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# A Study of Utilization of ICT Services in School Education during COVID-19 Pandemic in Satara District

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**Abstract:** Covid-19 stands for Coro virus disease of 2019 is name given by WHO(World Health Organization) on February 11, 2020. It has been declared as a Pandemic on 11 March 2020. WHO declared the outbreak a public health Emergency of International concern on 30<sup>th</sup> January 2020. In this pandemic situation it was big challenge to education System. ICT Service play important role in covid-19 pandemic situation for Government and for education system by the using platform of online learning. Teacher can use virtual classrooms to teach from home. In this article emphasize on how online learning is beneficial during time of covid-19 situation and also discussed using ICT service school and college perception for learning and education purpose on online learning System during covid-19 situation.

**Keyword:** Introduction-Covid-19 Impact on school- ICT Implementation to resolve issue - Major Challenges to Implement ICT – Suggestion.

## I. INTRODUCTION

School approach toward Training India 320 million students have been affected by COVID-19 schools closing and government quickly recommended shifting to online teaching. India's immense digital divide with embedded gender and class divides. In India 23.8 percent households had Internet access. Broadband penetration in rural India is limited to a mere 29.2 per cent over 60 per cent of rural India do not have access to the internet. In Urban rural divide as urban India has a broadband penetration of 92 per cent. About 72 per cent of households in urban areas have access to the Internet at home, almost as much as in rural areas (38 per cent). In India 16 percent of women had access to mobile internet, compared to 36 percent of men. Only 14.5 percent of students had access to smartphones and laptop and computer.

Specific challenges due to covid-19:-

- A. There no clear timeline for school re-opening.
- B. Closing of school could result in students losing up to 12 to 14 months of school.
- C. Because of closing of school widen the learning gaps for disadvantage children.
- D. It increase risk of drop-out and decrease in attendance.
- E. Postponement / cancellation of exams lead to promotion of students at critical stages of covid-19.
- F. Changing in current academic calendar will not be suitable for changing in upcoming academic year.
- G. Delay in annual education operations.
- H. Maintain social distancing once re-open its default to logistical and operational challenge.
- I. Families are under financial stress might be unable to pay school fee and other expenses.

## II. ICT INFRASTRUCTURE USED

Information and Communications Technology ICT has played important role in the covid-19 awareness and support of government. ICT has played important role in covid-19 awareness in following ways:-

### A. Awareness message of Covid-19

With the help of Telecom Department the Government of India spread the awareness Message in caller tune instead of regular ringtone like whenever you call someone you will hear caller tune of covid-19 Awareness the message broadcast in Hindi which was cover your mouth while coughing and sneezing, to clean their hands with soap thoroughly and regularly, to avoid touching their nose and face. This was the message was broadcasted by Telecom Department the Government of India spread the awareness of covid-19.

### B. Information Portals

The Ministry of Health and Family Welfare website provides information about India's COVID-19 situation. MyGov Portal and National Health Portal of India also help provide updates and information related to COVID-19 in India (National Informatics Centre, Ministry of Electronics & Information Technology,) (Ministry of Health & Family Welfare, Government of India). The Government of India and WhatsApp has launched a WhatsApp bot called MyGov Helpdesk (WhatsApp Number: +919013151515) where citizens can send their queries related to COVID-19 and receive instant answers.

### C. MyGov Social Media Hub

The Government use social media hub for the Awareness message and to collect the information and the situation of Covid-19. Government use various platforms like WhatsApp, Telegram, Facebook, YouTube, Twitter, Instagram My Gov app and other social media hubs for the Awareness message and to collect the information and the current situation of Covid-19.

Using Information and Communications Technology (ICT) Infrastructure government and some private Institute Built online learning resources.

## III. ONLINE LEARNING RESOURCES

The following are some of the online resources developed by the Government and some private Institute.

