PROBLEMS AND PROSPECTS OF ONLINE CLASSES DURING COVID-19 PANDEMIC – A STUDY.

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ABSTRACT:

The world witnessed an unexpected crisis in the year gone by and is still not able to completely come out of its captivity and repercussions. Covid 19 pandemic changed the entire global scenario of human living. Most of the emerging economies are still in the phase of restructuring and in the process of getting adapted to the changing practices in both personal and professional lives which now has become the new normal.

India was also one among the economies which was adversely affected by the pandemic. Among many other sectors one of the most disrupted sector was the education sector. There was a complete shift of learning from offline to online, which was the only alternative mode of learning. Though teaching and learning online has its own benefits, there were some major technical and non-technical hurdles faced by both academicians and students during the online sessions which were detrimental to the effective imparting of the curriculum.

The study focuses on the problems faced by both academicians and students during virtual classes. Reviews of various literatures and news articles on the topic under discussion were done extensively. Added to this certain issues based on personal observations and experiences of the researchers were included in the study. It also throws light on prospects of online classes in the future which could be encashed appropriately if the prevailing problems are thoroughly addressed by taking suitable remedial measures. The author's also made an attempt to suggest few solutions to overcome the issues of online classes to make teaching learning an overwhelming experience.

Key Words: Online Classes, COVID 19, Pandemic , Virtual classes.

1. INTRODUCTION:

The COVID -19 pandemic has severely disturbed the normal lifestyle of people in the world. Various sectors and the economy at large are adversely affected by COVID pandemic. One of the prime sectors involved in shaping the society is the Education sector which is severely affected due to suspension of classes in the physical environment. But since the show must go on, classes in the virtual environment served as an alternative to ensure that learning does not stop and the curriculum is complete. Many institutions schools have also shifted their base to virtual platform. Academicians and Students are experiencing a number of issues due to the unplanned and rapid shift to online mode of learning. All the schools, colleges and Universities are now teaching through online mode which has now become a new normal. Although there are many benefits of going online in today's World, this could be fruitful only if it is adopted in a planned manner. "I believe that the integration of information technology in education will be further accelerated and that online education willeventually become an integral component of school education, "says Wang Tao, Vice Presidentof Tencent Cloud and Vice President of Tencent Education.

In a country like ours there are numerous issues that are acting as hurdles for the successful adoption and smooth conduction of online classes. This is due to various reasons such as wide spread geographical areas, majority villages and rural areas, diverse population, existence of poverty and digital divide and traditional mindset.

There are, however, challenges to overcome. Some students without reliable internet access and/or technology struggle to participate in digital learning; this gap is seen across countries For example, 95% of students in Switzerland, Norway, and Austria have a computer to use fortheir schoolwork, only 34% in Indonesia do, according to OECD data.

2. REVIEW OF LITERATURE:

The literature review is based on Systematic review of research articles on Problems and prospectus of Online Classes in India and outside India. The literature review is done throughthe existing Secondary Sources like Books, Journals, Proceedings, Reports, Newspapers and Online Sources.

Arasaratnam-Smith & Northcote, 2017; Claywell et al., 2016; Sun & Chen,2016,this studies shows that, Inability to have a face-to-face connect with students and facilitatefree conversations, discussions, and mentoring, lack of online teaching experience consumes more time and practice, technological difficulties with high speed internet access and getting used to learning and being evaluated online are identified as major limitations.

Ruchir Khare and et al' (2020) explores that**,** A total of 760 students enrolled in the study. Six hundred and fifty-three (85.9%) were taking nap during lockdown period. Four hundred and thirty (56.6%) reported to have faced sleep problems during lockdown period. Sixhundred and fifty-five (86.2%) preferred classes in lecture theatre as better method of teachingas compared to online classes. Four hundred and eight students reported that the screen time has increased during lockdown due using electronic gazettes for entertainment and attending online classes. The screen time increased and higher percentage of students were taking naps during lockdown.

Amit Joshi, and et al' (2020), this article aims to identify the approaches made by thehigher education institutions for continues imparting of education amidst lockdown. The articlealso identifies the challenges faced by teachers in online teaching from their homes. the findings revealed that higher education institutions (HEIs) have taken many initiatives in the pandemic situation for imparting education. But these initiatives have not been very successfulfrom the teacher's perspective. Teachers faced may issue in online teaching such as lack of technical facilities, family interruption, lack of training, lack of clarity & direction, lack of technical knowledge. The learning curve of the article facilitates the HEIs to help them to execute the online educative in an effective manner.

