

# Blended E-Learning Constraints from the Viewpoint of Faculty Members

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## Abstract

This research aims to identify obstacles to the use of blended e-learning in Al-Balqa Applied University through the viewpoint of faculty members. This research also aims at finding out the constraints that this type of e-learning and finding appropriate solutions for these constraints in the future. The results of this research will also offer proposals and recommendations that will increase the effectiveness of this type of e-learning. Furthermore, the research also aims to find out the best method of training faculty members on how to use blended e-learning.

The study used a descriptive analytical through the review of the literature on the subject of the study to determine the factors influencing the phenomenon of study. A questioner was then developed to collect the necessary data. After analysis, the results showed that the constraints relating to the University support cited the most relating to faculty members. This was followed by constraints involving students and finally constraints related to infrastructure were ranked last. Training and workshops were shown to be the best methods to develop skills for e-learning systems for faculty members.

One of the main recommendations of this study was there needs to be attractive incentives for faculty members to be motivated and provide introductory course in e-learning for students. and provide adequate support for content development and the involvement of faculty members in designing the content and Exchange of experience between faculty members in the University with the support of the Ministry of higher education, and Increase the number of laboratories dedicated to blended e-learning that is available to students outside lecture times.'

**Keywords:** E-Learning, constraints

## 1. Introduction

The rapid scientific and technological developments as well as changes in communications and information technology and the exploitation of this technology as an educational and media tools to facilitate the learning process has led to the widespread use of e-learning. As a result of output from applying this technology which includes the improvement of the quality and the effectiveness of learning in addition to the flexibility that this type of learning which can provide teaching all year round. This will reduce the tuition fees for students as well as allowing students to participate in the knowledge as well as many other benefits. Many consider the growing relationship between e-learning and the global teaching industry as one of the causes of the proliferation of this type of e-learning. Another cause for the widespread use of e-learning is the growing global business markets that require fast delivery, communication, consultation, and cooperation which lead to the increase in the number of students enrolled in universities (Ryan, 2001).

E-learning represents the most modern teaching method and has become indispensable during the dawn of the recent scientific and technological progress. The aim of e-learning is to create a safe learning environment for students to learn and benefit from each other by transferring their shared experience and knowledge. The traditional learning process that is used by faculty members is an urgent need of change in order to keep up with the technological developments. These developments include mechanisms for cooperation and interaction in the communication process between teacher and student as well as other positive improvements that are achieved

through e-learning and the access to an effective learning environment where students achieve the maximum benefit from the educational process.

In order to take advantage of the features of both traditional and e-learning education, there are that combine both types of learning. E-learning will not replace traditional learning because the teacher is the foundation of any type of learning. Furthermore, the best method is the integration of e-learning and the traditional learning processes.

### *1.1 Study Problem*

One of the most important achievements of the modern era in the field of education is e-learning. Jordanian universities that have focused their attention in this area, include, Al-Balqa' Applied University which has founded an academy under the name Al-Balqa electronic academy' to provide this service. The academy began its teaching in the first semester of the academic year 2006-2007. Although blended e-learning has addressed many of the problems of learning, there are still going to be obstacles those users of this type of e-learning face. The survey asked faculty members to identify the obstacles that they faced while using this type of e-learning.

### *1.2 Study Objective*

First to view and provide the conceptual and theoretical framework of blended e-learning in terms of the origin and evolution of this concept and areas of application in an attempt to reduce the knowledge gap in adopting this type of learning.

Second, to identify the obstacles facing faculty members when using this type of e-learning for the future. In addition, to find appropriate solutions to these constraints to more effectively use and utilize its features.

Third, the submission of proposals and recommendations that will increase the effectiveness of this type learning.

### *1.3 Study Important*

The importance of the study is from the importance of the blended e-learning which is considered one of the most modern technological methods that identifies the suitability of the blended e-learning technology for the learning environment in the Hashemite Kingdom of Jordan and the dependence on this technology especially that blended e-learning is a unconventional teaching method that has lead to rise in skills in both levels of teacher and student.

The study was also able to identify the obstacles of blended e-learning which has transitioned without the expansion of this type of learning at Al-Balqa Applied University. It is also important to study to submit proposals and recommendations to help overcome these constraints. In addition to this study is consistent with recent trends that seek to take advantage of the technological developments and the exploitation of modern communication technologies in the educational process.

