Adapting Blackboard-Collaborate Ultra as an Interactive Online Learning Tool during the COVID-19 Pandemic

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Abstract

Background: The 2019–2020 coronavirus pandemic has affected educational systems worldwide, leading to widespread closures of schools and universities and social distancing. Hence, the shift to an online tool was required. **Aims and Objectives:** The main problem postulated is the lack of student–teacher interaction that occurs with online learning. **Methods:** The Blackboard Collaborate Ultra platform was used to deliver lectures on clinical biochemistry and the reproductive module to our students. Our main goal was to achieve students' engagement and interaction. **Results:** There were 189 male students enrolled in the reproductive module. The attendance rate was 93%–95%. The download of the recording was 100%. The active participation rate was up to 87%. Hence, Blackboard Collaborate Ultra's virtual classrooms are very useful tools for online interactive lecturing. **Conclusion:** Based on this experience gained, we could conclude that interactive virtual classroom lecturing can be used in addition to or instead of traditional lectures during ordinary situations as a successful online learning community tool.

Keywords: Blackboard-Collaborate Ultra, COVID-19 pandemic, online learning tool

INTRODUCTION

The 2019–2020 coronavirus pandemic has affected educational systems worldwide, leading to widespread closures of schools and universities, social distancing, and self-isolation recommendations as measures to help preventing the spread of COVID-19.

The pandemic hit during a critical time of education in the school of medicine. Medical teaching strategy is not like other teaching strategies; it requires a gradual building of knowledge and successful completion of one stage before passing onto the next stage. In the School of Medicine at King Abdulaziz University in Saudi Arabia, students are required to pass a certain module as a prerequisite for the next one. Hence, the shift from traditional lecturing strategy, the primary learning tool, to an online tool was required. The main problem postulated is the lack of student–teacher interaction that occurs with online learning.

METHODS

The Blackboard Collaborate Ultra platform was used to deliver lectures on clinical biochemistry and the reproductive module to our students. Our main goal was to achieve students' engagement and interaction. All available options for interaction were utilized, including sharing video and audio, posting chat messages, and drawing on the whiteboard. Student–student and student–teacher discussions were allowed and supervised by me as the instructor. One important issue was allowing students to join the session using their smartphones to encourage their attendance and participation wherever they were. Moreover, recording the course downloads allowed students to save lectures and revisit them.

RESULTS

There were 189 male students enrolled in the reproductive module. The attendance rate was 93%–95%. The download

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of the recordings was 100%. The active participation rate (through polls, virtual raise hand, and share feedback) was up to 87%. The rate of posting chat messages was 67%. The student–teacher discussion participation was 63%, whereas the student–student discussion participation was 42%. The rate of postlecture open discussion and question answering was 79%.

We employed some measures to ensure that students were engaged and found the process enjoyable. Students voted to determine the most suitable session time for all. More flexibility in timing and assignment submission due dates was provided. I noticed some psychological upset affecting a few of my students, so providing personal support for them was one of my priorities. The potential effects of the COVID-19 pandemic on fertility potential were prepared and presented by the students in an interesting manner. All these measures encouraged students to interact and engage.

Discussion

The Blackboard Collaborate Ultra's virtual classrooms are very useful tools for online interactive lecturing. The platform was a very successful substitute for physical attendance at traditional lectures during the COVID-19 pandemic restriction measures. Allowing students to join sessions through their smartphones encouraged a high attendance rate and good participation.[1,2]

Virtual platforms for learning have the following advantages that can aid the learning process: virtual learning improves access to education and the quality of learning. It also allows for a full capacity of investment of the tools of information technology in improving the process of teaching and learning, especially in the current situation. Moreover, it helps to deliver educational programs to a large number of students at a lower cost.[3,4] Students can get their learning process anywhere[5] as they can study wherever they can get access to a computer, laptop, or even smartphone and Internet connection.[6] Bijeesh,[7] also, reported that an important advantage is saving time with no possibility for wastage of time.

The expected disadvantages and limitation of virtual platforms for learning could be summarized as follows: The dramatic shift to online learning is associated with anxiety, in addition to the sense of that change is imposed and the fear of affecting the process of learning, this could lead to the unwillingness of students to be fully engaged.[8] The high probability of distraction and omission of the students with difficulty keep in contact with their tutor is a great drawback.[9] Lack of social interaction and a high degree of isolation is another limitation of the virtual learning platform.[10] Lastly, we should consider the issue of complicated technology tools. It is sometimes a great challenge in the successful virtual learning process. Students should be fully aware of the required equipment including computer, webcam, and a stable internet connection to get the full benefits from virtual learning platforms.[6,11,12]

Another case study has been reported in Georgia published by Basilaia and Kvavadze.[13] The education system in Georgia is based on the traditional method of education (classroom based). They shifted from traditional education method to homeschooling as the COVID-19 pandemic situation started in the spring semester of 2020, and they shut down all schools. Consequently, the alternative was to move from traditional to online virtual education. The National Statistics Office of Georgia for July 2019 reported that 79.3% of the Georgian homes are connected to the Internet and 86.1% and 69.9% of the population had access (urban and rural communities, respectively).[14] They allowed the Microsoft team platform available for all public schools in the country through the Ministry of Education and had built-in virtual classrooms for all classes. In this lockdown situation, the public schools had got endless support from large technology companies such as Microsoft, Google, Zoom, and Slack. They reported an attendance rate on the online virtual classes of up to 98% with higher success rates than that of the previous year. One of the limitations they faced was in the results of home assignments; statistics report showed that the lower grade students are better than the higher grades. They failed to explain this finding. They concluded from their experience that the shift to the virtual online education systems at the school was successful. Moreover, they recommended the use of a virtual learning system as an additional learning tool in the postpandemic period.

The lessons learned from this experience could be that quickly adapting the crisis of COVID-19 with great flexibility is mandatory to manage the learning process in a manner suitable for both students and teachers. Creating and following nontraditional methods of learning in the form of virtual platform is a successful tool and followed in a full capacity. From the experience that is already obtained from the management of the current situation, it is a good opportunity to use the online learning community tools as additional successful learning methods besides the traditional methods even after the end of the pandemic crisis.

Conclusion

Based on the experience gained during the COVID-19 pandemic restriction situation, we could conclude that interactive virtual classroom lecturing can be used in addition to or instead of traditional lectures during ordinary situations as a successful online learning community tool.

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Conflicts of interest
There are no conflicts of interest.

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