

Medical Staff Members' Experiences with Blackboard at Taif University, Saudi Arabia

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Introduction: The coronavirus COVID-19 has had very serious impacts on many aspects of people's lives worldwide, including the negative effect on the educational system that disturbed the normal functions of medical faculties. Understanding the experiences of medical faculty members will help to better prepare for making improvements in similar future crises. Moreover, to our extended knowledge, there is no study on e-learning in the field of medical university education in the Kingdom of Saudi Arabia. The aim of this qualitative study was to explore how online learning was applied at Taif University after the total transformation from traditional education to Blackboard during the COVID-19 crisis and how it can be improved.

Methods: The study used a descriptive qualitative study design. Staff from four medical colleges at Taif University, Saudi Arabia were invited to participate in a semi-structured interview. Eight Saudi lecturers participated, and data were analysed using thematic analysis.

Results: This study revealed four themes: Blackboard is professionally well designed; obstacles to the use of Blackboard; the need for Blackboard training; and student behavior through Blackboard.

Conclusion: The use of the Blackboard has its advantages and disadvantages, and the education sector needs to do more research to find out that issues and work to improve it.

Keywords: blackboard, distance learning, university

Introduction

Around the world, coronavirus disease (COVID-19) has affected the studies of more than a billion students.¹ In Saudi Arabia, more than one million students at universities across the country were significantly impacted when all universities were closed and teaching was converted from traditional and physical classes to online classes from home via the learning management system Blackboard Learn, which is well known in general e-Learning.² However, e-Learning is defined as a set of approaches to teaching by using technology, in particular computers and the Internet, when both teachers and students communicate from a distance. By using appropriate methods of teaching, teachers deliver the subject content online and in a flexible manner.^{3,4} The main ways e-Learning differs from traditional methods of learning is that the technique is focused on the students, which is known as student-centered, while in traditional learning, the focus is teacher-centered. The other important differences between the two types of learning are that e-Learning utilizes electronic technology to deliver the content in a flexible manner, which enables students to access the content in any from any place and at any time. Traditional

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learning, in contrast, requires a structured classroom that the students attend at a scheduled time at an official educational institution.^{5–7}

In medical and health science colleges, the nature of teaching from other specialties is based on core competencies that involve knowledge; instructors transmit skills and attitudes with a focus on cognitive and psychometric skills, usually delivered in physical classrooms that students attend to study either theoretical or practical medical topics. However, during the crisis of COVID-19, such institutions in many countries have converted to online instruction.^{8–11} Accomplishing this, however, necessitated a sudden change in the mode of learning for students around the world. It is perhaps needless to say that no plans exist to ensure that the alternative methods for delivering the contents of the subjects and courses are consistent with the same quality as traditional classrooms. As this concerns worldwide issues, efforts are being made by researchers worldwide to investigate this sudden change from traditional methods of instruction to online learning from different aspects. In Indonesia, for example, the COVID-19 crisis has affected many areas of life, including education; the universities were closed and replaced by distance learning systems (DLS). Thus, the readiness of healthcare students to use DLS was investigated, revealing that not all students have computers at their home and used instead the computers of their neighbors or friends. Furthermore, not all students have access to the Internet, and about half of the participants in the study of reference clearly stated that they were not ready.⁸

Although few university administrations were prepared for this crisis, it is imperative that all responsible personnel in the university learn from this crisis and develop plans for the sudden changes in education. In Egypt, a number of interactive learning programs have been created for medical students, ensuring that all students can benefit from this method as it supports even those students who have no Internet access.¹² Such efforts are occurring not only at the university level. In India, which has one of the largest systems of higher education in the world, the authorities are overcoming the challenges of the COVID-19 crisis by developing new policies for eLearning and creating more courses and material for distance learning.¹³ Education in Saudi Arabia was likewise significantly affected by the crisis, and all primary schools and universities were converted to online learning from home by utilizing the backboard system set up mainly for university students. As this was one of the important alternatives for students to

