Attitudes of Faculty Members at the University of Jordan towards Using the Blended Learning in Teaching and its Difficulties in Light of the COVID19 Pandemic

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Abstract

The study aimed to investigate the attitudes of faculty members at the University of Jordan towards using blended learning in teaching and its difficulties in light of the COVID19 pandemic. Due to the nature of the study, the study sample consists of 94 faculty members at the University of Jordan, numbering (94) teachers. A measure consisting of (52) items is prepared to measure the attitudes of faculty members at the University of Jordan towards the use of blended learning in teaching and its difficulties in light of the COVID19 pandemic, and the validity and reliability of the study instrument are verified as well. To answer the study questions, the arithmetic means and standard deviations of the study sample are calculated. The results show that the arithmetic means range between (4.15-4.46), where the item which states "The reality of employing the e-learning management system for blended learning courses" is ranked first with the highest arithmetic mean of (4.46), while the item which states "The reality of the e-learning management system for blended learning courses at the University of Jordan" is ranked last with an arithmetic mean of (4.15), and the arithmetic mean of the instrument as a whole was (4.35).

The study recommends holding training courses on modern applications for faculty members, proposing financial and moral incentives for those enrolled in these courses, providing rooms equipped with modern equipment, preparing them for the practice of blended learning, following them up by technical staff to address any sudden defects, linking the use of blended learning by faculty members with conditions for the promotion, and performance evaluation programs for faculty members at the university.

Keywords: Blended Learning, The University of Jordan, Faculty Members Attitudes.

1. Introduction

The current period has witnessed numerous modern technological developments in all areas of scientific and practical life, growing to include the Domain of education to bring about tremendous changes in the education systems that represent the mainstay in the advancement of peoples and nations. Looking at education in general, it is seen that it depends in many of its stages on traditional education in which the greatest burden falls on the teacher, and the role of the learner is largely deactivated and negative. Therefore, many educational institutions seek to improve education through new methods that aim to make the learner active and positive and the teacher a mentor and guide to improve and develop education and achieve the best educational results with high quality (Awad and Abu Bakr, 2010).

As the usual methods no longer enrich the needs of the knowledge society, universities are updated to re-evaluate their position for the 21st century.

Practically, this simply does not only mean implementing new software or developing e-learning models and courses but also helping learners to benefit from technology, the Internet, and knowledge sources and increase the facilitation of effective learning strategies (Colburn, 2009).

Education invests in technological and cognitive advancements with the emergence of computers and the international information network or the World Wide Web (the Internet) and their employment in education, which led to the emergence of new methods and techniques of education that depend on employing technology innovations, making a qualitative leap in educational and educational goals (Tahan, 2014).

This period is characterized by the knowledge explosion, the information revolution, and globalization. It is the era of rapid growth, discoveries, and technological innovations. The widespread use of modern technologies in all areas has become one of the most important components of life, making those interested in the Domain of education see an urgent necessity to reconsider the educational system so that technology occupies its place in it, and to contribute to providing learners with a measure of necessary knowledge and skills that contribute to the development of their thinking and help them in the treatment of increasing scientific knowledge. Given this, educational institutions, especially universities, occupy the forefront in raising the level of individuals and societies by bringing about changes and developments in the educational environment.

E-learning increases the effectiveness of learning, shortens the time required for training, and reduces the cost. The great diversity appears in the e-learning environments, leaves wide options for learners when using it with structured strategies and clear and pre-coordinated steps, and defines pre-prepared educational goals, and strives to achieve them. All this is reflected in the student by making him/her play a fundamental role in the educational process inside the lecture room, develop his research, investigation, and discovery skills, identify causal relationships, inferring, and make decisions and judgments in light of the availability of sufficient evidence. Therefore, the use of modern methods of teaching, which focus on the student by making him the center of the educational process, enables him to keep pace with the development in the world of knowledge. Blended learning is one of the strategies receiving great interest from educators, which includes a mixture of direct instruction in the classroom and communication through computer and self-learning (Ali, 2016).

Blended learning is complementary to traditional teaching methods, and a supplement to lecture-based education. Besides, blended learning is what a faculty member does during a lecture using the computer through a PowerPoint presentation, in addition to the usual classroom methods to present a set of skills to several learners. Likewise, blended learning is a mixture of computer learning with traditional learning, and is described as (hybrid) learning, which is learning that supports communication between participants, brings distance between them, and solves many problems related to learners (Suleiman, 2013).

