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## Online Learning: Need of the Post-Covid Days

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### Abstract

*All the educational institutions like schools, colleges, and universities in India are generally based only on age-old traditional methods of teaching-learning, that is, lectures in face-to-face mode in a classroom. Though some academic units have started following blended learning, still a lot of them are engaged with old method of teaching. The sudden outbreak of a deadly disease called Covid-19 caused by a Corona Virus (SARS-CoV-2) shook the utmost world. The World Health Organization declared this as a pandemic. This transformed situation challenged the whole education system across the world and forced the educators to shift to an online mode of teaching overnight. Most of the educational institutions those were earlier stubborn to stick only on traditional pedagogical approach had no option but to shift entirely to online teaching-learning. In this paper the researcher tries to emphasis the importance of Online learning in during and Post –Covid days and made a prominent SWOC analysis of Online Education to understand the whole scenario.*

**Key Words:** Online Learning, Covid-19, Classroom, SWOC Analysis.

### Introduction

Online Education is a tool which helps making the teaching-learning process more user-friendly, more innovative, more creative and even more flexible. Online learning is defined as “learning experiences in synchronous or asynchronous environments using different devices (e.g., mobile phones, laptops, etc.) with internet access. In these environments, students can be anywhere (independent) to learn and interact with instructors and other students” (Singh & Thurman, 2019). The systematic learning environment is structured in the sense that students attend live lectures, there are real-time classroom interactions between teachers and learners, and there is a chance of instant feedback, whereas non-systematic learning environments are not properly structured. In the second type of learning environment, learning content is not available in the form of live lectures or classes; it is available at different learning systems and forums.

All the educational institutions like schools, colleges, and universities in India are generally based only on age-old traditional methods of teaching-learning, that is, lectures in face-to-face mode in a classroom. Though some academic units have started following blended learning, still a lot of them are engaged with old method of teaching. The sudden outbreak of a deadly disease called Covid-19 caused by a Corona Virus (SARS-CoV-2) shook the utmost world. The World Health Organization declared this as a *pandemic*. This transformed situation challenged the whole education system across the world and forced the educators to shift to an online mode of teaching overnight. Most of the educational institutions those were earlier stubborn to stick only on traditional pedagogical approach had no option but to shift entirely to online teaching-learning.

### **Review of Literature on the Use of Online Education During Crisis Situation:**

Knowledge delivery becomes more challenging with the rise of natural disasters like floods, cyclones, earthquakes, hurricanes day by day. These hazards close the doors of schools, colleges and universities in several ways. Sometimes, it creates serious consequences for students and deprives them of their fundamental right to education and poses them to future risk. “100 million children and young people are affected by natural disasters every year. Most of them face disruption to their schooling” (World Vision). Situations of crisis and conflicts are the biggest hurdles in the way to education. Many students and teachers also face psychological problems during these crisis situations—some are stress, fear, anxiety, depression, and insomnia that lead to a lack of focus and concentration. Disasters create havoc in the lives of people (Di Pietro, 2017).

With the global hike in temperatures and changing weather patterns, the number of extreme weather events have been increased now-a-days causing varying amounts of loss to life and property. A large number of educational institutions were destroyed and thousands of students were affected by these natural disasters. They forced to stop their study in the midway. “Disruption of education can leave children at risk of child labor, early marriage, exploitation, and recruitment into armed forces” (Baytiyeh, 2018). When disasters and crises (man-made and natural) occur, schools and colleges need to be resilient and should find new ways to continue with teaching-learning activities (Chang-Richards et al., 2013).

For example, in 2016, Italy experienced three violent and powerful earthquakes bringing huge devastation in the number of areas. About 1,00,000 people became homeless, buildings and structures collapsed with severe loss of life and property. The University of Camerino, one of the oldest universities in the world suffered an innumerable loss. The university was in huge problem, its structure collapsed, a large number of students became homeless and some flown away. In such crisis situations, students were in shortage of education and learning. It is correctly said, “It is difficult to stick to the traditional road when the road itself has crumbled.” This means that instructions in face-to-face were not at all possible at that time; therefore, administration came forward to devise few plans to continue the educational processes. Before the devastating earthquake, learning in online version at the University was cumbersome. But they were unstoppable, and to carry on the teaching-learning processes smoothly, they used Webex (an online tool) by Cisco. Webex helped professors in designing the instructional programs and sharing notes and presentations with students according to their need. Unbelievably, within a month, the university was well-versed with e-learning strategies and techniques. They settled themselves comprehensively well in an e-learning world. They believed that, of course, the value of the face-to-face instruction method should not be reduced, but e-learning can be used in a blended mode to bring in efficiency, effectiveness, and competitive edge over other competitors by imparting quality education (Barboni, 2019).

