

## **PROSPECTS AND CHALLENGES OF E-LEARNING (A REVIEW DURING COVID-19 PANDEMIC)**

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### **Abstract**

In the past few years, e-learning is emerging as a global platform in the continuation of studies. E-learning has revolutionized the entire education system by providing flexibility and easy access to lectures anytime and anywhere, especially during covid-19 pandemic after which face-to-face learning was no longer possible. Although people were aware about e-learning and its usage but it got more prominent after COVID-19 pandemic. So, e-learning became a necessity for continuing education. This present study attempts to analyze the difficulties, benefits, and drawbacks of both educators and students by implementing these technologies as well as alternative solutions. This study discusses numerous prospects made possible by the COVID-19 pandemic and emphasizes the requirement for developing suitable methods to handle such an unanticipated crisis in the future. The problems faced by learners were a poor internet connection, a lack of electricity, a lack of interest, and a lack of desire. This study also suggests the government take the lead in assisting students who have limited access to the internet and technology, which are essential for participation in online classes, while also encouraging students to participate more actively in e-learning, particularly in context of the serious pandemic. To this purpose, various suggestions have been offered that could help academic institutions overcome these challenges and preserve academic quality during turbulent times.

**Keywords:** Challenges, Benefits, Downsides, Online Learning, COVID -19

### **INTRODUCTION**

Education is meant to transform an individual into a flawless being. Education offers a way for people to fulfill their potential. Education also aids in instilling social responsibility. Learning is the method of gaining information or abilities by studying, practical application, or

instruction. Every strange event which occurs inside this environment has an effect on schooling. Therefore, the COVID 19 epidemic has an impact on schooling. Education has gone digital in the realm in the current circumstances where students and academic experts are digitally linked. E-learning is indeed very easy to use and learn. During this period, e-learning, which has had enormous expansion, has proven to be the finest across all industries, particularly in education. Commonly known as E-learning (Wellman and Wortley, 1990). To enrich learner's skills and boost the status of learning, online learning is a crucial component for remote learning (Davis, 1989). E-learning has been excessively utilized during the entire period of COVID-19 lockdown. When unavoidable natural calamities occur which are beyond human control like seismic waves, storm surges, and epidemics, etc and other factors like war and disputes, for which we humans are responsible which put learners' access to education in jeopardy during times of crisis their e-learning comes as a savior to continue our education).

According to Dufty (2012), majority of the students and people has been continuously using e-learning during this covid-19 pandemic period for remaining in touch socially and to get real-time information through various technological enabled devices like cell phone, laptops and computers etc. These devices helps us to get connected to education anytime and anywhere just it need the proper connectivity. E-learning allow us to connect socially with our teachers in this way we don't let our education system to discontinue .If the education system become stuck it may make everything worse worldwide, Abbas (2020). Schools and universities of every corner of the world, including students from the medical field, were compelled to shut off the campus instruction and education so that the spread from COVID-19 can be minimized as much as possible as it was spreading every single minute through the contact of people.

The educational fraternity is now being compelled to look into new tactics and various ways to engage our students. To retain the continuity of the education, majority of the learning institutions, colleges and universities have moved to e-learning and has replaced face to face education so that students could study also without being affected from pandemic. The online flexible learning technique provides learners a wide variety of opportunities, enabling them to take greater charge of their education. Due to their absence of familiarity with online learning, professors of medical line will unavoidably be hesitant to actively engage their students online. (Z. Zayapragassarazan March 2020).

## METHODOLOGY

Data used for this study was gathered by collecting scholarly articles from reputable online sources like Google Scholar, Routledge, British Journal of Management, Amazonia Investiga, SAGE, OECD, and Elsevier. The study adhered to the existing literature research methodology. The search engine variant keyword "Covid-19 pandemic' advantages and disadvantages of e-learning", "readiness of students towards e-learning", "importance e-learning" used to choose the publications for this investigation. The researcher review abstract of 70 papers out of which thirty papers were found to be relevant to current study. Therefore, the researcher selected finally thirty papers for a detailed study. In order to get further crucial information, we combed through a number of periodicals and the university libraries. Normally, the secondary data

is used in this paper. Using reliable sources, such as research articles, official documents and government publications, universities websites, news items, journals and publications by international institutions, has helped to uphold research quality.

