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Reality of Using Blackboard Learning System at Applied College in Saudi Arabia

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Abstract

This research aims to study the reality of using e-learning systems in the educational process, in addition to analyzing the use of the BbS examining the decisions of THP and weighing its advantages and disadvantages. The descriptive technique was used in the investigation. The field study was carried out with the use of a questionnaire distributed to students enrolled in the THP at the Applied College, Al-Ula Branch. SPSS 25 was used to do a statistical analysis of the gathered data. The study's found that students in the THP utilize the Bbs functionalities to study their courses, resulting in a low degree of benefit from the Bbs. The study proposes that seminars and training courses be held for course teachers and students to train them on the BbS, encouraging instructors to utilize the range of evaluation tools offered by the BbS, including assignments, brief and oral exams, periodic exams, and final exams.

Keywords: blackboard learning system; learning management systems (LMS); Applied College; Taibah University; Saudi Arabia.

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1. Introduction

The use of Internet technology tools has significantly increased in higher education over the past few years along with the digital revolution. To make it easier for the new learning strategy based on education exchange between the teacher and the student, the internet has become a repository for all types of information that is readily available at any time thanks to the digitization of sources and contemporary advancements in information technology (Altun et al., 2008; AL-Hashimi, 2017). As most higher education institutions offer study courses 24 hours a day through learning management systems (LMSs), which assist course instructors in managing student access to courses, monitoring their activities, and evaluating their performance, educational courses are among the information that these institutions provide to students and learners. Additionally, they act as a tool for interactive communication between the teacher and the student, as well as between male and female students, and as a means of knowledge transfer and exchange (Abdel-Gawad & Al-Masaud, 2014; Al-Oqaily et al., 2022).

According to Hussein (2011), and Ibrahim et al. (2019) many students (younger and older) prefer e-learning as a method of instruction. It promotes education by providing a solution to issues with cost, time, distance, and educational gaps. E-learning, also referred to as LMSs, virtual learning environments, or course management systems, is intended to manage all learning activities.

The Blackboard system (BbS) as a LMS is at the forefront of modern technological progress in the field of higher education, and it was adopted at Taibah University long ago. With this modern development in LMS and the increasing use of BbS, also it is one of the most well-known systems used in Saudi universities generally, and specifically at Taibah University in Madinah and its satellite campuses, the level of interaction among students is increased by the availability of forums and blogs; assignments and tests are created and corrected electronically

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(Sangrà et al., 2012). BbS is possible to upload educational content as well, and by viewing reports from the system that show how much interaction there has been with the content, course instructors can better monitor their students' progress. Other services are also included, such as virtualized class systems, exam systems, and communication with the course instructor (Alhussiny, 2022).

Since Taibah University in Madinah adopted the BLS, to the best of the researchers' knowledge, no formal field study of this kind has been applied to the THP at the Applied College to determine the extent to which this system was used by college members and students, knowing their orientations, and what it accomplished of the desired objectives, making it difficult to evaluate and restricting efforts to improve its effectiveness. Consequently, the research's goals are as follows:

a. Shedding light on LMSs and Bbs.
b. Measure the reality of students' use of the THP at the Applied College for the Bbs.
c. An evaluation of how much the Blackboard system helped students in the THP at the Applied College to learn.

2. Literature Review

2.1. Learning Management Systems (LMSs)

LMSs are essential components of many university course delivery systems. They are online software platforms that support a variety of instructional, learning, and assessment activities (Weaver et al., 2008; Turnbull et al., 2021). In universities and other institutions of higher education, the management and administration of LMSs is typically a centralized task like other crucial facets of higher education (Turnbull et al., 2022).

LMS were categorized by Ahmed (2005) and Al-Jarrah (2011) into three categories: (1) Complete e-learning: This interactive system aims to create study materials, deliver them, mentor students, and set up tests through an integrated electronic environment. (2) Blended e-learning: It serves as a point of intersection between traditional and e-learning and must be carefully planned for distance education for the learner in accordance with demand. Four fundamental components make up the design of scientific content: learning content, learning methods, processes, and evaluation. (3) Supportive e-learning: This method combines face-to-face attendance at lectures in classrooms with the use of the faculty member's available e-learning resources and environment to facilitate learning through a learning management system. The researchers in this study adhered to the first pattern of complete e-learning.

