

Saudi EFL Students' Use and Perceptions of Blackboard before and during Online Learning Amid COVID-19

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Abstract

Online learning becomes the means of education during COVID-19. Blackboard is one of the learning management systems that has been widely used before and during the pandemic. This study focuses on English as a Foreign Language (EFL) students' use and perceptions of Blackboard. It explores and compares EFL students' use and perceptions of Blackboard considering three phases: before COVID-19 in 2019, during online learning in 2020, and during online learning in 2021. A questionnaire and semi-structured interviews were used to collect the data. A total of 381 Saudi EFL students participated in the study. The results show that there are statistically significant differences in EFL students' use of Blackboard between the three phases. EFL students' use of Blackboard increased during online learning in 2020 compared to 2019, especially concerning the frequency of visiting Blackboard and the time students spent using it. Further, EFL students' use of Blackboard increased significantly during online learning in 2021 compared to 2019 with regard to visit frequencies, time spent, and Blackboard tools used. Considering perceptions, the results indicate that there are statistically significant differences in students' perceptions of Blackboard in terms of easiness and usefulness between the three phases. Interestingly, students had more positive perceptions of Blackboard before COVID-19 in 2019 and during online learning in 2021. The technical problems that students faced while using Blackboard during 2020 might have affected their perceptions. The study results of students' use and perceptions of Blackboard are discussed in light of institutional policies and support.

Keywords: Blackboard, COVID-19, challenges, e-learning, EFL, online learning, perceptions, pandemic, Saudi

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Introduction

With the outbreak of Coronavirus (COVID-19), many schools and universities worldwide have shifted to online education. The shift to online learning has become an obligation that everyone must follow, not an option. Online learning has become the channel of teaching in different levels and fields. Schools and universities began to use several platforms and applications such as Blackboard, Microsoft Teams, ZOOM, etc. Yet, the only official platform used in many universities before and during COVID-19 is Blackboard.

Blackboard is a Learning Management System (LMS) that was used in many universities around the world before the pandemic, and it becomes one of the leading platforms for online learning during it. As the only platform used before and during COVID-19, it is essential to explore whether there are any differences in students' use and perceptions of Blackboard before and during online learning amid COVID-19. Such an investigation highlights the change, if there is any, in the activation and use of Blackboard as a result of online learning during COVID-19. More importantly, it sheds light on students' perceptions of Blackboard to see whether they become more aware of its importance. Or, on the other hand, they develop negative perceptions of Blackboard as a result of having experience with other platforms. The results of such a study can have significant implications for teachers and administrators.

From a research perspective, few studies explore students' use of Blackboard before and during COVID-19. Most of the studies focus on the use of Blackboard, or other platforms, mainly before COVID-19 with asynchronous features that do not require real-time involvement. Also, few studies focus on Blackboard during the pandemic. More importantly, there are very few comparative studies that explore the difference in EFL students' perceptions of Blackboard before and during COVID-19 when considering both synchronous and asynchronous tools. This might be due to the absence of data on the topic with the same study sample before the pandemic. Thus, this study fills a literature gap by comparing Saudi EFL students' use and perceptions of Blackboard before and during COVID-19.

Questions of the Study

1. Is there any difference in Saudi EFL students' use of Blackboard before and during online learning amid COVID-19?
2. Is there any difference in Saudi EFL students' perceptions of Blackboard before and during online learning amid COVID-19?

Literature Review

With the development of Information and Communication Technology (ICT), different methods for using the internet in education have been developed. E-learning emerged as a general umbrella term that refers to embracing the use of ICT in teaching and learning (Liontas, 2018). Some believe that the term e-learning can be used interchangeably with others such as electronic learning, online learning, and web-based learning, including both asynchronous (tools that do not require participation at the same time like emails, discussion boards, blogs, wikis) and synchronous tools (tools that require involvement at the same time such as video conferencing or virtual classrooms). Jones (2003), for example, maintained that regardless of the term given, e-learning, digital learning, computer-enhanced learning all involve web-based technology to improve

education. Yet, others distinguish between what can be fully online learning, distance learning, and other technology-based learning that includes the use of mediums such as CD-ROM, audio- and videotape, and TV (Moore et al., 2011).

