R evista de Antropología, Ciencias de la Comunica ción y de la Información, Filosofía, Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 35, 2019, Especial N°

Revista de Ciencias Humanas y Sociales ISSN 1012-1537/ ISSNe: 2477-9335 Depósito Legal pp 193402ZU45



Universidad del Zulia Facultad Experimental de Ciencias Departamento de Ciencias Humanas Maracaibo - Venezuela

The reality of using e-learning at the Middle East University

Taghreed Mousa Al-Momani^{1*}

¹Mathematics Education, Middle East University Amman Jordan <u>Talmomami@meu.edu.jo</u>

> Moham'd Mahmod AL-Dlalah² ²Measurement and Statistics, University of Isra Dlalah2003@ui.edu.jo

Abstract

This research aimed at discovering the reality of using elearning at the Middle East University (MEU) from its faculty members' point of view. The descriptive methodology was used. The population consisted of all faculty members at the (MEU) for the second semester of the university year (2018/2019). The results showed that the reality of using e-learning at the (MEU) was medium and there were no significant differences attributed to academic level and sex variables. In conclusion, there is equality and similarity among the faculty members of the Middle East University regarding the use of e-learning.

Keywords: E-Learning, Middle East, University, Faculty, Members.

La realidad del uso del e-learning en la universidad de Oriente Medio

Resumen

Esta investigación tuvo como objetivo descubrir la realidad del uso del aprendizaje electrónico en la Universidad de Medio Oriente (MEU) desde el punto de vista de sus profesores. Se utilizó la metodología descriptiva. La población estaba compuesta por todos los miembros de la facultad en el (MEU) para el segundo semestre del año universitario (2018/2019). Los resultados mostraron que la realidad del uso de e-learning en el (MEU) era media y no hubo diferencias significativas atribuidas al nivel académico y las variables de sexo. En conclusión, hay igualdad y similitud entre los miembros de la facultad de la Universidad de Medio Oriente con respecto al uso del aprendizaje electrónico.

Palabras clave: E-Learning, Medio Oriente, Universidad, Facultad, Miembros.

1. INTRODUCTION

The development of university teaching depends on the development of its teaching methods. With the revolution of modern technologies, and what it takes to deal with the global information network, several terms and philosophies have arisen, including: Distance education, e-school and e-university, virtual universities and e-learning, which is the subject of the current research.

E-learning is one of the most supportive of the educational process that promotes creativity and to deliver information with a high degree of flexibility. It changed from the teacher's role to a guide and a facilitator of learning, and the role of the learner to commensurate with the speed, ability and energy to learn according to the skills and previous experiences (SHEHADEH, 2006), as e-learning is one of the best ways to use and employ the World Wide Web for information, according to a study by SALEH & HAMID (2005) that one of the most important training needs of teachers is training on the use of this network in education, is based on this research to identify the reality of the use of faculty members in the Middle East University (MEU) of e-learning.

1386

The main objectives that e-learning seeks to achieve are:

 Paying attention to the educational activities practiced by the teacher, to develop all different aspects of the learner.

— Improving the performance of the teacher in the educational process to cope with the technological revolution and continuous knowledge.

— Providing the learner with educational means such as pictures, presentations and other materials that help the learner to acquire the educational material.

— Setting the general and behavioural objectives of the educational process and determining them accurately.

2. LITERATURE REVIEW

The aim of the ALYAHYAWI (2011) study was to find out the extent to which the organizational requirements for e-learning were applied at King Saud University in Saudi Arabia from department heads' point of view. The descriptive methodology was used. To achieve the objectives of the study a questionnaire was prepared about the organizational requirements of e-learning, applied to department heads, and reaching the number of (50) department heads. The study

reached a number of results of which, the organizational requirements for the introduction of e-learning applied at King Saud University were very high, from department heads' point of view. The mean was (4.26), and that senior leaders support e-learning to a very high degree. The mean was (4.43), and that these leaders are practicing strategic planning in the introduction of e-learning at a very high degree. The mean was (4.31). They also promote the dissemination of technical awareness and e-learning culture, for the professional development of the members of the teaching staff. The mean was (4.17) and that the university's readiness in terms of infrastructure was very high. The mean was (4.14).

ALGADI (2013) conducted a study aimed at determining the degree of use of teaching staff members of the e-learning management system at the Hashemite University in Jordan. The sample of the study consisted of (110) faculty members in the Hashemite University. They were randomly selected from different colleges and scientific departments. The questionnaire was used as a tool for the study. The results showed that the degree of use of teaching staff for the e-learning management system was medium. There were significant differences in the degree of using the e-learning management system by faculty members attributed to sex, experience and the rank of the faculty member, but there were no significant differences attributed to specialization variable.