In February 2011, Christchurch was shocked due to a 6.3 magnitude earthquake and the University of Canterbury collapsed. IT enabled education and online learning helped the university to begin again its operations and gave them a second chance to survive (Todorova & Bjorn-Andersen, 2011). At New Orleans, Southern University converted itself into an e-learning campus after the attack of violent hurricane. Several online courses were offered and mobiles were used to provide education to the displaced students (Omar et al., 2008).

### **The Situation Today:**

The dangerous infectious disease Covid-19, due to Corona Virus, has severely affected the global financial market. This tragedy has also shocked the education sector globally. The Covid-19 pandemic outbreak forced many schools and colleges to remain closed temporarily for indefinite days. Almost every place is affected worldwide and there is a fear of losing this whole ongoing semester or even the upcoming semesters. Various schools, colleges, and universities had to stop face-to-face mode of teaching-learning. As per the outcome of the researches, it is uncertain to get back to normal teaching anytime soon. As social distancing is a must criterion at this stage, this will have disruptive effects on learning opportunities. Educational institutions are struggling to find solutions to this challenging situation. These circumstances make us realize that an urgent shift in planning is needed for academic institutions (Rieley, 2020). This is a situation that demands togetherness and humanity. The need was urgent to protect and save our students, faculty, academic staff, communities, societies, and the nation as a whole.

There are several arguments associated with online pedagogy like accessibility, affordability, flexibility, learning pedagogy, life-long learning, and policy. It is said that online mode of learning is quite easy accessible and can even reach to rural and remote areas. It is considered to be a relatively less expensive mode of education in terms of the lower cost of transportation, accommodation, and the overall cost of institution-based learning. Flexibility is another interesting factor of online learning; a learner can plan according to their time schedule. Combining face-to-face lectures with technology gives rise to blended learning and flipped classrooms; this type of learning environment can fasten the learning potential of the students. Students can learn as per their time and place, thereby life-long learning became an inevitable approach of life. The government also started recognizing the increasing importance of online learning in this dynamic world.

The severe explosion of Corona Virus disease can make us add one more argument in terms of online learning, that is, whether it is the only solution during COVID – 19 Pandemic.

### **Objectives of the Study**

1. To explore the growth and development of online learning in past and present context.
2. To conduct Strengths, Weaknesses, Opportunities, & Challenges (SWOC) analysis of online learning during the Corona Virus pandemic.
3. To give some suggestions and recommendations for the success of online mode of learning during a crisis-like situation like Covid-19 Pandemic.

### **Research Methodology**

It is a descriptive study and tries to understand the significance of e-learning during the crisis period and pandemics such as the Covid-19. The problems associated with online learning and probable solutions were also identified based on previous studies. The SWOC analysis was conducted to understand various strengths, weaknesses, opportunities, and challenges associated with online learning during this critical situation. Content analysis was done for research tool. The research method is descriptive research. The qualitative aspects of the research study were also taken for consideration. This study is completely based on the secondary data. A systematic review was done in detail for the collected literature.

Secondary sources of data used are (a) journals, (b) reports, (c) documents, (d) company websites and scholarly articles, (e) research papers, and other academic publications.

### **History of Online Education:**

The 21st century has brought about a massive change in the world of education. Gone are those days when teaching was limited only within the confines of a classroom. The internet has brought about a paradigm shift in the fundamental way in which learning is done. It has taken learning beyond the hallowed walls of the universities and into the palms of everyone. But how did this radical transformation occur?

Though there are numerous examples of the usage of machines and tools in education throughout history, e-learning in the modern sense of the term is a relatively new concept. Slide projectors and television-based classes have been in use since the 1950s. However, one of the first instances of online learning in the world can be traced back to 1960, at the University of Illinois, USA. Though the internet wasn't invented back then, students began learning from computer terminals that were interlinked to form a network.

The first MAC in the 1980's enabled individuals to have computers in their homes, making it quite easier for them to learn about particular subjects and develop certain skill sets. Then, in the next decade, virtual learning environments came into existence truly, with people gaining access to a world of online information and e-learning opportunities.

The first-ever completely online course was offered in 1984 by the University of Toronto. In 1986, the Electronic University Network was established for being used in DOS and Commodore 64 computers. Three years later, the University of Phoenix became the first educational institution in the world to launch a wholly online collegiate institution, offering both bachelor's and master's degrees. This was the beginning of a revolution whose potential was largely unknown to the public back then, but one that would make learning greatly accessible and within reach of what people could ever have imagined.