2.2. Blackboard Learning System

The BbS is neither new in terms of technology nor new in terms of education, according to the academic literature on both subjects. It is actually quite dated because it has been discussed for a long time in educational circles. It all started with the speech understanding system known as Hearsay-II. It happened in the first half of the 1960s. (Bradford et al., 2007; Corkill, 1991). This system has been in existence for more than fifty years, and with its establishment in 1997, two of the most influential educational advisors, Matthew Petinsky and Michael Jessen, laid the foundation for the BbS Foundation and its development. These two advisors adopted the establishment of the institution as a consulting company to provide technical standards for e-learning applications, distance learning, or online learning in public and university education institutions, Those who accepted the institution as a consulting firm to offer technical standards for online learning, distance learning, or other forms of learning through the Internet in educational institutions by offering electronic tools that aid instructors in displaying lessons, publications, course syllapus, and other technical advice to students on their course pages on the Internet and on the website of the educational institution to which they are affiliated, to be available to the student at any place and time during the study period (Spivey& McMillan, 2013).

The Bbs Foundation has collaborated with many educational institutions, including Cornell University, George Washington University, and some computer and communications companies, to develop its electronic system and update it between technical and other aspects based on the needs of educational institutions and what is consistent with its objectives, mission, and future educational outlook. The first version of the e-learning program was released in 1998 and agreed with a team from the well-known American telecommunications company (AT&T) and CEI to design the iCollege program.

The institution's growth and development over the years continued, beginning with the acquisition of a program, and culminating with the launch of the new Bbs at the end of 2011. Some international, Arab, and regional educational

institutions are currently disseminating it. It should be noted that the system's releases continue and are created to meet the demands of both the labor market and the students enrolled in educational institutions. The variety of versions reflects the variety of requirements and needs. For instance, the Blackboard 9 version has more features and functions than its predecessors and almost entirely satisfies the requirements of university professors and students. It was also distinguished by simplicity of use and employment in the educational process.

More than 70% of colleges and universities in the United States use the Bbs, which circulated among educational institutions. The Blackboard empire grew and spread in 2006, reaching more than 12 million users in more than 60 countries. It turned out that the Foundation provides its goods to more than 2,200 institutes and educational facilities worldwide and in twelve different languages. The institution thus expanded north, south, east, and west, indicating that it was not limited to the western world between the nations of Europe and America but rather had a global reach that included nations from the continents of Asia and Africa, including the Arab region

Narwani and Arif (2008) indicated that Bbs is a LMS that is used for a wide range of systems that organize and provide access to online learning services for students, teachers, and administrators, and these services usually include providing access control to learning content, communication tools, and user group organizations. The interactive and collaborative nature of the e-learning program has enabled it to be adopted by officials and trainers in many higher education institutions as a tool for implementing technology-mediated education, where the course teacher in an educational institution can use the BbS to create and present the training course by using the course menu default that appears in the platform sidebar. It has capabilities to bring online elements to traditionally taught face-to-face courses and to bring fully online courses with little or no face-to-face interaction sessions. In the same context, Al-Muaither (2020) explained that there are two systems of LMS, which are open-source systems, and closed source systems, the most important of which is the BbS, which offers various educational opportunities by breaking barriers and obstacles facing educational institutions, and contributes to a high degree in spreading education through the Internet, in addition to being flexible and capable of development and expansion

As for the components of the BbS, Omar (2014) explained that they include:

a. Announcements: used to guide students to assignments, calendar methods, and appointments,

b. Course information: a description that specifies the educational objectives of the course, its content, and the grading system,

c. Information of the course instructor: it includes his teaching and office hours, and how to communicate with him,

d. Duties and tasks: they are defined at the beginning of teaching the course,

e. Organizing the list of course contents: the course instructor controls the components of the course, and shows or does not show keys or links to students,

f. Content management: It includes developing a general plan for the course that defines its components in a logical and sequential context, with the possibility of including external links to support the content of the course.

Al-Mubarak (2018) indicated that the BbS allows courses to be submitted electronically in several styles:

- administrative style: It is the most common and easiest to apply, and provides some tools such as the induction plan, test dates, course instructor information, assignment delivery dates, advertising,

- additional or supportive style: It is better than the administrative style, as it provides some additional tools such as course notes, drafts, etc,

- basic or integrated mode: in which the course instructor obtains most of the course components via the Internet, and the course instructor must have characteristics such as the ability to write educational material in a scientific manner in accordance with international standards,

- participatory mode: in which the course instructor becomes involved in building the course content, through his participation in simultaneous discussions, and he must be aware of the tools used in this mode,

- immersive or complete style: It is considered the most difficult style in terms of constructing the educational material, and the course instructor and students must be familiar with the tools used and how to use them, as shown in Table (1).

A course instructor at a university can use the tools of the Blackboard system, which includes many tools or features like course introduction, course content, and chapters, to educate students using technology, including communication with them, and provide online learning outside of class time. This collection of tools appears to have positive effects on virtual study, discussions, assignments, emails, calendars, grade centers, and the course instructor and students (Narwani and Arif, 2008).