continue their education, it will be worthwhile to investigate the experiences of the faculty staff on using Blackboard and online learning. Exploring their experiences will reveal opportunities for other educational facilities to develop similar Blackboard systems and train staff and students and develop strategies to overcome any obstacles. Therefore, the purpose of this study was to explore how Blackboard was applied at Taif University after the total transformation from traditional education to Blackboard during the COVID-19 crisis and how it can be improved. This study has two objectives: To explore the advantages and disadvantages of using Blackboard in medical colleges at Taif University, Saudi Arabia; and to explore the staff barriers and challenges of using Blackboard in medical colleges at Taif University, Saudi Arabia.

Methods

This study used a descriptive qualitative study design. Staff from four medical colleges at Taif University which are; the college of applied medical science, college of medicine, college of dentistry and college of pharmacy were invited to participate in a semi-structured interview. Eight Saudi lecturers were willing to participate voluntarily in the study. In-depth semi-structured interviews were used to explore the advantages and disadvantages of using Blackboard and to explore the staff barriers and challenges of using Blackboard in Taif University, Saudi Arabia. The interview durations were 30–45 minutes with eight participants. All interviews used Arabic as the participants preferred. Each interview was recorded, transcribed and analyzed in Arabic using thematic analysis.¹⁴ Then it was translated into English and reviewed by both researchers. The study's credibility, confirmability, and transferability were confirmed. For example, during interviews, researchers sometimes summarized participants' answers in front of them to check that the meaning was correct. Both researchers reviewed the transcripts and coding to ensure nothing was missed. Both of them reviewed the data together and approved the five themes of the study.

Ethical Approval

This study was reviewed and approved by the Research Ethics Committee of Taif university, Saudi Arabia (Application code: 42-0037). Each participant received an information sheet and consent form before they participated. All the participants were made aware that participation was voluntary, and they had the right to not answer any questions

they wanted and to stop the interview and withdraw at any time they wanted without any consequences. This study confirmed that all the participants' consent form included the publication of anonymized responses.

Results

In this study, we enrolled 8 lecturers between 27 and 45 years old. Two lecturers from each school. Participants working experience from 4 to 8 years (Table 1).

The results identified four themes: Blackboard is professionally well designed; obstacles to the use of Blackboard; the need for Blackboard training; and student behavior through Blackboard.

Blackboard is Professionally Well Designed

The majority of participants expressed their satisfaction with the use of Blackboard. Despite their fear when they started using it, a number of participants mentioned that Blackboard was well organized and designed in a professional manner, which helped them to use it easily. All participants expressed their admiration for the tools available inside Blackboard. Using these tools facilitated the educational process for them. One of those tools in Blackboard was recording students' attendance, which is automatic, while in traditional lectures it takes a large part of the lecture time, as quoted below:

Then it allows you to follow the students and the level of student activity inside Blackboard. This student is inside Blackboard, and another student is outside of Blackboard. This student uses Blackboard or not. This is what I used to say, that we have a very excellent report. (Participant 2)

All participants were happy with the tools in Blackboard, such as the tool that enabled them to communicate and

interact with students using a clear sound and image, as quoted below:

I felt that I was able to upload or download the material or the content that I had in a short time and quickly and it would be available to the students soon. Also, I communicated with my students with audio and video. This is one of the advantages of using Blackboard, which I felt was very excellent. (Participant 1)

Also, there were tools that can be used during the lecture, such as sharing files, videos, and surveys, participating in chat and other tools that helped students to focus during Blackboard lectures, as quoted below:

It is easy to share PDFs and lecture files with the students. Students can communicate with you easily whether on the chat, by messages, or if the student wants to speak about his question or about the video we share. (Participant 4)

In fact, those tools in Blackboard saved a lot of effort and time for participants. For example, correcting the students' assignments and showing the rates of plagiarism was quick and easy, as quoted below:

