Nat. Volatiles & Essent. Oils, 2021; 8(6): 3265-3282

NVEO
Natural Volatiles & Essential Oils

Factor Enable And Inhibit Using Learning Management System Applications In Saudi Universities: Reasons And Solutions

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Abstract:

Saudi Arabia invests a significant amount of money in education, with education development at all levels becoming a strategic aim. Learning management systems, which are integrated systems responsible for administering the e-learning process via the Internet or a local network, are one of the most essential ways for advancing education. Learning management systems use technology to organize, implement, and evaluate a specific learning process, and faculty members typically deliver them. The methods for developing content, tracking student engagement, evaluating their performance, and tracking student learning all investigated. The study looked at how students and faculty members felt about the Blackboard system, which used in Saudi universities, as well as their observations of its components, interactive features, and simplicity of use. To assess the efficacy of this system, the study investigated the supporting and obstructing aspects encountered when utilizing Blackboard, as well as the strengths and weaknesses in developing its components, whether they be temporal, technical, or human hurdles. The three axes that summarize these obstacles are the technical challenges and obstacles associated with the system, the educational process problems and its procedures; and the technological impediments and operating conditions. To achieve the best use of the contents of the educational process management systems, suggestions and solutions to these challenges offered.

Keywords: Blakboard, learning management systems LMS, learning system issues, learning system solutions.

1. Introduction:

As Saudi changes to a rising knowledge society, it will be key for the educational process to present the scientific contents of educational materials in a simplified, high-quality manner. The role of multimedia and educational technology in simplifying material, achieving quality at all levels, and creating a suitable learning environment that benefits from science-education simplification has grown in popularity (Chan et al., 2003).

E learning contributes to scientific education by presenting it in a language that is modernized, accessible, and student-friendly. Here, e learning defined as the use of computer and Internet technologies to deliver content through large groups of various systems and solutions to facilitate learning and improve educational process performance. The competition between universities, institutes, and the role of education in various countries motivates the provision of high-quality education; this competition necessitates a focus and reflection on current educational best practices, which includes quality. This re-visioning includes the services that support the educational process and the electronic systems that support it to improve the quality of the elements and

inputs used. In (Wang et al., 2009), the effect of e-learning on students' learning behaviors and performance is demonstrated, which in turn contributes directly to the formation of students' personalities, brings difficult concepts closer to students, increases achievement rates, and thus instills seeds of development and creativity through the electronic educational environment.

2. Research problem:

Despite strong support in Saudi universities for the provision of electronic learning management systems and the training of faculty members to use them in various administrative and educational matters, some obstacles prevent the universities from achieving their development and quality goals, as well as getting the most out of their e-learning systems 'capabilities.

The study raises several questions concerning why students and faculty members in Saudi institutions are not fully benefiting from the capabilities of e-learning systems. For example, what are students 'and faculty members 'opinions of the Blackboard system as a learning system, and what is their perception of the effectiveness with which it handles its components and tools? Additionally, what are the challenges and issues students and faculty members have when utilizing learning management systems? What are the reasons for such challenges, and what are the solutions?

3. Aims of study:

The current study aimed to contribute the growth of the educational system by ensuring the effectiveness of technology in all educational matters and optimizing its use, as well as by researching the enabling and limiting factors for the use of e-learning systems in Saudi institutions (King Faisal University as a model). Standing firm in the face of the problems and challenges that this application faces, and offering solutions to get the desired advantage from these systems so that students and faculty members can fully benefit from the capabilities of the e-learning systems used in Saudi.

3.1 .Terms Used:

- Course Management Systems (CMS):

A system allows for the dissemination of scientific materials, the management of course-related study activities, and the administration of all current courses. It enables dynamic website design and updating. One of its key focuses is the formation and growth of courses (Saputra et al., 2018). This system allows for the dissemination of scientific materials, the management of course-related study activities, and the administration of all current courses. It enables dynamic website design and updating.

- Learning Management Systems (LMS):

It is an abbreviation for Learning Management System, which is a software program or internet-based technology that used to design, implement, and evaluate a learning process (Coates, 2005). These programs intended to help with the administration, follow-up, and delivery of training and continuing education, as well

as all related operations in educational institutions. (Hussine H., 2011), presented findings that demonstrated the extent to which faculty members require training in the use of education management systems, specifically content management, file sharing, forums, and question banks, with an emphasis on the lack of any differences in system use between faculty members based on gender or types of faculties, such as Humanities, Sciences, or Health Colleges.