In fact, the literature is full of overlapping definitions of e-learning and online learning. For example, in their investigation of online learning definitions over 30 years (1988 to 2018), Singh and Thurman (2019) found that the growth and development in technology parallel development in the definitions of online learning. They stressed that to avoid overlapping, the definition of online learning should clarify the type of technology, the synchronous and/or asynchronous environment, interactivity, and the role of physical distance. In this study, online learning is defined as internet-based learning involving both synchronous and asynchronous tools where students interact with their teachers and colleagues without being present in physical traditional classrooms (Singh & Thurman, 2019).

In fact, the use of online learning in general and in language learning in particular has many advantages. Hjeltnes and Hansson (2004) listed several advantages for e-learning (used interchangeably with online learning), including cost efficiency and cost-effectiveness, easiness of learning, flexibility and convenience, and better administration. More importantly, the easiness of reviewing and the availability of repeated practice make it useful in learning (Long, 2004). Yet, using online learning has several limitations. Some limitations include the absence of face-to-face interaction and body language, technical problems, and the decrease of social relations (Soliman, 2014).

However, when considering the situation during the pandemic of COVID-19, there was an urgent and rapid transition to online learning. Such a transition was unprecedented, and the world was not prepared for it. Like many parts of the world, Saudi Arabia announced the transition of all education to online learning. This was at the beginning of March 2020 amid the second semester. Due to the sudden transition, some universities began to get the license of other platforms for video conferencing and virtual classrooms besides Blackboard, which was already available. Also, staff members tried their best to make use of all available platforms and applications including, ZOOM, Edmodo, Webex, Google Classrooms, Telegram, WhatsApp, etc. With the beginning of the next academic year from September 2020 to April 2021, the Saudi government also announced the continuity of online learning except for practical courses. Unlike the sudden transition during the onset of the pandemic, universities were prepared for online learning.

Blackboard is the only platform that was officially considered before and during the pandemic. It is one of the most well-known LMS worldwide that was developed by the American educational technology company 'Blackboard Inc.'. It is designed to support technology-based learning, blended learning, or online learning as it contains synchronous and asynchronous tools. The synchronous tool 'Blackboard Collaborate Ultra' is incorporated for virtual classrooms with a synchronized attendance feature. Other tools include course description, course content, assignments, course messages, discussion boards, blogs, wikis, pools, tests, etc. A full grade center is also included. Further, the company developed Blackboard applications for both teachers and students that can be used in Android and IOS mobile devices.

Before the pandemic, Blackboard was used in most Saudi universities. Different studies have explored it from various perspectives among EFL students and teachers (Al Hassan & Shukri, 2017; Fageeh, 2011; Fageeh, 2015; Hakim, 2020; Kashghari & Asseel, 2014; Mohsen & Shafeeq, 2011; Tawalbeh, 2018). For example, Mohsen and Shafeeq (2011) found that EFL teachers considered Blackboard useful in motivating students and making language classrooms interactive and innovative. Yet, some teachers had reservations about Blackboard practicality due to technical problems. They also used it as a communication tool rather than as a teaching/learning tool. Tawalbeh (2018) also found that in spite of EFL teachers' positive perceptions of Blackboard, especially with regard to its impact on learning, their use of it was very limited, and some teachers have never used it. Investigating EFL students' satisfaction with Blackboard, Al Hassan and Shukri (2017) found that students were satisfied with Blackboard because of the rich resources and availability of content, opportunities for communication and interaction in the foreign language, and ease of use.

However, few EFL studies have explored Blackboard during COVID-19 so far. Notably, the researcher has found few studies focusing on Blackboard in the Saudi EFL context (Anas, 2020; Almekhlafy, 2020; Al-Nofaie, 2020; Hakim, 2020; Khafaga, 2021). In his study, Almekhlafy (2020) found that EFL students in the preparatory year generally did not have positive perceptions toward online learning through Blackboard as the only tool of learning during COVID-19. The study also showed that poor internet connection and lack of technical skills were the major challenges of online learning via Blackboard during the pandemic. In addition, Al-Nofaie (2020) found that EFL students preferred traditional in-class learning to fully online learning via Blackboard. They also favored the asynchronous environment due to its flexibility. They mentioned several challenges, including internet speed and lack of IT skills and facilities. On the other hand, Khafaga, (2021) found that despite the technical problems encountered in using Blackboard, both teachers and students have positive attitudes towards Blackboard.