Students will upload the assignments for correction. You can see the percentage of plagiarism. This is very excellent as you can distinguish between the original assignment and the copied one. Moreover, you can correct it by hand. And the students can see your corrections immediately and they can see their grade. (Participant 6)

Obstacles to the Use of Blackboard

Although Blackboard is organized and professionally well designed, many participants mentioned that it has a number of disadvantages when they use it. One of the most important of these disadvantages is the failure to ensure that students were focused (concentrating) during the lecture. This may be due to many reasons, including students not sitting in front of the screen because they were busy with something else and some students asked other friends to switch on Blackboard or any other way, as quoted below:

As soon as a student enters the session, he is present. But the problem is that you are not sure is he the same student who entered or a second person who has entered on his behalf, or whether he entered Blackboard and slept during the lecture. (Participant 8)

A number of participants also mentioned the difficulty of ensuring that the student on the opposite side is the true student and therefore most participants feel that it is

Table 1 Participants Working Experience

Medical Colleges	Age	Gender	Qualification	Work Experience
College of applied medical science	30	F	MSN	4
	35	F	PhD	5
College of medicine	45	M	PhD	7
	49	M	PhD	8
College of dentistry	37	F	PhD	4
	39	M	PhD	7
College of pharmacy	35	F	PhD	5
	30	M	PhD	4

necessary to conduct exams in the traditional way to ensure the presence of the student himself, as quoted below:

It is not like we used to have. Even social media has everyone in their places, but there is no such thing as eye contact. In Blackboard or eLearning exams, students should not do them in their home. (Participant 3)

One of the obstacles mentioned by many participants is that Blackboard is suitable for them to teach theoretical subjects and is not suitable for subjects that contain a practical side, as quoted below:

I am very relaxed using Blackboard on a theoretical level. I don't have any problem, but in practical subjects, we need a classroom because whatever we do, you feel the skills are not the real ones. (Participant 5)

Therefore, a number of participants mentioned that lecturers should give the theoretical part of their subjects in Blackboard and the practical part in classrooms, as quoted below:

There are things that cannot be given using Blackboard at all. The practical part must be in a laboratory or in the hospital. The theoretical part can be divided into two parts, which are virtual classes and the other part that is a direct teaching. (Participant 7)

The Need for Blackboard Training

Before the COVID-19 crisis, the Blackboard system was only used as a basic way of communicating with students. During the crisis, all participants mentioned that they were able to interact with the Blackboard system using many tools, such as giving lectures and sharing them with students and other simple things, but they all agreed that training on the use of Blackboard is very important. The majority of participants suggested that all students and lecturers should be trained; moreover, one of them mentioned that training should be mandatory for successful education because there are many tools that can be linked between them to have good interactive lectures, as quoted below:

The lecturers need more advanced training. Not just simple training. I mean, in Blackboard there are many things that are related to the evaluation process, but we do not use it because we do not train on it. (Participant 2)

Student Behaviour Through Blackboard

The majority of participants recognised that the students on Blackboard are present more than in traditional lectures

and they mentioned different reasons behind that. For example, lectures through Blackboard do not need students' preparation and time such as getting ready to go to college and how long it takes between college and home, as quoted below:

Of course, firstly the students attended on Blackboard more than students joining us in the college. I asked them: What is the reason? Of course, most of the students said that they do not need to go to switch on the car to go to the college. That means once we wake up we need approximately five minutes to enter the Blackboard system. It means that we save time and effort, I mean, they see it like this. (Participant 1)

Many participants also agreed that students interact in lectures using Blackboard better than their interaction and their participation in traditional lectures. Some of them mentioned a number of reasons for that. Absenteeism in traditional lectures is more than in Blackboard; some students feel shy to participate in traditional lectures and they feel comfortable to participate in Blackboard; some of them feared giving wrong answers, as quoted below:

The motivation of interaction is because the student is sitting in his house. Some of them do not like to speak in front of their colleagues. The Blackboard situation, as he feels alone, motivates him to participate. When in the group, some of them remain silent, of course, because of the presence of barriers to participate, such as fears of wrong answers in front of their friends. When he is alone the situation is different, I think this is the reason. (Participant-3)

