



# Transition in Teaching-Learning Process during Pandemic Period: A Review Paper (Covid -19)

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## Abstract

Covid -19 has changed all most all the perspectives of life. Every family is affected by this pandemic either directly and indirectly. Everyone is so tensed due to the deadly virus and wants to be protected from this virus. Of course, some were also taking this virus lightly. In this pandemic period, many families lost their loved ones. Every sector has a large drop in their work process. The same happened with the education sector. The school and universities were not at all prepared for the online classes. But thanks to some of the existing online platforms through which the school/universities remained connected to their student. In this paper, mainly researches related to changes in the teaching-learning process especially during the COVID period have been reviewed based on this, it can be inferred that in this period various modes of online education have played a very significant role.

**Keywords-** *Pandemic, Online Education*

## Introduction-

Online education is a system through which students and teachers interact virtually on a system with each other with the help of the internet. After the revolution of digitalization in our country, people have started using online modes for shopping, booking tickets, ordering meals, studying, etc. But the teaching-learning method in online mode before the covid was minor. Student use to take help of you tube and other platform just to understand the concept in much more deeper form. But as the lockdown was done by the government due to the Coronavirus, the educational institute had no idea what to do next. Institute took a quick decision by starting the online class on the existing application like zoom app, google meet, etc. Somehow the educational institute managed to start its online class. But the online pedagogy were still lacking.

The change in the education industry was all of a sudden. No one was ready for an online class for a long period. As we know that the necessity is the mother of invention. The education industry needed some new change that can co-operate with both students and teachers. Strong willpower is required for innovative change. This change can occur only when there are both internal and external forces held together. A simple framework given by Kurt Lewin (1958) shows the process of organizational change. He categorizes his theory in three steps-:

1. Unfreezing
2. Changing
3. Refreezing

Step 1. Unfreezing refers to moving from an existing area to a new area, that is, moving from an existing comfort zone to a new zone. This will increase the productivity of the industry according to the needs of the new situation. In the education industry, it is a shift from face-to-face teaching to virtual classrooms mode. This is the only way to change the existing scene. The thawing phase is also important because classroom learning is avoided in the current situation. After all, the pandemic is at its peak and is spreading from person to person when they physically come close to each other. Therefore, offline classrooms must be transformed from online classrooms.

Step 2. Changing phase is the actual phase of shifting from one old concept to a new concept i.e. putting new innovative ideas into practice. This is the stage when people are ready to accept new changes. This stage requires planning, necessary communication, and the active participation of people to produce the necessary changes. This stage is the most critical because it is fraught with risks and uncertainties of technical failure. New technologies need to be tested frequently before they are applied to general education. For online education to achieve the same or even better results, new thinking skills and a diversified view of new technological development are required.

Step3- Refreezing means that once the change is successfully implemented in general education and adopted by students and teachers, it can be implemented for the long-term future of the education system. This stage provides a better knowledge transfer environment for teachers and students. This stage must not only meet the needs of technology but also adapt to the overall development of the country.

### **Response of Education Sector During Pandemic**

Different countries have developed different online resources for their students. As in India, there is a platform called BYJU'S, that has become one of the most successful EduTechs. It offers courses from 1 to 12, as well as courses for aspiring students of competitive exams. Approximately 50 million students have signed up and 3.5 million paid subscriptions, making it the most popular educational platform in the world. Tencent Classroom was created by the Chinese government in mid-February so that students can continue learning through online education. Lark was originally developed by Byte Dance, which was produced in collaboration with Singapore. It provides unlimited video conferencing, 200GB of free cloud storage, unlimited searchable chat logs, and built-in support for human translation in over 100 languages. Chinese multinational company Alibaba designed an online classroom software called Ding Talk. Roughly 100,000 new Alibaba Cloud servers were installed in just two hours. It also shows new expansion capabilities. Bitesize Daily is a powerful learning tool developed by the BBC and launched on April 20. It primarily provides 14 weeks of curriculum-based learning for children across the UK. The famous Manchester City footballer Sergio Agüero (Sergio Agüero) also contributed some content.