It is clear that there is a need for more studies on Blackboard during COVID-19 in the EFL setting. More importantly, there is a need for studies that compare students' use and perceptions of Blackboard before and during COVID-19. To the best knowledge of the researcher, there are few if any studies that compare EFL students' use and perceptions of Blackboard before and during the pandemic. Thus, this study tries to explore it among Saudi EFL students.

Methodology

Participants

The participants were 381 Saudi female EFL university students. They were randomly chosen from different levels at College of Languages and Translation, Imam Mohammad Ibn Saud Islamic University in Riyadh. The data was collected from the participants in three phases: before Covid-19 in 2019, during online learning in 2020, and during online learning in 2021. They are detailed as followed:

1. First phase in 2019: The data was collected before the pandemic in 2019. Only students who used Blackboard at that time were asked to participate. Blackboard was used as a LMS supporting face-to-face learning.

2. Second phase in 2020: With the outbreak of COVID-19 in March 2020, there was a rapid and complete transition to online learning. Participants who used Blackboard during 2020 amid COVID-19 were asked to participate.
3. Third phase in 2021: Online learning was still adopted in education in Saudi Arabia from January until April 2021. During that time, all participants were using Blackboard as the official platform for online learning.

The participants were asked to participate voluntarily in all the three phases. They were also assured that their data would be kept confidential.

Study Design

The study is based on a mixed-method research design. It combines both qualitative and quantitative methods to collect the study data. Morse (2016) maintained that using a mixed-method research design increases the strength of the study and enhances its validity. It also enriches the understanding and helps to verify the results from another perspective. In this study, the use of both qualitative and quantitative methods helps in getting in-depth information about students' use and perceptions of Blackboard before and during COVID-19.

Instruments

Two instruments were used to collect the study data: a questionnaire and semi-structured interviews.

The questionnaire.

The questionnaire was designed after a thorough review of different questionnaires in previous studies, especially questionnaires used with Saudi participants (Osman, Nasir, & Alzoubi, 2017; Pusuluri, Mahasneh, & Alsayer, 2017). Generally, the questionnaire consists of three main parts. The first part is about students' use of Blackboard. It includes items about the time spent using Blackboard, the frequency of visiting Blackboard, and the frequently visited Blackboard tools or features (announcement, course description, course content, assignments, email, discussion boards, virtual classrooms, etc.).

The second part is about students' perceptions of the easiness of Blackboard. It includes seven items rated on a 5-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The items are about the easiness of using Blackboard (user-friendly), clarity and simplicity of the interface, easiness of navigation, reaching content and class materials, submitting assignments, communication through different communication tools, and the ease of accessibility through desktop or application.

The third part is about students' perceptions of the usefulness of Blackboard. It includes seventeen items also rated on a 5-point Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The items are about the usefulness of Blackboard in general and its tools in particular, including getting a clear picture of the course from the uploaded syllabus, improving communication with both teachers and students, accessing course content at any time, learning at one's pace, getting better understanding because of pictures and videos, preparing lectures in advance, being updated because of announcements, being organized because of the calendar,

paying attention to assignments' deadlines, quick access to grades, and benefiting from the feedback provided.

After obtaining validity, the questionnaire was piloted with 18 students from the same population but outside the study sample. In order to measure the reliability of the questionnaire, Cronbach's alpha coefficient was used. The alpha coefficient for the whole questionnaire is .87, which indicates a good reliability estimate.

Table 1. *Reliability*

| Cronbach's Alpha | N of Items |
|------------------|------------|
| .877 | 51 |

Semi-structured interviews.

The purpose of the semi-structured interviews is twofold: confirmatory and explanatory. They are used to observe whether they confirm the results of the questionnaire. They are also used to explain them, especially with regard to unexpected results. All interviews were conducted during the pandemic of COVID-19. Thirty-four students participated in these interviews. The students were assured that their participation is voluntary. Those who accepted to participate were asked to sign an electronic consent form. The interviews were basically about three main questions with subsequent questions. The three main questions are:

1. What do you think of Blackboard?
2. Does your use of Blackboard change before and during COVID-19?
(Subsequent questions focus on the time spent, frequency of checking, and tools used)
3. Do your perceptions of Blackboard change before and during COVID-19?
(Subsequent questions focus on perceptions regarding importance, usefulness, and easiness)

Students in the third phase of 2021 were further asked about whether their use and perceptions of Blackboard change before the pandemic, during online learning in the previous semester in 2020, and during the current semester in 2021 (the previous and current semesters at the interview time).-The students were told that they could answer in their native language (Arabic) if they liked. This helped the interviewees talk more freely. Each interview lasted from 7 to 12 minutes. The interviews were recorded, transcribed, categorized, and then analyzed.

