

# A Future Vision for Activating Blended Learning Environments in the Jordanian Ministry of Education's Schools in Light of Quality and Accreditation Standards

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**Abstract:** The study to identify the future vision for activating the blended learning environments in the schools of the Jordanian Ministry of Education in the light of quality and accreditation standards. In government schools in the Directorate of Education in Karak Governorate, and the most important findings of the study are that the level of activation of the blended learning environment in the schools of the Jordanian Ministry of Education from the teachers' point of view came at a high level, with an arithmetic mean (3.42) and a standard deviation (0.68), where it came The field of (teacher) ranked first, averagely, with an arithmetic mean (3.74) and a standard deviation (0.80), while the field (human and material resources) came in the last rank with an average level, with an arithmetic mean (3.10) and a standard deviation (0.93). There are no statistically significant differences At the level of significance ( $\alpha \leq 0.05$ ) in the total and all sub-domains in activating the blended learning environment in the schools of the Jordanian Ministry of Education from the teachers' point of view due to the gender variable, where the value of (T) for the total = (0.899). Statistical machine at the significance level ( $\alpha \leq 0.05$ ) in the domains (leadership and governance, material and human resources, teacher, learner) to activate the blended learning environment in the schools of the Jordanian Ministry of Education from the teachers' point of view due to the variable of experience, while it was found that there are differences in the total and the two domains ( The curriculum, and the educational climate) where the (T) value of the total = (3.752). The study recommended the necessity of intensifying all efforts to activate the blended learning environment in the schools of the Ministry of Education because of its importance in developing students' abilities and developing their self-learning, and working on preparing adequate training for teachers to qualify them to activate blended learning in schools, especially since we are in the era of knowledge economy and technological development.

**Keywords:** future vision, blended learning, quality standards

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## Introduction

Technology has become essential for human life, without which life becomes so difficult, due to the facilities and benefits it provides to human beings at all levels, including education. Moreover, educational institutions compete with each other to use information and communication technology so as to keep pace with the rapid advancement of our time. Since the advent of the Internet and the development of ways to store and retrieve information at any time, it has become easy for teachers, learners and other individuals to access that data available on the network. Hence, E-Learning emerged as a form of distance learning that eliminated the traditional classes and replaced them with virtual classes. Moreover, due to the university teachers and lecturers' hesitation to accept the notion of a total shift from the traditional learning method to the e-learning method, and accusing purely e-learning of causing a feeling of loneliness and isolation, blended learning emerged as one of the ways to adopt e-learning in teaching. The concept of blended learning refers to one of the forms of teaching or learning in which e-learning is combined with traditional classroom education in a single framework, where e-learning tools, whether computer-based or online, are used in teaching the lessons, like computer labs and smart classes, where the teacher and the student meet face to face most of the time. (Hassan Zeytoun, 2005: 173).

Blended learning is one of the modern approaches based on making the ultimate benefit from the information technology applications in designing new educational situations that mix between classroom teaching and online teaching, activating the use of active learning strategies, Peer to Peer learning, and learner-centered approach strategies. This method is distinguished by combining the advantages of e-learning in its various forms and the advantages of face-to-face learning in classrooms under the supervision and guidance of the teacher (Abdul Majeed, 2009:26).

The extent of the success of this type of learning is measured by the level of integration in the blended learning environment; the parties of the educational process (teacher, learner, content), and its adoption of modern technologies to meet the basic needs of the learning process in all its aspects. When talking about designing blended learning environments, a number of criteria must be taken into account with regard to all parties to the educational learning process, including the quality and accreditation standards. There is no doubt that quality is one of the components of educational institutions in all its aspects. The reform of education, which is based on the movement of standards, has become the driving force for many educational policies that emphasize the need to raise the level of student performance, and to provide the opportunity for each student to learn the appropriate content up to the required level of performance (Saleh, 2008). The Jordanian Ministry of Education has been concerned with integrating technology in education and considered it a strategic option for implementing quality in education, by training learners on the skills of dealing with, and making the ultimate benefit from, technology tools, training teachers on the skills of using technology in education and giving them the necessary training courses, as well as through the development of educational curricula in line with the era of the knowledge economy and educational technology.

Despite all the efforts made to adopt the blended learning environment in the Jordanian Ministry of Education's schools, there are still some gaps that must be identified in order to try to overcome and correct them, thus the ultimate benefit from the blended learning is achieved. Therefore, the present study aimed to identify the reality of the situation concerning the blended learning and to envision a future vision for activating the blended learning environment in the Jordanian Ministry of Education's schools in light of the comprehensive quality standards in education.