The American Society for Training and Development defines blended learning as one of the best trends emerging in the knowledge industry (Kiviniemi, 2014). It plays an effective role in the strengths of face-to-face classroom meetings and e-learning by containing the best two ways to facilitate student learning outcomes (Kitchen, 2005). This confirms the importance of the faculty member's role in investing students 'capabilities, tendencies, and preparations for the optimal investment, which aims to achieve the aspirations of society. In light of the foregoing, the use of blended learning in universities, identifying its methods, its components, and the foundations on which it is based, and the design of its educational situations become among the

matters that the faculty members in universities pay most of their attention to. Also, some universities seek to create appropriate conditions for practicing this strategy by faculty members, where it has provided lecture halls with computers, data show, and smartboards to eliminate physical, human, and technological obstacles (Ghamlis, 2016).

On the other hand, blended learning faces some difficulties, including financial difficulties related to preparing devices, materials, means, and tools, and equipping the halls with modern technological devices to facilitate the use of this type of education. There are also human difficulties related to faculty members, the extent of their abilities, skills, and tendencies to use this type of education and advance it, alongside the administrative employees such as the deans, their deputies, their assistants and heads of departments, and the extent of their willingness to provide the appropriate environment for the application of this type of education.

In this regard, Mawadiyah and Zoubi's study (2019) aims at revealing the attitudes of the teaching staff in Jordanian universities towards the implementation of blended learning, and the emergent difficulties in using this. Due to the nature of the study, the study has relied on the descriptive approach. To achieve the objectives of the study, a questionnaire is developed to collect data from the 130 members of the study sample of the teaching staff in Jordanian governmental universities. The results of the study show that the general trend is high and this is an indication that the faculty members 'attitudes towards blended learning are positive and high, where the general average for this trend is (3.70) with a standard deviation (0.54). The results also indicate that difficulties are facing the use of techniques in blended learning, as the general arithmetic means for this trend is (3.72), with a standard deviation (0.52). In the study conducted by Emilianova (2017), it aims to investigate the extent to which secondary school students in New Zealand have

participated in teaching a subject that adopts blended learning, and its effect on the cognitive, skill, and emotional Domains.

The study lasts for four weeks, and the study population consists of (1000) students from the twelfth year students in New Zealand. The study's researcher has approved the interviews, questionnaire, and observation. The results show the effectiveness of blended learning and recommended its use in secondary school. Qabbani's study (2010) aims at examining the extent to which faculty members at Salman bin Abdulaziz University have applied smart boards in developing an educational environment. The questionnaire is used as an instrument for his study to determine the quality of using smart boards and determine the difficulties they face and prevent them from using them. To achieve the objectives of the study, (200) faculty members are randomly selected. The results show that a large percentage of the faculty members agree on the importance of using smart boards, specifically in presenting lessons and key points by displaying data. However, most of the sample members agree on the ineffectiveness of its use, and it has not been used to shift from teacher-centered (faculty member) learning to student-centered learning, and its contribution to cooperative learning is very small. The study also shows that the most prominent difficulties are related to the scarcity of the necessary hardware and software, the weakness of technical support, and the shortage of training programs in the university on use. In light of the above, this study aims to investigate the trends of faculty members at the University of Jordan, and the difficulties they face towards adopting this type of education at the University in light of the COVID19 pandemic.

2. Problem of the Study

E-learning is a strategy used by a faculty member to develop his students' skills and achievement abilities and to improve research, analysis, and investigation skills, and at the same time, it is a

means of developing the professional skills and abilities of the faculty member (Harthi, 2012). Identifying the methods used in blended learning and its components, the foundations based on them, and designing its educational situations is necessary to qualify faculty members and teachers to deal with this type of learning. Those familiar with the current reality of the training process in most of our universities will notice that curricula and study plans are developed, but teaching methods have not positively changed as required. Against this, the problem of this study lies in identifying attitudes of faculty members at the University of Jordan towards implementing blended learning, and the difficulties faced by them in light of the COVID19 pandemic.

