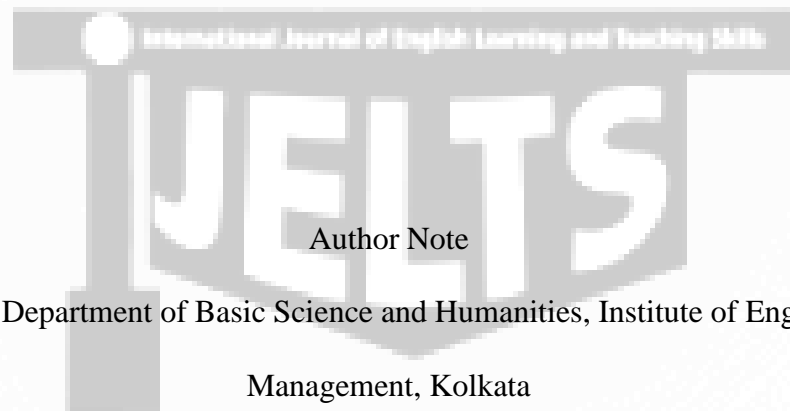The Challenges in online Teaching-Learning process

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Abstract

The worldwide irruption of COVID-19 pandemic has jeopardized the all the sectors of our society. Education System has been disrupted hugely affecting students, teachers of school colleges and universities. Online education system emerged as the only possible solution. But nationwide online teaching-learning process brings huge challenges due to the inadequacies and inequities of our education system. availability of smooth internet connection, access to required gadgets, being familiar and getting adapted to the online environment, maintaining privacy are parts of the challenge faced by almost all the academic staffs. Students feel isolated, lose their concentration and desire for learning, and their attention span decreases. Physical and mental health of the children, students can also get hampered due to excess screen time and absence of bodily movements due to continuous online classes. Not everyone can bear the cost of technological tools needed for online education. Many teachers and parents, not being familiar and comfortable with the technological tools, find it difficult to guide their students and children respectively. Planning and strategizing scenarios for the worst possible conditions could be the key. These difficult times have also taught us that in order to survive the crisis, students must be capable of problem-solving, critical thinking, and, most importantly, adaptability. Efficient technology that is able to effectively facilitate educational processes but has minimum maintenance and procurement costs, should be brought in after their pros and cons are thoroughly weighed.

Keywords: Covid-19, education, lockdown, inadequacies, inequities, technology, isolated, online learning, challenges, opportunities, collaborative

Introduction

Impact of pandemic on education:

The worldwide irruption of covid-19 pandemic has affected people regardless of their nationality, education-level, financial condition or gender. Like all the other sectors, worldwide education system, also, has been disrupted hugely by this pandemic impacting more than 94% of the world's student population. According to the statistics of UNESCO, due to COVID-19, all the schools and colleges have been closed in more than 100 countries. Over 1.1 billion learners have been affected out of the classroom, accounting for 67.6% of the total enrolled learners. The lockdowns in response to the pandemic have interrupted the traditional schooling practices with nationwide closure of schools, institution and other learning spaces in the most countries with majority lasting at least 10 weeks. Reopening of schools after the restrictions are relaxed, would be another challenge, as even when schools reopen, economic depression might limit the expanding access to education by increasing inequality.

However, the situational challenges may not end with this immediate crisis. Long-term public investment on education may be jeopardized in the coming years due to public funding being channeled to health and social welfare.

Challenges faced by developing countries like India in online education:

The imposed lockdowns have changed the perspective of schooling. As schools were closed for months, online education came to forefront. In the developing countries like India, the education system has observed a paradigm shift in it. The situation forced the students and

teachers to get adapted to e-learning leaving behind the conventional procedures of education. Already there have been many online Edu-tech platforms (like Coursera, Ed-x, Unacademy, Byju's) providing education through virtual modes. But applying the same method to the nationwide education sectors is a big challenge considering the inadequacies and inequities in our education system. From access to computers and broadbands required for online education, and arranging the favorable environment for attentive learning, up to the misalignment between resources and need – all are part of this challenge that needs to be overcome. Along with schools the COVID-19 pandemic has also had a huge impact on the higher education with universities closing their premises and countries shut their borders as a part of the lockdown measures. These measures had an impact on international students' learning and examination methods, as well as their safety and legal standing in their host country. Most importantly this crisis has brought some new questions regarding the value offered by an institute which includes social opportunities and networking besides the educational content.