A number of previous studies have highlighted the reality of activating blended learning, such as the study of Khayat (2011), which aimed to reveal the effect of the use of blended learning on the achievement of the trainees of the Technical College in Medina, officially Al Madinah Al Munawwarah, for

the subject of mathematics and their attitudes towards it. The study sample consisted of 33 trainees from the Technical College. They were divided into two groups; controlling and experimental groups. The two study tools are an achievement test concerned with the chosen unit, and a questionnaire to measure the trainees' attitudes. The results of the study reflected that the use of the blended learning strategy led to an increase in the students' achievement in mathematics. Besides, the students developed positive attitudes towards the subject. Accordingly, the study recommended conducting more studies on integrating learning with different variables and different study samples.

Another study in this context was conducted by Abi Al-Fadl (2017). It aimed to evaluate the use of blended learning in general education schools, in the preparatory stage, in the light of quality and accreditation standards. The researcher used the descriptive method. Moreover, the study sample included 30 preparatory schools and 109 teachers of different specializations. The research tools included a form for listing the components of blended learning in schools and a note card to evaluate the teachers' use of blended learning components available in schools. The results of the study showed that there is an availability of blended learning components in general education schools, in addition to the usual traditional learning components and these components are usable. Moreover, the percentage of the teacher's use of the textbook in the classroom is more than the use of electronic resources. Based on the results, the study recommended the development of school classrooms in line with the requirements of the age and the technical development, improving the teacher's use of blended learning in schools and developing strategies to implement the improvement plan by the authorities.

Another study was conducted by Al-Sharif (2013). It aimed to identify the degree to which secondary school teachers in Qurayyat Governorate use blended learning and their attitude towards it. The study sample consisted of 166 secondary school teachers. Moreover, the study relied on two tools; a questionnaire to identify the degree of teachers' use of blended learning, and a scale to measure teachers' attitudes towards blended learning. The results of the study reflected that the level of teachers' use of blended learning was high, and that their attitudes toward blended learning were positive. Based on the results, the study recommended that an emphasis should be put on the importance of blended learning and its applicability in the educational process, as it combines more than one method of teaching. It also highlighted the need to reconsider school programs and curricula and strategies in order to accommodate the requirements of the contemporary technological revolution.

Fu (2006) also conducted a study which aimed at knowing the impact of using blended learning on learning the speaking skill of a number of 121 male and female students, who registered in the conversation course in a US university. The results reflected that there were no significant differences between the grades of the students who studied the course using the blended learning method and the students who were taught by the traditional method.

Maguire (2005) conducted a study which aimed at investigating the impact of blended learning on the achievement of middle school students in mathematics in the Toronto region in Canada. Moreover, the study was applied to (56) teachers who use blended learning in teaching mathematics. The results reflected that there were differences between the students' scores due to the method of teaching through blended learning.

### **The Problem and Questions of the Study**

The Jordanian Ministry of Education has sought to reform and develop education so as to keep pace with the era of the knowledge economy. Moreover, it prepared an organized strategic plan for the development of education in light of the comprehensive quality standards, which include the learning environment (teacher, learner and content). Despite all the efforts made in this regard, there is still a need to develop a future vision for the employment of blended learning due its great role in solving many of the

problems facing the total dependence on e-learning or the total dependence on traditional classroom learning.

Hence, the problem of the study is determined by answering the following questions:

- 1- What is the reality of activating the blended learning environment in the Jordanian Ministry of Education's schools, from the point of view of teachers?
- 2- Are there statistically significant differences, at the significance level ( $\alpha \leq 0.05$ ), in activating the blended learning environment in the Jordanian Ministry of Education's schools, from the teachers' point of view, that are due to the two variables: (gender, experience)?
- 3- What is the future vision for activating the blended learning environment in the Jordanian Ministry of Education's schools, in light of quality and accreditation standards?

#### **Objectives of the Study**

The present study has aimed at:

- 1- Having a look at the reality of the Jordanian Ministry of Education schools' activation of the blended learning environment, from the teachers' point of view.
- 2- Identifying the differences in the teachers' perspectives on activating the blended learning environment in the Jordanian Ministry of Education's schools which are attributed to the two variables: (gender and experience).
- 3- Developing a future vision to activate the blended learning environment in the Jordanian Ministry of Education's schools in light of quality and accreditation standards?

