

**INNOVATIVE APPROACHES OF TEACHING AND LEARNING METHODS AFTER  
COVID 19**

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**Abstract**

The outbreak Covid-19 viral infection throughout the world made all the universities, colleges and schools came to halt because of the spread of the highly contagious coronavirus. The paradigm shift of physical classes to online classes brought many difficulties in students, teachers as well as parents to continue the education in online mode. This sudden transformation in education has brought many challenges in adopting new strategies of teaching learning methods, usage of technology and ICT tools and most importantly availability of internet in rural areas for receiving the online education. In this paper, it is aimed to discuss the various online learning resources and the challenges faced by the students, teachers and parents. There is a need to design and develop free online learning resources and free technology to all the students.

**Keywords:** COVID-19, Pandemic, online education, Learners, Educator

**Introduction**

The COVID-19 pandemic WHO (2020b) has hit the human life hardest affecting the health, education, Business, festivals and economy of the country (Fernando R 2020). A significant impact is seen in the education system due to the closing of educational institutions. Following Covid protocol and maintaining distance is necessary and precautionary measures need to follow to avoid the transmission of the spread of disease, that has affected educational systems worldwide, mostly in under developed and developing countries. Under these pandemic circumstances, Government has decided to temporarily close the all-educational institutions including Government and Private institutions to reduce the spread of COVID-19 shift the teaching learning to online mode (Niranjan, 2020).

The educational institutions had to take up innovative methods towards teaching and learning methods that were unknown for many institutions and educators within in record time as the lockdown was announced all suddenly. As there was no physical classroom learning due to lockdown, face-to-face instruction and collaborating learning was not possible (Daniel, 2020), Educators all over the world come up with new strategies for teaching online to keep students engaged to grow their skills and abilities during such disruptive times. Although educators didn't get much chance to prepare themselves' for a complete switch to digital classes, Educators have put in lot efforts in revising the curriculum resources for conducting online classes and make them interesting and motivating to students in acquiring the skills through knowledge (Cheema, M.S. 2020).

To help teachers overcome this unexpected switching, many educational institutions have also started professional development resources to improve the technical skills of teachers by providing hands-on-experience to various learning management software's and applications and also in selection of digital learning tools to create the content interesting such as in making attractive PowerPoint presentations, videos, assignments and assessments (Pellegrino, J. W., et al 2012 and UNESCO, 2020a). Educational institutions also encouraged educators in ensuring continuous learning of students using different alternative methods like providing recorded video lessons, e-books, Virtual labs, online assessments and supporting them in various ways by technical assistance,

learning centric methods and arranging webinars. Many innovative methods were followed to keep the student's attention and interest in learning through online teaching and artificial intelligence.

Government and MHRD have also taken up initiation to reach education to all the streams of students including urban and rural areas at their homes through alternate means of delivery such as, distribution of textbooks at homes of learners, telephonic guidance by teachers, online and digital content through TV and radio, activity-based learning, Online platforms, etc. The COVID-19 pandemic has also forced all of us to make substantial changes to our daily lives, especially entered in to online learning. The teachers, students and parents need to be always updated time to time with new technologies of the educational system and build stronger to face any challenge in the future (Zhu & Liu, 2020).

### **Online Learning Methods**

Educators are using Synchronous online conferencing systems such as Zoom meetings, Microsoft Teams, Google Classrooms, Cloud Meeting, Cisco WebEx, Udemy, Coursera, etc. for online classrooms and also to record presentations/ video lessons for individual learners to watch later. Furthermore, online teaching methods helped educators to make teaching and learning more interactive by creating videos using documents, excel sheets PDFs, PowerPoint slides, discussion forums for students, whiteboard features, multiple-choice quizzes with instant analysis and feedback, grading of assignments, exams, and etc.,

### **Online Learning Platforms**

SWAYAM MOOCs platform is one of the world's largest online free e-learning platform portal aimed to attain the three fundamental principles of Education Policy viz., Access, Equity and Quality that covers school/vocational, under-graduate, post graduate, engineering and various other Professional Courses.

e-Pathshala platform developed by NCERT and CIET offers a number of educational resources, such as NCERT textbooks for classes 1-12, audio-visual resources by NCERT, periodicals, supplements, teacher training modules and a variety of other print and non-print materials. These materials is available for download by the user with no limits on downloads.

T-SAT is one of the best wireless technology and Satellite Communications to Educate, Enlighten and Empower the people of Telangana State using audio-visual by taking the best of the faculty.