Lockdown periods:

In March,2020 as WHO (World Health Organization) declared the outbreak of COVID-19 as a pandemic and advised social distancing as the first prevention step, most of the countries started the action of lockdown to separate the contaminated people. In India also lockdown was imposed on March 25, 2020 to combat the pandemic. During the lockdown the total educational system started to collapse from elementary to tertiary levels not only in India but also across the globe. This was the time when online teaching was not an option anymore. It became the necessity.

The lockdown compelled the educational institutions to cancel the offline classes, examinations, internships etc. and shift to online platforms for the above. On one hand the

lockdown brought severe academic disturbances. But on the other hand, it presented several problems and possibilities for educational institutions to upgrade their infrastructure. The teachers started assigning tasks to students via internet, delivered lectures and video conferencing through different available platforms like Zoom, Google Meet, Skype, YouTube etc.

Problems faced by teachers and students due to pandemic and lockdown:

Even after one year i.e., in 2021, the plan to conduct offline classes have faced a serious setback, with India currently witnessing the second wave of COVID-19 cases. The educational community have made concerted efforts all over this period so that the learning process is least hampered. But the children and students have had to depend more on their own resources for remote learning through the internet, television or radio. Mostly, the students coming from privileged backgrounds, upheld by their family and eager and able to learn, could find their ways to alternative learning opportunities. But learners from disadvantaged backgrounds remain deprived of the modern technology-based education. In particular, students who do not have access to advanced digital learning assets or lack the resilience and engagement to learn on their own, are to face the risk of trailing behind.

But it is observed that even with the availability of technical equipment, students have to face different problems which include - the absence of human interaction and social connectivity, need of adapting to a changed home environment, need of getting used to the virtual platforms, temptations of virtual distractions, increased screen time and unchanged posture for a longer period affecting the health, lack of physical exercises and many more.

Teachers also had to face the barriers of new pedagogical concepts and modes of teaching and adapt to them, for which they may not have been trained. Lack of basic facilities, external

distractions and interruption caused by family, institutional support barriers like budget for purchasing advanced technology, lack of training, reduced motivation due to absence of effective teacher-student interaction and limited awareness about online teaching platforms are the major issues faced by the teachers and professors.

Emergence of online teaching-learning:

Online teaching methods are not new. They were there even before the pandemic. But now this crisis has made the institutions to accept and use the online teaching methods with no other options left. There is evidence that, if used correctly online teaching and learning can be more effective in a number of ways. Some research has shown that learners get access to 25-60% more material online as compared to only 8-10% in classroom. It requires 40-60% less time to learn online than in a conventional and offline classroom as students are able to learn at their own pace, reread, skip and accelerate through concepts as per their choice.

Considering all these advantages, online teaching-learning can be tremendously beneficial. But as it also brings some major obstacles along with it especially in a developing country like India, it is important to address these problems.

<center>**Discussion**</center>

Significance of e-learning:

Online education is a mixture of contents and instructional methods which are delivered by using media elements such as words or graphics on computer or smartphone in order to build knowledge and skills linked to learning goals of an individual or an organization. Technology holds the power to transform education. Digital literacy of the learner is important for surviving in this competitive world. It helps to broaden the horizon of learners by connecting them to the entire world. It also contributes to collaborative learning. Online teaching also makes learning

materials available easily so that students can study them as per their own pace and timing. According to research, appropriate application of online education improves the educational process's efficiency. Modern generation is very much adept with using technology. So, it facilitates the learning process and makes learning an interesting and practical exercise connected to modern age lifestyles. Because of global connectivity, huge amount of information can be facilitated using online platforms. Online learning makes the learners learn 'how to learn' rather than 'what to learn'. When the learners are involved in 'how to learn', they are engaged in the learning process. Learning becomes much more interesting when learners develop capability to become lifelong learners.