#### **Population and Sample of the Study**

The study population consists of all (7192) male and female teachers in the government schools, which are affiliated the Jordanian Ministry of Education in Karak Governorate, according to the statistics of the Ministry of Education for the year 2017/2018. The sample of the study consisted of (400) male and female teachers; 5% of the study population. They were selected as per the stratified random method from government schools, affiliated to the Directorates of Education in Karak Governorate.

#### **Methodology of the Study**

Following the nature of the objectives of this study, the descriptive analytical method was mainly adopted. The analytical field research was relied on to collect data by means of the study tool which was designed to answer the study questions. Then the phenomenon under study was described realistically. After that, a realistic future vision was presented.

#### **The Study Tool**

To achieve the objective of the present study, the researchers designed a questionnaire to find out the reality of activating the blended learning environment in the schools of the Jordanian Ministry of Education from the teachers' point of view. The questionnaire included a definition of the questionnaire for male and female teachers, and a request to answer its paragraphs accurately and objectively. It also included 30 clauses divided into three parts; each part included ten clauses.

#### **Face Validity of the Study Tool**

The indicators of apparent validity of the study tool were verified using the validity of the arbitrators, by distributing the questionnaire in its initial form to (11) arbitrators; experts and specialized professors from the University of Jordan, Mutah University and a number of experts and specialists, from the Ministry of Education, in the field of educational technology. The arbitrators read the clauses of the study tool and made their observations in terms of: the integrity of the linguistic wording of the clauses, the suitability of the clauses for the purpose of the study, the extent to which the clauses belong to the study fields, the suggestion of appropriate clauses, and the deletion of inappropriate clauses. The study tool was modified in the light of the arbitrators' suggestions until it took its final form.

**Content Validity of the Study Tool**

The validity of the questionnaire was also tested using the internal consistency validity by calculating the correlation between the clause's degree and the degree of the field to which the clause belongs. This was applied on survey sample of (30) male and female teachers who were randomly selected from the population of the study and were not included in the study sample. Table (1) shows the correlation coefficients:

**Table (1)The internal construction's validity of the scale by calculating the Pearson correlation coefficient between the degree on the clause and the sub-score on the field to which the clause belongs (n = 30)**

Clause	Correlation Coefficient	Clause	Correlation Coefficient
1	.459**	14	.416**
2	.575**	15	.508**
3	.429**	16	.390**
4	.614**	17	.493**
5	.544**	18	.536**
6	.457**	19	.381**
7	.584**	20	.517**
8	.613**	21	.420**
9	.609**	22	.581**
10	.492**	23	.459**
11	.557**	24	.400**
12	.392**	25	.605**
13	.722**	26	.748**

(\*) Significant at significance level ( $\alpha \leq 0.05$ )

(\*\*) Significant at significance level ( $\alpha \leq 0.01$ )

It is evident from Table (1) that the questionnaire achieved good content validity indicators, as the correlation coefficients ranged between (0.390-0.614).

The correlation coefficient between the degree on the field and the total degree on the questionnaire was calculated, as shown in Table (2):

**Table (2)Correlation coefficient between the degree on the field and the total degree on the questionnaire**

Field	Correlation Coefficient
Leadership and Governance	.856**
Material and Human Resources	.867**
Learner	.848**
Teacher	.864**
Curriculum	.846**
Educational Environment	.837**

(\*\*)Function at significance level ( $\alpha \leq 0.01$ )

**Stability of the Study Tool**

The stability of the questionnaire was tested using the Cronbach's alpha equation for internal consistency, on the same survey sample (n = 30). Table (3) shows the stability coefficients of the questionnaire:

**Table (3) Cronbach's alpha stability coefficient of internal consistency on the same survey sample**

Field	Stability Coefficient
Leadership and Governance	.85**
Material and Human Resources	.86**
Learner	.83**
Teacher	.87**
Curriculum	.83**
Educational Environment	.81**
Total	.91**

Table (3) shows that Cronbach's alpha stability coefficient for the whole questionnaire was (0.91), while it ranged between (0.81-0.87) for the fields.