- Learning and Content Management System LCMS:

It is the educational content management system. It is described by (Koper, 2006), as the learning and support activities carried out by various people (learners and teachers) within the context of a learning unit. It enables the "author, instructional designer, and materials specialist" to more effectively create, develop, and modify educational content by creating a repository that contains the content's learning object and is simple to control, assemble, distribute, and reuse in a way that suits the elements of the training process from the teacher, learner, and designer.

4. Literature Review:

Multimedia in education is more than just putting together the pieces of a puzzle. Massive simulations and elements using multimedia tools can used to improve thinking and problem-solving skills. Learning management systems are a critical component of e learning because they are an integrated system that manages the electronic educational process via the Internet or a local network. Asynchronous learning, testing, and certification are all options in terms of content delivery.

In light of the health conditions that followed the emergence of the coronavirus pandemic, and given the need to implement precautionary measures for disease outbreaks such as social distancing, the importance of using electronic education management systems in Saudi universities cannot be overstated. This importance is illuminated in a study by (Battles, 2006), which examined the effect of educational system design on disease prevention as a contributing factor that prevents exclusion.

4.1 Importance of E- learning development:

E learning used by many academic organizations and institutions since it may be a cost-effective component of the educational process while delivering content quality that is similar to traditional education techniques. The costs of developing e-learning, including the costs of web services and technical support are much lower than the costs of a traditional classroom in terms of preparing teaching materials in the classroom and training teachers, especially if highly advanced multimedia or interactive methods are used. (Xu's, 2010) study demonstrated the positive benefits of tablet computer use on students' participation and scientific success in co-related courses. For the same set of courses, he concluded that using e-learning systems raises students' grades at considerably higher rates than traditional systems.

4.2 The benefits of E-learning include:

E learning is simple to use and saves time for employees, teachers, and students who would otherwise have to

travel to traditional classroom sessions (Al Rawashdeh et al., 2021). Furthermore, e learning can reach a broader target population by involving learners who are unable to attend traditional classroom training. Broadly speaking, the benefits of e learning include:

- Complete flexibility in attending classes, courses, and training without regard to work or family duties that prevent people from attending courses on specified dates and according to a specific schedule.
- Freedom to engage in class sessions without restriction due to cultural differences or social conventions.
- Avoiding movement-restricting dangers that may develop for health, social, or security reasons.
- Motivating some students to overcome shyness as well as resolving some of the issues that arise from communication challenges in real-time.
- Offering effective learning approaches such as connected embedding practices, merging groups of activities with the learner's self-development, personalizing learning paths based on the needs of the learners, and using simulations and games.
- Because instruction can spread across an array of faculty rather than relying on the ability of a single faculty member, all students obtain the same level of instruction.

E-learning and its systems are compared to industrial production by (Mahnegar, 2012) because it is necessary to share the elements of the educational process in carrying out the tasks required of each element, as well as the need to develop appropriate plans for learning products and follow appropriate methods. Considering that, the contents of the courses and courses developed in accordance to the number of students who will exposed to them. Several studies focused on the topic of e learning, such as (Gilbert, 2015), revealed the benefits and challenges of e learning, suggested how to make the most of online training courses, and examined the potential challenges and drawbacks of e learning. Questions have been raised about the best ways to support students, the importance of implementing e-learning in Saudi universities, and researching the reality and obstacles, which include issues such as a lack of infrastructure, slow communications, network extensions within some educational institutions, inadequate computer equipment, and a scarcity of national software.

(Crow, 2002) illuminates some of the benefits that digital repositories provide to higher education and academic institutions, as well as their positive effects on universities through the preservation of intellectual production and intellectual property rights. A tool collects, documents, and makes accessible dispersed educational resources cost-effectively and simply, as well as providing a space for scientific discussion and the exchange of experiences and information in these digital archives.

E learning accomplishes a variety of objectives. According to (Doung, 2016), e-learning systems incorporate the engagement of trainers, students, and mentors who use technology and it occurs because of the way they work. This improves the educational process' effectiveness while also improving students' attitudes toward e learning. E learning assists teachers in developing educational materials for pupils, as well as boosting the efficacy of teachers and expanding the number of students. Some teachers' lack of expertise can compensated for by offering the educational package to both the teacher and the student in electronic form. It can centrally updated by the Curriculum Development Department, and virtual classrooms can compensate for a scarcity of

academic and training cadres in various educational areas.

