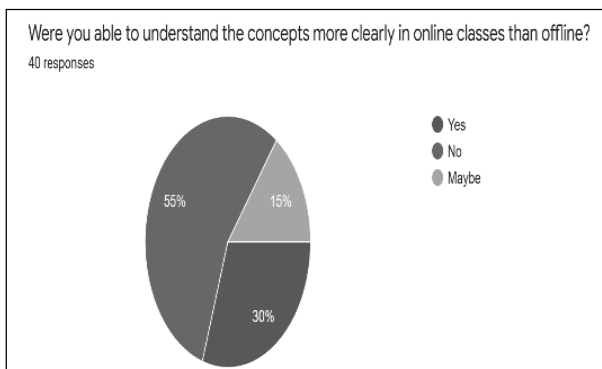


Figure 13: Understanding level during online classes

55% of student review says that they weren't able to understand clearly in online classes as in offline and 35% of students' review state they were able to understand.

Do you think there was less disturbance in online classes than offline?
40 responses

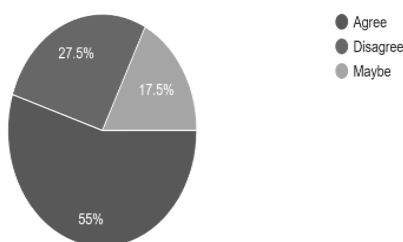


Figure 14: Disturbance during online classes

55% are agreeing with the fact that there were fewer disturbances in online classes and 27.5% are disagreeing with the statement.

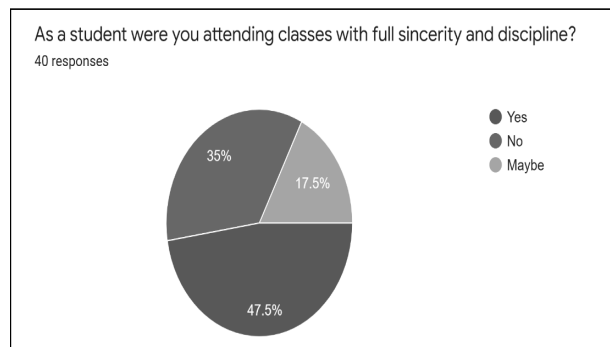


Figure 15: Student's sincerity and discipline in online classes

According to the survey, 47.5% of students have agreed with the fact that they were attending classes with full discipline and sincerity and 35% said they weren't.

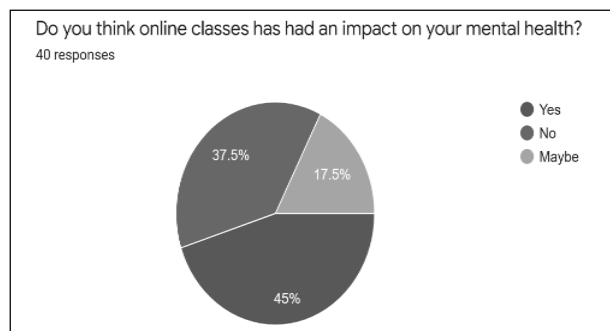


Figure 16: Impact of online classes on mental health

45% of review are agreeing with that online classes has had created an impact on their mental health and 37.5% of review are disagreeing.

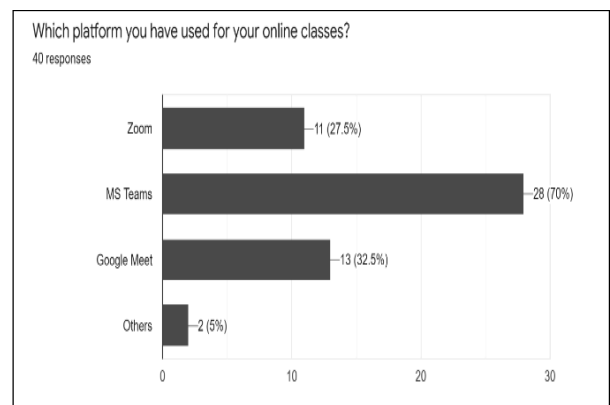


Figure 17: Platform used for online classes

Online classes have been conducted on an online platform. 70% of people have chosen that they have used MS TEAMS, 32.5% have chosen GOOGLE MEET, and 27.5% have chosen the ZOOM meeting platform.

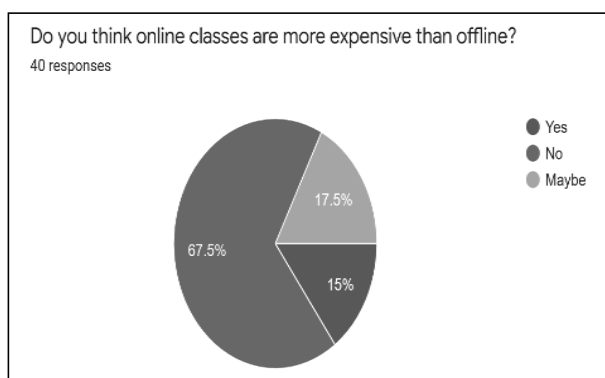


Figure 18: Online classes are expensive

67.5% submitted their viewpoint by stating that the online system isn't expensive as compared to offline and 15% submitted the opposite.

8. CONCLUSION

Although various studies have been conducted, the impact of the COVID-19 pandemic on teaching and learning around the world concludes that appropriate pedagogy and platforms for different class levels of higher secondary, middle, and primary education need to be explored further in developing countries.

Students' learning is being disrupted by the closing of schools, colleges, and universities, as well as internal and public tests for qualifications. The traditional model of instruction has been supplanted by online instruction. On the one hand, online teaching provides students with the opportunity to study; on the other hand, there are a

number of challenges associated with the new teaching style. COVID-19 has had a significant impact on India's education industry. It has created several challenges, but it has also created numerous opportunities.

Universities and the Indian government, on the other hand, are working nonstop to find a solution to this problem. The goal should be to employ digital technology to improve the lives of millions of young people.

There are other similar platforms to support this online teaching, and the capabilities each software may supply are virtually endless, but there is no perfect video conferencing service. Zoom is ideal for any type of health communication that involves a big number of people.

9. REFERENCES

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