### Editing the Questionnaire

The questionnaire is answered according to a five-point Likert scale (strongly agree, agree, neutral, disagree, strongly disagree). Moreover, the scores (1, 2, 3, 4, 5) are given respectively. The highest score that can be obtained on the questionnaire is (130), while the lowest score is (26). The level of approval is judged on the basis of the following criterion:

Arithmetic Mean	Level as per the Arithmetic Mean
1- 2.33	Low
2.34 - 3.67	Medium
3.68 higher than	High

### Procedure of the Study

After designing, conducting and ensuring the validity and reliability of the study tool, the researchers implemented the study procedures as follows:

- 1- Obtaining official approvals from the concerned authorities; the Ministry of Education / Directorates of Education in Karak Governorate.
- 2- Selecting the study sample, distributing the study tool and collecting it.
- 3- Collecting and analyzing data and drawing conclusions using the appropriate statistical analysis program.
- 4- Determining the overall quality standards in education by referring to the previous studies.
- 5- Preparing a future vision to activate the blended learning environment in the Jordanian Ministry of Education's schools in light of the comprehensive quality standards in education.
- 6- Coming up with a number of recommendations in light of the results of the study.

### Statistical Processors

The statistical software (SPSS) was used to perform the appropriate statistical operations, which include:

- Two-way ANOVA.
- Extracting the arithmetic averages and standard deviations for each field of study, and for each of its paragraphs.

- Cronbach's alpha equation to check the internal unity of the study tool.
- Scheffe post-comparison test for the direction of differences.

### Results of the Study

The first question: What is the reality of activating the blended learning environment in the schools of the Jordanian Ministry of Education from the point of view of teachers?

To answer the above question, the arithmetic means and standard deviations were calculated. Table (4) shows this:

**Table (4) Arithmetic means, standard deviations, and fields for the level of activation of the blended learning environment in the schools of the Jordanian Ministry of Education from the point of view of teachers**

Field	Arithmetic Mean	Standard Deviation	Grade	Level
Teacher	3.74	.80	1	High
Educational Environment	3.51	.83	2	Medium
Curriculum	3.49	.81	3	Medium
Learner	3.36	.91	4	Medium
Leadership and Governance	3.32	.87	5	Medium
Human and Material Resources	3.10	.93	6	Medium
Total	3.42	.68	-	Medium

Number	Clause	Arithmetic Mean	Standard Deviation	Grade	Level
1	The administration provides a suitable environment for employing advanced technology in the educational process	3.59	1.03	1	High
2	The administration provides advanced electronic methods in education	3.33	1.08	2	Medium
3	The administration organizes training courses for teachers on the use of advanced technology.	3.20	.97	3	Medium
4	The administration provides assistive electronic methods in evaluating learners' performance.	3.15	.95	4	Medium
5	Leadership and Governance Field	3.32	.87	---	Medium

Table (4) shows that the level of activation of the blended learning environment in the schools of the Jordanian Ministry of Education from the teachers' point of view has a high level, with an arithmetic mean (3.42) and a standard deviation (0.68). Moreover, the field the (teacher) ranked first, with an arithmetic mean (3.74) and a standard deviation (0.80), while the field (human and material resources) ranked last with an average level, an arithmetic mean (3.10) and a standard deviation (0.93). The following are the arithmetic means and standard deviations of the items for each of the fields of the questionnaire:

#### First: The Field of Leadership and Governance

**Table (5) Arithmetic means and standard deviations of the leadership and governance field clauses**

Table (5) shows that the clause No. (1), which states, “The administration provides a suitable environment for employing advanced technology in the educational process,” ranked first, at an average level, with an arithmetic mean (3.59) and a standard deviation (1.03), while the clause No. (4), which states, “The administration provides assistive electronic methods in evaluating learners' performance,” ranked last, at an average level, with an arithmetic mean (3.15) and a standard deviation (0.95).

**Second: The Field of Human and Material Resources**

**Table (6)Arithmetic means and standard deviations of human and material resources field**

No.	Clause	Arithmetic Mean	Standard Deviation	Rank	Level
1	The Internet is available in laboratories.	3.35	1.07	1	Medium
2	The school has laboratories equipped for e-learning	3.13	1.13	2	Medium
3	There are technicians to supervise educational laboratories	3.12	1.08	3	Medium
4	The necessary hardware and software are always available.	3.04	1.10	4	Medium
5	The capacity of the laboratories and the number of students are proportional to the study plan.	3.03	1.16	5	Medium
6	The devices used are modern.	3.02	1.11	6	Medium
7	All tools and materials needed to employ e-learning are available.	3.01	1.18	7	Medium
The Field of Human and Material Resources		3.10	.93	---	Medium

Table (6) shows that the clause no. (10), which states: “The Internet is available in laboratories”, ranked first, at an average level, with an arithmetic mean (3.35) and a standard deviation (1.07), while the clause no. (7), which states: “All tools and materials needed to employ e-learning are available”, ranked last, at an average level, with an arithmetic mean (3.01) and a standard deviation (1.18).

