Pros and Cons of E-Learning at Mutah University in Jordan: A Student Perspective

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Abstract

This study presents a review of the major pros and cons of e-learning system at Mutah University that is located in the southern part of Jordan based on the students' perspective in the scientific and humanities colleges. A literature review was undertaken for the purpose of understanding what benefits and challenges students perceive the most and is there a difference, if found, between students' perceptions in the scientific and humanities colleges. Quantitative data was collected through a survey questionnaire that was distributed on a non-probability purposive sample of (759) and analyzed empirically.

The analysis revealed that there is a significant difference between the answers of students in both scientific and humanities colleges regarding the pros of e-learning system, whereas there is no significant difference between the answers of students in both scientific and humanities colleges regarding the cons of e-learning system. Based on the study findings, recommendations were suggested for faculty members and the university administration to enhance the use of IT based learning tools.

Keywords: e-learning, Mutah, student, Jordan, electronic

● كلية إدارة الأعمال، جامعة مؤتة.

إيجابيات وسلبيات التعليم الإلكتروني في جامعة مؤتة في الأردن من وجهة نظر الطلبة

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ملخص

تقدم هذه الدراسة عرضا عن إيجابيات وسلبيات التعليم الإلكتروني من وجهة نظر الطلبة في الكليات العلمية والإنسانية في جامعة مؤتة التي تقع في الجزء الجنوبي من الأردن. تم مراجعة الأدبيات والدراسات السابقة لتحديد أهم الإيجابيات والسلبيات التي تواجه تطبيق انظمة التعليم الإلكترونية وذلك لمعرفة آراء الطلبة وتحديد الاختلاف في وجهات نظرهم بناءا على طبيعة الكليات سواء العلمية أو الإنسانية. لتحقيق هدف الدراسة، تم اتباع المنهج الكمي من خلال جمع البيانات الكمية بواسطة الاستبانة كأداة جمع البيانات الأولية وتوزيعها على عين غير احتمالية قصدية تتكون من (759) طالبا موزعين على الكليات العلمية والإنسانية.

جاءت نتائج الدراسة بعد إجراء التحليل الإحصائي بوجود فروق ذات دلالة احصائية بين إجابات الطلبة في الكليات العلمية والإنسانية بالنسبة لايجابيات نظام التعليم الإلكتروني بينما لا توجد فروق ذات دلالة إحصائية بين اجابات الطلبة في الكليات العلمية والإنسانية بالنسبة لسلبيات نظام التعليم الإلكتروني. على ضوء النتائج تم اقتراح بعض التوصيات لإدارة الجامعة والمدرسين لتعزيز استخدام تقنيات المعلومات في مجال التعليم والتعلم.

Introduction:

Nowadays the world witnesses rapid and radical changes in various fields; technical, economic, social, cultural and educational that have brought about dramatic influence on the educational systems at an individual and institutional level. Dealing with these variable changes requires a great deal of adaptation and initiative in accordance with the principles of the society and its cultural and religious perceptions. It is the responsibility of educational institutions to bear the burden of presenting these initiatives according to an acceptable social and cultural format.

There is no doubt that the revolution in Information and Communication Technologies (henceforth, ICT) have transformed the world into a small electronic village where time and spatial barriers have no effect as before, and as a result, poses more pressure on the educational institutions to take the benefits of adopting ICT in line with their purposes and goals. Moreover, educational institutions have also the responsibility to ensure that the use of ICT will boost the outcomes of learning and teaching and will promote the level of educational output in less effort but in better quality (Phillips, 2004).

At the individual level, the widespread of the use of ICT in the educational system has opened new horizons to individual learners and enabled them to access knowledge bases and various scientific resources from home and/or workplace that were difficult to obtain before the use of ICT (Mills et., al 2009). One important point to bear in mind is that the use of ICT in education has enabled individual learners to overcome numerous obstacles in learning such as the lack of availability of resources, transportation difficulty, or the failure to obtain a university seat. In addition, it is a great opportunity for people in the workforce (i.e. full-time employees) in either public or private sector to develop their competencies and achieve their higher education (Sloan, 2002).