3. Questions of the Study

In light of the problem of the study, the following questions are articulated.
1. What are the attitudes of faculty members at the University of Jordan towards blended learning in light of the COVID19 pandemic?
2. What are the difficulties facing the application of blended learning from the point of view of faculty members in light of the COVID19 pandemic?

4. Objectives of the Study

These objectives are formulated to answer the questions of the study.
1. Examine the attitudes of faculty members at the University of Jordan towards blended learning in light of the COVID19 pandemic.
2. Explore the difficulties facing the application of blended learning from the point of view of faculty members in light of the COVID19 pandemic.

5. Significance of the Study

The process of integrating technology into university education faces many challenges, including what is at the college or university level. The current study addresses the attitudes of faculty members at the University of Jordan towards blended learning, and the difficulties they face in applying it. With that, the significance of this study lies in several aspects such as determining the difficulties facing faculty members in at the University of Jordan on using the blended learning strategy, and working to overcome and address it by the relevant authorities, motivating those in charge of preparing plans and programs in universities to include the blended learning strategy in these plans and programs, keeping pace with technical development and employ it to make university blended learning more attractive and effective for students, keeping pace with recent trends in university teaching by experimenting with modern models, methods and strategies that lead to positive results, contributing to raising the level of blended learning, seeing the reality of the university to provide financial, human and administrative requirements that help in the application of blended learning within the university, encouraging those in charge of centers for developing the performance of faculty members in universities to hold workshops, seminars, and conferences for faculty members, reaching the required level in terms of technological education by using blended learning, and open novel venues for researchers and specialists to conduct more studies and pieces of research on blended learning and its requirements, and the modern global trends towards it.

6. Procedural Definitions

Due to the nature of the study, the following procedural definitions are adopted.
1. Blended learning: it describes the process that teachers perform using the computer along with the traditional classroom methods to present scientific knowledge to students. It is also believed that blended learning is a mixture of learning using the computer with traditional learning in a synchronized and carefully planned

manner to provide scientific content ready to be given to the student in an easy, fast and clear method Gharib, 2009). For this study, blended learning is integration between traditional learning (the lecture method), and electronic learning using computers as a method in support of traditional learning: lecturing, laboratory, dialogue, and discussion.

A faculty member: he is anyone who is appointed at the university and holds a Ph.D. degree with 2.the rank of professor, associate professor, assistant professor, or lecturer who holds a master's degree and has a quorum of teaching at the university ranging from 9 hours to 15 hours.

3.The trend towards blended learning: is the positive feeling of the individual towards blended learning, and the extent of his acceptance of using this strategy in the teaching process in the classroom, and his feeling of its importance and value in the educational process. For this study, the trend towards blended learning is measured by the degree obtained by the faculty member through a questionnaire prepared to measure trends towards blended learning.

7. Limitations of the Study

The current study is limited to explore the attitudes of faculty members at the University of Jordan towards the application of blended learning and emerging difficulties. This study is also limited to the University of Jordan. Besides, this study is limited to teachers of blended learning courses at the University of Jordan. Likewise, this study is limited to be implemented during the second semester of the academic year (2019/2020). Importantly, the results of this study are determined by its study population, the degree of responses of its sample members, and the nature of its instrument and variables (the type of faculty, academic rank, and gender). The results of the study can be generalized to similar populations of this study in light of the validity of the instruments, their reliability coefficients, and the objectivity of the respondents.

8. Methodolgy

Statical Criterion

Likert's five-point scale is adopted to correct the study instrument by giving each of its items one degree out of its five degrees (strongly agree, agree, neutral, disagree, strongly disagree) and are represented numerically (5, 4, 3, 2, 1), respectively, The following scale is adopted to analyze the results:

From 1.00 to 2.33 as low	From 2.34 to 3.67 as medium	From 3.68 to 5.00 as high

Instrument's Validity

The study instrument is constructed regarding previous literature and studies (See Masry's study (2019) and Thyabat's study (2013)). The indications of the construct validity are calculated for the scale, and the correlation coefficients of the scale items with the total score in an exploratory sample are also calculated from outside the 12-lecturer study sample. Then, the scale items are analyzed and the correlation coefficient for each item is calculated. Precisely, the correlation coefficient represents a sign of validity to each item in the form of a correlation coefficient between each item and the total score on the one hand, and between each item and its correlation with the related Domain, and between each Domain and the total score on the other hand. Statistically, the coefficients for the correlation of the items with the instrument as a whole have ranged between (0.57-0.96), and with the Domain (0.54-0.96) as shown in Table 1.