**Third: Field of Learner**

**Table (7)Arithmetic means and standard deviations of the learner's field clauses**

No.	Clause	Arithmetic Mean	Standard Deviation	Rank	Level
1	The learner employs information technology in life situations.	3.41	1.04	1	Average

2	The learner depends on the basics of modern technology to communicate with his colleagues and teachers.	3.38	1.01	2	Average
3	The learner understands the ethics of using technological innovations.	3.36	1.04	3	Average
4	The learner knows a variety of paper and electronic resources for learning and uses them in the classroom	3.29	1.08	4	Average
Field of Learner		3.36	.91	~	Average

Table (7) shows that the clause no. (15), which states: "The learner employs information technology in life situations", ranked first, at an average level, with an arithmetic mean (3.41) and a standard deviation (1.04), while the clause no. (13), which states, "The learner knows a variety of paper and electronic resources for learning and uses them in the classroom", ranked last, at an average level, with an arithmetic mean (3.29) and a standard deviation (1.08).

#### Fourth: Field of Teacher

**Table (8) Arithmetic means and standard deviations of the teacher's field clauses**

Table (8) shows that the clause no. (19), which states: "The teacher employs the content of the

No.	Clause	Arithmetic Mean	Standard Deviation	Rank	Level
1	The teacher employs the content of the training courses in his field of specialization.	3.81	.87	1	High
2	In his teaching, the teacher uses the e-learning strategy in addition to the usual teaching methods.	3.77	.97	2	High
3	The teacher encourages students to use a variety of learning resources (printed and electronic) with the textbook during study times and others.	3.74	.91	3	High
4	The teacher diversifies in his assessment methods between conventional and electronic methods.	3.64	1.05	4	Average
Field of Teacher		3.74	.80	~	High

training courses in his field of specialization", ranked first, at a high level, with an arithmetic mean (3.81) and a standard deviation (0.87), while the clause no. (20), which states, "The teacher diversifies in his assessment methods between conventional and electronic methods", ranked last, at an average level, with an arithmetic mean (3.64) and a standard deviation (1.05).

#### Fifth: Field of Curriculum

**Table (9)**Arithmetic means and standard deviations of the curriculum field

Table (9) shows that the clause no. (23), which states: “The elements of the curriculum are divided

No.	Clause	Arithmetic Mean	Standard Deviation	Rank	Level
1	The elements of the curriculum are divided between regular learning and e-learning to be used in the classroom session.	3.57	.98	1	Average
2	The curriculum provides multiple opportunities for the positive participation of the learner.	3.55	.94	2	Average
3	The laboratories and technology available in the school are used effectively in implementing the activities of the school curriculum.	3.48	1.04	3	Average
4	Curriculum content is presented to students through educational websites in addition to the usual method.	3.36	1.07	4	Average
Field of Curriculum		3.49	.81	~	Average

between regular learning and e-learning to be used in the classroom session”, ranked first, at an average level, with an arithmetic mean (3.57) and a standard deviation (0.98), while the clause no. (24), which states, "Curriculum content is presented to students through educational websites in addition to the usual method", ranked last, at an average level, with an arithmetic mean (3.36) and a standard deviation (1.07).

**Fifth: Field of Educational Environment**

**Table (10)**Arithmetic means and standard deviations of the educational environment field

Table (10) shows that the clause no. (27), which states: “The school motivates the teacher to

No.	Clause	Arithmetic Mean	Standard Deviation	Rank	Level
1	The school motivates the teacher to produce teaching aids.	3.57	.95	1	Average
2	The school encourages teachers to use learner-centered teaching strategies.	3.51	.81	2	Average
3	The school provides a variety of traditional and electronic learning resources to achieve excellence for all learners.	3.44	1.13	3	Average
Field of Educational Environment		3.51	.83	~	Average

produce teaching aids”, ranked first, at an average level, with an arithmetic mean (3.57) and a standard deviation (0.95), while the clause no. (25), which states, "The school provides a variety of traditional and electronic learning resources to achieve excellence for all learners", ranked last, at an average level, with an arithmetic mean (3.44) and a standard deviation (1.13).

The second question: Are there statistically significant differences, at the significance level ( $\alpha \leq 0.05$ ), in activating the blended learning environment in the Jordanian Ministry of Education's schools, from the teachers' point of view, that are due to the variables: (gender, experience)?

