



# PROBLEMS, METHODOLOGY AND LIMITATIONS OF ONLINE LEARNING IN ELEMENTARY EDUCATION DURING COVID 19: AN ANALYTICAL PERSPECTIVE

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**Abstract:** Various governments have implemented measures for restricting people from gathering at public places due to the coronavirus pandemic. These measures have obstructed the functioning of all the schools, colleges and universities. Since the duration for which these measures have been implemented is extensive and will most probably continue for an indefinite period of time, leaders of the public and the private institutions have devised alternate strategies for teaching students. Online learning is becoming a major tool in imparting education to the students. It is a safe method, which comes with a number of benefits for the teachers as well as students. However, just as every coin has two faces, this method of teaching also has its own advantages and disadvantages. Online Learning in Elementary Education during Covid 19 is having its own issues and challenges. There are multiple challenges that are being faced by both teachers and students while adopting the new method of learning and teaching. Using this technique of teaching school kids has proved to be challenging for the teachers during these already tough times. Internet connectivity is another issue that is being faced by them. In addition, kids are not able to sit in front of multimedia tools for a very long time.

**Index Terms - Online learning, E-education, E-education during COVID-19, Issues of e-education**

## I. INTRODUCTION

When governments in most of the countries ordered for nationwide lockdown and asked their citizens to stay inside their homes because of the risk of COVID- 19, something that was affected the most due to this was the education system. Schools, colleges and universities were shut and kids and teachers were confined to their homes with no clue of how the remaining course would be completed. Eventually teachers started using the E-learning tools for teaching students during this period. There is no certainty as to when this situation would clear out and when would schools and colleges open again. Therefore, a need to find an alternate solution was being realised.

Technology has played an important role in this case and a technological revolution is being witnessed. In every field including medicine, business, education, etc., technology is being used for delivering products and services to people.

Talking about E-education, it basically includes using computers and internet for delivering a wider range of solutions for enabling learning and improving the performance amongst students (Ghirardini, 2011).

It has also been seen that with the introduction and rapid increase in use of E-education tools, the challenges related to the same have also increased manifolds. The experience was relatively new for most of the institutions for which they were not fully prepared. Besides, people are used to following the existing practices and thus finding it difficult to adopt the new technological advancements. They are finding it difficult to cope up with the innovations and the technological revolution. In addition, the

perception of students regarding E-education has not been very positive because of their previous experiences that resulted in high number of dropouts and thus a reduced motivation for the learner (Barry, M. & Runyan, 1995). Several other factors have also contributed to this phenomenon. The biggest of these factors is low satisfaction amongst the students with the experience of E-learning.

However, since there is no other way of imparting and attaining education in the current scenario, students and teachers are trying to cope up with the trend of online education as a substitute for traditional education system.

Mainly I will be focussing upon the challenges and barriers that are being faced by the education system right now.

Certain academic skills, issues related to administration, social interaction, technical skills, time as well as assistance for studies, learner's motivation, cost, access to resources like internet and other technical issues are some of the challenges that the students and teachers are facing.

Online learning is seen to be effective only in the countries that are digitally advanced. The countries that are not so technologically advanced especially in terms of digital education do not seem to benefit a lot from online education. In fact in a number of under developed and developing countries, the academic institutions conduct most of their activities manually (Jianqiu, Pathan, & Lei, 2017).

A number of factors like slow, expensive and unreliable internet connection become an obstacle in online learning significantly for people who reside in the rural parts of the country and also for the marginal communities.

Students who access internet through their smartphones are not able to take complete advantage of this method since a good amount of content that is available online cannot be accessed properly on a smartphone. The unexpected changes in E-education became the parameter for measuring organizational agility when many institutions focused primarily on transferring the educational content to online platforms and not particularly on the methods of teaching online and other such delivery methods. In addition, a lack of interaction with the teachers and professors became a major concern for people related with E-education. The issues regarding any kind of content of online courses are discussed with specific instructors through mails which needs response time (Zhong, 2020). Another major thing that is missing in online education is socialisation. Students communicate with their friends digitally and not physically. Therefore, real-time knowledge sharing is missing. The current scenario is unique unlike the normal situations where digital learning maybe adopted if desired. It can be called as crisis learning. There is a very strong need for the academic organisations to make changes and necessary improvements in their curriculum and the use of latest advanced methods of imparting education.