4.3 E-learning and learning systems in Saudi Arabia (using Blackboard as a model):

The National Center for E-Learning and Distant Education founded in 2007 to provide a friendly environment for Saudi Arabia's e learning and distance education development. In its university institutions, e-learning technology is now widely utilized. The Saudi Electronic University, which founded in 2012, is the country's first electronic university, and it uses the Blackboard system for its e learning. The most significant aspects of choosing the correct learning management system are its distinctive characteristics, such as flexibility, the convenience of use, accessibility, and ease of use (Kasim and Khalid, 2016). Shelley et al. (2012) investigated whether Blackboard Mobile Learn made a significant difference in student learning, and the findings revealed that students used their mobile devices in class as much for Blackboard Mobile Learn as they did for web research, access to university web pages, email, and creating Facebook posts. The use of iPads enhanced their motivation to learn as well as the positivity of the e-learning system to a considerable amount, according to practically unanimous responses from the study sample.

One of the developments in the language of the times is the interest in the practical form of multimedia technology. By utilizing the vocabulary of the design process and applying its scientific basis, it employed in specifying complicated aspects, clarifying their ambiguous challenges, and easing their knowledge and understanding. While maintaining communication between professors and students, teachers must adapt to various learning strategies by utilizing powerful technology resources such as e-learning management systems (LMS) and their formative vocabulary (Jain et al., 2013), as well as student participation in the system. One of the advantages of using e-learning and multimedia technologies is the success achieved in the delivery of education (educational content), which includes the advantages of increasing ease of access to information as well as ensuring the use of best practices in content design.

One of the additional advantages of e-learning and the various e-learning systems that approach the method of simplifying science is that it unifies the content of educational courses and brings consistency to how they are communicated to the recipient, as opposed to what is done in a single lecture given to several different groups. The effort required by people in charge of follow-up responsibilities reduced by automatic tracking and reporting of student activities.

In addition, according to (Michael, 2009), Instructional Systems Design (ISD) is one of the most widely utilized approaches for producing new educational and training resources. This involves a methodology for combining human and machine aspects as an application of behavioral psychology, systems engineering, and computer programming, resulting in a new template, dubbed educational development. The evolution of ISDs, in reality, will likely continue to adapt in response to shifting social and economic circumstances, according to the report. Instructional Systems Design & Development (ISDD), Systems Approach to Training (SAT), or simply "Instructional Design (ID)" some of the terms used interchangeably. It lays out in detail the stages involved in analyzing students' needs, designing and developing educational and training materials, and assessing the educational experience's efficacy. E-learning management systems (LMS) are similar to e-learning content management systems (LMCS) in that they both focus on the creation, management, and dissemination of

information via an e-learning management system. The e-learning content management system manages the environment in which numerous users produce, develop, and store digital course content; as such, the e-learning content management system cannot itself used to develop or administer course content.

Although much of the research one learning focuses on its usefulness in primary and secondary school and higher education, the development of these systems can also developed for adult learners. (Siti et al., 2013) found that the biggest challenge faced by older students is an internal psychological one, followed by time, financial considerations, and family commitment. From this, they concluded that it is necessary to take further steps to improve the e-learning environment for adult learners to ensure the achievement of quality education outcomes. Adult learners share some traits with full-time students, but their studies are different in other ways, affecting the shape and design of learning programs. Adult learners (post-graduates) understand the benefits of learning and have a greater desire for experiential learning using a problem-solving approach. This often produces better outcomes because they can see results and apply content immediately through their work, as e-learning allows them to choose the best time, place, and speed to complete the study.

5. Methods:

This study uses a descriptive-analytical method. First, a list of learning management systems under investigation compiled after researching the relevant literature. The Blackboard system adopted as the system approved by the Ministry of Education in Saudi universities. Then, a questionnaire created to identify and quantify the difficulties and issues faced by students and faculty members with the learning management system at King Faisal University. The perspectives of the participants on the e-learning system, its simplicity of use, the perceived advantage of using the e-learning system, and the identification of technical challenges faced by teachers and students were all polled. The research tool was a questionnaire regarding each students and faculty member's perspectives to determine the elements that promote and limit the implementation of electronic education management systems. Using the Likert scale, the corresponding responses for each question in the questionnaire were set on a scale of 1 to 5, and the averages of the values were calculated and translated into relative values. The survey includes a series of questions on why students and faculty members do not fully utilize the Blackboard learning management system's features. The questionnaire had two questions, which were as follows:

1) How do students and faculty members rate the Blackboard system and the effectiveness with which it handles its components and tools?

2) What obstacles and problems do students and faculty member's face when operating and using learning management systems, and what are those difficulties? What are the reasons, and what are the solutions?