Role of teachers in technological world:

Teacher is the main person to help the learners to access the technological capabilities. Teacher takes the role of the guide to show their students the right approach to manage the ocean of information available online and use them for their benefit. They also help in taking right decisions in this technologically complex world. In online teaching, teachers have a blank canvas to reinvent engagement in the virtual classroom. They have a plethora of technological tools to support high-touch education. To bring students in the live classroom, video communications are used. Now, teachers can provid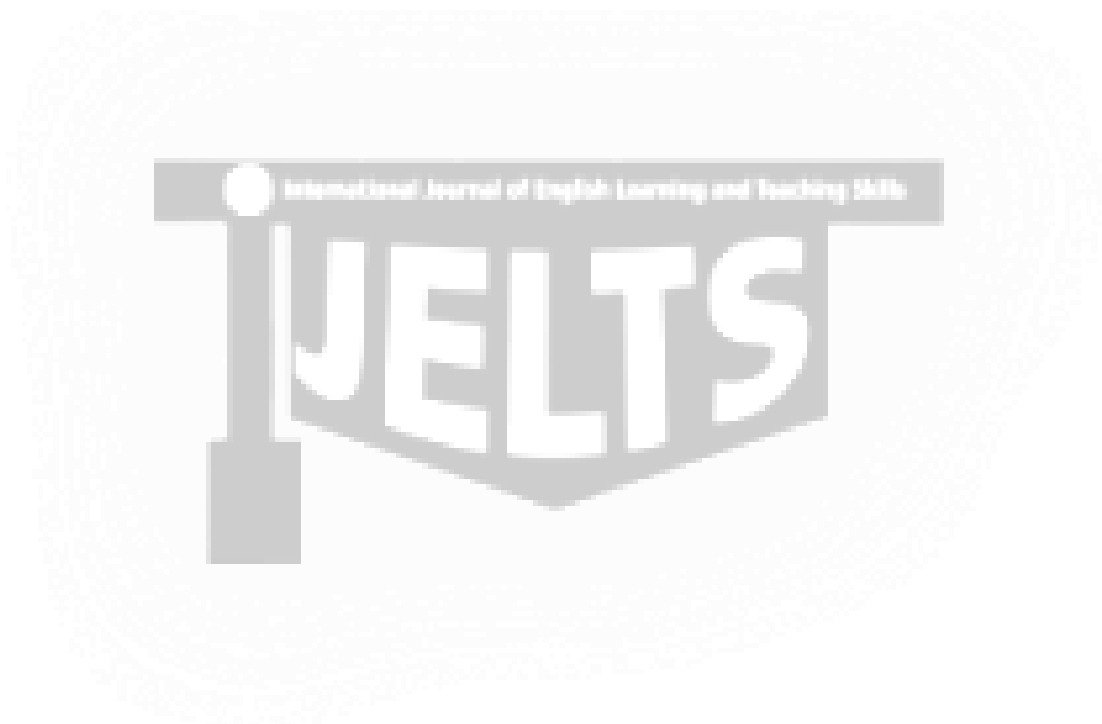e real-time feedback to the students. They use multimedia presentation to make a topic come alive to the students. A smartphone and an internet connection are enough to serve the purpose of connecting with teachers in this technologically advanced world.