## LITERATURE REVIEW

On the basis of our review we observed that E learning wasn't that much easy to understand by the students as much we have thought during the covid19 lockdown. It has gone through various challenges. Social inequality was the main concern according to **(Fadzlin Ahmadon Department of Computer Science 2020)** where male students were compelled to raise their families economically in addition to their study, while female students were compelled to perform domestic chores. Since no student was prepared to embrace it, he claims that quick and compulsory e-learning acceptance is bad for students and their families. He looked at the challenges that learners encountered during the COVID-19 pandemic as students weren't prepared for an entirely automated learning, they faced issues with the internet, lacked gadgets, and demanded social support due to their desperation and anxiety. **(Mansi Babbar and Tushita Gupta 2021)** were of the opinion that when learning became problematic, students were compelled to freeze, and teachers gone through significant worry. Concerns regarding the adaptability, longevity, and transformation of institutions of higher learning were also raised by the COVID-19 epidemic. Consequently, e-learning could be a boon that produces good outcomes if all people concerned focus their efforts in unity. Notwithstanding the fact that mostly students enjoyed their experiences with online and distance learning, a lot of disparities still remain. Many students had trouble locating an appropriate workstation and lacked the necessary supplies for lab activities. Both students and lecturers, especially those with part - time employment, were pressurized. The unavailability of practical and laboratory availability raised unique challenges. Campus-based education is still safe for the time being, but long-term concerns are growing because the present situation is not economically sustainable. The solution to this issue should be to offer introductory classes that are as interesting as feasible. **(Aini, Budiarto, Putra October 2020)** shown in her research that self-regulation issues, technology, the internet, and online learning communications infrastructure all provide hurdles for participants. Unfortunately, competence, pragmatism, self-control, and solitude difficulties are struggles for instructors. While conducting online lessons, trainers also face organizational and technological challenges, including a lack of sufficient training, ensuring students' interest, and an increased teaching workload. Instructors are also worried about loneliness problems, such as loneliness in tutorial videos, and keeping a balance between work and life when working away from home. **According to Daniel Twesige1 and Faustin Gasheja** the COVID-19 epidemic has both advantages and disadvantages on learners' educational life in higher learning, with the negative ones being more prominent. The bad effects of the COVID-19 pandemic generally involve educational disparities amongst several student and teachers, poor attendance rates, an absence of practical learning, knowledge and experience for classes that require experimental use, which impacted the standard of work of the trained key skills, and a total lack of teamwork because of restrictions on working in a team as a result of social distancing provisions. The research also revealed that problems with

broadband connections, internet data, and power supplies had a greater detrimental impact on rural students.. According to **Mahyoob, M. (2020)** the number of learners failed to connect with the internet, attend classes, and obtain course material. Smart phones owned by students could not be used to offer digital assessments. Concerningly, answers to open-ended questions throughout online English language classes can reveal pupils' reluctance to adequately connect with teachers. **Dr. V. Sathish Kumar, R. Radha, K. Mahalakshmi, Dr. AR. Saravanakumar, paa vizhi (2020)** we believed that the spectrum of e-learning was expanding rapidly. Their analysis showed that, particularly during the COVID-19 pandemic closure period, e-learning has become more and more widespread among students all across the world. With regards to e-learning, facilities and technology, administrative and technological support, and teachers' attitudes were the most commonly reported issues by nursing students. The absence of internet tools and students' reluctance to it are the biggest obstacles to an online learning environment. Thus, in order to create a conducive learning atmosphere for all participants, government should conduct conferences and meetings for both educators and learners. (2017) Ullah et al. Instead of blindly encouraging e-learning, the government, quasi organizations, and higher learning institutions must collaborate to support students' requirements in circumstances like these. **According to Linda Theresia 7<sup>th</sup> April 2022 Students'** desire to participate in online courses may be impacted by a variety of factors, including learning challenges, learning problems, and the use of technology tools that aren't as successful than in-person interactions. Additionally, according to the study's findings, motivation and student satisfaction are unrelated. According to **Mahadin, Corry Iriani Rochalina and Nurzengky Ibrahim May 25, 2022 one** of the issue that participants must resolve is poor network connection. Other issues include inconsistent connectivity, the availability of laptops and smartphones, as well as equipment failure. Another difficulty for teachers and students is that accessing e-learning tools requires a speedy internet connection in order to check and execute tasks. Many students do not percieve the content supplied in e-learning because the teacher simply delivers the educational content without properly explaining it and because it is difficult for both learners and educators to communicate with one another. (Albab, 2019; Taradi Taradisa et al., 2020). Members of the family also have financial difficulties because e-learning only drives up the cost of acquiring a license. This is because the COVID-19 pandemic has reduced the amount of money that student parents make. Technology difficulties, such as those involving technical assistance and care (such as Internet performance and the availability of contemporary technical multimedia training tools). According to data conducted by the Ministry of Digital Transformation, broadband Internet is not available in 65% of Ukrainian localities (Epravda, 2020). Methodological problems include a lack of scientific backing and the requirement that teachers receive specialized training in conducting remote learning. Users of e-learning had both positive and negative outcomes as a result of its use. The key advantage has been found as flexibility in terms of place and scheduling. The research also showed that e- learning rapid adoption has a negative impact on users' socialization and psychological health. Theoretical colleges appear to offer a more advantageous appraisal of the amount of productivity, motivation, efficient learning, and user involvement when compared to practical colleges. In the long term, users were strongly in favor of integrating online learning tactics into traditional classroom training; 75% of users preferred a blended model that combined face-to-face and e-