The educational organizations are the focal point for different type of social activities as well as interactions. When educational activities do not take place, children miss interacting with their fellow students that is important for their growth and development. Students need to learn continuously, especially the underprivileged ones who are impacted majorly due to suspension of educational institutions.

Thus, the educational institutions need to find ways of removing the obstacles from the way of online learning (McCarthy, 2020).

## II. LITERATURE REVIEW

The concept of E-education can be described as a technologically advanced tool that is used to teach students and make them learn new things. The tools that are crucial for this concept are internet and computer. They help in transfer of knowledge from one source to another. Applications of the concept of E-education include computer-based education, web-based education, virtual learning opportunities, digital collaboration, etc. The content is offered to the recipient through internet, videos, audio tapes, satellite televisions, etc. Different synonyms are also used for this concept of E-education including CBT- Computer Based Training, WBT- Web Based Training, IBT- Internet Based Training, etc.

There are certain features of E-education also which make it different from other methods of teaching. These features are the integral components of web-based education system. Thus, there is no need of installing any kind of software on the computer. A web-browser and internet are the only requirements for this concept. You learn things as the training professional demonstrates every lesson on your screen. All the courses and chapters are available online all the time. Therefore, you can view any information, anytime you want. The courses that are imparted through E-education are designed by professionals who have good experience of

training and teaching people. You also get a free access to the E-manuals, practice exercises, keyboard shortcuts, etc. (Raheem, Khan, 2020)

Since this crisis began, it was noticed that online learning has been effective only in the technologically and digitally advanced nations. It was not so effective in developing and underdeveloped nations. Places where most of the work is handled manually, online learning is not feasible. There are several other hurdles also which hamper the process of imparting education online. A lack of access to affordable, fast and trustworthy internet connection become a huge hurdle in the progress of E-education. It becomes even a bigger problem for people living in the rural areas and also for the marginalised communities (Wains & Mahmood, 2008). Students who use their smartphone for accessing internet are not able to view some content that is not accessible through smartphones. Therefore, there are various such issues that the students and teachers are facing on a regular basis.

However, the circumstances that we are witnessing today are unique, unlike the normal situations when digital learning is an option. It has become more of crisis education (Pace, Pettit, & Barker, 2020). Thus, the educational institutions have no option but to improve their infrastructure and adapt themselves to using the new methods of instructing students.

The educational organisations are also considered to be the points where all the social activities as well as interactions happen. When the educational activities do not happen, a lot of children as well as young adults miss interacting with people socially. These social interaction activities are important for the growth and development of students. However, it is important that the students continue their journey of learning. Therefore, this is a huge issue that needs to be handled.

Although the closure of educational organisations due to emergency situations is not new, the global pace as well as scope of the current day instability of the education system is unparalleled and just in case if it sustains, it might inflict the psychological distress at different levels (McCarthy, 2020). Although the adoption of the ICT methods is unavoidable in the higher education, but because of restricted budget, special funds are not allocated for buying advanced tools and latest technologies. As soon as a lockdown was imposed in all the countries due to the coronavirus pandemic, the educational institutions were asked to use the different E-education methods for conducting classes online (Ali, 2020). Majority of educational institutions were forced to shut their schools and colleges and conduct classes online, even for elementary classes. However, because of unavailability of proper education and management system in place, it was not possible for all the educational institutions to begin their classes online right away. Only some of the high ranked institutions that had already developed a strong infrastructure could begin their classes online.

Few studies that have been conducted earlier determine promising findings about online learning. It was concluded through these studies that like conventional methods of learning, a satisfactory interaction happens between the instructor and the students if the content has been designed properly and if it is updated on a regular basis, the instructor is committed as well as skilled and possess requisite knowledge. Nevertheless, the current day situation is quite different from regular distance learning system.