Table 1

Correlation Coefficients Between Items, Total Score, and the Related Domain

Item No.	Correlation coefficient with the domain	Correlation coefficient with the instrument	Item No.	correlation coefficient with the domain	Correlation coefficient with the instrument	Item No.	Correlation coefficient with the domain	Correlation coefficient with the instrument
1	.91(**)	.95(**)	19	.91(**)	.84(**)	37	.73(**)	.84(**)
2	.58(**)	.64*	20	.95(**)	.94(**)	38	.74(**)	.85(**)
3	.79(**)	.73(**)	21	.81(**)	.77(**)	39	.68*	.56*
4	.91(**)	.85(**)	22	.85(**)	.83(**)	40	.78(**)	.86(**)
5	.88(**)	.89(**)	23	.86(**)	.90(**)	41	.96(**)	.87(**)
6	.91(**)	.73(**)	24	.81(**)	.76(**)	42	.94(**)	.88(**)
7	.95(**)	.92(**)	25	.86(**)	.71(**)	43	.84(**)	.68*
8	.93(**)	.90(**)	26	.84(**)	.87(**)	44	.77(**)	.74(**)
9	.92(**)	.87(**)	27	.78(**)	.87(**)	45	.93(**)	.74(**)
10	.87(**)	.84(**)	28	.84(**)	.81(**)	46	.94(**)	.78(**)
11	.95(**)	.90(**)	29	.55*	.61*	47	.84(**)	.76(**)
12	.94(**)	.91(**)	30	.83(**)	.94(**)	48	.94(**)	.75(**)
13	.96(**)	.90(**)	31	.85(**)	.77(**)	49	.83(**)	.75(**)
14	.85(**)	.80(**)	32	.88(**)	.71(**)	50	.89(**)	.70*
15	.97(**)	.93(**)	33	.91(**)	.82(**)	51	.86(**)	.65*
16	.90(**)	.84(**)	34	.89(**)	.79(**)	52	.75(**)	.87(**)
17	.93(**)	.88(**)	35	.93(**)	.88(**)			
18	.90(**)	.84(**)	36	.84(**)	.98(**)			

* Statistically significant at the significance level of (0.05).

** Statistically significant at the level of significance of (0.01).

It is noted that all correlation coefficients are of acceptable scores and statistically significant, and therefore none of these items is omitted.

Table 2

Correlation Coefficients Between Domains and the Total Score

	The reality of the e-learning management system for blended learning courses	Competencies of planning, designing and managing blended learning courses through the e-learning management system	The reality of employing an e-learning management system	diffculties	Total score
The reality of the e-learning	1				

management system for blended learning courses					
Competencies of planning, designing and managing blended learning courses through the e-learning management system	.824(**)	1			
The reality of employing an e-learning management system	.832(**)	.943(**)	1		
Difficulties	.886(**)	.760(**)	.697*	1	
Total scores	.918(**)	.968(**)	.946(**)	.875(**)	1

* Statistically significant at the significance level of (0.05).

** Statistically significant at the level of significance of (0.01).

Instrument's Reliability

To verify the instrument's validity, the internal consistency is calculated on an exploratory sample from outside the study sample of (12) lecturers according to the Cronbach Alpha equation. Table (3) shows these coefficients, and these percentages are considered suitable for this study.

Table 3

Coefficient of Internal Consistency of Cronbach Alpha

Domains	Internal Consistensy
The reality of the e-learning management system for blended learning courses	0.96
Competencies of planning, designing and managing blended learning courses through the e-learning management system	0.97
The reality of employing an e-learning management system	0.95

Difficulties	0.94
Total scores	0.96

Study Sample

The study sample consists of faculty members at the University of Jordan applying the blended learning for the second semester (2019/2020).

9. Discussion and Results

This section presents the discussion and results related to the questions of the study.

Q1. What are the attitudes of faculty members at the University of Jordan towards blended learning in light of the COVID19 pandemic?

To answer this question, the arithmetic means and standard deviations of the estimates of the lecturers of blended learning at the University of Jordan are calculated as illustrated in Table 4.