SUHAIL & MOSLEH (2014) conducted a study on measuring the skills of e-learning among the faculty members at Al – Quds Open

University in Palestine. The sample of the study consisted of (47) faculty members. The questionnaire was used as a tool to collect data. The findings of the study showed that there were significant differences in the mean of the total score of the skills of e-learning among faculty members attributed to sex in favour of females, colleges in favour of administrative sciences, and academic qualification in favour of master holders.

The study of HASSAN & SALAH (2015) aimed at revealing the reality of using e-learning management system among faculty members at Hebron University in Palestine. A two–pronged scale has been developed: importance and constraints. The results revealed the existence of technological possibilities to use the e-learning management system and that there were some obstacles in the use of the system. The most important were: Not to use the system of examination electronically, and that some faculty members at the university find it difficult to use English while using the system. The results also showed that there were no significant differences at ($\alpha \leq$ 0.05) attributed to sex and academic rank variables. While there were significant differences attributed to the type of college in favor of scientific colleges, and to years of experience variables in favor of fewer than five years in the field of work.

The GOOSEN & MERWE (2016) study aimed at investigating and applying e-learning in (SA) region in South Africa, in terms of considering the applicable aspects on the ground, and looking at the achievement of the policy objective along with the strategic objectives in electronic schools. The results of the study were obtained using different methods, combining quantitative and qualitative methods of data collection. AMR (2018) conducted a study aimed at finding out the degree to which the faculty members at Jordanian private universities used the e-learning management systems and the factors that their use from their point of view. The descriptive – survey methodology was used to answer the three questions of the study.

HAMAD (2018) carried out a study aimed at determining the degree to which the teaching staff in the Jordanian universities uses the tools of e-learning in teaching and their attitudes toward them. The sample of the study consisted of (50) faculty members. They were randomly selected by using a random cluster method. The questionnaire was used to collect data, and observation card to measure the degree of faculty members' use of e-learning tools. The results showed that (86%) of faculty members use some e-learning tools in teaching.

The current study agreed in terms of the degree of using elearning by faculty members with the study of ALGADI (2013), HASSAN & SALAH (2015), AMR (2018) STUDY & HAMAD (2018) study, and differed in terms of goal with the study of ALYAHYAWI (2011), and the study of SUHAIL & MOSLEH (2014). It also agreed on the place of the study on universities in Jordan, with the study of ALGADI (2013), the study of AMR (2018), and HAMAD (2018) study. While the study of SUHAIL & MOSLEH (2014), and

1390

the study of HASSAN & SALAH (2015) were on universities in Palestine.

The present study also agreed with all the previous studies in applying them to samples of faculty members in universities except for the study of ALYAHYAWI (2011) which was applied to department heads, and the GOOSEN & MERWE (2016) study applied to principals and teachers in electronic schools in South Africa. As a result of all the above mentioned, the present study was to confirm the need to use e-learning by faculty members in universities especially the Middle East University, to be a model in this study, through research into the reality of their use of e-learning because it has a positive impact on the effective support of the process of learning and interest of students and increase their motivation towards it.

3. RESEARCH METHODOLOGY

The descriptive methodology was used on the reality of the use of e-learning by faculty members at Middle East University. The population of the study included all faculty members at the Middle East University for the second semester of the academic year 2018/2019, of the (176) members, with (53) females and (123) males distributed to colleges as shown in Table (1).

College	Females	Males	Total			
Arts	11	24	35			
Information	3	8	11			
Business	10	28	38			
Law	3	9	12			
Pharmacy	9	4	13			
Educational Sciences	4	11	15			
Architecture and	8	13	21			
Design						
Engineering	4	16	20			
Information	1	10				
Technology						
Total	53	123	176			

Table 1: Distribution of the study population

The sample of the study was chosen by using the stratified random sample method. The sample consisted of (60) faculty members, and by (34%) of the study population, as in Table (2) and according to the study variables.

Table 2: Distribution of the study sample according to its variables

Sex Academic level	Male	Female	Total
Ph.D. or higher	35	11	46
Less than Ph.D.	6	8	14
Total	41	19	60

To achieve the objectives of the study, a questionnaire was developed as a tool for the application of the study. Previous studies have been used in this regard, such as the study of AMR (2018) and the study of (HAMAD, 2018). To verify the validity of the questionnaire, the study tool was presented to a group of specialists. Their number was (8) arbitrators specialized in educational technology, curriculum and teaching methods, and to judge the tool in terms of its comprehensiveness, clarity, accuracy of its items and its relevance, and was modified in light of the notes of the arbitrators. To verify the reliability of the tool, an internal consistency coefficient was found using the equation of the Cronbach – Alpha. The value of the internal consistency was (0.88). This value is suitable for research purposes.