### *1.4 Study Questions*

- 1- What are the obstacles to blended e-learning regarding faculty members from the viewpoint of the faculty members?
- 2- What are the obstacles to blended e-learning regarding Student from the viewpoint of the faculty members?
- 3- What are the obstacles to the blended e-learning regarding the University support from the viewpoint of the faculty members?
- 4-What are the obstacles to blended e-learning regarding infrastructure from the viewpoint of the faculty members?
- 5- What is the best method to train faculty members on the use blended e-learning?

### *1.5 Study Limitation*

- 1-This study examined the one type of e-learning (blended e-learning).
- 2- This study was limited to the faculty members at Al-Balqa applied University/Centre who carrying out teaching courses through blended e-learning.

### *1.6 Keywords*

**Obstacles:** factors that negatively affect the use and the effectiveness of this type of learning.

**Blended learning:** is built on the basis of integration between traditional learning and e-learning which involves the teacher meeting face to face with students (Aleksey, 2004).

## 2. Literature Review and Previous Study

E-learning is a teaching and learning method that uses electronic media in the process of transferring and communicating information between teacher and student and this use may be as simple as using these electronic tools to view and discuss the information inside the lecture classroom in addition to so-called virtual classroom of educational process through network technologies and video.

According to Horton (Horton & Horton, 2003) e-learning as any use of the Internet for learning events as well as distance learning using the Internet. E-learning is a type of learning that does not adhere to the limits, whether temporal or spatial and is not tied to a specific level of education, can be used by all personnel to meet the desires, needs. The developments that they need a many that depend on sophisticated teaching methods based on cutting-edge technology in the transfer of knowledge and learning experiences. At the moment there is no specific definition of e-learning but most definitions express that it is a learning activity which is not bound by time and space and uses information technology and communication whether inside the classroom or to communicate information to the learner.

The objectives of e-learning are many and diverse. It helps in facilitating ways of communication between student and teacher to exchange opinions, experiences and viewpoints. E-learning methods can be used by a student to study at any time. In addition, provides an easy way for students and teachers to assess and share knowledge plus transferring educational experiences. Furthermore, this method reduces the administrative burden on teachers and helps solve the problem of student overcrowding. E-learning has many forms, there is a consensus that this type of learning depends on information technology. Three types of e-learning were identified.

1. Synchronous E-learning is considered of learning that brings the teacher and the learner via modern means of communication, either online or by using the video via computer.
2. Asynchronous e-learning is a type that allows the teacher to use learning chapters, as to allow the learner to access to the website at any time and follow specific instructions for learning without direct contact and coincides with teacher.
3. Blended Learning this is sort of an mixture of learning which includes classroom instruction, interactive training through the Internet, e-mail communication, self study, discussions and, collaborative programmes plus a virtual classroom and online tests. (Kerres & De Witt, 2003) and (Marsh et al., 2003).

where the two methods of e-learning and traditional learning are used together in the learning environment. And a lot of people in higher education are interested in blended e-learning and hope it will improve the learning process.

### 2.1 Blended E-Learning

This type of learning in which used an effective set of multiple submission methods and ways of teaching and learning styles, and then facilitates the learning process (Aleksey, 2004), it is also known as complementarily method where there is interaction between the various means of education and learning takes place as a result of the adoption of a systemic use of portal technology combined with the best features of interactive and face to face learning (Kruase, 2007). According to (Singh & Reed, 2001) and (Garrison & Kanuka, 2004) blended e-learning is a type of learning experience that combines offline learning and traditional learning where learning happens in the traditional classroom. As defined by the American society for training & Development (ASTD) is learning that is planned to merge any face-to-face interaction, collaboration and asynchronous and synchronous learning tools help improve performance. Learning tools that must contain a blended learning programs have multiple forms including: collaborative software, virtualization software and eBooks and electronic performance support systems.

### 2.2 Blended E-Learning Advantages

The blended e-learning is type of learning who worked on integrating face-to-face learning with e-learning (Little, 2006), to take advantage of face-to-face learning with e-learning features (Mitchell & Honore, 2007) (Schmidt & Werner, 2007) as flexibility in learning and to meet all the requirements for different levels, ages and times, as well as various desires in addition to learning methods that has relation to space or time to taste in addition to using learning tools in designing and coordinating lessons and educational material as well as to easily update content and enhancing communication plus the convergence between different students and tutor online in addition to the ability to access global markets (Ennew & Fernandez-Young, 2006 )

This method also worked in reducing the costs and speed the completion of courses or subjects addressed the obstacles related to the simultaneous learning of difficult materials are taught electronically in full, there is also a

loss for the humanitarian aspects and the social relationships between the teacher and the learner provided the traditional learning for the need for social interaction to meet and share ideas face-to-face as well as learner's desire for traditional ways of learning, blended learning to integrate the features and benefits of the two types and work force integration in learning and reduce fears. (Williams, 2003; Kruase, 2007).