Irtifa Mukhter and et al' (2020), in this article researcher surveyed the experiences of teachers and students as an online learning method of teaching was introduced during the pandemic**.** The study concerned itself with challenges faced by the students during learning from home and their views on continuity of online classes. Similarly, concerns with the teaching community were to elicit their views online teaching and their perceptions of studentlearning.

Rakhi Gaur and et al, (2020) Study findings showed that there were 209 (53%) femaleparticipants. Significant difference (p=0.05) was found among participants' gender and year ofstudy, area of residence, father education, family income and whether they had ever attended online classes. Lack of control over the group was top perceived barrier with highest score (261marks). Majority of participants (61%) perceived barriers encountered during online classes. Mann Whitney U test showed the significant differences of participants' perceived barriers among male and female participants by their age, year of study, fathers education and family income (p<0.05).

Girisha Lakshman Naik and et al' (2021). In this study, a survey based-investigationhas been carried out to analyse the efficacy of online teaching and learning method comparedto traditional teaching method. A questionnaire-based survey is prepared to collect the data from different degree students, faculties and parents with general publics. A total of 874 responses gathered from people of different background participated in the survey. The analysis of collected responses confirm that the traditional chalk and talk methodology is often better than online sessions. Results and analysis indicated that lack of facilities, infrastructure, technical tools and the internet access are the major drawback for conducting online sessions.

Meghna Kantharia (2021), this study highlights the challenges of online learning, howstudents without reliable internet access and technology struggle to participate in digital learning, whether the use of technology is proved less economical or it has improved the quality of the education and what are the impacts of online education on students. There are also few suggestions to overcome challenges of online education and the means to make online education a success in near future in the country like India.

3. RESEARCH GAP:

The extensive literature review indicates that, some of the studies emphasize on perception and satisfaction of students and parents in connection with the Online Classes, impact of lockdownon learning, online teaching amidst academic crisis, online teaching vs. classroom teaching , sleep-related problems caused by online classes etc., Despite the large amount ofliterature work on Problems and Prospectus of Online Classes during Covid 19 pandemic, it was found out that, these lack in-depth analysis on the problems experienced by both academicians and students during online classes**.** The present study is an attempt to fill the literature gap by identifying some difficulties experienced by academicians and students during online classes. Also the study describes future prospects of online classes and also provides some solutions in the form of suggestions to overcome these prevailing problems.

4. RESEARCH PROBLEM:

To fight against the inconvenience caused by the pandemic, all educational institutions prioritized the Virtual classes as an alternative mode of delivering education. NEP (2020) released by the Government of India also gives importance to online learning. Hence the virtual format for the conduction of classes became the new normal for all education institutions which is also accessible by all. (nazia Hasan, Vandana Daksh 2021)

Initially people both in the delivering and the receiving end faced some difficulties to get adjusted to online mode of delivering as well as learning, as it is coomon in almost all kinds of technological and cultural transitions.But later due to its inevitability and necessity everyone adapted the virtual mode which eventually has become a very commonly practiced method. But in spite of this, there were several issues involved in the conduction of online classes which acted as barriers for its effective reach and results. If these difficulties are not properly addressed by the concerned authorities or policy makers, online classes will just be a formal practice with very minimum or no productive benefits. This may result in lack of proper educational foundation for the student community in the days to come

5. NEED FOR THE STUDY:

Lockdown, due to the pandemic globally, created an unexpected necessity for E- Learning. As of 1st April 2020, nearly 1.5 billion children in 173 countries were affected by school and colleges closures. Hence to overcome the problem of non-conduction of regular offline classes, there was a need to continue classes online. Online classes play a vital role in improving the learning skills of students as stated below:

1. Online Classes have numerous options such as videos, PDFs, podcasts, website links etc., which can be effectively used by academicians as well as students for a better teaching and learning experience.
2. The other key benefit is its very nature of flexibility. Online classes can be held from any location provided proper connectivity and devices are available.
3. Online Classes can also be recorded and shared for future reference. This allows students to the access learning materials at a time convenient for them.
4. It can also lead to more autonomy and intellectual freedom among students.

Though online classes have a bunch of benefits to encashed, its effectiveness is still a prevailing concern. This could be ensured only if certain problems involved with its proper reach and delivery are addressed thoroughly. There is a crucial need to find out some difficulties involved in the effective conduction of online classes, which are faced by many academicians and students. If proper measures are adopted to overcome these problems, the future prospects of online classes are bright and huge potential for delivering quality education in the changing scenario is visible. In this regard, there is a genuine need to study the prevailing problems of online classes and also to look into their future prospects. Also appropriate solutions are to be found in order to get rid of the existing issues, which could make online classes most effective and preferred mode of teaching and learning.

