

Benefits and Challenges of Online Teaching Learning from the Students' View

Rayhana Sultana¹, Rono Mollika², Afroza Khanam Sumy³,
Sharif Shahjamal⁴, Farzana Alam⁵, Pran Ashraf⁶

Abstract

Background: Online learning is the major concept in education which converts the traditional educational shape into a new form that transforms in person or physical learning into a virtual approach of learning. It is an alternative to traditional classroom learning and involves using primarily the internet and one or more other technologies.

Objective: This study explores the perception of students regarding its benefits and challenges and recommendations. **Materials and method:** Data were collected from 273 students of 1st and 2nd year MBBS from January 2021 to February 2021 at Enam Medical College, Savar, Dhaka, Bangladesh, using a predesigned validated questionnaire. **Results:** The findings of the present study revealed that most of the students lack in academic or institutional knowledge regarding the ICT tools used in online learning process. The benefits included its flexibility regarding the time and place, sharing of information is easy and cost effective and allows mass audiences. Whereas, less effective in practice-based learning, instant feedback is difficult, lack of attentiveness, disturbance of physical health and diminished social interaction were identified as major disadvantages. **Conclusion:** Online learning has its own set of advantages and disadvantages as other teaching methods. The purpose of this study was to assess the current state of online learning activities from the students' perspective.

Keywords: Online learning; ICT tools of online learning; Advantages and Disadvantages.

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Introduction

The emergence of COVID-19 pandemic has led to the sudden closure of offices, shopping malls, schools and colleges, universities and other educational institutions all over the world temporarily.^{1,2} Unexpected closure of the

educational institutions created an enormous disruption of educational systems, affecting 94 percent of learners in more than 190 countries in all continents.³ To ensure that students are not left without studying and to reduce the epidemic from

Author information

1. Associate Professor, Department of Physiology, Enam Medical College & Hospital, Savar, Dhaka, Bangladesh.
2. Associate Professor, Department of Physiology, Enam Medical College & Hospital, Savar, Dhaka, Bangladesh.
3. Associate Professor, Department of Physiology, Enam Medical College & Hospital, Savar, Dhaka, Bangladesh.
4. Associate Professor, Department of Urology, National Institute of Kidney Diseases and Urology, Sher-e-Bangla Nagar, Dhaka, Bangladesh.
5. Lecturer, Department of Physiology, Enam Medical College & Hospital, Savar, Dhaka, Bangladesh.
6. Lecturer, Department of Physiology, Enam Medical College & Hospital, Savar, Dhaka, Bangladesh.

Correspondence: Dr. Rayhana Sultana. e-mail: jollyjolly2911@gmail.com

spreading, the educational authorities were forced to switch from the traditional learning to the alternative online-learning (OL) methods.⁴ Online learning is the concept in education which converts the traditional educational shape into a new form that transforms in person or physical learning into a virtual approach of learning, where students or teachers does not need to be available all the time but the learning resources can be obtainable 24/7 in the form of video or audio or any other file formats.⁵

There are three ways of online learning, synchronous, asynchronous and hybrid or blended format. Synchronous sessions provide real time interaction, which can be collaborative in nature incorporating e-tivities such as an instructor's lecture with a facility of questions-answer session. It requires simultaneous student-teacher presence. On the other hand, asynchronous environments are not time bound and students can work on e-tivities on their own pace. A hybrid online environment blends synchronous sessions with asynchronous set of e-tivities.^{6,7} Online learning is changing the way of our teaching-learning approach. As information and communication technologies (ICT) have kept advancing, online learning has become more feasible technologically, economically and operationally.⁸ It is becoming increasingly common at many higher education institutions, offering fully online and/or hybrid/blended courses combining online instruction with face-to-face teaching. In a statistics done by the Pew Research Center showed that in the 2010-11 academic year, 89 percent of four-year colleges and universities offered courses taught fully online, or hybrid/blended online or other forms of distance/non-face-to-face instruction.⁹

Online learning provides many benefits to both instructors and learners with speed and low cost of money.¹⁰ One of the major advantages is that online education is flexible regarding time and place. There is the hope that online learning will

be able to provide a world class education to anyone, anywhere, and anytime as long as they have access to the Internet.¹¹ Other advantages include; it is comfortable, easily accessible, student centered learning, provides attractive learning environment, allows mass audiences and it helps to acquire new ideas.¹⁰⁻¹² Although it boasts several advantages over traditional education, still there are some obstacles in the online learning such as technical hurdles, weak internet access, inadequate number of quality trainers, system errors, software updates, etc. It may not be suitable for those students who are inclined to procrastinate or who are not skilled in self-directed learning, or students who lack broadband and other technological resources. Even among students for whom technological resources do not pose a problem they may have lack the technological skills to make full use of the course content.^{13,14}

Although there are some advantages and obstacles, the advent of online education has made it possible for students with busy lives and limited flexibility to obtain a quality education.¹⁵ The purpose of this study was to understand the current status, advantages and disadvantages of online learning from the students' perspective.