Awareness of the students regarding availability of different tools used for E-education is also crucial for the success of E-education. Understanding the status of awareness amongst the students is important. The quality of delivering lessons to the students, gains in effectiveness, cost savings or any other such benefit cannot be realized if the students are not aware about these tools or if they do not fully understand the benefits of E-education.

Thus, creating awareness about technology is extremely important and building as well as promoting efficient E-education system in the educational sector. In the developing nations, a lack of knowledge regarding E-education has been noticed the most. A lack of awareness about the E-learning tools is a lack of knowledge about usefulness of the tools. The lack of students' interest also leads to a failure of the E-learning system. It may be explained on the basis of the fact that no formal introduction or training is conducted for the students or the teachers. No orientation is done and thus the students neither have the knowledge about the E-learning tools nor do they have the interest for the same. The problem of defining the components of E-education and the technology that maybe exploited for E-learning for the benefit of the students is also prominent.

The existing researches about E-education indicate that culture is a crucial factor for the success of the system of E-learning (Rosenberg, 2001). Deploying an E-learning system causes a number of changes in the education practise. Resultantly, a resistance to modify the existing traditional methods of offering content to latest advanced E-education paradigm of delivering content is considered to be a huge barrier for successful and complete utilisation of the tools of E-learning.

The resistance of lecturers for changing their conventional methods of teaching students and using E-learning tools is another factor that is important here. Some lecturers still prefer the traditional methods of teaching which are based on in person meetings. They

do not prefer using contemporary E-learning tools. Some lecturers are traditional to the extent that they use only whiteboard for delivering the lectures. Another point that emerges here is that some of the lecturers do not even know the right way of using the E-education tools and thus they do not use them.

A resistance to switch to the new and advanced methods of teaching is considered to be a major challenge here. Just like the lecturers, even the students are not ready to change their habit of learning through the traditional methods (**Fujuan, 2010**). Students also prefer using hard copies over the digital forms of reading and writing. They consider hard copies to be much more convenient as compared to the digital notes.

The quality perspective of the E-education system like accessibility, availability as well as reliability are also known to impact the satisfaction level that these systems offer to the students as well as the instructors. This is another huge barrier in the E-learning system. For the success of the E-learning system it is very important that the administration is committed and takes necessary action on time for ensuring that the website of their institution is running smoothly without any troubles, is accessible and the material is always available. When the content is not available on the website, the students lose out on time. Even their interest to study might be lost which would be a complete failure of the E-learning system.

The barriers that the students experience while working on group presentations, group assessments, etc. are also quite evident (**Davidson, 2015; Graham & Misanchuk, 2004; Jaques & Salmon, 2007**). Few issues that maybe experienced by the students include the stress and anxiety related to the use of technology, stepping out of their comfort zone, inequity in the assessment of the projects and assignments especially in the group projects and assignments. In spite of the best efforts of the teaching faculty for providing equitable as well as beneficial experience of learning to the students, irrespective of the mode of enrolment, many faculty members sometimes feel apprehensive and find themselves incompetent for teaching through the online methods. Sometimes the teaching faculty members are themselves learning to use the advanced tools and platforms. This might leave the learners in isolation where they may even have varying level of proficiency as well as competency using the various forms of learning and therefore all by themselves when it comes to online education environment through different kinds of learning management system. It is highlighted specifically in the tasks of collaborative learning where the individuals might be hardly managing to explore the system by themselves. While group assignments and projects are considered to be important for the purpose of educating kids and students, it also helps in developing the interpersonal and the employable skills.

While the online learning environment offers a number of opportunities for the way education is offered as well as accessed by the learners, the practises of assessment are mostly restricted in modes as well as variety in the way they are used in online learning environments (**Williams, Cameron, & Morgan, 2012**).

