

E-learning- A New Trend of Learning in 21st Century During Covid-19 Pandemic

Lata Kanyal Butola

Tutor, Dept. Of Biochemistry, Jawaharlal Nehru Medical College, Sawangi Wardha, Dmims Maharashtra

Abstract

The dissemination of COVID-19 has contributed to the closing of educational institutions around the world. Such closing accelerated the creation of online learning environments within these institutions, ensuring that learning would not be interrupted. The coronavirus pandemic tested the ability of the centers to cope with a problem that involves online and remote intervention. Most have not been educated, so it is necessary to investigate the motives for providing online classes to students, which go beyond the confinement era. The vast majority of children have no previous experience of remote learning previous to the pandemic. Since the COVID-19 pandemic has destroyed people's usual lifestyles around the globe, the virtual world has come to the rescue. Like several institutions, schools have already transferred their focus to interactive networks to take classes online. Video conferencing tools such as Zoom and WebEx are commonly used and learning management systems such as Infrastructure Canvas, Blackboard and Google Classroom. In addition, applications such as Proctorio, a Google Chrome plugin that tracks students taking online tests, are available. In India, too, all educational institutions have been suspended by the government as part of the national lockdown, which has impacted learners ranging from school-learning to post-graduate students.

Keywords: *E-learning, Lockdown, digital platform, COVID-19.*

Introduction

Due to COVID-19 pandemic, the doors of schools and colleges are barred all over the country. Approximately 1.5 billion student studies are affected by COVID 19. The entire education system has changed since the pandemic. The teaching and learning process is part of the digital platforms. This digital platform is known as e-learning. E-learning is a completely different learning experience for Indian students. Web-based computing, distributed learning, online learning, or internet-based learning is another term for e-learning. A method of learning based on formalized learning with the aid of electronic tools is known as e-learning. While education may be centered in or out of schools, the use of computers and the Internet is a core component of e-learning. E-learning

may also be defined as a network facilitating the sharing of skills and expertise and delivering education to a wide number of recipients at the same or different times. Earlier, it was not widely embraced as it was believed that this method lacked the human aspect needed for learning. E-learning or online education allows users to obtain access to world-class learning experience where regular higher education may not be feasible due to income, personal or other restrictions. In countries like India, there is a tremendous desire for e-learning to take its shape. India is the second-most populous nation in the world. The power of every nation is its inhabitants, and India has a population of 134 crores, or 1.34 billion. One of the best places in the world to take advantage of these new e-learning developments is a nation like India. Today, India is host to many of the new e-learning developments in education that developing countries have been using for a very long time. As we remember, the whole world is facing a very deadly virus called COVID-19. Due to the worldwide outbreak of Coronavirus, the governments of most countries have directed the closure and advised people to stay in their

Corresponding Author

Lata Kanyal Butola

Email: Kanyallata1010@gmail.com

Contact: +91-7892390212

Date of Submission: 19-09-2020

homes and be healthy. Likewise, the Indian Government has ordered a full lockdown. Education is known to be the foundation of our nation in India. Owing to the lockdown, the education system has been significantly disrupted because schools and universities cannot be accessed, so the main challenge is how to educate children when living at home. In order to address this issue, the idea of e-learning is being adapted by schools and colleges to educate their students. In fact, e-learning proved to be helpful during the COVID-19 crisis. More students have opted for Ed-tech and other online training outlets during this current pandemic. Online networks such as Vedantu, Unacademy and Byju's have provided free access to live classes to help students learn easily from their homes, and there has been a huge increase in students using these educational applications. Online platform educators have already begun to take more live classes.⁽¹⁾ Formerly, there were two common categories of e-learning: distance learning and computer-assisted teaching. Where distance learning is preferred for those living in rural areas, information technology is used to give guidance to learners and computer-assisted training uses computer tools to help provide stand-alone digital learning and teaching programs.

Role in Medical Education

The need for the hour is to bring e-learning into medical education. The Indian Medical Council (MCI), the governing body for medical education in India, has recognized the value of technology and has included the use of electronic means in the broad competency "Lifelong Learning Dedicated to Continuous Development in Skills and Knowledge".⁽²⁾ Indian medical graduates must have acquired this expertise at the time of graduation. The student must constantly learn new skills to keep up to date with the newest technologies, which are generally deemed impossible to do in the absence of technology. The use of e-learning will help them accomplish the aim of continuous professional growth, given the vastness of the program, the shortness of time and the often overburdened schedule.⁽³⁾ Recognizing the value of information technology for today's doctors, the General Medical Council in the United Kingdom further claims that medical graduates should be able "to make efficient use of computers and other information technologies, including information storage and retrieval".⁽⁴⁾ From a mere 'content spreader,' teachers are gradually