Materials and method

The study was conducted from January 2021 to February 2021 at Enam Medical College, Savar, Dhaka. Data were collected from 273 students of 1st and 2nd year MBBS. A predesigned validated questionnaire was developed and used to assess the level of the knowledge of students regarding the ICT tools used in online education, its advantages, disadvantages and recommendations how we can make online teaching and learning process more effective. All the participants had previously participated in both face to learning and online learning. Before answering, a previous briefing was given to students regarding questions. Students were assured on confidentiality of the questionnaire and that no

harm or legal consequences will arise regarding the results of the study. Ethical approval for this study was taken from the ethical review committee of Enam Medical College. The answers collected from the participants were recorded and subsequently analyzed by using MS Excel.

Results

A total of 273 students from the 1st and 2nd year MBBS commented and shared their valuable thoughts regarding their knowledge about the different tools of information communication technology (ICT), benefits and challenges of online education. They also gave their valuable opinion how to overcome the challenges and make the process more attractive and effective. Among the participants 143(52.39%) were male and 130(47.61%) were female students (Fig. 1).

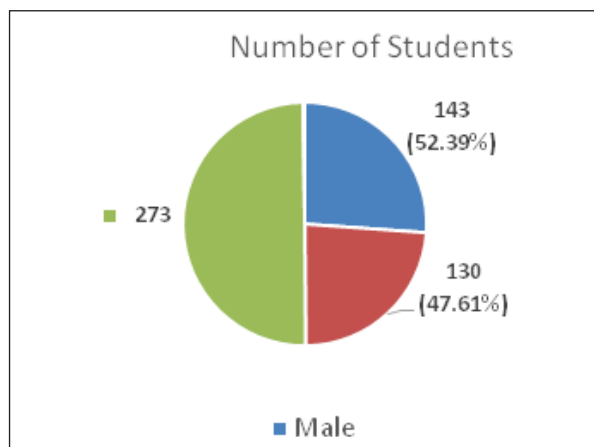


Fig. 1: Gender distribution of the participants (n=273)

By the question “How you have gathered knowledge regarding the ICT tools and online learning software?” we tried to know the sources of knowledge. In the Table I, important finding was that only 11.35% students have the institutional or academic knowledge on ICT tools and online learning software. Majority of the students answered that they gathered their knowledge from the internet (82.79%) and from friends (66.30%). From the answer of the students, it indicates that most of them lack institutional knowledge regarding online learning process.

Table I: Sources of knowledge of ICT tools and online learning software (n=273)

Sources or process of learning	Number (%)
Completed institutional or academic course on ICT tools	31(11.35%)
From friends	181(66.30%)
From internet	226(82.79%)
Newspaper or magazine	37(13.55%)
Others	43(15.75%)

Level of knowledge of the students regarding different tools of ICT and online learning software are shown in the Table II. It was found that among the tools and software of ICT most of them have excellent and good knowledge on internet browsing, operating of e-mail and social sites. On MS Word 49(17.94%) and 95(34.79%) had excellent and good knowledge respectively. While on MS Excel only 19(6.95%) and 67(24.54%) have excellent and good knowledge respectively.

Table II: Level of knowledge on the ICT tools and online learning software (n=273)

ICT Tools	Excellent	Good	Average	Poor
MS Word	49(17.94%)	95(34.79%)	77(28.20%)	52(19.04%)
MS Excel	19(6.95%)	67(24.54%)	81(29.67%)	106(38.82%)
Power Point	39(14.28%)	81(29.67%)	88(32.23%)	65(23.80%)
Internet Browsing	133(48.71%)	99(36.26%)	22(8.05%)	19(6.95%)
e-mail operating	91(33.33%)	107(39.19%)	59(21.61%)	16(5.86%)
Social Sites	135(49.45%)	95(34.79%)	32(11.72%)	11(4.02%)
Online learning software	51(18.68%)	119(43.58%)	83(30.40%)	20(7.32%)

The online teaching learning method of study has several benefits. Among the participants, 185(67.76%) students agree with that online learning is faster and cost effective, followed by 179(65.56%) students who think that it allows participation of mass audiences at a time. Regarding the other advantages, 171(62.63%) agree that sharing of information is easy and 156(57.14%) agree that it is flexible regarding the time and place (Table III).