6. RESEARCH QUESTIONS:

Literature review has reflected some crucial and relevant issues which not only lay down the foundation of the research but also raise "Research Questions" for the present study. The Research questions hierarchy is as follows:

1. What are the Problems encountered by Academicians and Students during online classes?
2. What are the future prospects visible for effective delivery of education through online?
3. What kind of measures could be adopted to overcome the issues of online classes to a major extent?

7. OBJECTIVES OF THE STUDY:

1. To study the problems encountered by Academicians and Students during online classes in India.
2. To look into the future prospects of delivering education through online mode.
3. To suggest suitable measures to overcome the problems posed by online classes in India.

8. METHODOLOGY:

This Research Study is a descriptive or conceptual study on both Observation Method and data reviewed through the secondary sources.

A) **Observation Method: As online became the mode of delivery for imparting the curriculum** during the COVID-19 pandemic, the Researcher's themselves experienced some difficulties while teaching through online mode and also identified few common and genuine problems faced by students.

B) **Secondary Data:** Reviews of literature and news paper articles which were based on survey on the chosen area of the study were done. Also the study was based on Secondary data which were collected from books, related journals, relevant text books, articles, magazines and from relevant websites.

9. RESULTS AND DISCUSSIONS:

A) Problems of Online Classes: Teacher And Student Perspectives

1. **Internet connectivity and Network Issues:**

The most commonly faced issue which comes as a stumbling block for the smooth conduction of online classes is lack of stable and strong internet connection. This is mainly evident for teachers or students residing in semi urban or rural areas or in the outskirts of the city where there are huge connectivity problems. Not only these but also people who are in the core urban areas are facing fluctuations in the internet connections due to unavailability of signals based on the structure of their buildings/premises .
Also due to low bandwidth connected at homes many are unable to attend classes continuously without glitches.

2. **Lack of suitable devices or no devises:**

The effectiveness of online sessions mainly depends upon the device from which it is accessed or learnt. Computer desktops or laptops may be ideal because of its very nature and dimension. But most of the students either do not have desktops or laptops due to various reasons such as low affordability, or these may be used by their parents during working hours which also happens to be the peak hours for online classes. According to NSSO data, only 4.4% of rural households and 23.4% of urban households own computers. Around 42% of urban households have a computer with an internet connection; the same is available to only 14.9% of rural households (Pratheek Agarwal, Counterview.Org). Smart phones/Android phones though have become more common among the majority of the households, they cannot be considered as most effective devices. The key reasons may be interruption by phone calls during class sessions, Low signals and speed in rural areas, lack of proper visibility due to size of the device, Software compatibility issues, not upgrading to a new version, regular system crashes, etc are few key reasons among others. If the classes are not properly monitored by trainers, there are all possibilities of students getting distracted to other websites and social media platforms in spite of being logged in for online sessions. While talking about the disadvantaged section of the society many of the children do not have smart phones or tablets and they are not attending online session and have no clue about what's going on in the classes (Times of India, April10 ,2020)

3. **Internet Speed and signal:**

The online survey conducted by Learning Spiral showed that, over 75% children reported a host of challenges to access education online which also includes internet speed not being conducive, (Times of India April 13, 2021).Slow internet speed has become one of the major hindrance in most of the states in India for the smooth conduction of online classes. This problem is present not only in rural parts or outskirts but also present in capital city like Delhi. Slow internet speed and connectivity were emerging as issues before the Delhi University professors, who were conducting online classes for thousands of students during the lock down.(India Today,21,March 2020).Also since data usage is become very heavy as almost all are working from home or attending classes online across the country there is a major hit on the speed. This is causing a major trouble when few learning videos are shown during online classes or few wed links are sent to students to make their learning more effective.

4. **Distractive Environment**:

Online classes do not have proper learning environment. Though the respective colleges or Universities issues certain specifications of the kind of environment required for online classes, most of them are for the purpose of documentation only and are not being monitored or practiced in reality. As most of the students are at their house they are at their comfort by having not seated properly at the right place or are walking or lying down while the classes are going. Due to this the students cannot pay proper attention to the ongoing sessions. On top of it, they get distracted due the conversations and other day to day activities of the inmates of the house which are unavoidable in many situations. This kind of highly informal set up of learning has turned out to be a great hurdle for making online classes effective.