- 1) *Diksha*: It is an online platform for school education. It has more than 80,000 e-content items in multiple Indian languages and Catering to Grades 1-12. Teachers, parents and students interested learning material to the point of advice school curriculum. During the lockdown period these contents have been accessed nearly 220 million times. This app is available on iOS and Google Play Store
- 2) *e-PATHSHALA* – it is mobile base application and also available of website which is deployed by the National Council for Educational Research and Training. The lesson or material is available in audios, videos- eBooks Books for classes 1st to 12th in different languages. This app is available on iOS and Google Play Store as well as on Website: <http://epathshala.nic.in> or <http://epathshala.gov.in>
- 3) *Swayam*: It national online education platform. It has more than 1800 courses which cover both school (class IX to XII) And Higher Education (both UG and PG) it including all subjects engineering, social sciences, and law and management courses. It has a unique feature of SWAYAM is that, it is integrated with the conventional education. The courses are interactive and prepared by the best teachers in the country, and are available free of cost to any learner in the country. There has been increase in access to the platform during the lock down period. It is available on Website: <https://www.swayam.gov.in>
- 4) *Swayam Prabha*: It Has 32 DTH TV channels transmitting educational contents on 24/7 basis. These channels are available for viewing all across the country using DD free Dish set top box and antenna. Now even the private DTH operators are telecasting these courses through their channels. The channels cover both school education (class 10 to 12) And Higher Education in a wide range of subjects like engineering, vocational courses, teacher training, performing arts, social sciences and humanities subjects, law, medicine, agriculture and many more. Website: <https://www.swayamprabha.gov.in>
- 5) *Nishtha*: It integrated with Teacher Training Portal and Mobile App Website : [nishtha.ncert.gov.in](http://nishtha.ncert.gov.in)
- 6) *National Digital Library*: This is a digital repository of a vast amount of academic content in different formats and provides interface support for leading Indian languages for all academic levels including researchers and life-long learners, all disciplines, all popular form of access devices and differently-able learners. Website: <https://ndl.iitkgp.ac.in/>
- 7) *Byju's*: It is an online learning base platform .where we can get both school education(class 10 to 12)and also higher Education in a wide range of subjects like law, engineering, medicine and also we can get material of upsc &mpsc and other study material is available on BYJU'S. We can join online lecture on BYJU'S and we can interact with teacher while online classes .it is available on both web & mobile app in Google play store.
- 8) *Unacademy*: It is an online learning base platform like BYJU'S. where we can get both school education(class 10 to 12)and also higher Education in a wide range of subjects like law, engineering, medicine and also we can get material of upsc &mpsc and other study material is available .we can join online lecture on Unacademy and we can interact with teacher while online classes . It is available on both web & mobile app in Google play store.

#### IV. STUDENTS ISSUES RELATED TO ONLINE LEARNING

Most governments have decided to temporarily close educational Institutions School & College to reduce the spread of COVID-19. The education sector globally in Covid-19 pandemic has been disturb. The concept of online learning existed even during the pandemic period, has certainly reached an altogether different level and intensity in these trying times. E-learning emerged as the biggest savior. The closure of educational institutions, it has come with its own set of challenges. Students, teachers and School & college are forced to overcome challenges that have come with online learning programmes. Online learning may be a saviour. There was Internet connection problems need to be assessment the issues.

Problems face while online learning that need to be assume for successful education:

##### A. Internet Connection

Online learning need lack of strong and stable internet connections. The ones correctly used at homes have either low bandwidth or have finished their limits. The process of logging in for a class is compulsory because of this process for students and teachers identical. The connection of broadband is a prima face solution. There should be one time process and there should app for both student and teacher so that will be easy connection and also for better understanding and also to select their class and subject.

##### B. Assessments

Assessing a student in the right manner in of the education system. Students are made to take a test or appear in an examination on school premises; unfortunately that's not possibility now. Online learning, assessing students through a Multiple-Choice Question (MCQ). Assessment was the one of the biggest challenges for traditional edtech solutions that is predominantly MCQ based. If students upload their answer sheets online and if the teacher concerned teaches across five different sections, they would have to assess more than 50 students.