### *2.3 Blended E-Learning Constraints*

Both traditional learning and e-learning have constraints and obstacles, blended e-learning was introduced to reduce these obstacles. (Khazaleh & Jawarneh, 2006) study noted that obstacles in Jordanian schools are: acute shortage of computers and equipment in schools, poor teacher training programmes in information technology, and the lack of skills and competencies in students, and inadequate time for teachers to plan and prepare material.

In (Al-Jarf, 2007) a study identified constraints from the viewpoint of faculty members at universities, most respondents agreed that the existence of a number of constraints such as the inability to use the e-courses, training courses, and the large workload, inadequate infrastructure, lack of management support, The study emphasized that these obstacles can be attributed to low use of learning management in Arabic universities and the lack a vision for the future.

Alkhobra (2004) reached the following obstacles: lack of computers for all faculty members, students are not prepared to use the Internet for educational purposes, and the lack of a plan for online education in higher education, to the lack of Arabic-language data that can be utilized in education, the lack of incentives to use the technology in education, the need for continuous follow-up by faculty members, and the absence of adequate laboratories, The University offers an online service but there few qualified specialist in the use Internet.

As explained by (Bathe, 2001) a number of factors such as the lack of compensation of teachers financially for developing the content for online courses, there is little urgency to develop electronic courses and the negative view teachers have towards electronic course. and this informed by wilson (Wilson, 2000) noted that the uncertainty of the effectiveness of this type of learning from a teacher's viewpoint and their lack of conviction as well as teachers lacking adequate time and wages that correspond to the activities involved as well as lack of rewards. There is also a lack of infrastructure to support this type of learning.

Rondy (Rondy, 2002) state that one of the main obstacles to the application of e-learning is the lack of effective leadership, the lack of adequate training, and lack of equipment, tools and technical support for this kind of education.

Naida Study (Naida, 2003) with the aim of investigating the use and acceptance of a group of faculty members at the University (Manchester Metropolitan University) for e-learning and how it can be used to support teaching in the University. The study also showed that there is a degree of awareness among teachers with some hesitation in adopting this system. The reason for this hesitation is the lack of institutional support, lack of time and resources to implement this system, in addition to the lack of information Knowledge and experience in e-learning technology.

In Jordan in a study by (Bani Domi & Shunnaq, 2007) revealed that the obstacles and challenges facing educational institutions in Jordan are: limited the use of e-learning, the lack of Internet access in schools, the insufficient number of computers for students, technical issues that appear in the computers and the Internet, computer labs without headsets, lack of equipments, students do not have computers at home. Educational literature and previous studies demonstrate that despite the advantages of blended e-learning there are many obstacles facing this type of learning.

## **3. Methodological Framework of the Study**

### *3.1 Study Methodology*

The study used descriptive analytical through the review of the literature on the subject of the study to determine the factors influencing the phenomenon of the study and then developed a tool to collect the necessary data. The questions were answered using descriptive statistics.

### *3.2 Method of Study*

The method used in this study includes determining the sample frame, which in turn depends on the identification of the study population and sample type and size, unit of analysis, identify the type of data sources and collection tools in addition to the design and statistical analysis tools.

### 3.3 Study Population

The study population included all the faculty members who are teaching using blended e-learning method which included 60 faculty members of various academic levels. The sample included all member of the study population.

### 3.4 Study Tool

A questionnaire was used as a collection tool after researchers reviewed educational literature in this area. The study tool consisted of two parts first part combined personal data and second part combined (44) paragraph spread over four areas: first area (constraints relating to the faculty member), second area (constraints regarding students), the third area (constraints relating to university support), the fourth area (obstacles relating to infrastructure ).

#### 3.4.1 The Credibility of the Study Tool

The questionnaire was shown to experts in the learning technology field and the experts were asked their opinion on the appropriateness of each paragraph and to each domain it fell under Adjustments were undertaken on the advice of the experts.

### 3.5 Reliability

Extraction reliability coefficient for study is extracting reliability coefficients by cronbach alpha of its consistency for each part of the study. Where the values of these transactions are as follows: the first (74.0), second (0.70), third (0.69), Fourth (0.79), for all (0.84) where these values are acceptable for the purposes of the study.