**First: Gender**

A t-test was used for independent samples to indicate their differences according to the gender variable. Table (11) shows this:

**Table (11) (T) Test's results for the independent samples that indicate the differences in the activation of the blended learning environment in the Jordanian Ministry of Education's schools from the teachers' point of according to gender**

Field	Gender	No.	Arithmetic Mean	Standard Deviation	Degree of Freedom	t Value	Significance
Leadership	Male	30	3.27	.94	126	-.357	.722
	Female	98	3.33	.85			
Resources	Male	30	3.32	1.09		1.507	.134
	Female	98	3.03	.87			
Learner	Male	30	3.27	.97		-.650	.517
	Female	98	3.39	.89			
Teacher	Male	30	3.80	.84		.464	.643
	Female	98	3.72	.79			
Curriculum	Male	30	3.42	.86		-.567	.572
	Female	98	3.51	.79			
Environment	Male	30	3.52	.95		.128	.898
	Female	98	3.50	.79			
Total	Male	30	3.43	.75		.127	.899
	Female	98	3.41	.66			

Table (11) shows that there are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ), in the total value and all sub-fields concerning the activation of the blended learning environment the Jordanian Ministry of Education's school, from the teachers' point of view, which are attributed to the gender variable, where the total t-value = (0.899).

**Second: Experience**

**Table (12) One-way analysis of the significance of differences in activating the blended learning environment in the Jordanian Ministry of Education's schools, from the teachers' point of view according to experience variable**

Field	Experience (A)	Experience (B)	Average Differences	Significance
Curriculum	Less than 5 years	Between 5 and 10 years	-.18981	.728
		10 years or more	-.54434*	.030

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	Between 5 and 10 years	10 years or more	-.35453	.127
Educational Environment	Less than 5 years	Between 5 and 10 years	-.30247	.463
		10 years or more	-.65216*	.009
	Between 5 and 10 years	10 years or more	-.34970	.146
Total	Less than 5 years	Between 5 and 10 years	-.18632	.657
		10 years or more	-.43105*	.049
	Between 5 and 10 years	10 years or more	-.24473	.258

Field	Experience	No.	Arithmetic mean	Standard deviation	Source of variance	Total squares	Degree of freedom	Squares average	F	Level of significance
Leadership and governance	Less than 5 years	18	3.04	.87	Between the groups	2.811	2	1.406	1.884	.156
	Between 5 and 10 years	27	3.17	1.05	Error	93.249	125	.746		
	More than 10 years	83	3.42	.79	Total	96.061	127			
Material and human resources	Less than 5 years	18	2.76	1.00	Between the groups	2.399	2	1.200	1.375	.257
	Between 5 and 10 years	27	3.17	.93	Error	109.052	125	.872		
	More than 10 years	83	3.15	.92	Total	111.451	127			
Learner	Less than 5 years	18	3.07	1.01	Between the groups	2.913	2	1.457	1.784	.172
	Between 5 and 10 years	27	3.23	.97	Error	102.063	125	.817		
	More than 10 years	83	3.47	.85	Total	104.976	127			
Teacher	Less than 5 years	18	3.35	.96	Between the groups	5.796	2	2.898	4.750	.010
	Between 5 and 10 years	27	3.54	.99	Error	76.254	125	.610		
	More than 10 years	83	3.89	.65	Total	82.050	127			

	10 years									
Curriculum	Less than 5 years	18	3.36	.95	Between the groups	2.302	2	1.151	1.776	.174
	Between 5 and 10 years	27	3.28	.88	Error	80.999	125	.648		
	More than 10 years	83	3.59	.74	Total	83.300	127			
Educational environment	Less than 5 years	18	3.02	1.05	Between the groups	7.453	2	3.726	5.848	.004
	Between 5 and 10 years	27	3.32	.91	Error	79.655	125	.637		
	More than 10 years	83	3.67	.68	Total	87.108	127			
Total	Less than 5 years	18	3.10	.78	Between the groups	3.349	2	1.675	3.758	.026
	Between 5 and 10 years	27	3.29	.80	Error	55.696	125	.446		
	More than 10 years	83	3.53	.59	Total	59.045	127			

Table (12) shows that there are no statistically significant differences, at the significance level ( $\alpha \leq 0.05$ ), in the fields (leadership and governance, material and human resources, teacher, learner), concerning the activation of the blended learning environment in the Jordanian Ministry of Education's schools, from the teachers' point of view due to the variable of experience. Moreover, there were differences in the total value and the two fields (curriculum and educational environment), where the value of (t) for the total = (3.752). In order to find out the direction of the differences, Schaffer's test was used for post-comparisons. Table (13) shows this:

**Table (13)**

**The results of the Schaffer's test for post hoc comparisons of the direction of differences in the activation of the blended learning environment in the Jordanian Ministry of Education's schools, from the teachers' point of view according to experience variable**

Table (13) shows that the differences between the experience (less than 5 years) and the experience (more than 10 years) are in favor of those whose experience (more than 10 years), that is, in favor of higher level of experience.