— To answer the first question, means and standard deviations were used.

— To answer the second question, two – way ANOVA was used to detect differences according to sex and academic level.

The score is essential in building educational standards. It is calculated as follows:

Highest value – lowest value Number of levels

No.	Mean	Corresponding estimate
1	1-1.8	Very weak
2	1.81 - 2.61	Weak
3	2.62 - 3.42	Medium
4	3.43 - 4.23	High
5	4.24 - 5	Very high

Table 3: Criterion for each level of the questionnaire

A set of procedures were followed as follows:

1. Reviewing the relevant educational literature to develop the study tool.

2. Verifying the validity and reliability of the tool in the appropriate methods.

3. Determining the population of the study.

4. Distribution of the questionnaire on the study sample.

5. Analysis of the study data using the statistical analysis package (SPSS).

6. Presenting and discussing the results.

7. Providing appropriate recommendations and suggestions.

4. RESULTS AND DISCUSSION OF THE STUDY

First: Results related to answering the first question that states:

What is the reality of the use of e-learning at the Middle East University from faculty members' point of view?

The question was answered by calculating the means and standard deviations in light of the responses of the study sample subjects as follows:

N	Itama Maan S.D. Bank Dagrad					
No	Items	Mean	S.D.	Rank	Degree	
1	I post the article plan for all the materials I teach	4.11	1.02	1	High	
	through the e-learning system.					
2	I post teaching materials to students through the e- learning system.	4.04	1.12	2	High	
3	I use published materials on the e-learning system.	3.92	1.17	3	High	
4	I use e-learning system to respond to students' messages.	3.90	1.01	4	High	
5	I use data base to conduct surveys on specific issues through the e-learning system.	3.90	0.79	4	High	
6	I encourage my students to work on joint projects using the e-learning system.	3.70	0.80	6	High	
7	I use the e-learning system to complete homework.	3.40	0.85	7	Medium	
8	I use the e-learning system to develop students' communication skills.	3.33	0.79	8	Medium	
9	I use the e-learning system to develop students' problem – solving skills.	3.32	1.12	9	Medium	
10	I use the e-learning system to develop students' self-	3.21	1.23	10	Medium	

 Table 4: Means, standard deviations and ranks in light of the responses of the study sample subjects

	1				
	learning skills.	2.20	1.00		
11	I use the e-learning system	3.20	1.22	11	Medium
	to develop students' skill in				
	dealing with information.				2 4 44
12	I use question bank to	3.17	1.41	12	Medium
	create a reference frame for				
	tests.				
13	I use Quiz tool in	3.14	1.29	13	Medium
	conducting multiple				
	question tests through e-				
	learning system.				
14	I use the e-learning system	3.14	1.04	13	Medium
	to provide feedback from				
	students through feedback				
	box.				
15	I use a lesson tool to build	2.90	1.25	15	Medium
	sequential learning lessons				
	through the e-learning				
	system.				
16	I use the Glossary tool to	2.80	1.35	16	Medium
	build a glossary of terms				
	for some of the subjects I				
	teach students through the				
	e-learning system.				
17	I use the Choice tool to	2.77	1.30	17	Medium
	hold short exams through				
	the e-learning system.				
18	I use the Assignment tool	2.49	1.36	18	Weak
	to assign students to				
	specific appointments.				
19	I use the Forum tool to	2.42	1.34	19	Weak
	hold student dialogue				
	forums.				
20	I use the chat dialogue tool	2.40	1.33	20	Weak
	with my students to discuss				
	methodological issues				
	through e-learning system.				
Tota	l score	3.26	0.89	-	Medium

Table (4) shows that the means of the responses of the sample subjects of the study on the questionnaire items, ranged from (4.11 - 2.40). The mean of the total score was (3.26) with a standard deviation of (0.89) to a medium degree. Item (1) that states I post the article plan for all the materials I teach through the e-learning system came in the first rank. Its mean was (4.11) with a standard deviation of (1.02) with a high degree. Followed by item (2) that states I post teaching materials to students through the e-learning system. The mean was (4.04) and a standard deviation of (1.12) with a high degree. While item (20) that states I use the Chat dialogue tool with my students to discuss methodological issues through the e-learning system.

Its mean was (2.40) and a standard deviation of (1.33), with a weak degree. As shown in Table (6) there are six items that have reached their high means, and (11) items came in a medium degree according to their means, while three items received a weak degree according to their means. The mean of the total score of the tool was (3.26) with a standard deviation of (0.89) and a medium degree. This may be due to the fact that the university has prepared for the teaching staff members the appropriate educational environment for the teaching process through linking the e-learning system with the university education system in all the current courses that the faculty members teach. The university also provided each faculty member with a computer that was connected to the World Wide Web. The university also held training courses to assist faculty members in the employment of e-learning and how to use it. In addition, the university administration is continuously monitoring through the information

systems unit to send reports to all faculties, explaining the extent of the use and employment of faculty members for e-learning to urge them to activate it continuously.