Table 4

The Arithmetic Means and Standard Deviations of the Estimates of the Blended Learning Lecturers at the University of Jordan from their Attitudes towards Blended Learning Arranged in Descending Order According to the Arithmetic Means

Rank	No.	Domain	AM	SD	Degree
1	3	The reality of employing an e-learning management system for blended courses	4.46	.48	high
2	2	Competencies of planning, designing and managing blended learning courses through the e-learning management system	4.38	.52	High
3	1	The reality of the e-learning management system for blended learning courses at the University of Jordan	4.15	.53	High
		Total score	4.37	.47	High

Table (4) shows that the arithmetic means range between (4.15-4.46), where item No. (3), which states "The reality of employing the e-learning management system for blended learning courses" is ranked first, with the highest arithmetic mean of (4.46). However, item No. (1), which states "The reality of the e-learning management system for blended learning courses at the University of Jordan," is ranked last, with an arithmetic mean of (4.15), and the arithmetic mean of the instrument as a whole is (4.37).

The arithmetic means and standard deviations of the estimates of the study sample members are calculated on the items of each domain separately, as they are as follows:

First Domain: The reality of the e-learning management system for blended learning courses at the University of Jordan.

a. Infrastructure and basic equipment

Table 5

The Arithmetic Means and Standard Deviations of the Items Related to the Domain of Infrastructure and Basic Equipment Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	1	The university provides Internet access for faculty members.	4.45	.99	High
2	3	The university provides faculty members with access to electronic libraries in order to access scientific references.	4.31	.98	High
3	2	The university provides equipped halls that support blended learning.	3.53	1.14	Medium
		The field of infrastructure and basic equipment	4.22	.945	Medium

Table (5) shows that the arithmetic means range between (3.53-4.45), where item No. (1), which states "The university provides Internet access for faculty members." is ranked first, with the highest arithmetic mean of (4.45). However, item No. (2), which states "The university provides equipped halls that support blended learning," is ranked last, with an arithmetic mean of (3.53), and the arithmetic mean of the instrument of the domain of infrastructure and basic equipment is (4.22).

b. The used strategies and procedures

Table 6

The Arithmetic Means and Standard Deviations of the Items Related to the Used Strategies and Procedures Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	5	Administrators and technicians deal with faculty members' feedback on blended learning with the utmost effectiveness.	4.32	.780	High
2	4	There are clear instructions on how to interact electronically between students, faculty members and educational content.	4.25	.754	high
3	6	The university sets clear standards for the mechanism of evaluating students in blended learning courses.	3.94	.794	High
		The used strategies and procedures	4.17	.673	High

Table (6) shows that the arithmetic means range between (3.94-4.32), where item No. (5) which states, " Administrators and technicians deal with faculty members' feedback on blended learning with the utmost effectiveness" is ranked first with an arithmetic mean of (4.32). Yet, item No. (6) which states, "The university has set clear standards for the mechanism of evaluating students in the blended learning courses" is ranked last, with an arithmetic mean of (3.94), where the arithmetic mean of the used strategies and procedures as a whole was (4.17).

c. Training and technical support

Table 7

The Arithmetic Means and Standard Deviations of the Items Related to the Training and Technical Support Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	7	The university (Quality Center) provides training service on using the e-learning management system for faculty members before starting blended learning.	4.44	.660	High
2	8	The university provides a technical support team to assist the faculty members with any problem related to the e-learning management system for the blended learning course	4.29	.799	High

3	9	The university provides informational brochures for faculty members about blended learning.	4.21	.808	High
		Training and Technical Support	4.31	.656	High

Table (7) shows that the arithmetic means range between (4.21-4.44) item No. (7) which states "The university (Quality Center) provides training service on using the e-learning management system for faculty members before starting the blended learning" is ranked first place with an arithmetic mean of (4.44). However, item No. (9) which states, "The university provides informational brochures to faculty members about blended learning" is ranked the last place, with an arithmetic mean of (4.21), where the arithmetic mean for training and technical support as a whole w (4.31).