Challenges faced by teachers and students:

It has been a challenging period for teachers during the pandemic. All of a sudden,

education had to be shifted to online mode. Students are learning remotely. Educators

and

There are numerous challenges faced by teachers in online education. This pandemic situation demands a higher level and different set of skills which were ever designed to teach. First of all, there is need for adequate availability of technology in the schools which includes huge costs incurred on acquiring, installing, operating, maintaining and replacing the machines used in online education. Secondly, it is imperative to make all teachers educate in handling the tools required for online teaching. Third challenge is that teachers need to develop their own capacity in order to efficiently use the various tools in various situations. Another problem is that the language associated with most modern technology is English and many teachers may not be comfortable with English. Many teaches are not comfortable in using the modern technology and the gadgets. Sometime spamming from people using fake identities creates disturbances in the online environment. The challenge for teachers is to create the meaningful learning experience where students are taught how to apply their knowledge to solve the real-world problems.

There are a handful of difficulties faced by the students in online education. Learning from home can be lonely. That is why boredom is seen on the face of students. Students miss the excitement of having the company of peers in the classroom setting. Sometimes this sense of being isolated becomes so strong that they lose their desire to learn.

Online learners go through a lack of motivation. From the classrooms, designed to encourage learning, the environment of a student has moved away to bedrooms and kitchen tables full off distractions and disturbances.

Many students face technical difficulties with online teaching tools. Not every home has a reliable internet connection or required gadgets for the students to use. Many students are not habituated in responsibly handling the online software.

Online teaching can turn students into passive observers rather than active participants. Although these unengaged students may acquire the lecture content, they are unable to apply their learnings outside the virtual classroom. They might pass assessments and complete learning activities, but they aren't planning on using their new knowledge to connect with the real-world situation.

Interaction among the students is one of the most important elements of successful online education. Collaborative engagement motivates learning and promotes a deeper approach to the subject. Many discussions or assignments do not support conversation in the online mode.

It is tough for the students to start using any digital tool out of nowhere without any additional training. Facing the unknow makes them frustrated.

From the time of shutdown of the educational institutes, teachers and students have been using multiple digital tools without paying attention to the amount and nature of the personal data these apps are collecting. Reaching the main objective of a quick transition to online learning, we neglect our privacy, especially in times when large e-learning software suppliers are offering free subscription plans.

Online education also brings some unhealthy practices with it. Anything that is online includes a screen. The increased screen-time and absence of bodily movements due to continuous classes may affect the physical and mental health of the students, children or teachers.

Group projects, that students are assigned to, are not always conductive in virtual mode. Also due to excessive use of online information, PDFs the urge of reading books, which is a good habit, has decreased. This whole online system has increased the tendency of learners to instantly google every question without even thinking about the answer themselves. This increased "Googling syndrome" limits the thoughts of the learners and decreases their attention span.

Directly or Indirectly Parents also face obstacles due to the online teaching-learning process. Especially the parents of children or very young students, many times find it difficult to give their children the proper guidance. During offline classes the children used to go to school. But now, them being at home and studying offline, many working parents face problems to manage their own work and studies of their children together. Children-parent or children-family interactions can get hampered due to excessive usage of e-platforms.
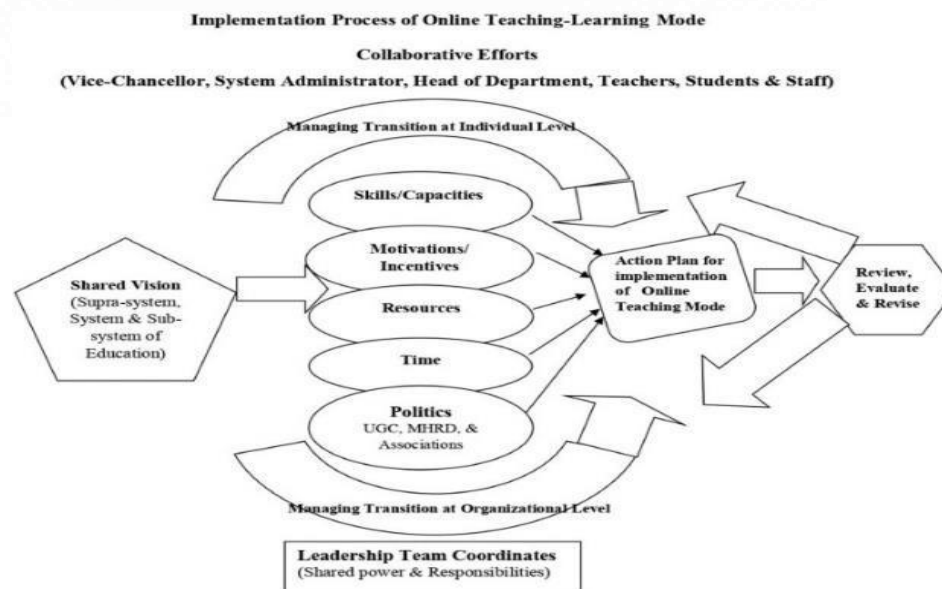