Results and Discussion

Using Statistical Package for the Social Sciences (SPSS), descriptive statistics and One-way ANOVA were run to explore the differences in students' use and perceptions of Blackboard before the pandemic in 2019, during online learning in 2020, and during online learning in 2021. The results for each phase are detailed as follows:

1. EFL students' use of Blackboard before and during online learning amid COVID-19

Table 2. Means of Students' Use of Blackboard Before and During COVID-19

| Before or During COVID -19 | | N | Mean | Std. Deviation |
|----------------------------|--------------------------------|-----|------|----------------|
| Blackboard Use | Before the pandemic in 2019 | 127 | 2.59 | .839 |
| | During online learning in 2020 | 127 | 3.72 | 1.232 |
| | During online learning in 2021 | 127 | 3.94 | 1.022 |

Table 3. Difference in Students' Use of Blackboard Before and During COVID-19

| | | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----------------|-----|-------------|--------|------|
| Blackboard Use | Between Groups | 115.586 | 2 | 57.793 | 75.033 | .000 |
| | Within Groups | 291.150 | 378 | .770 | | |
| | Total | 406.735 | 380 | | | |

Table 2 shows the means and standard deviations of students' use of Blackboard before the pandemic in 2019 ($M = 2.59$, $SD = .83$), during online learning in 2020 ($M = 3.72$, $SD = 1.23$), and during online learning in 2021 ($M = 3.94$, $SD = 1.02$). The results in Table 3 show a statistically significant difference in students' use of Blackboard between the three phases, $F(2,378) = 75.033$, $p = .000$. Post-hoc tests indicate that students' use of Blackboard before the pandemic in 2019 is significantly different from online learning in 2020 ($p = .000$), and online learning in 2021 ($p = .000$).

This is supported by the results of the interview. When asked whether their use of Blackboard changed before and during COVID-19 in 2020, all the interviewed students, except one, asserted that their use of Blackboard increased after the pandemic. One student commented, "Of course, it becomes one of the important tools for our learning and communication. My use of Blackboard now is incomparable with my use before the pandemic." Another added, "Yes, it is by far different as I never used it before because we know everything from attending the lectures on-campus. However, after the pandemic, we become in need for a learning system and a communication tool to be constantly updated with the course." Further, one student said, "Before Corona, I didn't even know about it and that we have it because everything was direct [on-campus face to face]; the explanation, exams, grades, etc. Yet, now its benefits are shown as it can replace going to the university." Students' responses in the interview indicate that Blackboard was not really activated before the pandemic.

Some students commented that their use of Blackboard increased only slightly. For example, one student said, "Yes, my use of Blackboard is different now. I began to use it slightly more." Another mentioned, "My use of Blackboard is almost similar to my use before Corona. It might be just a little more." Only one student stated that her use of Blackboard became less, "My use of Blackboard is less than previous semesters because there are other applications which are better and easier."

However, all students agreed that their use of Blackboard considerably increased during online learning in 2021. For example, one student commented, "We did not use Blackboard a lot before. But we entirely depend on it this semester." Another added, "Absolutely yes. I didn't use it before Corona. I used it a little during the previous semester. Now, we use it a lot because teachers depend on it". One student replied, "Yes, my use of Blackboard changed greatly. I use it to a great extent, and I fully depend on it this semester as opposed to the previous semester." Another elaborated, "Before COVID-19, I did not even know about it. During the last semester, we used Teams and Zoom. Thus, we did not benefit from Blackboard. However, we depend on it entirely this semester." It should be noted that students mentioned 'the previous' or 'last semester' to refer to online learning during 2020, and 'this semester' or 'now' to refer to online learning during 2021.