According to Al-Hujailan and others (2016), one of the benefits of using the Blackboard system is that the course instructor can use the course introduction feature to post a welcome message for students and provide them with information about the course schedule and curriculum outline. Students who read this information will have the necessary foundational knowledge to do well in the course. Upon viewing the curriculum and getting a general understanding of it, they added that there is a course description feature, where the professor of the course can download information that gives a thorough introduction to the course and puts information related to its scope, importance, purpose, and benefits; it can also include a list of its objectives, teaching and learning activities, and strategies needed to complete them.

Table 1. E-learning modes through the learning management system (Blackboard).

Comparison	Administrative style	Additional style	Basic or supportive mode	Combined mode	Full mode
Course contents	▪ Teaching plan ▪ Course instructor information ▪ Activate the bulletin board	▪ Teaching plan ▪ Course instructor information ▪ Activate the bulletin board ▪ Course materials in references, slides, documents and recordings support learning ▪ Sources to see	▪ Teaching plan ▪ Course instructor information ▪ Activate the bulletin board ▪ Course materials in references, slides, documents and recordings support learning ▪ Sources to see ▪ The entire course curriculum, including objectives, content, activities, and evaluation ▪ Activate the virtual classroom as desired by the course instructor	▪ Teaching plan ▪ Course instructor information ▪ Activate the bulletin board ▪ Course materials in references, slides, documents and recordings support learning ▪ Sources to see ▪ The entire course curriculum, including objectives, content, activities, and evaluation ▪ Activating the default class is essential	▪ Teaching plan ▪ Course instructor information ▪ Activate the bulletin board ▪ Course materials in references, slides, documents and recordings support learning ▪ Sources to see ▪ The entire course curriculum, including objectives, content, activities, and evaluation ▪ Activating the default class is essential
procedures & requirements	▪ The course site is a communicatio n center between the course instructor and the students	▪ The courses that support the course are made available electronically on the site successively (explanation of lectures using PowerPoint), and the course site is	▪ Courses supporting the course are made available electronically on the site successively (explanation of lectures using PowerPoint or Word files), followed by assignments, activation of the	▪ Determine the percentage of the part devoted to e-learning of the actual teaching hours from 25% - 75%, with attendance dates set electronically in agreement between the course	▪ A synchronous meeting is held between the course instructor and the students since the beginning of the semester to ensure that the students have the basic skills necessary to ensure their ability to learn on

Comparison	Administrative style	Additional style	Basic or supportive mode	Combined mode	Full mode
		a center for communicatio n between the course instructor and students	discussion forum, courses and grades are delivered, and everything that can be done through the site, where the course site is a center for communication between the course instructor and students	instructor and the students.	their own. The course instructor explains the course plan and how it works
Course grades	▪ No grades are calculated	▪ No grades are calculated ▪	▪ 10% - 50% of course grades are calculated on online activities and tests	▪ 25% - 50% of course grades are calculated on online activities and tests	▪ 75% - 100% of course grades are calculated on online activities and tests
Activities	▪ There are no activities	▪ There are no activities	▪ The course instructor is left free to add activities in agreement with the students and announce them on the course bulletin board	▪ The course instructor is committed to adding one activity per week, which requires the student to enter to participate and respond	▪ The course instructor is obligated to add two activities to the course per week, specifying the end time for solving the activity, which requires the student to enter to respond and participate.

Source: Al-Mubarak (2018), p. 63.

In the same context, Pusuluri et al. (2017) suggest that the course instructor can publish course content and other useful information such as text, images, audio, video, and animation in the course content section. In addition to the ability to upload multiple files as attachments from your computer, set file savings by selecting the check boxes (View after and show until) to enable date and time selections or by using the Select date and time pop-up menu to specify dates and times. Also, they stated that the referral feature is used to publish homework, as the course instructor publishes the assignments with specific instructions and deadlines for their delivery through the system to direct students' attention to the course objectives and curricula, and the calendar tool is used to remind students of assignment due dates as they submit their assignments in the form of files, and once they submit files, the professor can access them.

The BbS feature is an easy-to-use web conferencing platform for teachers and students to multitask. Lectures and presentations, Q&A talks and whiteboarding, group web surfing the professor can schedule the session and then record the actions for the benefit of enhancing student learning. Session recordings can be shared. The collaborative tool is an ideal platform for integrating blended learning into the curriculum. Since the professor can schedule the session anywhere and anytime, in addition, the feature can be used by the teacher to experiment with the innovative idea of a "flipped classroom," where part of a concept or theory can be done online, mastery exercises done, or the concept shared through classroom discussions (AL-Hashimi, 2017; Devraj and Irene, 2018). The discussion feature allows course instructors to create discussion threads on a specific topic, such as forums that are created for teachers and students to share questions, answers, concepts, and ideas on various topics of the course. The teacher can use the forum settings, such as viewing, grading, subscribing, creating, and editing, and additional options, to perform various tasks for the benefit of the students (Alharbi, 2015).