Figure 1

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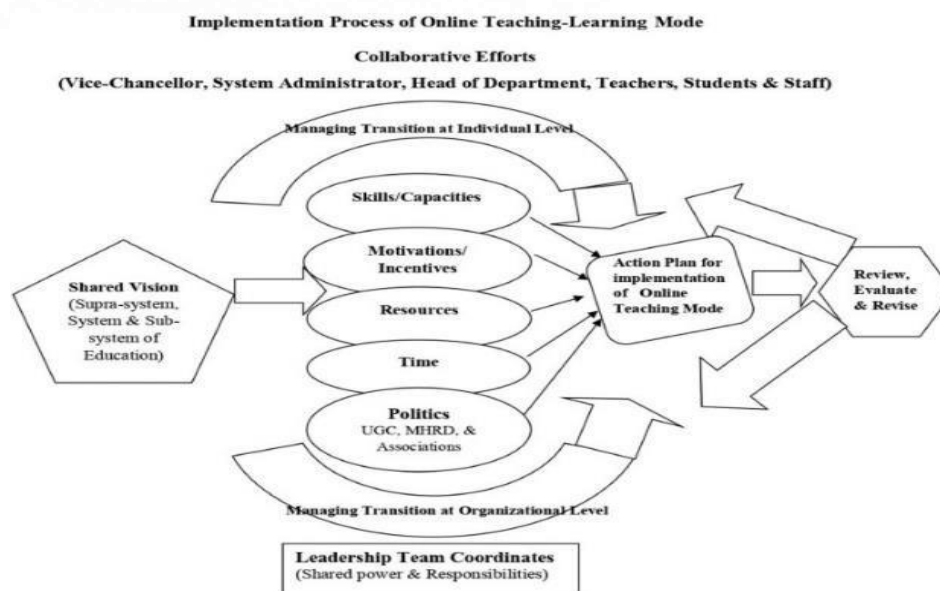

Figure 1

Strategies to improve online education:

Teachers need to establish a virtual presence at the very beginning of the e-learning course. They need to engaging and supportive to the students through the total duration of the course, to maintain an effective learning community so that students can feel the touch of traditional classroom to some extent.

Teachers need to select the right teaching tools for the class. There are a huge variety of technology tools to transform teaching and engage the students. Working with a mix of activities make the content more interesting and exciting. It increases the engagement of students with teachers as well as other learners.

Feedback is an essential component of all effective learning environments. Feedback helps to create an engaging, informative and motivative experience for the learners.

Teachers must ensure that their e learning contents can be accessed via smartphones and laptops to maximise teaching methods. It will also allow the students to access the materials later on for their self- learning.