The possibility of getting an immediate feedback through online teaching environment also helps in improving the potential for assessments delivered through the E-learning portals (**Anderson, 2004**). The issues related to assessment including the complexity, the technical glitches, sequence of activities and also learning through new modes present a lot of hurdles while multimedia applications are incorporated and during the assessment in learning environments (**Boyles, 2011; Fahy, 2004; Jaques & Salmon, 2007**).

However, greater participation by students and better access to E-learning needs to be enabled by working on removing all the barriers that are experienced by the externally enrolled candidates, specifically in the case of group assessments online. Offering additional scaffolding for supporting the students learning experience and welcoming the flexibility which is inherent in online learning environments also support such processes (**Anderson, 2004; Broadbent & Poon, 2015; Crawford-Ferre & Weist, 2012**). Classrooms that run through seminars as well as discussions have an edge of supervision and also have some kind of accountability. Another major challenge in E-learning emerges with the fact that when the students are left with their personal devices, they might not even explore the entire course material. In the worst case, the employees may even resent using the time for completing the coursework. Thus, it becomes even more important and much bigger challenge to keep the students motivated for completing the course and make them enjoy the whole online learning experience.

Implementation of e-education also depends majorly on the computer proficiency of students as well as teachers. The capabilities of the learners for accessing and interacting with course material defines the utility they would realise from the program.

Digital learning also poses the challenge of stating if the course would have the expected effect or not. It becomes a little difficult to tell if the implementation of E-learning would help in reaching the desired goal or not.

The younger generations have their laptops, computers, mobiles, etc. which are completely revolutionising the way to teach. They participate actively in communicating socially through online communities and their smart devices since their childhood itself. But, the issue arises when these activities happen after their formal education is completed and when there's absolutely no synchronisation between the informal methods of learning and formal methods of learning. Further, researches indicate that students who are skilled in using technology are those who do not participate in formal learning sessions.

Researches also suggest that the informal methods of learning are considered to engage people more. They are much more effective as compared to the formal methods of learning. It has also been observed that students who are skilled in technology are also non-participative in formal methods of learning. For solving this problem, SEL or Social and Emotional Learning needs to be offered by the parents as well as teachers. This method comprises of skills that are required for regulating oneself and interacting with other people in constructive ways. The emotional and societal interaction skills are crucial for the students, workers, citizens, etc. A number of risky behaviours that include use of drugs, bullying, violence, etc. may be reduced or prevented while the emotional and social learning methods are used.

The method of SEL maybe best adopted through effective classroom teaching, engagement of the students in the positive activities throughout the session and even after the session and broader involvement of parents and communities in education (**Dual, SeemaWadhawan<sup>2</sup>, Gupta, 2016**).

Students also are influenced by the way lecturer or teacher teaches them. In case the teacher conducts the classes through the E-education system, then the students will have to use the same for learning. The lecturers upload all their lectures, sample question papers and other important material on the website. The students need to go to the website and download all the material or the parents may do it for young students. It is helpful for the students and even for the teachers. So, it would not be wrong to say that use of e-learning tools by the students depends mainly on the use of these tools by the teachers and the lecturers (**Hujran, Aloudat, 2013**).



### III. CONCLUSION

In spite of the most obvious benefits associated with E-education, its uses by the students are not improving as per the expectations. In addition, success of e-learning system depends majorly on how skilfully the key issues and challenges are addressed. The findings of the in depth qualitative analysis that have been presented in different studies based on the evaluation as well as the perspectives of the students to the e-education paradigm and tools stated a number of challenges. These challenges are awareness about advantages of E-education system, resistance of the instructors as well as the students for using the methods of e-learning as well as technological challenges.

Considering the significance of issues of design of the E-education systems, a lot of emphasis is given to accommodate innovative trends of the social networking in the e-learning system in such a way that it keeps attracting the students for using as well as interacting with these systems. A lack of on-the campus socialisation causes difficulties for the teachers and the students for completing the group projects in the mode of online learning. Because of all these hurdles, maximum students would not complete their entire course through e-learning methods efficiently. Comparing the effectiveness of online learning and conventional methods of learning, person's contact with the instructor is important for learning effectively which is not there in the mode of online learning.

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