Table 4. Means of the Variables of Students' Use of Blackboard Before and During COVID-19

| | | N | Mean | Std. Deviation |
|---------------------|--------------------------------|-----|------|----------------|
| Frequency of use | Before the pandemic in 2019 | 127 | 2.59 | .839 |
| | During online learning in 2020 | 127 | 3.72 | 1.232 |
| | During online learning in 2021 | 127 | 3.94 | 1.022 |
| Time spent using BB | Before the pandemic in 2019 | 127 | 1.27 | .495 |
| | During online learning in 2020 | 127 | 2.50 | 1.007 |
| | During online learning in 2021 | 127 | 2.89 | .902 |
| Tools used | Before the pandemic in 2019 | 127 | 2.82 | 1.49653 |
| | During online learning in 2020 | 127 | 2.92 | 1.72105 |
| | During online learning in 2021 | 127 | 4.00 | 1.81482 |

Table 5. Differences in Students' Use of Blackboard Before and During COVID-19

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---------------------|----------------|----------------|-----|-------------|---------|------|
| Frequency of use | Between Groups | 133.087 | 2 | 66.543 | 61.117 | .000 |
| | Within Groups | 411.559 | 378 | 1.089 | | |
| | Total | 544.646 | 380 | | | |
| Time spent using BB | Between Groups | 182.378 | 2 | 91.189 | 132.015 | .000 |
| | Within Groups | 261.102 | 378 | .691 | | |
| | Total | 443.480 | 380 | | | |
| Tools used | Between Groups | 109.417 | 2 | 54.709 | 19.320 | .000 |
| | Within Groups | 1070.394 | 378 | 2.832 | | |
| | Total | 1179.811 | 380 | | | |

The results in Table 5 show that EFL students' use of Blackboard is significantly different before and during online learning amid COVID-19 in 2020 and 2021 in terms of frequency of use $F(2,378) = 61.117, p = .000$, the time spent using Blackboard $F(2,378) = 132.015, p = .000$, and the tools used, $F(2,378) = 19.320, p = .000$.

More specifically, Post hoc tests show that there are statistically significant differences in the frequency of use between the three groups $p = .000$, except between online learning in 2020

and 2021 ($p = .294$). Regarding the time spent using Blackboard, the results show that there are statistically significant differences between all the three groups ($p = .000$). For the tools used, there are significant differences between the phases before the pandemic and during online learning in 2021, and between online learning in 2020 and 2021 ($p = .000$). However, there is no statistically significant difference in the tools used before and during online learning in 2020 ($p = .887$).

The qualitative results of the interview also support the quantitative results regarding the time, frequency of use, and the tools used during online learning in 2020. One student stated, "I spent more time than before in Blackboard to see the content of my subjects as well as the announcements and assignments from my teachers." Another elaborated, "I used it more now. I spent about half an hour every three to five days. I use course content, grades, and virtual classes." Another stressed her use of Blackboard though it has technical problems, "Now, I daily check Blackboard especially, the uploaded lectures, grades, virtual classes, and exams, in spite of its technical problems." Yet, the students indicated that not all teachers used it as they depended on other platforms; or used Blackboard just to upload content or grades. A student maintained, "Only a few teachers are using it. Some use it just for uploading some course content or posting announcements. So, I just check it to see if there is something important or if the teachers upload the grades." Another added, "Before the pandemic, I used Blackboard just for checking the marks of the courses, and it was only for some minutes. Now, I use it for the course materials and checking my marks about twice a week." Also, students made it clear that because of Blackboard technical problems, teachers switched to other platforms, "Teachers used Blackboard only at the beginning, but because of its technical problems, they switched to Teams."

However, during online learning in 2021, the time students spent using Blackboard, their visit frequencies, and the tools they used change greatly. For example, one student maintained, "We began to use Blackboard after COVID-19. But we did not use it a lot because of the technical problems. I used to use it for two hours maximum. However, this semester we depend on it for about 95%." Another added, "We never used Blackboard before Corona. We began to use it after Corona just to submit assignments while using Teams or Zoom for lectures. Yet, this semester, everything is on Blackboard that I spend almost 6 hours daily using it." Students explained that their use of Blackboard increased during online learning in 2021 because of the few technical problems compared to the phase of online learning in 2020. In addition, many teachers depended entirely on it. One student commented, "Last semester we did not use it due to some technical problems like logging in and kicking students out, but now it works well." Another added, "Most of the teachers insisted on using Blackboard so we began to use it more."