learning strategies rather than relying exclusively on one type of learning. The two major challenges i.e poor e-learning facilities and participants' absence of preparedness were found to be major constraints to Rwanda's successful implementation of e-learning. In spite of the COVID-19 pandemic, this study investigated the factors impacting learners' decisions to continuing using online learning. Learners' desire to continue using online learning is highly altered by how satisfied they are with it. This aspect also motivates learners to keep using online education. The findings also demonstrated that there was a greater choice for online learning resources due to the perceived COVID-19 danger. By emphasizing the ongoing use of e-learning both during and after the COVID-19 Pandemic, the present research contributes to the volume of knowledge in this area. It is also one of the rare research projects to include the COVID-19 Perceived Risk variable into consideration. Nigerians have a number of challenges while trying to learn remotely, including inconsistent power supply, costly internet services, and poor internet connectivity.

## **THEORETICAL FRAMEWORK**

### **Evolution of E-learning**

E-learning is typically defined as education that is taught and learnt using a computer. E-learning is sometimes referred to as online learning, web-based training, computerized learning, computerized teaching and other similar words. All of these refer to the use of information and technology in educational activities, whether they are carried out individually or in groups, online or offline, simultaneously or not, or using separate or connected computers or other digital devices. This is the main idea behind all of these. Future learners will be entirely digital. Researchers have referred to today's students as Generation @, digital immigrants, net-generation, and so-called digital natives. (Pelevin & Bromfield, 2002) During the new normal era, when higher tutoring institutions were suffering from numerous challenges due to COVID-19 outbreak, the goal of this paper was to examine how e-learning and other relevant platforms, technology, and internet effects benefited this significant business. In this study, teachers and students will talk about ways to get over the challenges of using these devices. Although there were many advantages of e-learning like ease to use, flexibility, and quick delivery of lectures but there were many challenges that learners faced while using e-learning because not every student was having digital facilities, especially the one who lives in remote areas. Advanced and developed learning institutions quickly adopt the theories and methods of e-learning, the education fields are undergoing major alterations. At present, most of the universities, including those in Taiwan, are beginning to offer online courses as a supplement to their traditional classroom offerings. Online learning offers students a range of advantages, including ease, versatility, and chances to engage and interact with professors and learners from various institutions globally.

### **E-Learning 1.0**

E-learning 1.0 refers to a time when teachers communicate with learners through a range of communication channels and provide educational information that is media-rich.



## **E-Learning 2.0**

Stephen Downes coined the term "e-Learning 2.0" to refer to the usage of Web 2.0 technologies in education. (2005). (Richardson, 2009) in this environment of collaborative learning with multi-directional interaction, learning may be socially generated via wikis, blogs, podcasts, and other social web tools.