The email feature allows teachers and students to send emails to each other, and this feature also allows the professor to send emails to anyone associated with the course. Emails can be sent to individual users, specific users, or all of them, and this feature is ideal for the professor to be in contact with students and other colleagues, teaching assistants, and observers. (Almekhlafy, 2021).

As for the advantages achieved by the Blackboard system, they were summarized by Bradford et al. (2007) in: (1) the ease of dealing with the software for both the teacher and the student; (2) improving and facilitating the communication process as it allows students to communicate with their teachers and classmates; (3) student tracking and statistical information on individual assignments; (4) organizing and managing time to help students perform their homework; and (5) skill building. This system also provides students with the opportunity to use the familiar environment of the Internet for educational purposes and provides a way to present the curricular materials in a way that promotes the development of students' organizational, communication, and time management skills; (6) providing continuous and immediate feedback on test results and students' inquiries, whether from teachers or students.

According to Shoaib (2014), the Blackboard system has several advantages, including:

- providing a store for all the units included in the course, and they are summoned as needed or transferred from one section to the next, as well as the ability for the course instructor to share academic content with their colleagues who study the course without any security risks,
- giving each student or professor a password that allows them to access it and benefit from its capabilities, depending on the validity of the password; additionally, the system provides the option to remember the password, which supports its reliability and contributes to the confidentiality of the information contained,
- providing various services to all users according to their specialization, as it provides administrators with many tools related to admission and registration, the study plan, and others, in addition to tools related to the powers granted to the course instructor, such as building the course, designing tests, monitoring grades, and allowing students to register the courses they wish to study,
- It is easier to divide the students into groups, whether at random or by choice, so that each group can assign tasks to its members and maintain a forum, chat room, or white board. This can be done by following up with the course instructor and keeping track of the students who belong to each group,
- Providing many methods of assessment, such as active participation in the forum, creating individual or group blogs by students, writing reports, and providing the electronic correction feature; Providing several templates for building course content,
- including many tools for editing content, enables the course instructor to build his course in the form he desires (educational pages or units). On the other hand, the system contributes to an internal division of appearance according to sections,
- The possibility of following the students everywhere from the beginning of their joining the lecture until their exit, and the time they stayed in it, with the writing of a special report for each student that includes the time, date, and tasks that he performed.

While the disadvantages of the BbS are dealing with an unfamiliar technology; limitations of the system that may limit the use of various materials to support students; facilitating fraud through the system; non-follow-up by some course instructors to the course site, as well as the need for lengthy follow-up (Al-Amr, 2012). Al Meajel and Sharadgah (2018) added that there are other downsides: the educationally restrictive nature of it, the inefficiency of the Internet, its need for troubleshooting, and most importantly, its increased cost. There are viable alternatives to open-source LMS.

3. Research Method

3.1 Measurement

A questionnaire was used to gather primary data, and it was designed with five axes on a Likert scale: the first axis contained demographic information about the research sample; the second axis contained information about how the BbS functions were used in the educational process; and the third axis contained information about the degree to which the BbS was beneficial. The fourth axis contained information about the benefits of the BbS, and the fifth axis

contained information about the drawbacks of the system. The survey questions were taken from earlier studies (Pusuluri et al., 2017; Abu Al-Hajj, 2019).

3.2 Sample and data collection

The Deanship of Distance Education was established by Taibah University in 2008; in 2019, the Deanship of E-Learning took its place. This deanship was established to meet the university's needs for e-learning implementation and to offer better options that aid in keeping up with advancements in science and technology. One of the most significant services that university students receive through e-learning programs is the deanship of information technology (Al-Husseini, 2022). A group of 68 male and female students from the THP at the Applied College, Al-Ula Branch, and Taibah University in Saudi Arabia participated in the field study. The comprehensive enumeration method was used due to the small size of the sample.

4. Results and Discussion

4.1 Reliability and validity

To verify the stability of the constructs used in the questionnaire, Cronbach's Alpha correlation coefficient test was conducted, as shown in Table 2.