### 3.5 Statistical Treatments

#### 3.5.1 Measurement Tools

Measurement tools have been selected the likert scale. it is one of the most commonly used metrics for measuring consensus so as to easily measure, understand and balance the grades where the sample under test over agreeing to all the words of phrases that make up the scale direction proposed responses have been translated as follows:

Strongly agree	agree	Neutral	disAgree	Strongly disagree
5 grade	4 grades	3grades	2 grades	1 grades

And to determine the degree of agreement, three levels were specified (high, medium, low) based on the following equation along the ceiling for category alternative-minimum alternative/number of levels for any length of class  $5-1/3= 1.33$

low =(1-less than 2.33)

middle = (2.33 -3.66)

high (of 3.67 and above)

#### 3.6.2 Statistical Method

The descriptive statistical method was used (arithmetic means and standard deviation) to determine the response rate.

## 4. Data Analysis and Presentation of Results of the Demographic Data

### 4.1 Analyzing Demographic Data

Analyzing demographic data collected from questionnaires distributed to the study sample population where the sample distribution results by demographic factors as in Table 1.

Table 1. The sample distribution by demographic factors

demographic factors	Branches	Frequency	Percent
Gender	male	49	81.6
	female	11	18.3
Educational Qualification	master	30	50.0
	phd	30	50.0
Experience	Less than 5 years	10	16.6
	10-5years	30	0.05
	Above 10 years	20	33.3

#### 4.2 Results of Statistical Analysis

Results of statistical analysis that has been reached, which describes the mathematical level of the degree of approval of the axes are shown in Table 2.

Table 2. The degree of approval of the study fields

Field	mean	grade approve	the order of factors in terms of approval
1 blended e-learning obstacles related to university supports	4.53	high	1
2 blended e-learning obstacles related to students	3.83	High	3
3 blended e-learning obstacles related to the faculty members	4.23	high	2
4 blended e-learning obstacles related to infrastructure	3.6	high	4

Is evident from Table 2 that the scope of the constraints related to the university support has formed the biggest obstacles with a mean of (4.53), followed by the field of the obstacles related to faculty members with a mean of (4.23) then the field of obstacles that relate to students with a mean of (3.83), while the area of the constraints related to infrastructure LATEST RANK came with a mean of (3.6).

The following Table 3 shows the results of the statistical analysis and arithmetic means and standard deviations of blended e-learning obstacles related to university supports.

Table 3. Arithmetic means and standard deviations of blended e-learning obstacles related to university supports

Elements	standard deviations	Arithmetic means	degree of approval
1-1 the University Encourages to apply blended e-learning	0.50	4.79	high
1-4 there is an independent committee within the University monitors blending e-learning	0.48	4.67	high
1-5 The university environment generally encourages e-learning	0.58	4.56	high
1-6 The technical support provided by the University is sufficient	0.62	4.52	high
1-8 There is adequate laboratory supervisors for the number of laboratories and equipment	0.68	3.46	middle
1-9 The number of students in each class section is appropriate	0.77	3.44	middle
1-2 The technical support provided by the University is sufficient	0.74	3.44	middle
1-7 There are concrete incentives for faculty member who is teaching through blended e-learning	1.01	2.00	low
1-3 There are non-financial incentives for the faculty member who are teaching through blended e-learning	1.06	1.69	low

It is evident from Table 3 that the arithmetic mean of the University support element ranged between (1.69-4.79) and highest mean was related to “the University encouraging to apply the blended e-learning” and the lowest mean was related to the paragraph “There are non-financial incentives for the faculty member who are teaching through blended e-learning” generally note that most paragraphs had popularity among high level and middle but there are two obstacles approval rate was low. This confirms that the University cares about blended e-learning. But they do not pay much attention to the incentives and rewards for faculty members who are teaching using blended e-learning.

Table 4 Shows following the results of the statistical analysis, the arithmetic means, and the standard deviations for the blended e-learning obstacles related to students.