### Summarizing the Results

The results of the first question show that:

- The level of activation of the blended learning environment in the Jordanian Ministry of Education's schools, from the point of view of teachers in general, was average. That is, the field of (teacher) ranked

first at an average level, while the field of (human and material resources) ranked last at an average level as well.

- Concerning the field of leadership and governance, the clause “the administration provides an appropriate environment for employing advanced technology in the educational process” ranked first, while the clause “the administration provides electronic methods of assistance in evaluating the performance of learners” ranked last.

- As for the field of human and material resources, the clause "the Internet is available in laboratories" ranked first, while the clause "all tools and materials needed to employ e-learning are available" ranked last.

- Concerning the field of the learner, the clause “the learner employs information technology in life situations” ranked first, while the clause “the learner knows various paper and electronic sources of learning and uses them in the classroom” ranked last.

- In the field of the teacher, the clause “The teacher employs the content of the training courses in his field of specialization” ranked first, while the clause “The teacher diversifies the methods of evaluation between the traditional and electronic methods” ranked last and at an average level.

- In the field of the curriculum, the clause “The elements of the curriculum are divided between regular learning and e-learning to be used in the classroom session” ranked first, while the clause "The content of the curriculum is presented to students through educational websites in addition to the usual method" ranked last.

- Concerning the field of educational environment, the clause “The school motivates the teacher to produce teaching aids” ranked first, while the clause “the school provides various traditional and electronic learning resources to achieve excellence for all learners” ranked last.

**The results of the second question also indicated that:**

- There are no statistically significant differences, at the significance level ( $\alpha \leq 0.05$ ), in the total and all sub-fields concerning the activation of the blended learning environment in the Jordanian Ministry of Education’s schools, from the teachers' point of view due to the gender variable.

- There are differences between the experience (less than 5 years) and the experience (10 years or more). This difference is in favor of those whose experience is (10 years or more), that is, in favor of higher level of experience.

To answer the third question, which states: “**What is the future vision for activating the blended learning environment in the schools of the Jordanian Ministry of Education in light of quality and accreditation standards?**”, by referring to the previous studies, and on the basis of the best international practices concerning the blended learning and e-learning, taking into account the reality of the Jordanian school environment in activating the blended learning environment, the main axes of the future vision for activating the blended learning environment have been identified as follows:

- First: Defining the goals of the future vision.
- Second: The presence of an effective leadership that provides an appropriate environment for blended learning.
- Third: Determining all procedures to activate blended learning and its applicability.
- Fourth: Designing integrated courses as well as developing their content, and controlling their quality with different learning styles.
- Fifth: The optimal use of teaching methods and educational technology which are consistent with blended learning.
- Sixth: Providing human and material resources, while ensuring their effectiveness in activating blended learning.

- Seventh: The application of a comprehensive and continuous assessment system that is consistent with the blended learning standards.

Below is an illustration of each of the previous axes:

#### **First: The Objectives of the Future Vision**

The objectives of the future vision for activating the blended learning environment are as follows:

1. To avoid collecting negatives that affect the schools' ability to activate the blended learning environment as it is planned.
2. Foreseeing future prospects, keeping pace with the rapid changes, and activating the integrated learning environment in schools through a comprehensive and integrated scientific vision.

#### **Second: Effective leadership that provides an appropriate environment for blended learning**

The effective leadership is based on achieving the principle of participation between the school, the teacher, the learner and the local community concerning the activation of the blended learning environment, and working within a harmonious and cooperative team, by employing all modern administrative methods and providing an appropriate environment to employ advanced technology in the educational process, or providing human resources, including teachers and technicians, and qualifying them to use all sources and techniques of blended learning in the classroom environment.