## **E-Learning 3.0**

We are entering the next phase of e-Learning thanks to the rise of cloud computing and the introduction of new technologies like collaborative intelligent filtering, expanded and dependable data storage capacity, higher screen resolutions, multi-gesture devices, and 3D touch user interface. An example of a true e-learning 3.0 system is AHKME (Adaptive Hypermedia Knowledge Management E-Learning Platform)

## **The latest Online Learning Platforms**

Thinkific, Coursea, LinkedIn learning, eDX, Skill Sharing, Open Learning, Udemy, Masterclass serve as great platforms for developing educational products and setting up a unique learning opportunity for your team which offers so much flexibility. Uncertain about how to begin? These platforms will show you how to design online classes and a syllabus, while also showing you how to successfully market, to promote, and deliver them. These are the world's biggest education platforms; they collaborate with prestigious universities and businesses to create the finest programs and courses in a broad range of subjects and have millions of students worldwide. Individual courses, diploma courses, and college-level courses are all also offered. LinkedIn Learning has offered more than 17,000 programs on a variety of business, digital, and creative subjects. LinkedIn Learning excels at instructing users how to utilize complicated functions, frequently by breaking it down into the most basic activities (e.g. how to utilize v-lookup functions in Excel sheet). Skill share is a great resource for anyone interested in the arts or learning new skills which are creative. Skill share emphasizes practical skills over educational achievements. On Skillshare, courses are frequently taught by well-known creative people and rarely last longer than two hours. An Australian platform called Open Learning collaborates with prestigious organizations and provides more than 4,000 courses on a range of topics. Udemy is the widest online educational platform available, offering more than 180,000 courses throughout every possible subject area, with 60,000 teachers. On Udemy, there is no overarching subject; you may learn everything, from graphic design to personal development. The majority of lectures also make use of interactive multimedia, combining questionnaires, text, graphics, and videos. Anyone can learn from the world's top experts on Master Class. Presently, there are approximately 100 courses accessible this website, although, serves greatest for individuals who want to be exposed to overviews of numerous distinct crafts. If you're searching for systematic and organized way of learning digitally, edX is one of the greatest solutions available online on the internet. This online learning platform partners with esteemed universities like Berkeley, MIT, and Harvard to offer online access to real degree programs.

## **Importance Of E-Learning**

- For learners to finish their basic education and advance their skills, e-learning has been designed. Additionally, anyone can obtain a certificate or degree without ever entering a school, college, or other institution of learning.
- Teachers can instruct from wherever they want at their convenient times, which is a terrific way of earning money.
- Using e-learning throughout all stages of education ensure that learners comprehended the information well and more quickly.
- According to psychology, the audio-visual teaching method fosters an organized learning environment. Excellent instructor and learner interactions are maintained.
- One advantage of using e-learning in the classroom is that both students and instructors can get enhanced skills
- The goal of e-learning is to connect students, educators, experts, professionals, and others. Therefore, using multiple digital channels to deliver information is a terrific idea. This is essential in the present period, when competition is growing and the world is expanding. So quick information contributes to a person's effective growth.

## **TYPES OF E-LEARNING**

### **Blended eLearning**

Blended e-learning is a combination of face-to-face teaching and computer- based- teaching, blended e-learning promotes educational and information review beyond usual classroom environment.

### **Mobile eLearning**

Ability to access educational resources via mobile is known as mobile learning, or M-Learning. This technology allows users to collect information anywhere and anytime according to their suitability. According to Sharples (2000).

### **Social Elearning**

Applying social pedagogical approaches to the electronic learning process is what social e-learning entails. Social learning involves learning from and with others, as its name suggests. According to Chetia (2019), when people watch how others behave or the effects of others' actions, it is called social e-learning.

### **Synchronous Online Learning**

Learners from all around the globe can simultaneously connect by synchronous online learning. (Hrastinksi, 2008). Video conferences online and online chat help to facilitate this direct interaction, allowing for immediate communication between teachers and learners.

## Asynchronous Online Learning

Asynchronous online learning enables learners to study separately at different time and places without actual interaction. Email, blogging, digital books, DVDs and CDs, are few examples of technologies that are utilised for asynchronous e-learning methods. On the basis of the previous study and literature review done on e-learning around the time covid-19 pandemic these downsides and prospects were found.

**1) E-learning quickly gained popularity because there weren't many alternatives:** -During the recent covid-19 outbreak lifestyle and social functioning was seriously disrupted such as businesses, jobs, transportation etc same was the case with education. Due to the rising number of Covid cases it was quite essential to follow preventive measures and health care guidelines. Whilst E-learning emerged as a valuable asset for students and teachers due to the easy of accessibility, surplus of information and as a worthy substitute of regular learning.