Table 4. Arithmetic means and standard deviations of blended e-learning obstacles related to students

Elements	standard deviations	Arithmetic means	degree of approval
2- 2Student have a good understanding of the courses in blended e-learning	0.93	3.94	high
2-6 Students interact with the teacher well	0.85	3.92	high
2-8 Students information on blended eLearning is good	1.18	3.88	high
2-10 Student have prior knowledge of using computers	1.06	3.83	high
2-11 students have prior knowledge of how to use the Internet	1.34	3.79	high
2-3 There is an awareness among the students of modern techniques	1.07	3.61	middle
2-1 There are accepted by students( Blended e-learning blended)	0.88	3.50	middle
2-9 Students have enough time to use the blended e-learning	1.08	3.43	middle
2-4 Internet connection is available to the students at home	0.87	2.28	LOW
2-5 Students face difficulty in dealing with the system because of the English language	1.12	2.01	LOW
2-7 Students have difficulty accessing the material from outside the University.	0.87	2.28	LOW

It is clear from the Table 4 that the arithmetic means of students element ranged between (2.01-3.94) and the highest mean was paragraph “Student have a good understanding of the courses in blended e-learning” the lowest mean was of the paragraph “Students have difficulty accessing the material from outside the University” system generally note that most paragraphs had popularity among high, medium. This ensures that students understand the courses given by the blended-e learning better than traditional learning, but shows the existence of three paragraphs of the degree approval them weak and this confirms that they are an obstacle to e-learning, namely the lack of Internet connectivity to students at home and scarcely treated students with English as well as difficult access for students courses from outside the University.

Follows Table 5 the results of statistical analysis shows the arithmetic means and standard deviations for the blended e-learning obstacles related to faculty members

Table 5. The arithmetic means and standard deviations for the blended e-learning obstacles related to faculty members

Elements	standard deviations	Arithmetic means	degree of approval
3- 5teachers have the ability to help students in using the system	0.93	4.35	high
3-2 faculty members are involved in the formulation of e-content courses	0.85	4.32	high
3.3 the ability of teachers to assess the performance of students with ease	1.14	4.32	high
3-13 workshops optimization method for developing skills in the use of e-learning systems	1.18	4.31	high
3-6 teachers have the ability to help students questions regarding used	0.74	4.27	high
3-10 I believe that collective participation the optimal method to develop skills in the use of e-learning systems	1.16	3.81	middle
3-12 see the Faculty is concerned to support and develop Skills	1.15	3.54	middle

in the use of e-learning systems			
3-11 computer center who better to develop skills in the use of e-learning systems	1.45	3.25	middle
3-7 I think short courses are the best method for developing skills in the use of e-learning systems	0.91	2.52	middle
3-8 see that personal experience the best method for developing skills in the use of e-learning systems	0.92	2.58	middle
3-9 I think lectures optimization method for developing skills in the use of e-learning systems	1.02	2.86	middle
3.4there is co-operation and exchange of experience between faculty members	1.13	2.23	LOW
3.1 teacher training on the blended e-learning is continuously	0.67	2.20	LOW

It is clear from the Table 5 that the arithmetic mean of the faculty members ranged between (4.35-2.20) and highest mean was related to paragraph “teachers have the ability to help students in using the system” and the lowest mean was related to the paragraph “teacher training on blended eLearning is continuously” generally note that most paragraphs had popularity among high, medium. This ensures that faculty members have the ability and adaptability to teaching through e-learning blended . But there are two paragraphs show weakness which indicates the presence of obstacles, namely the lack of courses which would raise their skills and abilities in the blended e-learning and dealing with system as well as lack of cooperation and exchange of experiences among the faculty members.

Table 6 Following the results of the statistical analysis shows the arithmetic means and standard deviations for the constraints of a blended e-learning infrastructure.

Table 6. Arithmetic means and standard deviations for the constraints of a blended e-learning infrastructure

Elements	standard deviations	Arithmetic means	degree of approval
4-1 The preparedness of laboratory for blended e-learning requirements	0.93	3.94	high
4-5 Curriculums are organized and ready for electronic learning	0.85	3.92	high
4-3 Internet speed is sufficient within the University	1.14	3.88	high
4-2 There is sufficient laboratory lecture times	1.18	3.88	high
4-6 There tech support are qualified and capable	1.08	3.83	high
4-7 Academic content is updated constantly	1.06	3.83	High
4.8 The multimedia presentation is available	1.34	3.79	High
4.9 Safety and reliability of system is efficient	0.88	3.0	middle
4-10 Time of lecture is enough	0.87	2.71	Middle
4-4 Laboratories are available for students beyond the lecture times.	1.12	2.69	Low

Table number 6 shows the arithmetic mean of infrastructure ranges between (2.69-3.96) and highest mean was the paragraph “The preparedness of laboratory for blended e-learning requirements” and the lowest mean paragraph was “Laboratories are available for students beyond the lecture times”. Note that most paragraphs had popularity among high, medium. This confirms that good infrastructure for blended e-learning but the corresponding paragraph’s low results constitute obstacles to e-learning and there are no available laboratories for use outside lectures times.