2. EFL students' perceptions of Blackboard before and during online learning amid COVID-19

Table 6. Means of Students' Perceptions of Blackboard Before and During COVID-19

| Perceptions | Before or During COVID -19 | N | Mean | Std. Deviation |
|-------------|--------------------------------|-----|------|----------------|
| | Before the pandemic in 2019 | | 127 | 3.79 |
| | During online learning in 2020 | 127 | 3.36 | .702 |

| | | | |
|--------------------------------|-----|------|------|
| During online learning in 2021 | 127 | 3.77 | .589 |
|--------------------------------|-----|------|------|

Table 7. Differences in Students' Perceptions of Blackboard Before and During COVID-19

| | | Sum of Squares | df | Mean Square | F | Sig. |
|-------------|----------------|----------------|-----|-------------|--------|------|
| Perceptions | Between Groups | 14.695 | 2 | 7.348 | 19.172 | .000 |
| | Within Groups | 144.868 | 378 | .383 | | |
| | Total | 159.563 | 380 | | | |

Table 6 shows the means and standard deviations of students' general perceptions of Blackboard before COVID-19 ($M = 3.79$, $SD = .56$), during online learning in 2020 ($M = 3.36$, $SD = .70$), and during online learning in 2021 ($M = 3.77$, $SD = .59$). The difference between the three phases in students' perceptions is statistically significant $F(2,378) = 19.172$, $p = .000$ with greater positive perceptions of Blackboard before COVID-19 in 2019 and during online learning in 2021 as shown in the means in Table 6 above.

Table 8. Means of the Variables of Students' Perception of Blackboard Before and During COVID-19

| | | N | Mean | Std. Deviation |
|------------|--------------------------------|-----|--------|----------------|
| Usefulness | Before the pandemic in 2019 | 127 | 4.0315 | .60193 |
| | During online learning in 2020 | 127 | 3.4771 | .68013 |
| | During online learning in 2021 | 127 | 3.9037 | .55916 |
| Easiness | Before the pandemic in 2019 | 127 | 3.5489 | .62489 |
| | During online learning in 2020 | 127 | 3.2598 | .82996 |
| | During online learning in 2021 | 127 | 3.6558 | .73095 |

Table 9. Differences in the Variables of Students' Perceptions of Blackboard Before and During COVID-19

| | | Sum of Squares | df | Mean Square | F | Sig. |
|------------|----------------|----------------|-----|-------------|--------|------|
| Usefulness | Between Groups | 21.408 | 2 | 10.704 | 28.229 | .000 |
| | Within Groups | 143.334 | 378 | .379 | | |
| | Total | 164.742 | 380 | | | |
| Easiness | Between Groups | 10.658 | 2 | 5.329 | 9.908 | .000 |
| | Within Groups | 203.314 | 378 | .538 | | |
| | Total | 213.972 | 380 | | | |

Specifically, the results in Table 9 show that EFL students' perceptions about the usefulness of Blackboard is significantly different before COVID-19 and during the two phases of online learning in 2020 and 2021 $F(2,378) = 28.229, p = .000$). Also, their perceptions about Blackboard easiness show statistical significance $F(2,378) = 9.908, p = .000$.

More specifically, Post hoc tests show that there are statistically significant differences in students' perceptions of the usefulness of Blackboard before the pandemic in 2019 and during online learning in 2020 ($p = .000$), and between online learning in 2020 and 2021 ($p = .000$). Yet, there is no significant difference before COVID-19 and the during online learning in 2021 ($p = .188$). The results also show that there are statistically significant differences in students' perceptions of the easiness of Blackboard before the pandemic in 2019 and during online learning in 2020 ($p = .005$), and between the two phases of online learning in 2020 and 2021 ($p = .000$). Yet, there is no significant difference between the phase before COVID-19 and during online learning in 2021 ($p = .424$).

The results of the interviews show that students realize the importance of Blackboard more after COVID-19. For example, a student said, "It is necessary. I wonder why we didn't depend on it before. For example, it saves time, so instead of sending the lecture files to the class leader, the teacher can just upload them." Another commented, "My opinion about the importance of Blackboard changed, especially with online learning. I also feel that we will use it more when we come back to traditional classrooms."