Three of the participants believe that students at the upper grades are better at dealing with Blackboard than the students in the lower grades of the university. They attributed this to the large number of them using it during previous grades and their sense of responsibility, as quoted below:

I think the experience has an effect on students' skills to use Blackboard. I have a students in grade eight, and students in grade six. The grade eighth students are very, very high on Blackboard because they used it more often, and the level of responsibility is higher than the lower grade because they are about to graduate. So, I think the more years, the more experience and better. (Participant 2)

Discussion

This study found that the Blackboard system is a very useful tool for delivering educational material. Among these important features, a lecturer will have the ability

to record all attendance and the time students spend with the lecture during virtual classes. In detail, the education policies and regulations for undergraduates, the student must attend classes more than 80% from the total credit hours per subject per semester, and this regulation was supported. A study conducted on medical students found no significant differences in the performance of students who attend lectures or do not.¹⁵ Among the other important benefits from Blackboard found in the study was the good communication and interaction between students and lecturers, which were enhanced by the system. This is an interesting finding, as some studies in the literature reported a lack of interaction and improper discussion between the students and lecturers in eLearning.¹⁶ However, one study conducted to compare Blackboard and Moodle found that the opportunity for using discussion and interaction between lecturers and students is higher in Blackboard compared to Moodle.¹⁷ Interaction took place not only between the lecturer and students but among students. In light of these findings, further studies are recommended to investigate the level of interactions between students themselves or students with lecturers. Staff also reported that Blackboard is a very easy tool for receiving the assignment and checking for plagiarism. This feature will help lecturers at all universities to ensure the originality of students' work.

This study explored some critical issues that the academic staff considered to be obstacles, such as the inability of lecturers to monitor the attendance of students during lectures or when they were taking an exam. These findings agree with the claim in the literature that it is very difficult to maintain monitoring for real attendance in class or exams in all-virtual classes.¹⁸ This critical issue needs action from policy makers and researchers to ensure that they have strategies to ensure the virtual classes meet the standards of quality. The other serious obstacle explored in this study was related to the practical courses; all medical colleges have many courses as practice as required to meet the core competencies of skills and psychometrics. However, virtual classes are not options for practical courses.¹⁹ This point was supported by the decision of the Saudi Ministry of Health when they decided to postpone the continuation of the practical and clinical courses after the return to normal from the crisis of COVID-19.

To ensure that academic staff are competent and confident when dealing with Blackboard, they must receive effective training on all features and functions for students of the system. This study confirmed that not all staff have

adequate competencies to use Blackboard as a tool for delivering the contents. The literature shows that the training of academic staff who are new to the field is very effective.²⁰ At the same time, it has been reported that faculty members do not fully support having more competencies to deal with eLearning at a high level of confidence.²¹ Therefore, this sudden change might open chances for eLearning in Saudi Arabia and to deliver courses, especially those that are theoretical, via Blackboard. In light of this, the authorities in the medical faculties must make every effort to ensure that all faculty members are ready and well equipped with the essential skills and information needed for using the Blackboard system. In addition, it is essential to explore the needs of education and training for faculty members via a survey or interviews to ensure the efficacy of the training.

Conclusion

The study showed that most of the participants were satisfied with using Blackboard at Taif University, and that education using Blackboard has advantages and disadvantages. In addition, this study identified some issues that need improvement from the leaders and scholars at the university.

Recommendation

This study recommends continuing using Blackboard in education even after the COVID-19 crisis ends and also to determine the percentages of each subject given through the Blackboard due to the following positive features: (1) Faculty members are very satisfied with Blackboard in recording the lectures to allow students to review them at any time. (2) The ability of lecturers to interact with students clearly via various options. (3) Various tools are available to allow the lecturer to deliver the content and evaluate the students.

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Disclosure

The authors report that there are no conflicts of interest in this study.

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