##### C. Restricting Cheating

There are quite a few students who try to advantage that the easy way to success, Accept it or not. It has become easy for them to cheat while using online learning system. The perceptions of academic staff and students to student cheating behaviors in online exams and other online assessment formats. Cheating is on the rise, as exams are now being taken online to keep up with the new normal of the pandemic. For example "There have been reports of students in IIT-Bombay, IIT-Kharagpur, and IIT-Ropar using WhatsApp groups to share solutions to questions, and sometimes using bio-breaks to call their peers during the examination". There should be a best platform for exam where on one can cheat in online exam.

##### D. Online Security

Online security was the big challenge for Institutions School & College No matter what you do on the Internet, the big question is related about data privacy and security. Teachers conduct online classes through free platforms such as ZOOM and Google Classroom are really they safest or the most secure tools for the purpose of learning. They need to make use of new-age edtech platforms that ensure a safe and better online environment for students.

#### V. SUGGESTION FOR EFFECTIVE ONLINE EDUCATION

Information and communication Technology ICT service plays an important role during covid-19 pandemic in education system.

##### A. Online Learning Challenges Faced by Students

- 1) *Adaptability:* Students find difficult in adapt to accept online environment immediately. After traditional classroom learning. Due to the sudden change, they are not able to adapt to the based learning. Students who have been always studying in the traditional classroom they are mindset are not able to focus on online platforms. It is important for them to accept the new learning environment.
- 2) *Technical Issues:* Many of the students don't have well equipped with a high internet connection that is required for online learning. They face problems in going live for virtual learning and other platforms that require internet connection. They face technical issues as they are not much aware of technology. Internet connection can play an important role in how quickly you can attend the class and do not miss any live sessions. Poor connectivity can find difficulty in downloading some information related to the subject.



- 3) *Computer Knowledge*: There is a Lack of computer education concern in today's world. There are many students who don't know about MS word and PowerPoint and still cannot operate basic computers with MS word and PowerPoint. Some technical issues emerge, they find it difficult to solve the problem because they are not from IT background so they find difficult to solve problem. Sometime there is problem in login, live class or while creating or submitting work and also communicating with teachers
- 4) *Time Management*: Some students find difficulty in time management with the online learning because it totally new for students so they are feeling it difficulty. They need a scheduled planner to manage their time. Online learning in is flexible time unlike traditional classrooms but sometimes face difficulties in adjusting to the time required for online learning.
- 5) *Learning Style*: Most of the students have habit learned and writing in the physical classroom. Online learning can make it difficult to learn in different styles. There are some students who can adapt to these styles quickly but there are some students who need time? In such cases, there is lack of concentration and inability to understand the live classes, difficulty in creating projects and assignments using technology.
- 6) *Communication*: Lack of Students has effective communication skills during online learning. Teachers give assignments for improving reading and writing skills but there is a possibility that they might not be able to write so that educators understand the concept behind their assignments. There are some students who feel frightened to communicate with their teachers due to the new model of learning. It might happen due to lack of interest, poor technological skills with apps and video calls or unable to express themselves via live chats, emails or text messages.
- 7) *Virtual Engagement*: Online classes help teachers to provide reading material, assignments, communication via email, live chats or messages and delivering content by live sessions, presentations, recorded videos or lectures for the students. Students find it difficult to communicate in person who struggles with understanding concepts. Many times these students do not able to clear their doubts.

## VI. CONCLUSIONS

Information and Communications Technology (ICT) has played important role in the covid-19 awareness and support of government. ICT help in the Awareness message and to collect the information and the current situation of Covid-19. It also help in education system on online platform by which it teacher can easily teach student using online platform. It was difficult to teach in covid-19 condition and ICT make it easy to teach and take online exam so that student don't have to waste there year in covid-19. Online learning is best platform in covid-19 but it also have drawbacks after covid-19 the mentality of students will change which is no good .ICT is best but not perfect form education system there should change I it so it will prefect make better education system.

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