It is true that students recognize the importance of Blackboard; however, they stress that it is not easy and has many technical problems that affect its usefulness during online learning in 2020. For example, when asked whether her perceptions of Blackboard changed before and during the pandemic, a student responded, "Yes, I realized it was more important, but the problem is that it is not easy to use, and has a lot of technical problems." In terms of easiness, students repeatedly comment that it is not flexible, hard, complicated, and there is a need for training to use it. Also, the usefulness of Blackboard tools is negatively affected because of technical problems. Starting with the login process, for example, a student stated, "Blackboard helped at the beginning of COVID-19 in our classes and finding teachers, but it did not get easier with time, unfortunately. It is very hard to use and has many problems with signing in." Besides logging in problems, students face difficulties in using virtual classrooms. A student stressed, "I can't log in easily. I can't use my mic and communicate with the teacher in the virtual class." Another maintained, "Blackboard is complicated. It hangs. I can't hear the teacher. It cuts off suddenly. The screen is not shown sometimes, as well." Furthermore, students did not find the mobile application as useful as expected, "In spite of its importance, it is not flexible and requires strong internet connection. I use the application as I don't have a laptop, and it is not flexible, unfortunately." For announcements, a student added, "Blackboard is slow. Announcements take time to open." Exams are without exceptions because students complain about the problems they face in finding the exam, moving to another question, slowness, and sudden cutoffs. A student declared, "I took a test in Blackboard. It wasn't a good experience at all. The system needs improvement."

During online learning in 2021, students have better perceptions of Blackboard due to solving many of the technical problems. One student commented, "Honestly, Blackboard made

studying online very easy and the way everything is organized made everything easier to check and find.” Another elaborated, “I and many of my colleagues didn’t prefer Blackboard last semester. Yet, this semester, it has improved a lot.” Also, another student explained, “Blackboard was very slow and complex. Everyone had issues with it. But this term I think that nearly all the issues had been fixed. It has been working very smoothly.”

Despite having better perceptions of Blackboard during online learning in 2021, several students stated that the system needs further improvements, especially in the application and exams. For example, a student stated, “Blackboard becomes easy to use and everyone is using it now. But I hope that it becomes more flexible if used in the mobile. The phone application and exams need improvement.” Another added, “I noticed that Blackboard has improved this semester, but we still find difficulties with network connections and exams. Sometimes questions don’t appear to me during exams or they appear messy.” Further, two students indicated that they still prefer using other platforms or LMS such as Teams or Zoom. One student stated, “Yes, my perceptions of Blackboard have changed this semester. It is somewhat good. But I still prefer Teams as it is easy to use and has few technical problems.” The second student maintained, “I found Blackboard more difficult than any app I’ve used before.”

Discussion

The results indicate that EFL students’ use of Blackboard significantly differed before COVID-19 in 2019 and during the two phases of online learning amid COVID-19 in 2020 and 2021. The highest use of Blackboard was during online learning in 2021. Before COVID-19, students attended lectures on-campus and Blackboard was mainly used to support learning and, more notably, communication. The most frequent tools used are announcements, course content and assignments. However, Blackboard was not fully activated, and some teachers did not use it at all. This is in line with some previous studies. For example, Tawalbeh (2018) asserted that not all teachers use Blackboard, and some use it rarely. Even if teachers use it, their use focuses more on its communication tools (Mohsen and Shafeeq, 2011).

During online learning in 2020, EFL students’ use of Blackboard increased but not to a great extent. In fact, the results indicate that there are statistically significant differences in students’ use of Blackboard before COVID-19 in 2019 and during online learning in 2020 considering the time spent using Blackboard and the frequency of visits. However, there is no significant difference in terms of Blackboard tools used. The result can be explained given that the only official platform considered in the university before the pandemic was Blackboard. Yet, for online learning during the pandemic in 2020, the university got the license for different platforms, including Microsoft Teams and WebEx. These platforms and applications gave teachers and students the opportunity to use their features and benefit from their tools, especially when considering the technical problem they faced with Blackboard. Thus, even during the pandemic in 2020, Blackboard was mostly used for communication purposes. Teachers and students prefer to use easier and flexible platforms, especially when using asynchronous features. These results support the findings in the studies of Al-Nofaie (2020) and Almekhlafy (2020). It seems that students prefer to use asynchronous tools in Blackboard more than synchronous tools because of the technical problems.

However, EFL students' use of Blackboard increased significantly during online learning in 2021. Such a result can be explained considering several reasons. First, the university made several updates and improvements in Blackboard. The institutional improvements included upgrading Blackboard infrastructure and increasing Blackboard capacity which solved many problems. Further, additional features were added such as the immediate correction of assignments and incorporating Teams meetings in Blackboard. Additionally, the university requested all staff members to use Blackboard as the only official platform considered for online-learning in 2021. This was done after providing many Blackboard training workshops for both teachers and students. In fact, the increased use of Blackboard during online learning in 2021 reflects the vital role of institutional policies and support in using technology during the pandemic. No one can deny how governmental or institutional support can influence the use of educational technology in general. The case becomes vividly evident during COVID-19. For example, before the pandemic, CALL generally wasn't fully implemented in EFL classrooms due to several barriers (Alsuhaibani, 2019). However, the pandemic proved that institutional policies and support can fundamentally change educational practices. Alhawsawi & Jawhar (2021) maintained, "Before the outbreak of COVID-19, many teachers were reluctant to explore online platforms. However, when the institution made the decision and created the space, most teachers were left with no option but to use it." (P.5).