The results of this study were agreed with the study of ALGADI (2013), and the study of AMR (2018), while they differed with the HAMAD (2018) study, where the use of faculty members of e-learning was in a high degree. Second: Results related to answering the second question that states: Are there significant differences at ($\alpha \le 0.05$) between the means of responses to the sample subjects of the study in the degree of the use of faculty members of e-learning attributed to sex and academic level? This question was answered by calculating the means and standard deviations of the responses of the sample subjects according to sex and academic level. Then, two-way ANOVA was used. Table (5) shows the means and standard deviations of their variables.

Academic level	Ph.D. and more		Less than Ph.D.			
Sex	Male Female		Male	Female		
Mean	44.40 46.56		47.16	41.56		
Standard	6.11	6.11 9.16		9.56		
deviation						

 Table 5: Means and standard deviations of the sample subjects responses according to their variables

It is clear from the calculation of the means and standard deviations of the responses of the subjects of the study sample according to sex and academic level variables that there is a convergence of these means, and to find out if there are significant differences at ($\alpha \le 0.05$), two – way ANOVA was used. Table (6) shows that.

Source of Variation	Sum of squares	Degrees of freedom	Mean squares	F – value	Level of Significance
Academic	0.233	1	0.233	0.042	0.776
level					
Sex	2.653	1	2.653	0.474	0.328
Academic	0.395	1	0.395	0.071	0.705
level sex					
Error	313.181	56	5.592		
Total	316.462	59			

Table 6: Two – way ANOVA results of the responses of the study sample subjects according to sex and academic level variables

Table (6) shows that there were no significant differences at ($\alpha \le 0.05$) in the reality of using e-learning at the Middle East University from faculty members' point of view attributed to sex and academic level variables. This result means that there are equality and similarity among the faculty members of the Middle East University regarding the use of e-learning. The reason for this result may be due to the fact that the Middle East University provided all faculty members with all available means of using and employing e-learning, regardless of their sex or academic level. It deals with all faculty members in a fair manner in order to enhance the educational process.

This result is consistent with the HAMAD (2018) study with respect to sex and academic level. As agreed with the study of HASSAN & SALAH (2015) and AMR (2018) study according to sex variable. This result differs from the study of ALGADI (2013) and the study of SUHAIL & MOSLEH (2014) according to sex variable. Also differs with the study of AMR (2018) according to an academic level variable.

REFERENCES

- ALGADI, N. 2013. The degree of use of faculty members' elearning management system at Hashemite University. (Unpublished Master Thesis). Hashemite University. Zarqa, Jordan.
- ALYAHYAWI, S. 2011. "Application of organizational requirements for e-learning at King Saud University from educational leaders' point of view". **Journal of faculty of education.** N^o 145. USA.
- AMR, M. 2018. The degree of use of faculty members in the Jordanian private universities for e-learning management systems, and the factors that limit their use from their point of view. Unpublished Master Thesis. The Middle East University. Amman, Jordan.
- GOOSEN, L., & MERWE, R. 2016. E-learning, teachers and managers at e-schools in South Africa. Proceedings of the European Conference on E-learning. UK.
- HAMAD, L. 2018. The degree of use of faculty members in Jordanian universities for e-learning tools in teaching and their attitudes toward it. Unpublished Master Thesis. The Middle East University. Amman, Jordan.
- HASSAN, S., & SALAH, A. 2015. "The reality of using e-learning management system among faculty members at Hebron University". **Hebron University Journal for Research.** Vol. 10, N° 2: 138-160. Jordan.

- SALEH, E., & HAMID, M. 2005. "The professional needs of faculty members in the faculties of education of technological innovations in light of quality standards". **Journal of Educational and Social Studies.** Vol. 11, N° 2. Canada.
- SHEHADEH, A. 2006. Educational technology. Amman: Dar Kinooz Al – Mearifa for Publishing and Distribution. Jordan.
- SUHAIL, T., & MOSLEH, A. 2014. "E-learning skills among faculty members at Al – Quds Open University in Palestine".
 Palestinian Open Education Journal. Vol. 5, N° 10. Palestine.



opción Revista de Ciencias Humanas y Sociales

Año 35, Especial No. 22 (2019)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia. Maracaibo - Venezuela

www.luz.edu.ve

www.serbi.luz.edu.ve

produccioncientifica.luz.edu.ve