There must be discussion boards and forums which provides students the space to share what they have learned or what they want to know more about others in the classrooms including the teachers. There can be different discussion boards for individual lesson topics.
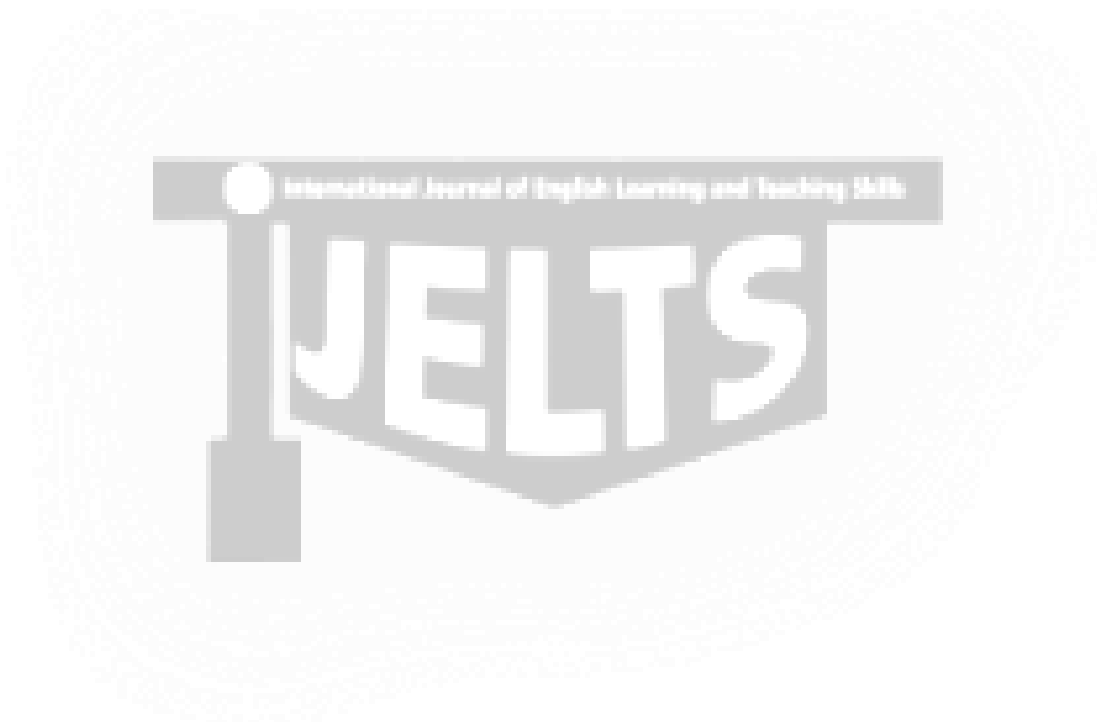
Conclusion

Author's views

As discussed in this paper, the online-teaching learning process brings lots of challenges along with it. To find new solutions to existing as well as new problems we have to bring in the much-needed innovations and changes. Teachers and students habituated in traditional methods of education hesitate in accepting the change. But having no other options left, we need to

address the problems, bring lots of innovations to solve them and get adapted to this new way of learning. This terrible time of fate has taught us to always be prepared to fight unpredictable obstacles. Planning and strategizing scenarios for the worst possible conditions could be the key. These difficult times have also taught us that in order to survive the crisis, students must be capable of problem-solving, critical thinking, and, most importantly, adaptability. Educational institutions must structure themselves in such a way that the presence of these skills in their students is ensured and prioritized. Efficient technology that is able to effectively facilitate educational processes but has minimum maintenance and procurement costs, should be brought in after their pros and cons are thoroughly weighed. A variety of factors influence the selection of a specific technology. The factors include internet speed and access, digital literacy levels of the users, security features, condition of available laboratories and so on. That is why plenty of research must be conducted for bringing the right innovation for different educational initiatives. Also, we cannot ignore the learners lacking the access to online technology. We have to work on strategies to minimize the digital divide and inequality within our country so than a huge number of learners do not trail behind. The infrastructural facilities should be available in the educational institutions so that they can regulate the learning process in future health emergencies.

Practically, the digital medium is unable to replicate the interpersonal interactions that face-to-face education system facilitates by bringing together children and students from different cultures. While offline, schools and college premises act as the melting pot of ideas and perspectives which expands the essential social skills within the students. But the situation demands us to be ready with alternatives. Disasters and pandemics like COVID-19 create a lot of tension, frustration and chaos. To balance these fears and tensions, deep and diligent study of

technology, vital multi-prolonged strategies are the urgent need to ensure the development of

skills for employability and the productivity of young minds.

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