#### **Third: Determining all procedures to activate blended learning and its applicability**

In this context, there must be practical and realistic procedures to activate the blended learning environment in such a way that it is consistent with the objectives of blended learning and stemming from the main blended learning dimensions. Al-Shahwan (2014), delimited such procedures to certain dimensions; (the institutional, administrative, educational, ethical, and technical dimensions). These procedures can be summarized as follows:

- The institutional dimension: This is concerned with good planning to activate the blended learning environment, by asking questions which are related to the readiness of the institution and the infrastructure in schools to activate the blended learning environment. Moreover, focusing on developing comprehensive strategies and plans related to administrative and academic affairs, the extent of human and technical readiness, and monitoring the budget to activate the blended learning environment in schools, designing curriculum with regard to blended learning, raising awareness and guiding learners about the blended learning system and their need for it.
- The administrative dimension: This dimension includes managing the blended learning program through the management of content development and management of maintenance, follow-up and evaluation processes, providing technical, technological and skill competencies for teachers and learners, and setting standards and policies for infrastructure employment.
- The educational dimension: This dimension is concerned with identifying the needs of learners and the mechanism of designing the content to be compatible with the activation of blended learning as well as the educational activities appropriate to their needs.
- The ethical dimension: This dimension takes into account cultural diversity and forms of learning according to learners and their different cultures, along with providing teachers and learners with guidelines related to the ethics of using devices and networks.
- Technical dimension: This dimension is concerned with planning the necessary infrastructure, hardware, software, servers, databases, network devices, printers, and network security.

#### **Fourth: Designing integrated courses, developing their content, and controlling their quality with different learning styles**

When designing blended learning courses, several things must be taken into account:

- The integrated courses should achieve interaction between teachers and learners.
- The blended courses should be centered on the student, since the student is the main focus in the blended learning environment.
- The content of blended learning courses should be developed as per the requirements of a self-learning style and it should depend on multimedia.
- The integrated courses should take into account the needs of the learners and their developmental abilities.

Moreover, when designing integrated courses, it must pass certain stages: course content planning stage - course design stage - course implementation stage - course evaluation stage.

**Fifth: The optimal use of teaching methods and educational technology which are consistent with blended learning**

Through the blended learning environment, a variety of educational forms and strategies must be employed. These forms and strategies may include collaborative direct virtual teaching and indirect educational classes for self-learning, along with learning methods based on e-learning, distance education, traditional face-to-face classroom instruction, active learning, group education, and small group education.

**Sixth: Providing human and material resources while ensuring their effectiveness in activating blended learning**

Human resources are represented by teachers, technicians and learners, while ensuring that the necessary qualification is provided for them to activate the blended learning environment in schools in a way that achieves the desired goals. In this context, a teacher should:

- be able to apply what he has taught using the computer.
- have the desire to constantly develop and update his information using the Internet.
- be able to deal with course design programs.
- be able to design electronic tests.
- have the desire and contentment to move from traditional education to e-learning.

Concerning the learner in the blended learning environment, there are certain requirements that he must meet, the most important of which are:

- He should understand that he is a participant in the educational process and that his role is important in order to interact with the teacher and reach the desired goal.
- The learner must feel that he is a participant and not a recipient.
- He must practice conversation online.
- He should have the skill to use e-mail.

With regard to the material resources, they are concerned with providing the necessary infrastructure for blended learning, providing the required budget and its resources, and ensuring their optimal and required use. Moreover, they are related to providing the technical requirements required to activate the blended learning environment, the most important of which are:

- Providing the classes with a computer and a Data Show connected to the Internet.
- Providing an electronic course for each subject.
- Providing a Learning Management System (LMS).
- Providing a Learning Content Management System (LCMS).
- Providing E-Evaluate programs.
- Determining contactable sites.
- Providing electronic dialogue sites for dialogue with experts in the field.

**Seventh: The application of a comprehensive and continuous assessment system that is consistent with the standards of blended learning**

The evaluation system should be comprehensive for all stages of evaluation (pre - constructive - final). Moreover, it should also be comprehensive of all inputs and outputs of the blended learning environment, in addition to being diversified and not limited to a specific method of evaluation, but rather a combination of regular and electronic evaluation methods, training teachers and learners on them constantly and keeping pace with everything that is new in the age of technology.

### Recommendations

Based on the study results, the researcher has recommended the following:

- 1- It is necessary to intensify all efforts to activate the blended learning environment in the schools of the Ministry of Education, due to its importance in developing students' abilities and their self-learning.
- 2- It is urging to prepare adequate training for teachers to qualify them to activate blended learning in schools, since we are in the era of knowledge economy and technological development.
- 3- It is necessary to regularly evaluate the teaching practices in relation to blended learning and publishing the results.
- 4- It is necessary to adopt the future vision of activating the blended learning presented in this study, and work on conducting several studies that will activate blended and electronic learning, such as technology, which is the tool of the age, and it has become an inevitable necessity for our students.

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