The questionnaire asked respondents to consider the following issues when responding the degree of clarity of instructions and instructions for use; the ability to complete and follow up academic and teaching tasks efficiently and quickly; and the extent to which an interactive e-learning environment is more enjoyable, especially in unstable conditions. An open interview used with the respondents to get their thoughts on the second question, the actual hurdles they face, and their ideas and perspectives on how to solve these issues.

It should note that the validity of the instrument determined by the respondents' honesty, based on their

observations.

The actual hurdles they face, and their ideas and perspectives on how to solve these issues.

5.1 Research Sample

. The sample consisted of 112 students and 46 faculty members for the first semester of the academic year 2019/2020.

6. Results:

The goal of the study is to determine the elements that influence faculty members' ability to use the "Blackboard" e-learning system in their teaching and to identify the roadblocks that impede them from getting the most out of it .The perspectives of the participants on the e-learning system, its simplicity of use, the perceived advantage of using the e-learning system, and the identification of technical challenges faced by teachers and students were all polled. The survey includes a series of questions on why students and faculty members do not fully utilize the Blackboard learning management system's features. The questionnaire had two questions, which were as follows:

6.1. Responses for the first question:

The following points studied in the paragraphs of the questionnaire for this aspect: the degree of clarity of instructions and instructions for use, the ability to complete and follow up academic and teaching tasks efficiently and quickly, and the extent to which an interactive- learning environment is more enjoyable, especially in unstable conditions.

6. 1. 1. Student Survey Responses, Question One:

Figure (1) depicts the students' general evaluation of the Blackboard software as one of the e-learning systems shown in Figure 1. Only 7% of students think the system is great, while 26% think it is good, and 54.5% think it is decent. Only 8% of students think it is a medium-benefit program, and 4.5 % say it is a weak program.

total	Weak	Moderate	Good	Very Good	Excellent	
112	5	9	61	29	8	total
100%	4.46%	8.04%	54.46%	25.89%	7.14%	%

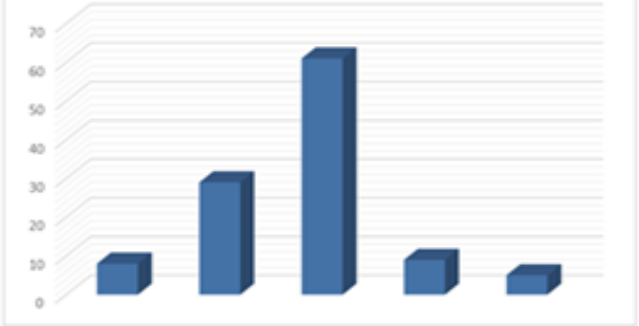


figure (1) Student Evaluate blackboard (LMS) in general

Figure (2) depicts the students' perspectives on the clarity of the instructions and instructions for use, with 8% of students believing that the software is very complex; 29% believing it is complex, and the remaining 42% believing it is of average clarity. Further, 15% of students say the program is simple in its existing form, while 5 % believe the program is very simple and does not require any further simplification. When it comes to the ability to accomplish educational activities efficiently and promptly, most students, (61%) feel that the system allows them to submit assignment files directly onto the system platform, eliminating the need to print them and the associated hassles.

total	Very Easy	Easy	Moderate	Complicated	Very Complicated	
112	6	17	47	33	9	total
100%	5.36%	15.18%	41.96%	29.46%	8.04%	٪

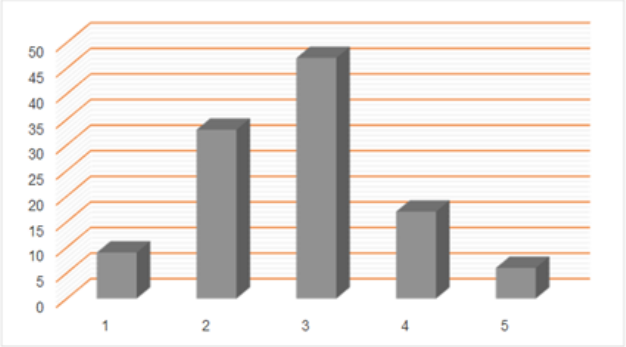


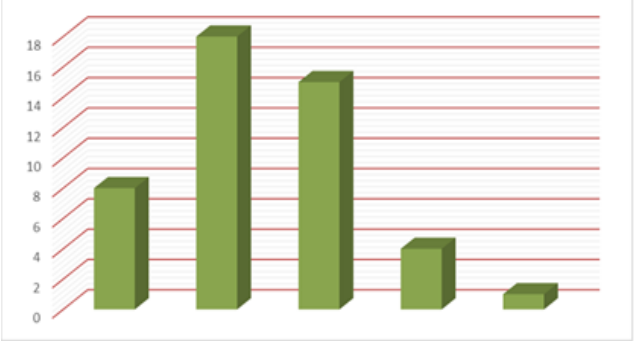
figure (2) Student evaluate blackboard LMS easy to use