Table III: Benefits of the online education (n=273)

Benefits	Agree
More flexible regarding the time and place	156(57.14%)
Online learning is faster and cost effective	185(67.76%)
Offer combination of education with work and family life	146(53.47%)
Sharing of information is easy through online education	171(62.63%)
Allows mass audiences	179(65.56%)

There are some challenges or disadvantages in the online teaching learning process. Among the challenges, we found that 141(51.64%) students thought that social interaction of students will be diminished due to online teaching as the major challenge, followed by 139(50.91%) identified that instant feedback is difficult or resolve problems are not possible (Table IV).

Table IV: Challenges of the online education (n=273)

Challenges	Agree
Lack of face-to-face interaction	127(46.52%)
Technology issues (poor internet facilities, lack in computer skills and poor infrastructure)	128(46.88%)
Less effective in practice-based learning	129(47.25%)
May disturb the physical health	137(50.18%)
Lack of attentiveness	137(50.18%)
Instant feedback is difficult	139(50.91%)
Diminished social interaction	141(51.64%)

Beside the numerous benefits, students, teachers and institutions are facing several challenges in the online teaching learning process. In order to overcome these challenges and to improve the quality of online teaching learning process more successful, we can take several steps and strategies. In the present study our observation was that 238(87.17%) students thought that for the effective online teaching activities infrastructures

and other facilities should be increased, and 223(81.68%) agree that easy and more communication between the students and teachers are important which may make the teaching learning process more successful. Other initiatives like creating a sense of comfort and community of learners, choosing suitable technology, establishing effective class norms and identification and supporting the struggling students may also improve the online teaching learning process (Table V).

Table V: Possible initiatives may be taken to overcome the limitations of the online teaching learning (n=273)

Initiatives	Agree
Infrastructures and other facilities should be increased	238(87.17%)
Create easy and more communication between students and teachers	223(81.68%)
Create a sense of comfort and community of learners	217(79.48%)
Choose suitable technology	195(71.42%)
Establish effective class norms	163(59.70%)
Identify and support struggling students	135(49.45%)

Discussion

As with most teaching methods, online learning also has its own set of advantages and disadvantages. Regarding the benefits in the present study we found that online learning is faster and cost effective, it allows participation of mass students at a time, it offers combination of education with work and family life, sharing of information is easy through this learning process and moreover, it is flexible regarding the time and place. In an article Axmedova and Kenjayeva¹⁶ described the several advantages of online learning. One important advantage is that teachers can use videos, PDFs, podcasts as tools and can deliver his lessons more efficiently. Another advantage is that it allows students to attend classes from any location of their choice even at home. So, it minimizes the costs of transportation, student meals, and real estate as compared to physical learning. Additionally, online lectures

can be recorded, archived and shared for future reference. As online learning is creating a paperless learning environment, it is more affordable and being beneficial to the environment. Moreover, every student has a different learning style; some students are visual learners, while some prefer to learn through audio, some students prefer to learn in the classroom and others are solo learners. The online learning system, with its range of options and resources, can be personalized in many ways. It is the best way to create a perfect learning environment suited to the needs of each student.¹⁶ In a survey done by Almahasees et al., students opined that online learning ensures the flexibility in time and communication, it encourages self-paced learning, E-learning is useful for grasping new skills which helped them to acquire new experiences and skills. Moreover, it also reduced the cost of traveling to universities and related expenses.¹⁷ In another study Mukhtar et al. found that the advantages of the online learning include; it is flexible (not time bound, useful in remote learning, comfortable, easily accessible). It is a student centered learning which helps to make good students more active and self-directed learner.¹

Beside the numerous benefits, there are some challenges or disadvantages in online teaching learning process. In the present study we found that social interaction of students will be diminished due to online teaching as the major disadvantage. Other disadvantages were; lack of face-to-face interaction so it is less effective in practice-based learning, there may be poor internet facilities, lack in computer skills and poor infrastructure, instant feedback or solve problems are difficult and possibilities of lack of attentiveness. In a survey done by Almahasees et al. regarding the disadvantages showed, students' responses that they faced problem to adapt themselves to online learning due to the lack of IT competency and managing their time and organizing homework to submit their tasks due to improper access to the internet. Other challenges

were: lack of student-teacher interaction, insufficient tools for student assessment, adjusting of online courses to deaf or hard of hearing students and students with disabilities, data privacy and security.¹⁷ Mukhtar et al. found several limitations of online learning which include; as hands on training is not possible it is unable to teach skills, student feedback limited, possibilities of losing attention, chance of disciplinary problem and it is difficult to assess the individual student.¹