Many other Private platforms like BYJU'S, Khan Academy, etc., help the young and educated with right guidance to employment, coaching to competitive exams, vocational training and skill development.

### **Challenges Faced by the Students**

The traditional schooling which includes a physical building, class rooms, books, boards, benches has been changed to smart phones, zoom classes, Google class rooms, Pdf due to the pandemic.

Prioritizing our health, there is closure of educational institutions physically to maintain social distance for the welfare of the students and staff. It was only because of development of technology it doesn't become a lost year though we have learning loss. The National Sample Survey of 2017 have reported 17% of rural households and 42% of urban households have internet facilities and 6% of rural household and 25% of urban household had access to a computer and may be a slight increase in their percentage until the arise of pandemic. There are many issues faced by the students in E-learning which is the only way to connect during the pandemic.

### **No adequate Internet facilities**

In most of rural areas there are no adequate Internet facilities where the education is only through online mode.

To avoid this problem the government has provided some broadcasting channels like Tsat ,DD yadagiri, Dd saptagiri etc through which the students they can hear classes from television .There

was also electricity problem in rural areas where they can't get access even to television. The students in rural areas also faced lot of problems due to decrease in day to day interaction with teachers (Mahmood, S. 2020).

### **Lack of practical knowledge**

There is a need of use of labs for higher education for all the streams of education. Hands on performance is very important which is virtually not possible. Teachers tried to manage through videos, to gain experience it's very important to do experiments in laboratories. The field trips also play a major role as they provide practical knowledge. Because of the pandemic the direct interaction through field trips and labs have been lost.

### **Lack of adult supervision**

A lot of screen time during online classes has various effects on students physically and mentally, the straining of eyes, decrease in eye sight and also mentally it causes insomnia, the students also became addicted to games in mobiles because of lack of adult supervision.

### **Financial crisis**

The pandemic has also caused loss of jobs where the families were unable to meet the ends of the families and which cause the children in their families to contribute financially to the families.

### **Physical fitness and sports**

The athletic and fitness facility centres have also closed by the hit of covid-19. Sports and physical fitness play a major role in the student life. These activities release stress hormones and makes our body physically and mentally strong. Though online training has helped somehow it was not that effective.

### **Mental health issues**

Students have faced mental health issues because of stress, anxiety. The lack of interaction face to face and loss of social connection due to increased covid cases is also one of the reasons. But to avoid these issues many professionals have supported mentally through a lecture which has been provided by many schools and colleges for the mental wellbeing of students.

### **Marriages for young women**

Due to lockdown everyone stayed at homes. Many young women who have just passed out their intermediate or turned 18 were forced to get married because of parental and circumstantial pressure. Because of the technology we are able cope up the situation from no learning to at least slow learning.

Some students also said they are benefited through online classes as they can save their time from traveling and traffic and also money in hostels. They also added that the video and the ppt presentation by the teachers is more innovative to make them understand the concepts clearly.

### **Challenges faced by the parents**

The Covid protocol shifted the institution to the learners place, thus making parents more responsible towards their children education. Before Covid parents were not aware of the teaching learning process. During pandemic parents also started attending the online classes to see their child behaviour in the class, otherwise they use to attend only parent teacher meeting to know about their children progress. Usage of online classes was also a task for the parents, as they have to resolve the technology issues (Dong et al, 2020 and Tzifopoulos, 2020)), Not only that many parents were concerned about the health of their child as they have to continuously sit in front of the monitor and exposure to the radiations for many hours.

In some cases, mostly with the families more than one child, Parents could not provide phone or desktop to all the children in the family, Hence many children did not get the required education

(Di Pietro et al., 2020). The online teaching can be made available to everyone by adjusting the abilities of parent's teachers and students (Lestari & Gunawan 2020).

**Conclusion:** While online learning/Teaching may not have been first choice for both the teachers and students, but to some extent could fill the gap of education and educators through YouTube/online lectures that can be preserved for re-use at learners' convenience. Apart from the video lessons, collaborative learning by sharing learning materials and conducive learning at home indicated as some of the benefits of receiving lectures from online platform.

Pandemic is a learning experience for both the educators and learners where the educators learned many ways of approaching and getting closer to the learners through various learning management systems and learners also made efforts in adapting the education and facing the pandemic challenges, they are in. Hence it is necessary for a nation to develop the online teaching learning resources to face any challenges as the students are the future of any nation. The efforts must grow stronger in establishing digital education and online teaching learning infrastructure that is information and communication technology facilities.

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