**2) Prompted unorthodox behavior:** -Due to the freedom aspect of E-learning unorthodox behavior was a challenge for guardians and educators. Most common examples are skipping learning sessions, lack of focus and concentration, disturbance and mischief during sessions. Due to the virtual nature of online classes it was difficult for teachers to enforce disciplinary actions on students, therefore E-learning required willingness and commitment of students to harness its maximum benefit.

**3) Lack of internet facility:** - Online learning requires strong internet connection which many students failed to access. This was the most common problem faced by every student as many of them didn't have proper internet connections and there was shortage of electricity in the remote areas. So students could not matched up their standards with the virtual learning.

**4) Monetary Losses:** - Unemployment was one of COVID-19's major effect as it was spreading rapidly many people were asked to leave from their jobs to stop it from further spread. Many of the individuals had to take salary cutbacks, others had trouble finding fresh work. Based on the United Nations labor agency, COVID-19 is causing a rise in career losses for close to 50% of the worldwide workforce. Most people are financially impacted by unemployment, particularly those who have big families.

**5) Absence of Extra activities like sports and other cultural activities:** -E-learning is good platform to learn various subject and syllabus digitally but co-curricular activities like dancing, singing, sports and other cultural activities were not available online. Through E-learning students couldn't participate and enjoyed co-curricular activities so they were not that much happy and felt disconnected.

**6) Cheating in test and assignments:** - Most of the students cheated while giving test or submitting the assignments as they were having full access of internet so they cheated while giving the answers through notes available to them online rather than relying on their self-knowledge and skills.



**7) Psychiatric distress:** -As e-learning became a compulsory option to adopt for continuing the education majority of the learners could not adopt it successfully due to its unfamiliarity. This led to anxiety, worry and emotional distress among the students.

**8) Limited interaction of students:** -During online classes, student interaction was limited to coordinating group assignments and homework. In contrast to face-to-face instruction, learners were deprived of the chance to converse, spend leisure time together, visit the dinner hall and the devotional hall, and gain knowledge from one another.

**9) Learning environment was not favorable at home:** -Students didn't got a positive learning environment at home because they were forced to devote their time in household activities. Females were forced to do the activities like washing clothes, cooking food and dusting etc. While male students on the other hand to help their families financially.

## ADVANTAGES

**Lessons are delivered quickly:** E-learning is a method of delivering lessons quickly. This mode has relatively short delivery cycles when compared to traditional classroom teaching methods. Lessons begin quickly and are completed in a single learning session.

**Provides flexibility:** Students can set their self- learning pace rather than following the class's pace. Students can study only the topic related to his/her study areas of the learning material rather than studying entirely. They can skip the sessions that does not relate to their study.