The Open University in Britain was one of the first universities in the world to begin online distance learning, in the early 1990s. Currently, the Indira Gandhi National Open University in India is the largest university in the world with around 4 million students enrolled, most of whom currently receive education via online methods.

By the early 90s, very few schools had been set up that started delivering courses online only, making the most of the internet and bringing education to help those people who could not attend a college due to geographical or time constraints. Technological advancements also helped educational establishments to lessen the costs of distance learning, thus, helping bring education to a larger audience.

New and experienced workers alike now had the opportunity to improve upon their industry related knowledge and improve their skills. Thus, the individuals were enabled to access to earn online degrees and enrich their lives through expanded knowledge of internet and online learning. End of 2000 was inspired by flash video and mobile web.

2010 brought a massive change in online education. Social media, various websites and YouTube came into popular and became very popular. MOOC courses brought a revolutionary change in education system. Interested learners can take the full opportunity of these online courses since then.

### **The Online Market Size: The Present Scenario**

Online learning is booming in current times. Aided by the widespread availability of high-speed internet, making use of new technologies such as 4G and the soon-to-be-released 5G, online learning is expected to grow by leaps and bounds in the foreseeable future. The worldwide market size of online learning is approximately \$187.87 billion in 2019, a 400% increase over what it was just six years ago. This phenomenal growth has been made possible not just by the rapidly evolving scenario in the world of technology, but also by the spread of education in the developing world. Experts predict that the next wave of online education will occur not in North America and Europe, but newly emerging markets like Africa, India, and China.

Online learning is no longer just limited to colleges and universities. Right since primary school, online learning is gradually being incorporated into the curriculum. The recent COVID-19 pandemic further illustrates the importance of online learning in today's school system, as it has proven to be a boon to both students and teachers alike who are unable to attend school due to the risk of disease spread. Beyond high school, online learning is steadily increasing its market share at the pre-university level. Furthermore, e-learning is expanding in presence beyond the traditional fields as well.

## Recent Developments in Online Learning

Online learning has evolved far beyond its original capabilities. It is no longer limited to a didactic method, which had a one-way monologue from the teacher to the student. Current advances in online learning enable the student to play an active role in the learning process, with regular feedback and assessments. This has greatly improved the effectiveness of the teaching system, bringing it on par with classroom-based learning. Some of the features that give an edge to online education are:

- Less expensive than traditional teaching methods: As the cost of teaching is low, the expenses borne by the students inevitably come down. This makes education far more widespread and economical.
- Vast variety of available courses: These days, online courses on everything are available at the touch of a button – from religion to commerce, philosophy to fashion designing, programming to painting, photography to yoga – there is hardly any field that hasn't been touched by e-learning.
- Study groups: There is a scope of engaging with like-minded students across the world, sharing information and ideas.
- Flexibility: This can be in terms of time, money, and location. Online learning enables the student and the teacher to be present at opposite ends of the world, in different time zones, and yet have the knowledge imparted effectively.
- Much less infrastructure required: This is a huge incentive to the education providers, as the additional costs are largely minimized.
- Standardized quality: Since the content available online can be evaluated and revised at any point in time, it helps maintain a reasonable standard of quality.

Smartphones have played a crucial role in making online learning viable. It is rapidly gaining ground even in rural areas, bringing high-quality education, at par with the best in the world, available to the masses. Massive open online courses (known as MOOCs) are a promising new field. The *New York Times* had declared 2012 as “the year of the MOOC”, and there has been no stopping since then. The total number of students enrolled in MOOCs has risen to about 100 million now. Thus, the recent developments in online learning can be broadly attributed to the following factors:

- Innovation in smartphone technology
- High-speed data access
- Interactive learning models
- Rising number of startups in the e-learning field

## SWOC Analysis of Online Learning: During Corona Virus Pandemic

The most recent dangerous disaster, in the form of the Covid-19 confined the world into their room. Almost all the schools, colleges, and universities are facing lockdowns in the worst affected areas to curb further spread of the Corona Virus. Most of the academic institutions are, therefore, seeking the help of online education for smooth conduct of teaching learning.

The SWOC Analysis of Online Learning is discussed below.

In the last few years, e-learning has started gaining popularity in the developing countries including India. Many platforms provide affordable courses to students via (MOOC) Massive Open Online Courses. Still a lot of institutions in India were reluctant toward online teaching and learning. Anyway, the challenges posed by the Corona Virus pandemic introduced everyone to a new arena of online learning and remote teaching. Instructors indulged them in remote teaching via few platforms such as Google Hangouts, Skype, Adobe Connect, Microsoft teams, and few more, though ZOOM emerged as a clear winner. Also, to conduct smooth teaching-learning programs, a list of online etiquettes was shared with students and proper instructions for attending classes were given to them (Saxena, 2020).