#### 4.3 Discussion of Results

The results indicated that the answer the first question of the study which was, What are the obstacles to blended e-learning regarding faculty members from the viewpoint of the faculty members? The teachers have the ability and adaptability to teach on the system as well as the ability to help students use the system.

The constraints face the faculty members is lack of training courses which could improve r their skills and abilities in the blended e-learning and help is dealing with the system. The lack of cooperation and exchange of experiences among the faculty members is also a constraint and the lack of cooperation between universities in

sharing experiences and knowledge in the field of Blended e-learning there results are compatible with the following studies: (Rondy, 2002) and (Khazaleh & Jawarneh, 2006) and (Al-Jarf, 2007).

The results of the research answered the second questions which was, What are the obstacles to blended e-learning regarding Student from the viewpoint of the faculty members? The students using blended e-learning and generally accept the technology but face difficulty with the English language. Students weakness in English makes more difficult to use the e-learning system for the success blended e-learning students must have adequate capacity to deal with the system. In addition, to the lack of Internet connectivity for students and this is due to the financial conditions of the students. Most students can't afford the cost of internet connection. There are also difficulties for the students to access this technology from outside the university because it requires high speed internet connections to interact with the system. The results are compatible with the following studies: (Denis, 2003) and (Khazaleh & Jawarneh, 2006) and (Alkhobra, 2004) and (Al-Jarf, 2007).

The results provide an answer the third question of the study which was what are the obstacles to the blended e-learning regarding the University support from the viewpoint of the faculty members? It was indicated that the university promotes blended e-learning application to keep pace with development in educational technology. The university has assigned this task to a specific committee to manage e-learning systems which shows that the university is greatly concerned about this issue.

There are still some obstacles to overcome which include the lack of material and non-material incentive for faculty members who will be teaching using the blended e-learning. The university does not pay enough attention to the incentive and rewards for faculty members who are using this technology to teach. there results are compatible with the following studies: (Bathe, 2001) and (Wilson, 2000) which stressed the importance of incentives and its negative impact that the lack of incentive with create.

The results also provide an answer for the fourth question which was what are the obstacles to blended e-learning regarding infrastructure from the viewpoint of the faculty members? The laboratory is in a good state preparedness which indicates an advanced infrastructure in the university that will meet the needs of blended e-learning. There are however some constraints that the university has find solutions for which are related to the infrastructure and the lack of available laboratories for students to access outside lecture times. This requires additional laboratories. The results are compatible with the following studies: (Naida, 2003) and (Brown Domi walshnak, 2007; Alkhobra, 2004), which stressed the importance of providing the necessary infrastructure until the educational process in successful.

While the results showed the answer for question five which was what is the best method to train faculty members on the use of blended e-learning? The workshops are the best method for developing skills in the use of blended e-learning systems. Other goods methods include, lectures, collective participation of faculty members, short courses and personal experience.

## **5. Conclusion and Recommendations**

Despite it widespread application in the educational process, e-learning faces several obstacles which include, the lack of infrastructure and necessary expertise to deal with e-learning tools. This includes the lack of experience of both the teacher and learner. Furthermore, the difficulty of students in dealing with the English language as well as ensuring the availability of devices with the same efficiency of learners outside the lab as well as the lack of Internet access service when all students are at home plus difficulties in monitoring the systems. In addition, there is a shortage of qualified personnel and training. There is also a lack of cooperation and exchange of experience between faculty members and a lack of material and non-material incentives for faculty member who teach blended e-learning.

In the light of the findings of the study, the recommendations of the researchers are:

1. That there should attractive material and non-material incentive for faculty members
2. provide adequate support for content development and the involvement of faculty members in designing the content
3. Provide courses and workshops for faculty members to enable teachers to use the system effectively
4. Exchange of experience between faculty members in the University with the support of the Ministry of higher education,
5. Making it mandatory for students to pass English proficiency to prevent students from having difficulties in using e-learning systems
6. Provide introductory course in e-learning technology for students before they use the system.

7. Increase the number of laboratories hours dedicated to blended e-learning that is available to students outside lecture times
8. Seminars and lectures to educate students about blended e-learning as well as brochures to encourage and increase student's acceptance of this technology.

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