### **Reviews related to Teaching-Learning Process during Pandemic Period**

- Arora and Srinivasan (2020) organized a survey on the impact of the online teaching process during the pandemic period. They ranked the pros and cons of using online technology. They considered the challenge of not accepting virtual courses. For this study, they collected responses from 341 teachers from the Ghaziabad Higher Education Institute. The survey results reached the point where teachers who adopted online teaching did not get the expected benefits. The main reason for the conclusion is that teachers do not understand the application of technology.
- Almonacid Fierro et al. (2021) conducted a survey based on how Chilean teachers use and develop pedagogy in virtual classrooms. Physical education teachers from the Maule-Chile region formulated 14 open-ended questions through the Zoom team. The restrictions on the use of online courses have had a great impact on the lives of students and teachers.
- Lepp et al. (2021) conducted a study on how teachers' decisions to use different aids can help change the virtual classroom environment. The research was mainly based on open-ended questions of 16 Estonian primary school teachers. The results show that different teaching aids related to online learning have different effects.
- Rasmitadila and others. (2020) conducted a study that found the views of Indonesian elementary school teachers on online learning, called "homeschooling". The research is based on a survey and public interviews with 67 elementary school teachers. Indonesia's achievements during the pandemic are due to the people-centered curriculum, where stakeholders work with teachers, schools, parents, the community, and of course, the community's team to embrace new technologies to government.

- Mailizar (May 2020) studied the opinions of mathematics teachers on educational pathways during the pandemic. The standard is based on four barrier levels, namely, school, teacher, student, and curriculum. The study was based on an online questionnaire and involved 159 applicants from Indonesian high schools. The results show that there is a direct correlation between student-related lockdown and online learning.
  - Mishra et al. (2020) discovered mandatory elements of educational pathways during the COVID19 pandemic. The research also shows how the existing resources of educational organizations can effectively transform classroom education into virtual education with the help of computer-generated courses. Due to the mandatory closure of schools and colleges by the Indian government, Mizoram University established its learning management system (MZULMS) after suspending the face-to-face learning process.
  - Irene and others. (2020) conducted a study on how the epidemic affects online education based on teachers' prior skills that understand ICT use and teacher gender. The research is based on 2 surveys completed by 200 Dutch educators. It turns out that even after the Covid era was completely gone, teachers are now more aware of the use of technology in the classroom.
  - Rana et al. (2020) analyzed the consequences of emotional anxiety in teachers and students who adopt new technologies. The topic of this study is related to the various fears of using Google Meet as online education. The data found in the research were reviewed using partial least squares structural equation models (PLS-SEM) and machine learning algorithms.
  - Budi Azhari and Iwan Fajri (2021) conducted research, focusing on the challenges faced by educators, the introduction of online learning, and strategies for solving various problems in non-face-to-face learning applications. During this apprenticeship, information was collected from science and mathematics teachers in Aceh Province, Indonesia. The research is based on interviews with 6 teachers and questionnaires collected from 353 teachers to obtain detailed statistics. The results show that teachers who have never used technology in education find it difficult to keep up with students. The main reason is that the teacher's salary is not enough, he can't even afford a laptop, or he can't drive.
  - Jijun Yao et al. (2020) The educational system during the pandemic was studied through semi-natural experiments. He collected 1024 responses from Guiyang No. 8 High School and another similar school with the same conditions. The research is based on the evaluation criteria of pre-recorded courses or lives online courses. The results show that live online courses are more beneficial for students. Findings of the Studies
1. Part of the results shows that the online platform is not effective because students and teachers are still unaware of the usefulness of technology, have doubts about the practicality of virtual courses, and lack concentration. The main disadvantages of online courses are lack of concentration, lack of interaction due to connection problems, and insufficient personal contact. (Arora and Srinivasan, 2020)
  2. Research results show that due to the limitations of online courses, the lifestyles of teachers and students have undergone major changes. Teachers have to switch to different online platforms to keep in touch with students. Also, since it is impossible to monitor students behind the screen, it is impossible to verify student learning. (AlmonacidFierro et al., 2021)
  3. The dramatic shift in online education from topics to emphasis on socialization and inspiration of students seems to be an exception to this new situation. (Lip et al., 2021)
  4. The research demonstrates the teaching changes in teaching by producing online learning results based on the students' family background and the students' learning experience. (Rasmitadila et al., 2020)
  5. The research results show that the situation of educators does not affect the level of barriers to ICT use. The educator can overcome the obstacles of online learning by improving their professional level. (Mail 2020)
  6. Teachers' professionalism is of utmost importance to implement technology in teaching. There are positive and negative experiences of e- teaching. The positive effect is that the e-content can be easily delivered to the student in a very short time. The negative effect is that downloading materials can be not so easy for unskilled students. (Mishra et al. 2020)
  7. The study shows the interrelation between fear and using ICT. It is connected with perceived ease of use (PEOU) and perceived usefulness (PU). (Irene et al., 2020)
  8. The study depicted various results such as fear of education failure, fear due to family lockdown situation, and fear of losing social relationships are the most common types of problems that may be