## Strengths

E-learning approaches and processes have really strength. The online learning modes have the capacity to rescue us from these hard times. It is user-friendly and very flexible in time and location. The e-learning mode enables us to customize our procedures and processes based on the needs of the learners. There are an ample number of online tools those are important for an effective and efficient learning environment. Educators may use a combo of audio, videos, and text to reach out to their students in this pandemic time to maintain a live-touch to their lectures. This can help in creating a collaborative and interactive learning environment where students can easily give their immediate feedback, ask questions, and learn with interest. The time and location-flexible feature of e-learning is effective during the pandemic times, such as Covid-19. As the closure of places and unsafe traveling by roads can create a lot of troubles, e-learning can remain one of the important options of getting an education at our homes or workplaces.

Technology provides innovative and resilient solutions at times of pandemic situation to continue education and to help people to communicate and working in virtual mode without the need of face-to-face mode. This leads to many system changes in organizations as they adopt new technology for interacting and working (Mark & Semaan, 2008).

## Weaknesses

Online Education has certain weaknesses in the form that it hampers the regular communication between the learner and the educator, leading to loss of human touch. Users can face many technical hindrances that slow down the teaching-learning process (Favale et al., 2020). Though the flexibility of time and location is one of the strength of online learning, yet these aspects are fragile and create problems. Student's non-serious behavior creates a lot of problems. Though all the learners are not the same, they vary according to their capabilities and confidence level. Some do not feel same comfortable while learning online which increases their frustration and confusion. Often this online education fails to understand the psychology of the students and utterly failed to reach them and inadequate customization of learning processes can obstruct the teaching process and creates an imbalance.

## Opportunities

E-learning actually has a lot of opportunities available but this time of pandemic will allow online learning to boom as most academic institutions have switched to this mode of learning. Online Learning, Remote Working, and e-collaborations exploded during the outbreak of Corona Virus crisis (Favale et al., 2020). Now, academic institutions can continue with this opportunity by making their teachers teach and students learn via different online approaches. The people are generally complacent and scared to try some new modes of learning. This crisis will be a new phase for e-learning and will allow people to look at the effective side of online learning technologies. The time is already started when there is a lot of scope in bringing out surprising innovations and digital technologies. Already, EdTech companies are doing well by helping us fighting the pandemic and not letting learning to be stopped. Teachers can practice technology and can design various flexible programs for students' better comprehension. The usage of online learning will test both the educator and learners. It will enhance problem-solving skills, critical thinking skill, analytical abilities, and adaptability among the students. In this crucial situation, any age group learners can access the online tools and get the benefits of time and location flexibility associated with e-learning. Teachers can develop innovative pedagogical methodologies in this panicky situation, termed as *Panicgogy*. EdTech Start-ups have plenty of opportunities to bring about radical changes in nearly all the aspects associated with education ranging from, teaching, learning, evaluation, assessment, results, certification, degrees, and so on. Also, increasing market demand for online learning is an amazing opportunity for EdTech start-ups to bring technological disruption in the education sector.

## Challenges

Online learning faces a number of challenges ranging from learners' issues, teachers' issues, content issues and pedagogical issues. It is a challenge for institutions to engage students and make them participate in the teaching–learning process for the whole pandemic time. It is a challenge for teachers to transfer from offline mode to online mode, changing their teaching pedagogies and managing their time. It is challenging to develop content which not only covers the curriculum but also engaging the students (Kebritchi et al., 2017). The quality of e-learning programs is truly a challenge. There is no clear stipulation by the government in their educational policies about e-learning programs. There is a lack of standards for quality, quality control, development of e-resources, and e-content delivery. This problem needs to be solved immediately so that everyone can enjoy the benefits of quality education via e-learning (Cojocariu et al., 2014). One should not merely focus on the pros attached to the adoption of online learning during the crises but should also take account of developing and enhancing the quality of virtual courses delivered in such emergencies (Affouneh et al., 2020). A lot of time and cost is involved in e-learning. A considerable amount of investment is needed for getting the devices and equipment, maintaining the equipment, training the human resources, and developing the online content. Therefore, an effective and efficient educational system needs to be developed to impart education via online mode.

Ensuring digital equity is crucial in this tough time. Not all the teachers as well as students have equal access to all digital devices, internet, and Wi-Fi. Unavailability of proper digital tools, no internet connections, or interrupted Wi-Fi services can cause a lot of trouble due to which many students might lose out learning opportunities. Efforts should be taken by institutions to ensure that every student and faculty is having proper and equal access to the required resources. They must also ensure that all the educational apps work on mobile phones as well, in case students do not have laptops. Therefore, steps must be taken to reduce the gap of digital divide.