Table 2. Results of the reliability and validity test for the research scale

Variable	No. of items	Cronbach's α	Credibility
Students use the BbS functions in studying courses	8	0.892	0.944
Students benefit from studying courses through BbS	8	0.901	0.949
Advantages of BbS	8	0.902	0.950
Disadvantages of BbS	8	0.895	0.946

Source: Developed by the authors

Table 2 shows that the measure of the research dimensions (students' use of the functions of the BbS in studying courses, students' benefit from studying courses through the BbS, the advantages of the BbS, and the disadvantages of the BbS) were all characterized by a high degree of stability, as they ranged from 892 to 902, and the values of the validity coefficient ranged between 944 and 950, which means that the stability and homogeneity coefficients of the research tool are sufficient indicators for the purposes of its adoption in its final application, as the Cronbach alpha exceeded 0.6, which is the minimum for stability (Sekaran & Bougie, 2013) and the Hence, all the reliability and validity coefficients referred to are considered good as they are higher than the mentioned percentage.

4.2 Demographic characteristic of the research sample

The demographic profile as illustrated in Table 3 shows the demographic data of the research sample, as the results showed that 27 students from THP were males, at a rate of 39.7%, while only 41 were females, at a rate of 60.3%, which indicates the remarkable superiority of females over males in the program. In terms of age, it is evident that the students in the age group under 20 years excelled, as they numbered 56 students with a rate of 82.4%, followed by students over the age of 20 years, who numbered 12, with a rate of 17.6%.

The table 3 showed that at the academic level of the THP students, it was found that 30 students, with a rate of 44.2%, are studying in the second level of the THP, followed by students who study in the fourth level, numbering 29, with a rate of 42.6%, and then students studying in the first level, numbering 6, with a ratio of 9.1%. Finally, students in the third level rank third with a rate of 4.1%.

4.2 Descriptive statistics and correlation analysis

To find out the extent to which students use the functions of the BbS, a descriptive statistics test was conducted for this dimension, as shown in Table 4.

Table 4 shows that the answers related to the extent of using the BbS functions agreed, as the arithmetic mean was 3.53, indicating that 70.7% of the students in the THP agreed that they used the functions of this system while studying the courses, but their opinions differed in using the system's functions. Whereas the function of "seeing grades" was at the forefront of use, as 81% of the students agreed to use it, followed by the function of "uploading assignments" by 80.4%, and then by the functions of "uploading lectures" and "sending e-mail to the course instructor" by 79.6% and, 72.8%, respectively.

Table 3. Demographic profile of sample.

Demographic characteristic		Frequency	Percentage %
Gender	Male	27	39.7
	Female	41	60.3
Age	Less than 20	56	82.4
	20 to 25	12	17.6
Education	Level 1	6	9.1
	Level 2	30	44.2
	Level 3	3	4.1
	Level 4	29	42.6

Source: Developed by the authors

Table 4. The extent to students uses the BbS function.

Items	Mean	Percentage %	Std. dev.	Rank
Lectures Download	3.98	79.6	0.982	3
Upload and handover duties	4.02	80.4	0.763	2
Viewing announcements and news	3.22	64.4	0.546	6
Viewing grades	4.05	81	0.890	1
Sending an e-mail to the course instructor	3.64	72.8	0.625	4
Having a direct chat with the course instructor	2.91	58.2	0.791	8
Participating in discussions	3.17	63.4	0.905	7
Having conversation between classmates in courses	3.28	65.6	0.338	5
Overall average	3.53	70.7		

Source: Developed by the authors

The previous table also shows a decrease in the program's students' use of some jobs compared to other jobs (direct conversation with the course instructor, participation in discussions, viewing announcements and news, and conversation between classmates in academic courses), as it amounted to 58.2%, 63.4%, 64.4%, and 65.6%, respectively, and this decrease in the use of these functions may be due to the students' lack of experience in using these functions or the failure to create or use them by the course instructor in teaching courses, and therefore the students are not aware of them, also the standard deviation values ranged between 0.338 and 0.982, and this result is consistent with the study of Al-Mubarak (2018), which concluded that the most used functions were seeing grades, uploading assignments, downloading lectures, and sending e-mails to the course instructor, and the least used were direct conversations with the course instructor, participation in discussions, viewing announcements and news, and conversation between classmates in courses.

Table 5 indicates the low level of students' benefit from BbS functions, as the mean was 3.15, meaning that 63.1% of the students in the program agree that they have benefited from this system while studying the courses. The jobs they

benefited from were the highest (seeing scores) and the least beneficial (participating in discussions). This may be because the period during which the field study was conducted was when COVID-19 was widespread, and it was a difficult period for the entire world, and it affected the students. Also, BbS was still recently used in teaching courses for the students of the program, or the nature of the courses may be that they are more practical than theoretical, as students may prefer to teach them in the classrooms of the college. This result is consistent with the study of (Al-Randi & Aba Al-Khailes, 2014) for the students of the program, or the nature of the courses may be that they are more practical than theoretical, as students may prefer to teach them in the classrooms of the college. This result is consistent with the study of Al-Randi and Aba Al-Khail. As reported by Whitmer et al. (2016), successful students spent more time using tools such as grade centers, course content, assessments, assignments, and discussions.