becoming 'learning facilitators'^(5,6), which is supported by e-learning tools that offer a range of online resources.⁽⁷⁾ E-learning systems can be used to increase all learning fields, including cognitive, psychomotor and affective learning. In the cognitive area, classroom community instruction may be improved by offering online resources such as pre-reading assignments and audio-video clips during sessions. And students may be equipped with virtual resources such as audio-video clips, podcasts, videos, and web-links for self-directed learning designed to be used at home or as part of Flipped lectures. Psychomotor abilities, while better learned with actual experience, can also be improved by technology, at least up to the 'know-how' stage. Audio-visual illustration of treatments, diagnostics and therapies can be given. Students can read through the descriptions and display the procedural skills checklists before actually practicing the same under supervision in clinical posts or in specialist laboratories. In the affective domain, videos of scenarios depicting good and bad communication-skills, role-playing and counselling sessions, and self-recording - can be used to promote learning. Other modalities include multimedia case reports and patient records, health decision support services, interactive patients, medical video games, e-books, e-atlases, instructional libraries, and digital editions of online journals.

More and more colleges are now incorporating classroom training with online learning. Related methods have been applied: Blended learning ties together with online education and traditional classroom teaching. Both blended learning and e-learning in medical schools have developed over the past few years, taking various forms.⁽⁸⁾ It should be assured that students have gained a minimum of expertise before they reach the professional. This will significantly increase the efficiency of teaching.⁽⁹⁾

Flipped classroom instruction is a situation where students research challenging data at home. The classroom is then used for problem-solving, analytical instruction and asking and response sessions. This teaching method has been seen to be very effective.⁽¹⁰⁾ Just in time teaching is another type of blended learning, where students study online, respond to MCQs and thus allow the educator to adapt the in-person teaching session to the needs of specific students.⁽¹¹⁾

Technology and applications play a vital role in the education sector during the lockdown:

1. Interaction enhancements:

Learning apps can improve a child's relationship with their guardians. They seem to get more involved and to speak about their professions.

2. Good contact between parent and teacher:

These days, learning innovations are being introduced in different classrooms. This device also allows teachers to lecture from their homes and also review the student's success with their parents. Teachers will take care of the parents' questions at any time and wherever and make educated decisions about the child's development.

3. Availability of resources online:

Online learning infrastructure allows students to browse a broad library of materials, including books, PDFs, test papers and more. These tools assist students in their learning process in order to access informative information.

4. Provides fun too:

According to research, smartphone applications facilitate entertainment. Learning is a no longer passive practice, it is involved with apps. Lessons turned into games will change the face of education. The implementation of gamification of learning has helped to increase the level of engagement of children with creative and exciting strategies to play while studying.

5. Promotes distance learning:

Online learning has benefited from versatility in the time and place of study. Students have access to research materials and tools at all times. It also offers students the autonomy to study at their own pace.

6. Offers personalization:

In addition to so many other opportunities, E-learning often provides personalization. In order to address the needs of each student in compliance with their needs, e-learning platforms offer a customized way of teaching and learning that is specific to the individual. They stay involved in the course until they know what

to study.

7. Cost-effectiveness:

E-learning technology is much more cost-effective than most other methods of education. With access to all students around the world, regardless of their educational and economic context, e-learning resources are accessible at a low price and provide them with better education.

8. Portability:

When studying online learning applications, you can study in a cozy and relaxing environment. And sure you're checking it because you're getting a decent internet connexion.

9. Sustainability:

The method of mobile learning is sustainable. Although millions of trees are being cut down to generate papers on the conventional learning process, smartphone applications in education need only a download. It means greener land for future generations.

10. Report on real-time performance:

E-learning helps students to assess their success in real-time. This input offers students a quicker and more thorough review of their success in school.

11. Live-streaming seminars on the solution of real-time doubts:

Online learning applications allow students to take part in live streaming lectures by instructors and professionals. Students may also benefit from real-time doubt-solving through the use of specialized technologies. This gives them a living knowledge of great and quality education at the comfort of their homes.⁽¹²⁾

E learning during Covid 19

In India, students have access to their studies through e-learning due to a lockout. There are several platforms in place to facilitate online education in India. These networks are funded by the Ministry of Human Resources Development (MHRD), the National Council for Educational Research and Training (NCERT) and the Department of Technical Education. Many apps

have free access for online courses such as Gradeup, Unacademy, Vedantu, Byju's. In the current situation, students have access to lessons across multiple applications and this lets students study for and complete their exams. Commonly, in India, since closing, most universities and colleges have requested faculty members and students to use the digital platform for academic purposes. Faculty members include PDF files, PPT, tasks, mock-tests to their WhatsApp and addresses, as well as online classrooms through Google Classroom, Zoom Cloud Meeting Software, WebEx App. This study of the students is not affected during this corona crisis. Health educators now face distinct obstacles than their predecessors in training physicians tomorrow. Over the last few decades, improvements in health care implementation and innovations in science have raised pressures on the college staff, resulting in less time for teaching than was historically the case.⁽¹³⁾ Changes in health care delivery environments, from acute care hospitals to community-based chronic care facilities, have prompted modifications in educational settings.⁽¹⁴⁾ Seeking time to educate "modern" subjects such as genomics, palliative care, geriatrics, and alternative medicine is challenging while medical school curricula are also being forced to include standard materials.⁽¹³⁾ Typical teacher-centered education gives way to a learner-centered paradigm that places learners in control of their own learning.