Students' opinions differed on the system's success in delivering a more enjoyable e-learning environment, with nearly equal percentages believing that it delivers an enjoyable education, 43 percent, and those believing that the attendance system is the most enjoyable, 39 percent. The interview showed that 98 students agreed on the quality and efficiency of education systems under emergency conditions such as the Coronavirus pandemic. According to the interview, the system rated highly for creating a secure interactive environment that protects students, instructors, and educational institution personnel from negative consequences.

6 .1 .2 .Faculty Survey Responses, Question One:

Figure (3) shows that the percentage of faculty members who evaluate the efficiency of the Blackboard software is higher than the percentage recorded for students. The lowest score recorded for the weak level was 2%, whereas 8.7% believe the program is of average benefit, 32.6 percent believe the program is good, 39 percent believe the program is very good, and 17% believe the program is excellent, all of which are greater than the percentages reported for students.

total	Weak	Moderate	Good	Very Good	Excellent	
46	1	4	15	18	8	total
100%	2.17	8.70	32.61	39.13	17.39	٪



Figer (3) Faculty members Evaluate blackboard LMS in general

Figure (4) depicts faculty members' views on the convenience and clarity of the instructions. The results show that 8.7% of them think the system's operating tools are very complicated, 15% think some commands are complicated and clear, 26% think the program in its current form is of average ease, 37% think the program is easy to deal with, and 13% think teaching is very easy and doesn't need to be simplified. Most faculty members (57 percent) believe that the system allows students to follow up on their responsibilities and work directly on the system platform, allowing them to fulfill teaching assignments efficiently and swiftly.

total	Very Easy	Easy	Moderate	Complicated	Very Complicated	
46	6	17	12	7	4	total
100%	13.04	36.96	26.09	15.22	8.70	%

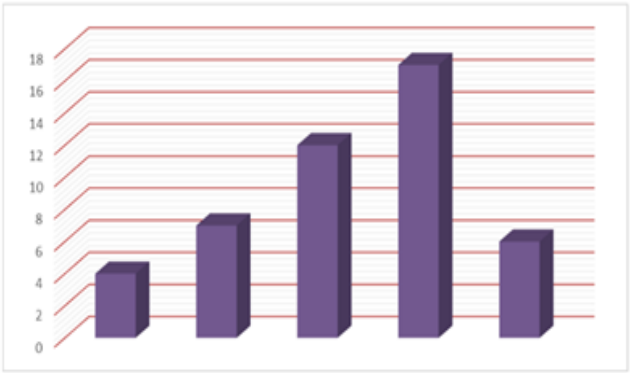


Figure (4) Faculty member Evaluation Blackboard LMSEasy to use

Faculty members' views on the system's effectiveness in creating a more delightful learning environment were nearly identical to those who thought the attendance system is the most useful and responsive. 98 students & 42 faculty members agree that having e-learning education platforms in place during the coronavirus pandemic was the best way to provide a positive and safe educational environment.

6 .2 .Responses for the second question:

What obstacles and problems do students and faculty member's face when operating and using learning management systems, and what are those difficulties? What are the reasons, and what are the solutions?

The content analyzed in preparation for an open interview with the sample members to learn about the actual difficulties and barriers they face, their causes, their recommendations, and their perspectives on how to solve these issues. Despite the students' and faculty members' belief in the program's efficacy, the results revealed the existence of the following hurdles and difficulties:

6. 2. 1. Student Survey Responses, Question Two:

Students' observations divided into three categories: technological difficulties and obstacles related to building the program as one of the education systems; other educational issues related to the method of explanation and the efficiency of the teaching process; and a third technical issue related to the system is operating conditions, as follows:

• System-related technical challenges and roadblocks:

Concerns around technical challenges as expressed in the student survey include:

- The lack of an official operating manual on the program's website, as mentioned.
- Several commands never used because they are incompatible with the nature of the courses or the studies.
- Some pupils find it challenging to use all of the program's features.
- The program's UI is not interactive, which leads to boredom.