Table 5. Students benefit from studying courses through BbS.

Items	Mean	Percentage %	Std. dev.	Rank
Lectures Download	3.22	64.4	0.778	3
Upload and handover duties	3.58	71.6	0.665	2
Viewing announcements and news	3.01	60.2	0.490	5
Viewing grades	3.81	76.2	0.562	1
Sending an e-mail to the course instructor	3.18	63.6	0.659	4
Having a direct chat with the course instructor	2.85	57	0.970	7
Participating in discussions	2.60	52	0.861	8
Having conversation between classmates in courses	2.96	59.2	0.745	6
Overall average	3.15	63.1		

Source: Developed by the authors

Table 6. Advantages of BbS.

Items	Mean	Percentage %	Std. dev.	Rank
It helps the student understand concepts that were challenging to grasp during lectures	3.12	62.4	0.845	6
Accessibility of copies of lectures and review materials for students	3.61	72.2	0.429	2
It was no longer necessary to deliver and pick up assignments in person at the college	3.77	75.4	0.551	1
Communication with instructors is simple	3.38	67.6	0.586	4
The student will find it simpler to catch up on and comprehend the lectures he missed	2.70	54	0.884	8
Information and experiences can be shared easily	2.89	57.8	0.517	7
The student can quickly learn about the most recent developments	3.14	62.8	0.697	5
During office hours, it is simpler for the student to wait outside the faculty members' offices	3.48	69.6	0.984	3
Overall average	3.26	65.2		

Source: Developed by the authors

Table 7 demonstrates that the responses related to the positives of BbS were agreed upon, as the mean was 3.26, meaning that 65.2% of the students in the program agree to a great extent on some of the positive aspects of this system. For example, it is no longer necessary to personally come to the college to receive and deliver homework; it is simple to obtain copies of lectures and review papers; it is simple to queue up in front of faculty members' offices during office hours; and so on. Alturise (2020) confirmed that students can perform a range of activities on the BbS,

where course instructors direct them to use the various features through advertisements that they publish periodically. If they are allowed to access the course menu, which consists of the course description, course content, discussion, assignments, and grade center, they can participate in a collaborative area with the professor and fellow students via the virtual classroom feature. The barriers that prevent students from taking advantage of the benefits of the Blackboard system in studying for courses must be removed since they are also permitted to participate in a threaded discussion with members of their group in the discussion forum.

Table 7. Disadvantages of BbS.

Items	Mean	Percentage %	Std. dev.	Rank
The cheating process is made easier by BbS	2.15	79.6	0.892	8
The use of Blackboard in the educational process is constrained by the shortcomings of the Internet	3.66	80.4	0.883	1
Some teachers don't adhere to the course website	3.53	64.4	0.777	2
Some students' disregard for proper discussion manners	2.25	81	0.664	7
Too many comments were made by some students	3.08	72.8	0.807	3
Some students fail to meet the deadlines for their assignments	2.80	58.2	1.020	4
Some students are adamant about their viewpoints	2.52	63.4	0.701	5
Some students failing to adhere to the controls	2.46	65.6	0.595	6
Overall average	2.81	56.1		

Source: Developed by the authors

Table 7 shows that the answers related to the disadvantages of the BbS are closer to disapproval, as the mean was 2.81, meaning that 56.1% of the students in the program do not agree with some of the negatives of this system (the cheating process is made easier by the BbS, some students' disregard for proper discussion manners, too many comments were made by some students, some students fail to meet the deadlines for their assignments, some students are adamant about their viewpoints, some students fail to adhere to the controls). This demonstrates students' bias toward negative questions because many studies have confirmed them (Al-Amr, 2012; Al Maqtri, 2014; Al Meajel and Sharadgah, 2018). While they agreed to some negatives, such as the fact that the use of Blackboard in the educational process is constrained by the shortcomings of the Internet and some teachers don't adhere to the course website.

It can be said that there are many tools provided by the system to eliminate the negatives; for example, cheating during exams can be reduced by creating a question bank that contains a large number of questions, then choosing the different settings provided by the system as mentioned in the theoretical part of the research, such as the beginning of the test and its end, arranging the questions in a random way so that each student appears on a different test from the rest of the students, and so on. Also, it is possible to eliminate the failure of some students to adhere to the deadlines for handing in assignments by creating announcements and alerts about the end date for submitting and delivering assignments.