faced by educators and learners. (Rana et al. 2020)

9. Due to economic factors, restricted Internet access, and lack of guidance, few teachers cannot use e-learning. But as time goes by, teachers can adapt to the environmental conditions and the characteristics of students autonomously in the process of completing e-learning. (Budi Azhari & Iwan Fajri, 2021)
10. It is emphasized that the educator must not only play the role of imparting knowledge but must also play the role of “companion” and “leader” and through effective communication and guidance. (Jijun Yao et al.,2020)

## Conclusion

After reviewing the different research papers, the following conclusions were drawn-:

1. The teachers who were not well equipped with the online mode faced problems in using different tools of online teaching. The teacher who does not have any knowledge of online teaching went on online teaching transactions without fixing any accountability.
2. A student who was in the city for studying went back to their remote rural areas, where no 4G internet or broadband services was available. They faced many problems such as poor connectivity and interrupted electricity. In this way, two-way interaction was hampered.
3. The fear of COVID is arising day by day. So, students are also faced mental distraction and stress. Many families got affected by the COVID. So, the students had to leave their studies for caring their affected ones. This also created anxiety in the students.
4. Online education also added an extra economic burden on the poor family. They cannot afford the costly net pack. Since the academic year varies from one year to three years, they have to buy a recharge monthly continuously. Many students faced this economic issue.
5. Many difficulties and problems related to modern technology from download errors, installation problems, connection problems, audio, and video problems were encountered.
6. Sometimes students found online teaching boring and unengaging.
7. Students want two-way interaction, which is sometimes difficult to do in online education.
8. Online content is purely theoretical and does not allow students to practice and learn effectively. The practicality of the sciences is greatly hindered. Students find the lack of community, difficulty understanding learning goals, and technical issues as major barriers to online learning.
9. Students have proven to be insufficiently prepared to balance their professional, family, and social life with their academic life in an online learning environment.

## Recommendations

There are many problems with online education, but we cannot ignore their necessity in these COVID times. This paper recommends some of the solutions-

1. Even the prerecording video lectures are less effective, the recording of the lecture must be given to the student after the lecture finishes. It will reduce the fear of losing the content due to loss of connectivity. But online live classes should be the priority for the student.
2. Online courses must be dynamic, interesting, and interactive so that students do not get bored.
3. Each student should be provided with personal attention in online classes only so that they can easily acclimatize to this learning atmosphere. The teacher's way of interaction should be always well-mannered, so that students may not deviate from an online class. For example, if the teacher asks the student harshly in the online class, then the student might get depressed and he/she may not attend the class.
4. The quality of the classes can be made better by using different audio-video clips in their content so that students may not get bored. This will improve the attention of the student toward the learning.
5. Effective online teaching can be enhanced by formative assessment, facilitating student feedback, allowing students to ask questions, and broadening their views on the content of the course.
6. Institutions should focus on teaching issues and emphasize collaborative learning, case learning, and project-based learning through online guidance.
7. A practical approach to the studies can be done through apps such O-Labs. Blended learning can be done when the corona cases may decline.

The education institution is the basics foundation of a new society, so they must focus on new technology along with the reconstruction of education so that the students can make feel proud for their parents, society, and their nation. The leading education industries should make online education more flexible so that the weaker section of society may get a complete education.

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