Conclusion

With the rapid development of information and communication technologies, have created the opportunities of online teaching learning more feasible technologically, economically and operationally. Though online teaching learning has some advantages, it still has some disadvantages too. We tried to assess its advantages and disadvantages from the students' view. Future studies are required on a larger scale, including additional online courses, teachers and students to better assess the benefit and useful strategies of successful students.

References

1. Mukhtar K, Javed K, Arooj M, Sethi A. Advantages, Limitations and Recommendations for Online Learning during COVID-19 Pandemic Era. *Pakistan Journal of Medical Sciences*. 2020;36(COVID19-S4):27-31.
2. Dhawan S. Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*. 2020;49(1):5-22.
3. Xhelili P, Ibrahim E, Rruci E, Sheme K. Adaptation and Perception of Online Learning during COVID-19 Pandemic by Albanian University Students. *International Journal on Studies in Education*. 2021;3(2):103-11.
4. Maatuk AM, Elberkawi EK, Aljawarneh S, Rashaideh H, Alharbi H. The COVID 19 Pandemic and E Learning: Challenges and Opportunities from the Perspective of Students and Instructors. *Journal of Computing in Higher Education*. 2022;34:21-38.

5. Nafrees ACM, Roshan AMF, Nuzla Baanu AS, Fathima Nihma MN, Shibly FHA. Awareness of Online Learning of Undergraduates during COVID 19 with Special Reference to South Eastern University of Sri Lanka. *Journal of Physics: Conference Series*. 2020;1712012010. International Conference on Computational Physics in Emerging Technologies (ICCPET) 2020. 2020 August 1; Mangalore, India.
6. Perveen A. Synchronous and Asynchronous E-Language Learning: A Case Study of Virtual University of Pakistan. *Open Praxis*. 2016;8(1): 21-39.
7. Cahyani NMWS, Suwastini NKA, Dantes GR, Jayantini IGASR, Susanthi IGAAD. Blended Online Learning: Combining the Strengths of Synchronous and Asynchronous Online Learning in EFL Context. *Jurnal Pendidikan Teknologidan Kejuruan*. 2022;8(2): 174-84.
8. Palvia S, Aeron P, Gupta P, Mahapatra D, Parida R, Rosner R, et al. Online Education: Worldwide Status, Challenges, Trends, and Implications. *Journal of Global Information Technology Management*. 2018;21(4):233-41.
9. Sun A, Chen X. Online Education and Its Effective Practice: A Research Review. *Journal of Information Technology Education: Research*. 2016;15:157-90.
10. Hiranrithikorn P. Advantages and Disadvantages of Online Learning. *International Academic Multidisciplinary Research Conference in Berlin*. 2019;14-17.
11. Nguyen T. The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons. *MERLOT Journal of Online Learning and Teaching*. 2015;11(2):309-19.
12. Kumar S. Awareness, Benefits and Challenges of E-Learning among the Students of Kurukshetra University Kurukshetra: A study. *International Journal of Information Dissemination and Technology*. 2018;8(4):227-30.
13. Al-Amin M, Al Zubayer A, Deb B, Hasan M. Status of Tertiary Level Online Class in Bangladesh: Students' Response on Preparedness, Participation and Classroom Activities. *Heliyon*. 2021;7(1): e05943.
14. Hart CMD, Berger D, Jacob B, Loeb S, Hill M. Online Learning, Offline Outcomes: Online Course Taking and High School Student Performance. *Open Access Journal of the American Educational Research Association*. 2019;5(1):1-17.
15. Paul J, Jefferson F. A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course from 2009 to 2016. *Front Comput Sci*. 2019;1:7.
16. Axmedova TB, Kenjayeva ND. Advantages and Disadvantages of Online Learning. *Eurasian Journal of Humanities and Social Sciences*. 2021;3:48-50.
17. Almahasees Z, Mohsen K, Amin MO. Faculty's and Students' Perceptions of Online Learning during COVID-19. *Frontiers in Education*. 2021;6:638470. doi: 10.3389/educ.2021.638470.