

Guest Editorial

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E-Learning in Times of COVID-19 Crisis

The novel Coronavirus-19 (COVID-19) pandemic has adversely affected healthcare, society, and the economy. With no definitive drug therapy, the governments worldwide have taken preventive measures such as social distancing to curb the spread of COVID-19. There has been widespread closure of the schools, colleges, and universities since World Health Organization declared the situation as a pandemic in March 2020.¹

Medical education has faced the brunt, especially as the teaching hospitals have been converted to COVID-care hospitals, healthcare professionals are involved in COVID-care rather than their specialization, academic gatherings have been restricted, and the clinical teachings in hospitals have been curtailed.²⁻³

With COVID-19 likely to stay for uncertain amounts of time and its negative effect on learning opportunities, the education systems have rapidly come up with online-learning as an alternative to in-person teaching.⁴⁻⁵

'Online learning' or 'e-learning' or 'web-based learning' may be defined as "learning in synchronous or asynchronous environments using different devices with internet access."⁶⁻⁷ The students/ learners may be present anywhere and still participate in learning and interact with the teachers/ instructors. Synchronous learning involves live classes, lectures, and webinars. These have the advantage of real-time interaction between students and teachers and instant feedback. Asynchronous learning is not live and includes recorded classes or lectures. The students may attend the classes/ lectures as per their choice of time. However, interpersonal interaction and instant feedback are not possible with asynchronous learning. For e-learning to be of most benefit, there are certain prerequisites. These include a reasonable number of eligible students, good internet connection, access on multiple devices (mobile phones, i-pads, or laptops), the opportunity for learner-instructor interaction, and the option of recording the session for watching later. E-learning has increased exponentially in the current pandemic, and it is no longer merely an option. The pandemic has forced the education systems to switch from in-person age-old mode to modern technology-based teaching mode. The greatest benefit of the online mode of pedagogy is that many learners and instructors may attend at any time and from any-place across the world. The education systems have to adapt to this change and do so in a short span of time and maintain the quality of education. Lucrative solutions include video-conferencing software's such as Zoom, Skype, Microsoft Team, Google Meet, etc. and online course platforms such as Thinkific, Teachable, Udemy, WizIQ, etc.

Online learning has its own difficulties and problems.⁸⁻⁹ Technical difficulties may involve internet connectivity, installation of software, login, download, and audio and video telecast. Organizational problems may include a poor design of the class/lecture, all-theoretical or mediocre content, and lack of interaction between students and teachers. There may also be present learner-associated barriers such as poor motivation, lack of perceived benefit, concerns about the content validity, time constraints due to COVID duty, and inadequate access to technology or the internet. The students may face a dilemma from innumerable options of online learning platforms available. The balance between study, work, family, and social life may be disturbed with over-occupation in online learning. Increased digital-screen time also adversely affects the ocular surface, refractive state of the eye, sleep pattern, attention span, mental and physical health.¹⁰

Since e-learning has become a necessity in the current scenario, we need to look for possible solutions to fix the difficulties and problems with e-learning. Technical problems can be dealt with using technology based on internet connectivity and digital skills of students and teachers, temporarily mobilizing the tools/devices for e-learning to those with poor access,

and by keeping pre-recorded sessions. The online classes/ courses need to be made interesting and interactive. The quality of the courses should be improved continuously. The duration of the sessions needs to be defined and regulated as per the abilities of the students. The teachers/ instructors should make an effort to strategically interact with students throughout the session to keep them alert and attentive. Social media platforms such as Twitter, Facebook, etc. may extend the interaction beyond the session. Feedback from the learners and teachers may help educators in making the sessions more effective. The screen time needs to be regulated as per age-appropriate recommendations with frequent breaks, short sessions, maintaining proper distance from the digital screen, preferring larger screens rather than mobile phones, and following other screen etiquettes such as room lighting, screen brightness, and contrast.

The Covid-19 pandemic has changed the way how we receive and impart education. Online learning methods facilitate teaching activities, but there is a need to weigh the pros and cons of technology. Educators must focus on collaborative and case-based learning approaches to make e-learning experience better both for learners and teachers.

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