•Barriers to the educational process and its mechanisms:

Concerns around educational barriers as expressed in the student survey include:

- Some students are embarrassed to ask faculty members questions during explanations or to jot notes that the lecturer ignores in large groups.
- Large assignments cannot uploaded by students.
- Indifferent students can take advantage of their colleagues' efforts by cutting and pasting assignments from the responses that their classmates have uploaded to the site. All assignments can show to all students, and they can copy them without restriction, thanks to the system.
- Non-renewal because the teacher has already raised the course.
- When it comes to preparing homework, students turn to libraries and outside help. A percentage of students expressed a preference for face-to-face education, particularly in practical courses, because they believe it allows for more engagement that is positive and more communication with the course lecturer.

• Technical Issues and Operating Conditions:

Concerns around operating conditions as expressed in the student survey include:

- Some students are unable to join the lecture using their university account, but they can participate as a guest using a URL that is separate from their Blackboard account.
- The difficulty of accessing the program from outside the university, as some mobile devices are unable to access the software. The ability to load assignments from an iPhone is limited, and they do not appear on the page.
- Even though the course was finished by the end of the semester, the assessment did not appear.

6. 2. 2. Faculty Survey Responses, Question Two:

Faculty member responses have been divided into three categories: technological difficulties and obstacles related to the development of the program as one of the educational systems; issues related to the methods of explanation and the effectiveness of the teaching process; and other technical issues related to the system's operating conditions.

• System-related technical challenges:

- Concerns around technological issues as expressed in the faculty survey include:
- The safeguards in place to protect the e-learning system against incorrect data are adequate, but they have undesirable side effects (eg. access denied to the system after several attempts).
- The user interface is not engaging, and it should be improved and simplified, especially for orders that not used regularly.
- The requirement to repeat the same subject each semester.
- Searching is difficult.
- Creating and disbanding workgroups is a challenge.
- On the program's website, there is no user manual.
- The Kodak operating system is not very good.
- There is not enough room for pictures.
- The type in the layout is tough to modify, and font-formatting instructions are slow and difficult to use.
- The command menus on the side are slow to reply.
- The challenge of associating the website's address http:// should copied and pasted.
- When producing content, you not permitted to attach more than one file.
- Because the format alters while viewing files in another format, files must save in PDF format.
- The requirement to repeat the same course each semester and to discard the data from previous semesters.
- Steps to use should take slowly, especially when adding information to live lectures.
- Barriers to the educational process and its methods include:
- Concerns expressed in the faculty survey around educational barriers include:
- There is no mechanism to protect the intellectual property rights of the content posted to the program

because any student, not only survey participants, can view and download the content, files, and recordings.

- Some students were ashamed of asking faculty members and not being able to answer their questions completely, especially with large numbers, as it is difficult to follow up on students' comments because there are other active elements.
- Students are using external libraries to prepare assignments and are not paying attention to in-person lectures as much as they should.
- The ability to copy and paste assignments from their colleagues' answers that have submitted to the system, where the assignments are visible to everybody.
- Some pupils' inability to concentrate during the lecture and their concern with checking e-mail or social networking sites.

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- **Operating Conditions and Technical Obstacles*:***

Concerns expressed in the faculty survey around operating conditions include:

- The course cannot always presented since the page is unavailable.
- Because voice communication is only possible through the desktop computer, there are instances when technical issues arise, prompting students to transfer their notes through groups or send a guest link to other students.
- Most students choose to connect using social networking apps, which are not available in the Blackboard system, and it is not possible to add another e-mail address.
- Even though university email is safe and hacker-proof, it is not suited for sending files larger than 10 gigabytes. As a result, students are unable to upload some files, particularly in practical courses with huge assignments.
- Difficulty understanding commands at initial usage, as well as ones that are only used once a year, causing the method of dealing with them to be forgotten (such as creating tests and copying them to more than one division).
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7. Discussion

7 .1 .Analyze the results of the first question:

What is the Blackboard system's rating among students and faculty? The following were among the questions on the questionnaire for this section:

7. 1. 1. Student Response Discussion, Question One:

The majority of the findings support students' belief in the Blackboard system's effectiveness as an e-learning system in general. This could be because, in recent years, due to the effects of the coronavirus pandemic, online education has been limited to using learning tools, particularly Blackboard. The reason for the improvement in students' evaluation of the system is, according to the researchers, that students gained more experience interacting with the system in the absence of other options for the educational process, which

boosted their efficiency and acceptability of e-learning systems. However, students are not familiar with all of the software's tools and usage instructions, and some of them say that the program should clarified and simplified, as well as having interactive and entertaining elements added to the system.

Students like to use the Blackboard system as one of the electronic education systems because it allows them to complete and follow up on academic and teaching assignments efficiently and swiftly. The researchers attribute this to the students' perceptions that the system is more comfortable than traditional methods; compared to face-to-face education, e learning yields time and effort savings as well as mitigating any issues with mobility.