5. **Heavy data Consumption:**

As opined by many students around the nation, online classes consume major part of their data packs from their internet plans. Many times they have no other option but to recharge again for the purpose of online sessions as they are held on a continuous basis at least 3 to 4 hours in a day. All classes of the society cannot afford for higher data packs or for recharge ad on's. This has led many students either not to attend classes regularly or attend selectively both of which are not congenial for better learning.

6. **Student mindset:**

It is common among students to become inattentive. This was a common issue even during offline sessions as many students are physically present but mentally in their own world. When it comes to online sessions where there is no proper eye contact or face to face monitoring between students and teachers, lack of attention has become much more adverse. However interesting are the classes made, most of the students are not making the best use of it due to their mindset. They intentionally do not pay greater attention as they feel it is a temporary alternative measure and shall not be counted upon when it comes to evaluation of their assessments. Also when they hear few oppositions coming in against online classes through media, most of them who are equipped with proper gadgets, facilities and learning resources too, join the bandwagon by opposing online classes stating few common reasons such as network, internet speed and so on which are not at all issues for them in reality.

7. **Digital Literacy:**

One of the crucial problems for a better online learning in India is its discouraging digital literacy rate among people especially in the rural belt. A recent report by the Digital Empowerment Foundation indicates that nearly 90% of our population lags on digital literacy in India. Along with the prevalent urban rural divide there also exists a wide digital gap between male and female population. Data from NSSO's 75th round national survey (2017-2018) shows a significant gap between the male and female population in rural and urban areas with regard to the ability to operate a computer and use the internet.(Kashika Chadha, Sept 4, 2020,SPFR) Refer table below:

Table 1: Share of persons able to operate computer and use the internet in India

Ability	Rural		Urban	
	Male	Female	Male	Female
Able to operate a computer	12.6%	7%	37.5%	26.9%
Able to use internet	17.1%	8.5%	43.5%	30.1%

Source: Ministry of Statistics and Programme Implementation 2019

Digital literacy rate among women is much wider than men in India where less than 40% of women have used Internet in majority of the states and Union territories (Economic times, Dec 15, 2020).

The digital divide between rural and urban households is severe with just 4% of the rural population having access to computers According to the report on "Household Social Consumption: Education" released, only 24% of the rural people in the age group of 15 to 29 years are able to operate a computer as compared to 56% of their urban counter parts (Times of India, 15 July 2020).

8. Close Monitoring:

Since students are attending classes online, it becomes highly difficult for teachers to have eye to eye contact and closely monitoring every student is almost impossible. Though the facilitators can insist students to keep their cameras on during classes, they are not in a position to compel them to do so. This is mainly because; some students may not be comfortable in keeping their cameras on due to improper environment in their surroundings which could openly embarrass them.

9. Lack of flexibility imparting knowledge:
Teaching is an art and can be much more effective when it is done in the physical presence of students. The trainer or teacher can adopt/alter the course content and flow of teaching according to the student mood and situational demands which usually happens in offline sessions. This is may not be possible online because there is no clue about the student's mood and each one will be under uncommon situations where teaching cannot be made flexible and effective.

10. Low technological knowledge among Trainers or Teachers:
Though it is now a digital age where everyone are exposed to digital appliances and gadgets, there still exists a huge gap in digital proficiency among the teaching fraternity. Most of the teachers find classroom teaching more convenient and suitable and have a low adaptability to virtual teaching. Only a small percentage of teachers or trainers from Generation X and most of the trainers from among the millennial that are in the age group of 25 to 40 may be having digital proficiency to some or a greater extent. Whereas the rest of the experienced group, though have acquired knowledge of handling classes virtually, they are very basic. They are able to conduct normal classes having no much scope for creative teaching or student engagement programs for making classes interesting, teaching effective and breaking monotony.

B) PROSPECTS OF ONLINE LEARNING:
In the last few years, India has seen a significant revolution in the area and usage of internet both in personal and professional lives of people. Use of internet has almost become inevitable and is now a necessity for most of the commercial and non-commercial transactions and interaction. Training and education too is no exception. Though the rate of adaptability of internet or online based learning was low till the year gone by, the unexpected spread of pandemic causing huge disturbance to the normal life has made online learning not one among the alternatives but the only alternative available.