Benefits of e-learning

- It's simply a web-based instruction.
- The easiest and most practical way to practice on your own.
- It's the quickest way to read.
- 24x7 Easy to reach anytime.
- It helps to improve students' skills when they have the option of choosing study content.
- It's time-saving. Making education interactive Visually impressive content to learn and retain better Convenient learning from comfort zones Personalized guidance and mentoring Multiple practice sessions Flexible study time.⁽¹⁵⁾
- Convenience for participants in the learning

process, – streamlining and maximizing the work of teachers.

- Simple, fast and reliable access to tools and deliverables for learning.
- Better data protection.
- More communication opportunities.
- More effective flow of knowledge.
- A highly efficient class organization.⁽¹⁶⁾
- Some of the advantages of this digital platform are Screen Sharing Online Study-Whiteboard Online Mock Testing and Practice Testing File Sharing Registered and Live Classes Update and share analysis materials detailed scorecards and reviews Annotation Live discussions.⁽¹⁵⁾

Limitations to e-learning

- It is not effective in rural regions where Internet access is not as high as it is focused solely on the Internet.
- It is not suitable for technical subjects such as mathematics and operational research.
- It is not important that the teacher is always available on request.
- It is not helpful for students who are not self-motivated to learn.
- The use of e-learning can make students feel alienated.

Conclusion

The Covid-19 outbreak makes us realize that no matter where the learning process takes place, schools should be ready to make the most of it. From this review paper we can conclude that e-learning is all about learning and taking a step that helps in moving toward higher education level. We have to be familiar with technology devices and use them to enhance the education system. This tool is very helpful in this pandemic as you will get knowledge without going outside to the home.

Ethical Clearance- Nil

Source of Funding- Nil

Conflict of Interest - Nil

References

1. Owusu-Fordjour, C., Koomson, C.K., & Hanson, D. (2020). THE IMPACT OF COVID-19 ON LEARNING - THE PERSPECTIVE OF THE GHANAIAN STUDENT. *European Journal of Education Studies*.
2. MCI Vision 2015 Booklet. Medical Council of India. Available from: www.mciindia.org/tools/announcement/MCI_booklet.pdf. Accessed June 18, 2016.
3. Choules AP. The use of e-learning in medical education: A review of the current situation. *Postgrad Med J*. 2007;83:212-6.
4. Outcomes for Graduates. Available from: http://www.gmck.org/Outcomes_for_graduates_Jul_15.pdf_61408029.pdf. Accessed September 27, 2016.
5. Ruiz JG, Mintzer MJ, Leipzig RM. The impact of e-learning in medical education. *Acad Med*. 2006;81:207-12.
6. National Journal for Basic Medical Science. Effective use of e-learning in basic medical sciences. Available from: <http://njbms.com/physiology/effective-use-of-e-learning-in-basic-medical-sciences/#.V2UcMhIcky4>. Accessed June 18, 2016.
7. Chodorow S. Educators must take the electronic revolution seriously. *Acad Med*. 1996;71:221-6.
8. Wodecki A, Dąbrowski M, Zając M. Efektywność zdalnej edukacji w aspekcie nauczania przedmiotów medycznych. E-edukacja w praktyce–wyzwania i bariery. 2008;2:89.
9. Hadie SNH, SimokAA, Shamsuddin SA, Mohammad JA. Determining the impact of pre-lecture educational video on comprehension of a difficult gross anatomy lecture. *J Taibah Univ Med Sci* 2019;14:395-401.
10. Roe Y, Rowe M, Odegaard NB, Sylliaas H, Dahl-Michelsen T. Learning with technology in physiotherapy education: Design, implementation and evaluation of a flipped classroom teaching approach. *BMC Med Educ* 2019;19:291.
11. Dominguez M, DiCapua D, Leydon G, Loomis C, Longbrake EE, Schaefer SM, et al. A neurology clerkship curriculum using video-based lectures and just-in-time teaching (JiTT). *MedEdPORTAL* 2018;14:10691.
12. Online accessed. india.today.in/education-today/featurephilia/story/how-app-and-technology-is-playing-a-crucial-role-in-education-sector-during-covid-19-pandemic-1711081-2020-08-14. Accessed September 18, 2020.
13. Ozuah PO. Undergraduate medical education: thoughts on future challenges. *BMC Med Educ*. 2002;2:8–10.
14. Nair BR, Finucane PM. Reforming medical education to enhance the management of chronic disease. *Med J Aust*. 2003;179:257– 59.
15. Online accessed. <https://yourstory.com/mystory/online-learning-impacts-education-industry-covid-19>. Accessed September 18, 2020.
16. Roszak M, Kołodziejczak B, Póljanowicz W, Bręborowicz A, Ren-Kurc A, Kowalewski W. E-learning portal tools for medical education. *Studies in Logic, Grammar and Rhetoric*. 2015 Dec 1;43(1):177-93.