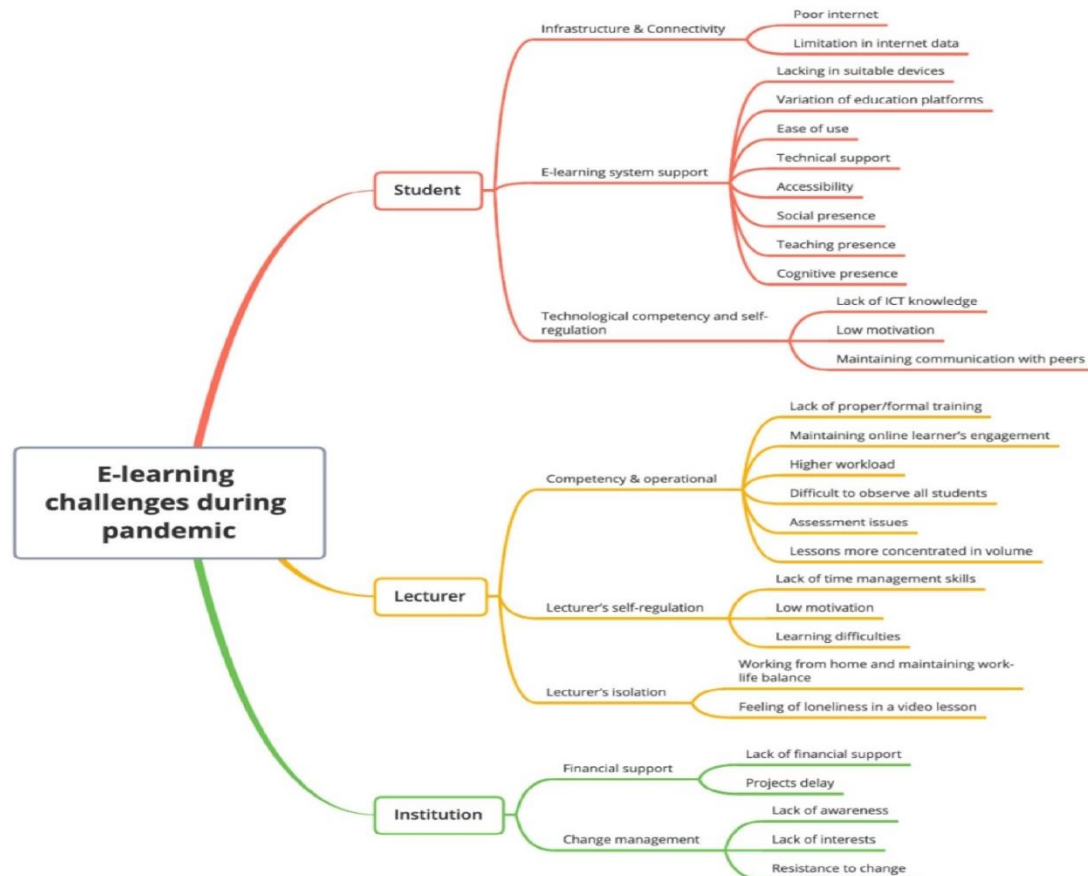
**Saves time:** E-learning saves a lot time as learner need not travel to schools and colleges to attend the lecture, he/she can attend class in privacy of your own home.

**Reduction in expenditure:** In contrast to traditional forms of education, e-Learning is economically more affordable. This cost reduction comes from the effectiveness and ease of online learning. Due to lower costs for students, course materials, hotel, and travel, a sizable amount of teaching time is saved. Thus cost saved ultimately contributes to an organization's profitability.

**Environmental Impact Is Reduced:** Because E-learning is a paperless way of instruction, it helps to safeguard the environment to a large degree. As per research on distant online courses, e-learning occupies approximately 90% less power and produce 85% less Carbon-di-oxide radiations than offline campus-based classes. As a result, switching to online mode is a very environmentally friendly method of studying.

**Risk-free:** Individuals who feel confident taking risks can study in an atmosphere that is largely invisible without the shame of failures or any political and social prejudice that might come from face-to-face interaction.

**Figure 1: Taxonomy of challenges in e-learning during COVID-19 pandemic**



## CONCLUSION

This survey revealed that E-learning has grown to be extremely widespread among learners from all over the world, especially around the time of COVID-19 pandemic's quarantine phase. This paper offers an assessment of the difficulties as well benefits with online education around the time of COVID-19 epidemic. E-learning has both beneficial and detrimental effects, although the negative effects are more pronounced. Most of the authors agree that absence of strong internet connectivity, equipment failure, costly internet services, irregular power supply, lack of devices, lack of interest were the most common obstacles that made e-learning even more challenging. Moreover, instructors worry about issues like absence of social inequality, student reluctance, isolation, practical and technical challenges while difficulty in presenting e-learning content, including an inadequate level of training, and increased teaching workload. The Covid-19 pandemic also gave rise to several institutional barriers, including raising finance and addressing issues with change management, such as resistance to change and slow implementation of e-learning. The majority of the authors have discovered issues like mentioned above but only few has talked about sports and extracurricular activities in their study. In additionally, there is a need to narrow the inequity gap among kids who have access

to educational tools and those who do not and also to expand sports and extracurricular activities through means of e-learning. The learners should receive online learning training from educational institutions. Effective instructional supervision should be implemented in courses as a vital positive step toward online teaching and learning to prevent negative consequences for students. Government should take necessary steps to improve the quality of educational content by providing regular power supply, strong internet connection, proper training to educational instructors, technological devices which are fully equipped, removing social inequality and affordable internet services. To create a favorable learning environment for all learners, administration should hold time-to-time meetings and conferences for both teachers and students to create interest in regard to e-learning. Students' needs must be given prior attention so that what actually they demand while learning online can be identified. In this way e-learning will become a boon to students rather than a challenge.

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