As for EFL students' perceptions of Blackboard, the results interestingly show that students' positive perceptions of both the usefulness and easiness of Blackboard were better before COVID-19 than during online learning in 2020. Most studies on Blackboard before the pandemic show that students had positive perceptions of the system (Al IHassan and Shukri, 2017; Pusuluri, Mahasneh, & Alsaye, 2017). Yet, during the pandemic in 2020, students' positive perceptions decreased. Such a result can be explained considering two reasons. First, there was a huge simultaneous increase in using Blackboard among university users, which caused pressure that negatively affected the system functionality. Second, teachers were allowed to use other platforms that students found more useful and easier. It seems that using multiple platforms raises students' awareness to compare between them and distinguish the usefulness and easiness of each platform. They, for example, experienced difficulties in Blackboard in logging in, the use of the mobile application, virtual classrooms, and exams, etc. that they do not encounter when using Microsoft Teams or WebEx. Similarly, Almekhlafy (2020) argued that EFL students had negative perceptions toward online learning via Blackboard as the sole tool of learning during the pandemic. He also found that the technical problems students faced while using Blackboard during the pandemic received the highest mean. Dahmash (2020) maintained that the technical problems are attributed to the sudden increase of using Blackboard during COVID-19 crisis as many university students access virtual classrooms simultaneously. Also, Mahyoob (2020) elaborated that the technical problems EFL teachers and students encountered in using Blackboard during the crisis led them to use other platforms. Additionally, Al-Nofaie (2020) found that students encountered technical issues and slow internet speed that made teachers record lectures so that students could go back to them.

During online learning in 2021, students had better perceptions of Blackboard than in 2020. Interestingly, no significant differences are found in students' perceptions of the easiness and usefulness of Blackboard between the phase before COVID-19 and during online learning in 2021. This is in line with Khafaga's study (2021). Khafaga found that both EFL teachers and students

have positive attitudes towards using Blackboard during COVID-19. In the current study, many students have positive perceptions of Blackboard in 2021 after solving many of its technical problems. Nonetheless, they still believe that there is a need for additional improvements, especially in the mobile application and exams. Similarly, Mahyoob (2020) found that among the challenges students encountered in using Blackboard during the pandemic were online exams and internet speed because some students could not access the exam or had network problems. In addition, Dahmash (2020) mentioned the compatibility problem in Blackboard exams as some of the exams cannot be accessed using mobile devices.

Conclusion and Recommendations

The study shows that Saudi EFL students' use and perceptions of Blackboard differed significantly before and during online learning amid COVID-19 in 2020 and 2021. Among the three phases, EFL students used Blackboard the most during online learning in 2021. In addition, they had better perceptions of Blackboard before COVID-19 and during online learning in 2021 more than 2020. Blackboard technical problems and institutional policies and support affect EFL students' use and perceptions of Blackboard during the three phases. For example, with the outbreak of COVID-19 in 2020, students faced several technical problems because of the increased use of Blackboard as many students and teachers tried to access virtual classrooms simultaneously. Accordingly, staff members shifted to other platforms which students found more user-friendly at that time. However, with the beginning of 2021, the university did several updates and maintenance to Blackboard infrastructure and incorporated additional features. Many Blackboard training workshops were also provided for both teachers and students. More importantly, the university required that Blackboard should be used as the official platform for online learning. Given such institutional policies and support, students' use and perceptions changed significantly. Thus, it is recommended that institutions consider more educational technology policies. They should also consider providing sufficient support in terms of training workshops, technical support, infrastructure development, maintenance and updates, etc. Particularly, more Blackboard training workshops should be provided to teachers and students. Such workshops can help teachers take full advantage of Blackboard features in a way that improves language teaching and learning. Further, regular updates and maintenance along with immediate technical support are needed to ensure the success of the online learning experience.

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