With the advent of new technology and its processes, India has witnessed an enhanced acceptance of online learning and education from the last few years. We have seen many students and professionals enrolling for variety of certification and diploma courses through online to enhance their skills for the purpose of employability and growth.
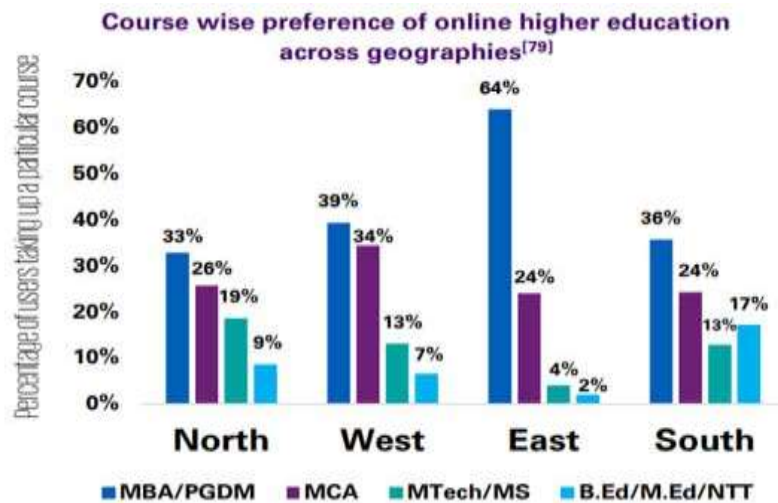
Though the online education model currently adopted has several issues but there are also few attractive opportunities for effective online learning the near future.

1. Internet penetration:
India has an internet penetration of about 31% today, which means 409 million internet users. It is predicted that by 2021, there will be nearly 735 million internet users in India, which will lead to increase in traffic for online education too.(Shikha Anand, Aug 5, 2019,Shiksha.com).As more efforts are also being put by the policy makers through flagship programs like Digital India, most of the rural areas too are now being provided with internet connectivity. One of the key expectation of Digital India program in the near future is to ensure that high speed internet connection should be available for every gram panchayats in India (Anand Kumar & Girish Kumar Singh, 2017, International Journal of Linguistic & Computing Research).The internet penetration itself will have a greater influence on adoption of online learning practices among the rural and most of the urban population in India.

2. Emergence of Varied Higher Education and Diploma courses online :

The Challenges of business environment have created a need among students to develop certain skills and certification in their domain areas and not just academic eligibility. There are many certification courses such as Digital marketing, Advertising, Logistics and Supply chain, Tally, Aviation, Cyber Security and many other employability courses which are registered and learnt via online mode. Besides many Universities, Colleges and B-Schools too are offering higher education through Online. According to KPMG report, online higher education in India is at an early stage of development and has witnessed emergence of different private universities offering UG and PG e-learning courses to students. compared to graduation and diploma courses, the demand for online higher education is dominated by post-graduation courses such as MBA and MCA (as evident in the graph below). (Shikha Anand, Aug 5, 2019,Shiksha.com).

Course wise preference of online higher education across geographies[79]

Legend: MBA/PGDM, MCA, MTech/MS, B.Ed/M.Ed/NTT

Categories: North, West, East, South

3. **Growing need for Competitive exams coaching:**

There is an ever growing aspiration for higher education and appearing and cracking various related competitive examinations among the younger crowd. Most of the people are now moving towards online platforms for test preparations. As per the KPMG report, number of students adopting online platforms for test preparation is expected to increase significantly in coming years. It is projected that the category of test prep will grow at a CAGR of 64% in 2021. The different online platforms could either act as a substitute or complement to the existing offline test prep market to provide coaching to students for various exams such as JEE Main, NEET, CAT, Bank PO, and CLAT. Added to this many new players have now developed many exam specific mobile apps for the benefit of students and faculty in tier 2 and tier 3 cities are now recommending students to adopt online mode for exam preparations. There are also more enrolments for online job focussed test preparatory courses such as Bank PO ,mainly in tier 1 cities.((Shikha Anand, Aug 5, 2019,Shiksha.com).