Second Domain: The competencies of planning, designing and managing blended learning courses through the e-learning management system

Table 8

The Arithmetic Means and Standard Deviations of the Items Related to the Competencies of Planning, Designing and Managing Blended Learning Courses Through the E-learning Management System Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	22	I prepare and upload students' homework on the e-learning management system and provide them with feedback.	4.62	.652	High
1	26	I have the ability to adjust assignment settings (instructions, grade, deadline, submission method, edit assignment name).	4.62	.604	High
3	10	I have the ability to define general and specific objectives for the blended learning course.	4.59	.557	High
4	11	I can divide the course into logically arranged parts that can be used according to the blended learning.	4.53	.662	High
4	19	I can include enrichment scenes and links in the attached electronic courses through the E-Learning Management System.	4.53	.615	High
4	28	I have the ability to adjust file settings (Help, View, Edit File	4.53	.662	High

		Name, Delete or Replace File).			
7	13	I set a clear and detailed schedule for completing the various tasks of preparing the course on the E-Learning Management System.	4.47	.615	High
7	20	I have the ability to determine the appropriate electronic communication method (simultaneous, asynchronous) between the elements of the educational process.	4.47	.748	High
9	23	I have the ability to use various evaluation methods (projects, tests) that are suitable for the e-learning management system.	4.47	.662	High
10	14	I am constantly working on developing the study plan through the e-learning management system.	4.41	.701	High
10	17	I have the ability to convert course contents into electronic content through the use of e-learning management system modules.	4.41	.743	High
10	25	I can view students 'results in the course through the e-learning management system.	4.41	.821	High
13	18	I can include e-lessons with activities that encourage students to use the e-learning management system that suits their needs.	4.38	.652	High
14	12	I have the ability to manage interaction between students when they use the e-learning management system.	4.35	.691	High
14	16	I can choose the appropriate learning strategies for the course through the e-learning management system such as (simulation, discussion, etc.)	4.35	.646	High
16	24	I can schedule the presentation of weekly learning activities for students and follow them from outside the classroom through the e-learning management system.	4.35	.950	High

17	15	I can determine the suitability of the course to be taught through the E-Learning Management System.	4.32	.684	High
18	21	I have the ability to organize students 'roles through prior announcements to them, and to provide instructions to them through the e-learning management system.	4.24	.654	High
19	30	I can create the Question Bank and add the necessary modifications to the questions via the e-learning management system.	4.15	.958	High
20	27	I engage with my fellow faculty members in the major in describing the content of the blended learning course.	4.06	.983	High
21	29	I can activate and use the dictionary via the e-learning management system.	3.88	1.225	High
		Competencies for planning, designing and managing blended learning courses through the e-learning management system	4.39	.508	High

Table (8) shows that the arithmetic means range between (3.88-4.62), as the two items No. (22 and 26) which stated, "I prepare and upload students' homework on the e-learning management system and provide them with feedback" and "I have the ability to adjust assignment settings (instructions, grade, deadline, submission method, edit assignment name" are ranked first with an arithmetic mean of (4.62). However, Item No. (29) which states "I can activate and use the dictionary via the e-learning management system" is ranked last with an arithmetic mean of (3.88).

The arithmetic mean of the competencies of planning, designing, and managing blended learning courses across the e-learning management system as a whole is (4.39).

Third Domain: The reality of employing the e-learning management system for blended learning courses in terms of:
a. The interactive environment in the e-learning management system for the blended learning courses.

Table 9

The Arithmetic Means and Standard Deviations of the Items Related to the Interactive Environment in the E-learning Management System for the Blended Learning Courses Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	33	I follow the foundations of academic integrity in using educational content through the e-learning management system.	4.59	.557	High
2	34	I provide students with the scientific references and books they need through the e-learning management system.	4.50	.707	High
3	36	I take students' opinions about the blended courses after completing their teaching to determine strengths and weaknesses.	4.41	.892	High
4	31	The e-learning management system increases my ability to communicate and communicate during blended learning.	4.35	.691	High
5	53	My use of the e-learning management system contributes to the use of many educational activities and forums.	4.32	.727	High
6	32	I rely on the e-learning management system to prepare for the daily activities required of me.	4.09	.753	High
		The interactive environment in the e-learning management system for the blended learning courses	4.38	.563	High

Table (9) shows that the arithmetic means range between (4.09-4.59) where item No. (33) states, " I follow the foundations of academic integrity in using educational content through the e-learning management system" is ranked first with an arithmetic mean of (4.59). However, while paragraph No. (32) came, which states " I rely on the e-learning management system to prepare for the daily activities required of me" is ranked last with an arithmetic mean of (4.09). The arithmetic mean of the interactive environment in the e-learning management system for the blended learning courses as a whole is (4.38).

b. Justifications for using the e-learning management system for blended learning courses.