## Conclusions and Suggestions

According to World Economic Forum, the Covid-19 pandemic also has changed the way how several people receive and impart education. To find new solutions for our recent problems, we ought to bring in some much-demanded innovations and change. Teachers as well as students have become habitual to traditional methods of teaching –learning in the form of face-to-face lectures, and therefore, they are not ready to accept any change. But amidst this pandemic situation, we have no other alternative left other than adapting to the dynamic system and accepting the change. It will be beneficial for the academic sector and could bring a large number of surprising innovations. But amidst all, we cannot neglect and forget the students with limited access to all online technology. These students may lose out when classes occur online due to their restricted financial resources. This is all because of the heavy costs associated with digital devices and internet data plans. This digital divide often widens the gaps of inequality.

This terrible time of fate has taught us many new things. Everything is so unpredictable that we should be prepared to face challenges. Though this COVID-19 outbreak did not give us much time to plan we should take a lesson from which that planning is the key. We should plan everything, no matter if plan A fails, plan B must be ready. We have to do scenario planning for that. We have to be prepared for all types of critical and challenging situations which may occur and plan accordingly. This pandemic has also taught us that students must acquire certain skills like problem-solving, critical thinking, and most importantly adaptability to survive the crisis. Educational institutions should build resilience in their systems to ensure and prioritize the presence of these skills in their students.

“The key lesson for others may be to embrace e-learning technology before disaster strikes!” (Todorova & Bjorn-Andersen, 2011). Today, we are compelled to learn online mode of education., it would be surely easier for us if we have already mastered it. The time we engaged in learning the modes could have been spent on nurturing innovative content. But it is better late than never. COVID-19 pandemic surely has speed up the process of online learning. For instance, the e-application like ZOOM, Google Meet, CISCO WEBEX allow conducting live online classes, web-conferencing, webinars, video chats, and live meetings. In this crisis period when most of the

schools, colleges, universities, companies are closed due to lockdowns/curfews and most of the people are working from home, these apps helped in keeping people connected via video conferencing.

Disasters will continue to occur and technologies will likely help us cope with them (Meyer & Wilson, 2011). Don Diplo, The Co-Principal Investigator at the Borderless Higher education for Refugees said that “We are in a world where conflict and environmental destruction ... are going to have lots of people, families, and communities, living in precarious contexts. The willingness of post-secondary institutions to step-up and engage and provide opportunities for those people will never be as large as the need. The only way we can even make a dent in this is to learn to collaborate and cooperate across institutions and across time and spatial boundaries. The only way really to do that is to rely on technology to create conditions to allow people to collaborate.”

We should be more adaptive to accept changes need in the environment and can adjust ourselves to different delivery modes, for instance, remote learning or online learning in situations of pandemics such as Covid-19. Institutions and organizations should be prepared to deal with challenges such as pandemics and natural disasters (Seville et al., 2012). Reliability and sufficient availability of Information Communication Technology infrastructure, learning tools, digital learning resources in the form of Massive Open Online Courses, e-books, e-notes, and so on are of utmost importance in such severe situations (Huang et al., 2020). Instruction, content, motivation, relationships, and mental health are the five important things that an educator must keep in mind while imparting online education (Martin, 2020). Some teaching strategies (lectures, case-study, debates, discussions, experiential learning, brainstorming sessions, games, drills, etc.) can be used online to facilitate effective and efficient teaching and learning practices. In such panicky situations teaching and learning should be made interesting to reduce the stress, fear, and anxiety levels of people.

Students and teachers across various universities have never practiced e-learning in reality. Most of them are comfortable with traditional modes of teaching. The COVID-19 outbreak is the opportunity to make out the best from the current situation. We are learning a lot in this challenging situation. Amidst a lot of tools available, teachers are required to choose the best tool and implement it to impart education to their students. A step-by-step guidance is required and academic institutions can guide the teachers and students on how to access and use various e-learning tools and how to cover major part of curriculum content via these technologies thereby reducing the digital illiteracy. Teachers can present the curriculum through a number of formats, like, videos, audios, and texts. It is beneficial if educators complement their lectures with video chats, virtual meetings, and so on to get immediate feedback and maintain a human touch with the students. Disasters and pandemic such as Covid-19 has already created a lot of chaos and tensions; therefore, there is an important need to study and apply the technology deeply and with due diligence to balance these fears and tensions amidst such crisis.

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