5. Conclusion

The present research aimed to reveal using the blackboard learning system at applied college, Taibah university in Saudi Arabia. The study's findings, which showed students use of the BbS features (download, upload, and handover responsibilities for lectures; viewing announcements and news; viewing grades; sending an email to the course instructor; having a direct chat with the course instructor; participating in discussions; and having conversations between classmates in courses) to study for classes, supported this.

According to the findings, the students concur that the BbS has a number of benefits, including (The results revealed that the students agreed that the BbS achieves many advantages, such as: it helps the student understand concepts that were challenging to grasp during lectures; it provides accessibility of copies of lectures and review materials for students; it is no longer necessary to deliver and pick up assignments in person at the college; communication with instructors is simple; the student will find it simpler to catch up on and comprehend the lectures he missed; information and experiences can be shared easily; the student can quickly learn about the most recent lectures).

The results of this study helped researchers better understand how the blackboard learning system works at Taibah University. These conclusions were used to improve the Saudi Arabian educational system. The study therefore gives the following recommendations to Saudi universities: the need to properly train course instructors and students on the BbS through the holding of workshops and training courses for them; the need for colleges to prepare a guide explaining the various functions of the BbS so that course instructors and students can use it as a procedural and indicative guide and refer to it when needed; the requirement of merging between the explanation of the courses through the use of blended learning ,especially in the practical courses; encouraging instructors to utilize the range of evaluation tools offered by the BbS, including assignments, brief and oral exams, periodic exams, and final exams; the necessity of encouraging instructors of students' courses to participate in forums, chat with peers, and use techniques that inspire participation during lectures via BbS; given the effectiveness of the system and its contribution to the most effective use of financial and human resources, increasing the incentives for students to take courses through the BbS is appropriate. Because the BbS has so many benefits for both teachers and students, we are working to use it effectively during the learning process.

6. Limitations and Further Research

Like all studies, this one had some restrictions. This is, first and foremost, a cross-sectional study. Future research should consider collecting longitudinal data. The research was also conducted in Saudi Arabia. Third, the sample size for the current study is modest. Larger samples from other Saudi universities and longitudinal data may be used in a future study. A future study might include a comparison of the effects of both methods of teaching courses through Blackboard system and in-person classrooms on achieving learning objectives. In conclusion, given the paucity of empirical research on using the blackboard learning system at an applied college in Saudi Arabia, the current study adds significantly to the body of knowledge in the literature.

Preferences

Abu Al-Hajj, A. (2019). The reality of using the Blackboard learning management system from the point of view of Qassim University students in the study of the Introduction to Islamic Culture course. *Scientific Journal of the Faculty of Education / Assiut University, 35(2)*, 1-28.

Al-Husseini, S. (2022). Teaching problems related to the Blackboard system in teaching practical courses in the Faculties of Science at Taibah University. *Arab Journal of Science and Research Publication,5(2),* 21-46.

Al-Muaither, R. (2020). Employing e-learning management systems in developing the skills of using digital content and awareness of intellectual property among foundation year students at Princess Noura bint Abdulrahman University. *SUST Journal of Educational Sciences, 21(1),* 19-36.

Abdel-Gawad A, & Al-Masaud K. (2014). Impediments of Activating Elearning in Higher Education Institutions in Saudi Arabia Case Study: Ar-Rass College of Science and Arts, Qassim University. *International Journal of Advanced Computer Science and Applications. 5(4),* 12-18.

Ahmed, M. (2005). The philosophy of e-learning through networks. Cairo, *World of Books.*

Al Maqtri, M.A.T. (2014). How effective is e-learning in teaching English? A case study. *Journal of Education and Human Development, 3(2),* 647-669.

Al Meajel, T.M. and Sharadgah, T.A. (2018). Barriers to using the blackboard system in teaching and learning: faculty perceptions. *Technology, Knowledge and Learning, 23(2),* 351-366.

Al-Amr, R. (2012). The reality of students and faculty members of the Department of Educational Technology using the Blackboard learning management system. *Unpublished master's thesis, King Saud University, Riyadh.*

Al-Balasi, R. (2016). Attitudes of faculty members in Hail towards the use of the learning management system - Blackboard. *Arab Studies in Education and Psychology. 103,* 69-120.

Alharbi, M. (2015). Effects of blackboard's discussion boards, blogs and wikis on effective integration and development of literacy skills in EFL students. *English Language Teaching, 8(6),* 111-132.

AL-Hashimi M. (2017). Faculty perceptions of E-learning: case study. *International Journal of Innovative Research & Development. 6(4),* 211-214.

Al-Jarrah, A. (2011). Attitudes of University of Jordan students towards the use of Blackboard software. *Journal of Educational Sciences, 38,* 1293-1304.