Aside from the safety element, some of them desire that the educational process continue in the same manner after the health measures have removed. The results of the survey highlighted the students' capacity to fulfill instructional activities more easily and swiftly because of their use of the Internet for research, assignment preparation, and general course requirements. That said, students also believe that the program should create a more pleasurable interactive e-learning environment and that the browser interface should be updated.

Some students in practical courses have expressed their dissatisfaction with e learning, believing it to be ineffective. This, according to the researchers, is due to the nature of those courses, which sometimes necessitate the direct transmission of experiences from the professor to the pupils. This finding can explained by the system's ineffectiveness in providing a more efficient environment for courses that require skill development, even though the system contains many mechanisms for doing so.

7 .1 .2 .Faculty Response Discussion, Question One:

The results of the survey show the impact of faculty members' training and regular use on the efficiency with which they use the system. Because of the entire reliance on electronic education systems recently, faculty members' evaluation of the efficiency of the Blackboard system is very high. Because of practical reasons and a sense of responsibility, the majority of faculty members regard e-learning systems as very good or exceptional.

Despite this, some faculty members believe that the instructions and instructions for use are unclear and that some of the instructions are complex, which could be for non-permanent orders. Most faculty members say that the system allows students to follow their assignments and work directly on the system platform, which allows them to fulfill instructional chores more rapidly. In addition, the ability to evaluate them and track their grades directly on the program platform, with the ability to easily re-weight the responsibilities. The technique speeds up the completion of educational duties when compared to traditional approaches.

Researchers believe that if certain parts of the system not used regularly, such as testing, the system forgets how to do them. The fact that faculty members have an equal opinion about the system's effectiveness in providing a more effective- learning environment, and those who believe the attendance system is the most useful, could be due to the nature of their teaching programs and their decisions based on their specializations.

7. 2. Analysis of the second question's results:

The answers to this question provide appropriate solutions to the actual barriers that all students and faculty members confront, as well as the system's ability to fulfill users' desires. The following are the outcomes of the difficulties and impediments that limit optimal use of education system programs, particularly the blackboard:

7. 2. 1. Student Response Discussion, Question Two:

The answers to this question provide appropriate solutions to the actual barriers that all students and faculty members confront, as well as the system's ability to fulfill users' desires. The following discusses the difficulties and impediments that limit optimal use of education system programs, particularly the Blackboard system. Researchers feel that to get the most out of today is education systems, it is vital to take a holistic approach to the challenges and hurdles, whether they are technological, educational, or technical, as follows:

- **System-related technical obstacles:**

Many of the students' criticisms about the system related to the lack of an official operating manual on the program's website, according to the researchers. This missing element makes it difficult for students and faculty members to recognize the system's capabilities and make the best use of them. Some commands that are only used seasonally, such as during exams, or that are never used because they are incompatible with the nature of the courses or the nature of the study, should be moved to the secret commands list, recognizing also the need to include them within the operating manual. The researchers believe that altering the system's interface and including interactive activities in certain of its components will boost student participation and reduce boredom, particularly in theoretical lectures that need to be developed and simplified.

- **Barriers to the educational process and its methods include:**

Researchers believe that the main reason for some students' apprehension about approaching faculty members during explanations or taking notes is the large number of students who attend a single lecture, which may cause embarrassment for the student in front of his peers, and the faculty member's lack of knowledge of all the observations and comments. Students for their numerous remarks and inability to respond to them all. The experts believe that boosting the storage capacity for assignment and project components is important so that students can upload large-sized assignments. In the event that some students take over their colleagues' efforts by ripping and pasting assignments from their peers' responses to the system, the system designers can hide all of the assignments from all students and only disclose them to the course professor. Allowing pupils adequate time to complete their homework ensures that they are conversant with the material and that they do not need to seek assistance from the library. For courses with skill components, researchers agree that elements of the course must presented in person.

- **Operating Conditions and Technical Obstacles:**

Internet networks, their strength, and their proximity to transmission towers may be the main causes of problems in operating conditions, and the only way to solve this problem is to recommend the use of Fiber-based networks to achieve appropriate communication efficiency, especially during the lecture.

Additionally, providing system designers unrestricted access to lectures from within the university network and outside networks would be advantageous while taking into account the required security requirements.