Table 10

The arithmetic means and standard deviations of the paragraphs related to the justifications for using the e-learning management system for the blended learning courses arranged in descending order according to the arithmetic means

The Arithmetic Means and Standard Deviations of the Items Related to Justifications for Using the E-learning Management System for the Blended Learning Courses Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree

1	38	I direct students towards self-learning through the courses offered through the e-learning management system.	4.59	.557	High
2	42	Using blended learning helps provide students with more information about the topic I am teaching.	4.59	.557	High
3	41	The use of the e-learning management system helps in distributing the educational activities and exercises in a balanced way for the blended learning course.	4.56	.613	High
4	37	Blended learning makes me able to use a variety of learning resources through the e-learning management system.	4.47	.615	High
5	40	Using an e-learning management system for blended learning courses helps save time and effort in the long run.	4.47	.662	High
6	39	The use of the e-learning management system helps in enabling the teaching of the blended learning course.	4.41	.557	High
		Justifications for using the e-learning management system for the blended learning courses	4.51	.481	High

Table (10) shows that the arithmetic means ranged between (4.41-4.59), where item No. (38) which states, "I direct students towards self-learning through the courses offered through the e-learning management system" is ranked first with an arithmetic mean of (4.59). Yet, item No. (39) which states "The use of the e-learning management system helps in enabling the teaching of the blended learning course" is ranked last with an arithmetic mean of (4.41). The arithmetic mean of the justifications for using the e-learning management system for the blended learning courses as a whole is (4.51).

Q2.What are the difficulties facing the application of blended learning from the point of view of faculty members in light of the COVID19 pandemic?

To answer this question, the arithmetic means and standard deviations of the difficulties that faculty members face while applying blended learning are calculated as illustrated in Table 11.

Table 11

The Arithmetic Means and Standard Deviations of the Items Related to the Difficulties that Faculty Members Face While Applying Blended Learning Arranged in Descending Order According to the Arithmetic Means.

Rank	No.	Items	AM	SD	Degree
1	.43	I suffer from following up the large numbers of students in blended learning courses through the tools of the E-Learning Management System.	3.62	1.256	Medium
2	.45	The use of an e-learning management system increases the teaching load of faculty members.	3.32	1.364	Medium
3	.50	Lack of periodic updating of the e-learning management system.	3.29	1.315	Medium
4	.48	Vulnerability in the Internet within the university.	3.18	1.381	Medium
5	.46	The lack of awareness and education programs on how to deal with the e-learning management system.	3.03	1.291	Medium
6	.51	Lack of specialized technical staff to conduct maintenance. The e-learning management system is continuously disrupted.	2.88	1.200	Medium
7	.47	Solve technical problems related to the e-learning management system when needed	2.79	1.274	Medium
8	.49	The difficulty of applying different evaluation methods in the e-learning management system.	2.76	1.182	Medium
9	.52	Lack of the necessary skills to design integrated e-courses through the e-learning management system.	2.56	1.541	Medium
10	.44	The use of blended learning continuously improves students' social isolation.	2.35	1.433	Medium
		Difficulties facing faculty members while using the e-learning management system for blended learning courses.	2.98	1.016	Medium

Table (11) shows that the arithmetic means range between (2.35-3.62), where item No. (43), which states "I suffer from following up the large numbers of students in the blended learning courses through the tools of the e-learning management system" is ranked first with an arithmetic mean of (3.62), while item No. (44) which states "The use of blended learning continuously improves the students' social isolation" is ranked last with an arithmetic mean of (2.35). The arithmetic means of the difficulties facing faculty members while using the e-learning management system for blended learning courses as a whole is (2.98).

Recommendation

In light of the discussion of the results of this study, the study provides several recommendations such as holding training courses for faculty members about modern applications and proposing financial and moral incentives for those enrolled in these courses, providing

classrooms and halls equipped with modern equipment, preparing them for the practice of blended learning, and following them up by a technical staff to deal with any sudden defects, and inking the use of blended learning by faculty members with the conditions for the promotion, and the performance evaluation programs for faculty members at the University of Jordan.

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