Almekhlafy, S. (2021). Online learning of English language courses via blackboard at Saudi universities in the era of COVID-19: perception and use. *PSU Research Review. 5(1),* 16-32

Al-Oqaily, E., Salam, A., and Na, K. (2022). The use of blackboard in the practice of English-speaking skills among Saudi EFL Learners during COVID-19. *Arab World English Journal (AWEJ) 2nd Special Issue on Covid 19 Challenges, (2),* 342 -355.

Altun A, Gulbahar Y, & Madran O. (2008). Use of a content management system for blended learning: perceptions of pre-service teachers. *Turkish Online Journal of Distance Education. 9(4),* 138-153.

Alturise, F. (2020). Difficulties in teaching online with blackboard learn effects of the COVID-19 pandemic in the western branch colleges of Qassim university. *(IJACSA) International Journal of Advanced Computer Science and Applications, 11(5),* 74-81.

Bradford, P., Porciello, M., Balkon, N. & Backus, D. (2007). The Blackboard Learning System: The be all and end all in educational instruction. *The Journal of Educational Technology Systems, 35*, 301-314.

Corkill, D. D. (1991). Blackboard Systems. AI Expert 6(9):40-47. Available @ www.researchgate.net/...Blackboard_Systems/.../9c9605

Derbali, A., and Elnagar, A.K. (2020). Measuring Student and staff satisfaction with the university facilities. *Virtual Economics, 3(3),* 25-52. https://doi.org/10.34021/ve.2020.03.03(2)

Devraj, M., and Irene, G. (2018). Use of the blackboard learning management system. *EURASIA J Math Sci and Tech Ed, 14(7),* 3069-3082

Hussein H. (2011). Attitudes of Saudi Universities Faculty Members towards Using Learning Management System. *The Turkish Online Journal of Educational Technology. 10(2),* 43-53.

Ibrahim, L., Mohamed, A.G., Aldhafeeri, F.M., & Alqdah, M. (2019). Faculty members' perceptions towards utilizing blackboard in teaching system at Hafr Al-Batin University. *Saudi Arabia. Journal of Nursing Education and Practice. 9 (5),* 64-74.

Mubarak, R. (2018). The impact of the different learning style used in teaching courses with the Learning Management System (Blackboard) on the cognitive achievement of Princess Noura bint Abdulrahman University students and their attitudes towards it. *Journal of the Islamic University for Educational and Psychological Studies, 26(2),* 52-82.

Narwani, A., and Arif, M. (2008). Blackboard adoption and adaptation approaches. In M. Iskander (ed.) Innovative techniques in instruction technology, e-learning, e-assessment, and education. *Springer Publishing Company,* 59-63.

Omar, A. (2014). The effect of teaching the communication skills course electronically using the Blackboard system on the development of the cognitive aspects related to the course and the satisfaction of preparatory year students at the University of Dammam towards the use of Blackboard in teaching. *Educational Sciences, 1 (1*), 442-472.

Pusuluri, S., Mahasneh, A., and Alsayer, B. (2017). The application of Blackboard in the english courses at Al Jouf university: perceptions of students. *Theory and Practice in Language Studies, 7(2),* 106-111.

Sangrà, A., Vlachopoulos, D., and Cabrera, N. (2012) Building an inclusive definition of E-Learning: an approach to the conceptual framework. *The International Review of Research in Open and Distance Learning, 13(2*), 145-159.

Sekaran, U., Bougie, R. (2013). Research methods for business: a skill-building approach. *6th Edition ed. Wiley, New York.*

Shoaib, I. (2014). The impact of a proposed training program for faculty members at the University of Hail to acquire the skills of building electronic tests with the Blackboard learning management system. *Journal of Arab Studies in Education and Psychology*, 53.

Spivey, M. F. & McMillan, J.J. (2013). Using the Blackboard Course Management System to Analyze Student Effort and Performance. *Journal of Financial Education, Spring/Summer 2013.*

Turnbull, D., Chugh, R., & Luck, J. (2021). Issues in learning management systems implementation: A comparison of research perspectives between Australia and China. *Education and Information Technologies, 26,* 3789–3810. https://doi.org/10.1007/ s10639-021-10431-4.

Turnbull, D., Chugh, R., & Luck, J. (2022). An Overview of the Common Elements of Learning Management System Policies in Higher Education Institutions. *Tech Trends, 66,* 855–867. https://doi.org/10.1007/s11528-022-00752-7

Weaver, D., Spratt, C., & Nair, C. S. (2008). Academic and student use of a learning management system: Implications for quality. *Australasian Journal of Educational Technology, 24(1),* 30–41.

Whitmer, J. et al. (2016). How successful students use LMS tools – confirming our hunches. http://blog.blackboard.com/how-successful-students-use-lms-tools/.