7. 2. 2. Faculty Response Discussion, Question Two:

Researchers feel that the world events surrounding the Corona epidemic, as well as the enforced health issues, such as distance, have increased the need of employing e-learning systems. It was a ready-made and handy alternative to traditional education. The findings of the difficulties that the faculty members see can understood as follows by studying the substance of the open interview:

• **System-related technical issues and obstacles:**

The researchers believe that many security measures cause programs and systems to run slowly. Some challenges may arise because of these measures, including denial of access to the system after many tries. Researchers believe that faculty members can enter the system in adequate time before the start of the lecture and upload the contents to ensure that the lectures start on time and immediately, bypassing the slow steps of use, especially when uploading content to live lectures.

Researchers trace some students' disengagement back to the user interface, where interactive aspects might incorporated to pique students' attention and generate interaction. A review of interface designs regularly (mentioned also in the technical concerns section) should include hiding unnecessary commands will be important to simplify the system interface.

The researchers argue that if the same course taught for two semesters in a row, there is no reason to upload the same course each semester independently unless there is a need to update the course to keep the content up-to-date. Some issues, such as the complexity of the research techniques, the establishment of work teams, and their dissolution, require training for faculty members. The researchers feel that the lack of a manual for use on the program's website is to blame and that giving one would be the best solution.

There are some technical issues, such as the Kodak operating system not working properly with the system, as well as a lack of image storage space. The reason for this is that the system will require a huge amount of data to cope with it, which could result in delayed work. However, it is possible to reduce the size of the photographs by using file compression. To address the challenges of adjusting the typing in the layout and the slow formatting font's commands, training is required to improve the efficiency of interacting with the system and to address the issues of sluggish response side menus. In addition, there is the issue of copying and pasting the site's address (http ://).

When creating content, it is not possible to connect more than one file, and it is necessary to upload files in PDF format due to the difference in format when viewing files in another format. According to the researchers, this is not a major issue because it speeds up content browsing. The researchers claim that rather than removing the data from expired classes, this data may retained because names, data, and grades of students will replaced every semester.

• **Barriers to the educational process and its methods include:**

In the interest of battling plagiarism, the system administrators can asked to make the files available for browsing only to safeguard the intellectual property rights of the information contributed to the program. Copy assignments from their fellow participants on the system to stop students from using external libraries to prepare assignments. A faculty member to take swift and decisive action can use the withholding tool and fraud detection tools.

In the case of certain students' apprehension about approaching faculty members and their incapacity to completely answer their questions, especially in large groups; it is feasible to communicate via university mail at times other than during the lecture. Because there are other active elements, following up on the students' comments with a large number of students will inevitably be challenging.

On the matter of students distracted by their devices in class: According to (Petherbridge and Chapman, 2007), teachers should not be overly concerned when students use their mobile devices in class for purposes other than learning, such as reading Facebook and surfing the Internet. This behavior should see as comparable to what might have taken place in traditional lectures, such as scribbling or letter writing.

• Operating Conditions and Technical Challenges:

The researchers believe that following up with network operators, particularly internal ones at educational institutions, can solve the majority of technical problems and overcome barriers. Due to technical problems that prevent audio communication with students, the guest link can be prepared and sent before the start of the lectures. This would be a suitable alternative in case of an inability to log in through the university account. To tackle the problem of students not being able to upload some files, especially in practical courses with huge assignments, the files can compressed or their resolution and size can reduced.

An operating manual should be made readily accessible to help users manage any difficulty understanding commands at initial usage, as well as ones that are only used once a year (where the intermittent usage leads to the users forgetting the relevant commands and protocols).

8. Conclusion

The study looked at the components of e-learning systems and the prospect of maximizing their use in Saudi universities. To benefit from those systems, researchers must examine the supporting and hindering variables, as well as the strengths and weaknesses in their construction. The findings reveal that there is an electronic divide between the students' generation of current technology and the generation represented by academics. Despite their admiration for the system, many professors' concerns generally related to technical issues and the system, while the students' complaints relate to personal problems and individual differences in learning, problems related to faculty members, as well as technical problems with the e-learning system.

9. Recommendations:

In light of the findings of this study, the researchers offer the following recommendations:

- We stress the importance of regularly and intensively training faculty members, as well as developing an operating model for the program, particularly in terms of arranging and duplicating exams and

creating models for different persons.

- We encourage the simplifying and lowering of the interface tools to their bare minimum of functionality, while simplifying access to the remainder of the instructions as needed, and adding appealing aesthetic elements to the program interface.
- On the home page of the e-learning program, it will be important to include a user's handbook that users can readily access.

Acknowledgments:

The researchers express their gratitude to the **Deanship of Scientific Research** at King Faisal University in Al-Ahsa, Saudi Arabia, for providing financial and moral support for **Project No (180023).**

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