4. **Smartphone penetration:**

There are more than 500 million smart phone users in India at present. According to market research firm techARC, India had 502.2 million smart phone users as of December 2019, which means over 77 percent of Indians are now accessing wireless broadband through smart phones. This gives an immense opportunity for increased acceptance of online learning through various apps developed exclusively for the convenience and use of smart phone users.(Gadgets 360 degrees,30, Jan 2020).According to a report jointly released by Indian Cellular and Electronics Association and consulting firm KPMG, Smartphone penetration in rural India has risen from 9% in 2015 to 25% in 2018. Also as per the same report the number of smart phone user base in India was estimated to reach over 820 million by 2022(Economic times, July 9, 2020)

5. **Changing mindset towards quality and affordable education:**

There are areas in India where there is lack of quality offline education. States like Bihar, Jharkhand, Madhya Pradesh and Uttar Pradesh revealed lower scores among students while evaluating their reading ability (Unicef.org).Hence online modes of learning have become a major source of quality education where students have accessibility to video lectures, webinars, and live interactions from experienced and top professors and corporate professionals. Besides online courses also include home assignments to be completed by students by watching video lectures and answering MCQ's online, through which their assessments and certifications are done. The New Education policy too is stressing upon learning by doing, usage of internet based tools and applications encourage students to develop technological abilities and explore new avenues for developing both life and employability skills.

6. **Time constraints due to job responsibilities:**

Due to various reasons, many students who have either completed their graduation or 12th, now are taking up various jobs matching their skills and qualification. Due to their engagements in career related tasks they are not able to stick on to a fixed time table as followed in offline classes of various diploma, UG or PG programs. Now that varied courses are available in online mode and also on a flexible time, it is becoming more convenient for these kinds of students to enrol and attend for courses/programs of their choice. Some of the online courses may have weekly 3 to 4 hours of lectures and students get access to their portals where there are huge number of video lectures related to their domain and also lectures of the classes missed. This makes it much more convenient for students to listen to the lectures at a time appropriate for them. The number of students pursuing their career roles is expected to increase in the coming days; hence there are greater possibilities of more enrolments for online courses.

7. **Government initiatives:**

Digital India is one of the key flagship schemes launched by Government of India which mainly aims at for providing high-speed internet networks to rural areas and also to improve the overall digital infrastructure in India encouraging digital transactions. The Government has introduced many online courses for UG & PG students such as MOOC, SWAYAM and few more to encourage students to take up short duration online courses to enhance their employability .The provision for free access to SWAYAM has increased the number of users. About 50,000 people had accessed SWAYAM since 23rd March 2020. This was over and above the 25 lakh students/learners who are already enrolled in the 571 courses of the January 2020 semester of SWAYAM.(source:ndtv.com, March 28, 2020).The future seems to provide wider scope for these courses as observed from the current trend.

10. SUGGESTIONS OR SOLUTIONS:

1. Policy makers to take proper accountability on the internet reach especially in rural, hilly, and semi urban areas and take immediate corrective action to fill the gap.
2. The Ministry of communications and Information technology to take necessary steps to provide low cost or free access to internet facility.
3. Special Apps could be developed to help students watch/read/ download online lecture videos or study materials.
4. Provide digital devices to the under privileged, free of cost, by partnering with many private PC or mobile manufacturing firms.
5. To chalk out concrete programs to enhance digital literacy by utilizing Doordarshan network, or rewarding programs to motivate people in select areas, to be digitally qualified could be adopted.
6. Strict assessments of students and uniform policies and rules for class conduction can help reduce student distractions and carelessness during online classes.
7. Skill India and its avenues are to be promoted extensively through all media's all over India so that it is utilized by the masses.
8. Teachers are to be trained effectively to make online classes interesting and productive through many virtual faculty development programs and workshops.
9. Upgrading the present ICT tools and infrastructure in many Government Colleges and Universities to facilitate students learning.

11. CONCLUSION:

Online classes are the best alternative mode available for effective delivery of skill based education which is the need of the hour. This enables students to independently work on and get acquainted to technology which is crucial for employability in today's globally competitive markets. This is also an opportunity for academicians to upgrade themselves and make effective use of ICT's for learning to be interesting and engaging. All these could be possible only if the problems discussed are thoroughly addressed by the concerned departmental authorities of the Government in collaboration with the Ministry of education. The main hurdles being low internet bandwidth, unavailability of proper internet services at low or free of cost and lack of suitable programs for digital inclusion especially in the rural and backward areas are major concerns. These are to be viewed seriously by the policy makers and remedial measures as suggested in the study are to be taken for education through online to be effective as in case of developed economies. If these are not addressed and implemented at the earliest, it is going to hit badly on the student output and the education system at large.

12. LIMITATIONS OF THE STUDY:

1. The study is based on secondary data where majority of the surveys were conducted in a single city.
2. No Empirical data to prove the problems faced by the academicians and students.
3. The researchers own experience may be subjective.

13. FURTHER RESEARCH.

- Research could be conducted to analyse the region specific problems through primary sources of data.
- A comparative study on measures adopted for the successful conduction of online classes by developed and developing nations could be undertaken.

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