Theoretical Framework :

Alqdhah and Maqableh, (2013) conducted a study to reveal the challenges of using e. learning by faculty members in Jordanian private universities. (113) faculty members were surveyed and the results showed the challenges of using e-learning ranked in a descending order; the scientific research, e-learning techniques, financial and administrative challenges, occupational challenges, evaluation, management, planning and

design of the e-learning. In addition, the results showed that 73% of the faculty members have participated in ICDL courses, 1402 participated in WORLDLINK courses, and there were no statistically significant differences in the challenges related to gender, academic rank and experience. However, the results showed statistically significant differences related to the type of faculty in favor of humanities faculties.

Hussam and Al Abdallah (2011), conducted a study that aimed to identify the reality of e-learning at Teshrein university in Syria from the perspective of faculty members and students. The study's main conclusions were: there was no statistically significant difference between the means of responses of the faculty members towards the use of e-learning, its positives, negatives and barriers according to the academic rank, teaching experience and also showed no statistically significant difference between the means of responses of the faculty members towards the use of e-learning, its positives and barriers according to the type of the faculty they belong to (i.e. scientific and humanities). However, the study results revealed significant difference between the means of responses of the faculty members towards e-learning negatives according to the type of the faculty they belong to and in favor to humanities faculties. In addition, there was a significant statistical difference between the means of students responses   toward using E-education and its negative according to the major (specialization) variable in the favor of the scientific major, there was no significant statistical difference between the means of students responses on the positives and obstructions according to the major variable.

Hakmi (2010) conducted a study that aimed to identify the state of use of the techniques of information and communication technologies by faculty members in teaching at Um Alqura University, and to identify the difficulties that prevent faculty members of Um Alqura University from using ICT in teaching. The results showed that faculty members in the scientific colleges had positive attitudes toward the use of ICT in teaching, whereas the actual use of the faculty members in the scientific colleges of ICT in teaching was moderate.

Mills et al. (2009) conducted a study to investigate the views of the faculty members towards remote education and e-learning at one of the educational colleges in one of the universities located south of Texas in the

U.S.A. The results revealed that faculty members were concerned about the increased time required to apply the e-learning system, to develop and design the electronic courses to be uploaded onto the e-learning system and the potential increase in the desk hours. Moreover, the results showed that faculty members were also concerned about the skills required to apply and get benefits from using effectively this pattern of learning, the mistrust in the administration support for the e-learning program, the lack of technical support and the distrust expressed by the faculty members arising from the fear of impartiality of the tests conducted over the e-learning systems. Finally, the results showed that faculty members were concerned about their weakness in the technological knowledge required to utilize the e-learning system.

Cahill (2008) conducted a study that aimed to identify the significant influencing factors that encourage (i.e. enablers) or hinder (i.e. barriers) faculty members working in the educational sciences faculty at St. Thomas university in the USA from adopting the e-learning system. The findings showed that the most important incentives were easy communication with students, easy access to electronic course subjects and other related academic materials, physical rewards and the recognition faculty members receive from colleagues and administrators for using e-learning system. But the most significant obstacles were the long time devoted to use e-learning by faculty members that may not be counted for promotion purposes, the unavailability of physical reward for those conduct this sort of learning and the heavy teaching burden required by the faculty member.

Stevenson (2007) conducted a study to identify the incentives and constraints that encourage or discourage faculty members at universities to participate or not in the e- learning, the most significant constraints were the teaching burden and time dedicated to computerize the courses and prepare the courses to be used electronically, the lack of technical and substantive support by the institution, the lack of physical support for those who participate in e-learning. The results also showed that the most important incentives that motivate the faculty members to adopt this pattern of education were salary increase, physical rewards and work conditions improvement.

Ghulam (2008) conducted a study that aimed to identify the reality of using the techniques of e-learning in the King Abed Alazez University in Jeddah/Saudi Arabia by identifying the most significant administrative and

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organizational barriers that face the faculty members in using e-learning system. The results showed a low rate of adoption and spread of e-learning techniques in the King Abed Alazez University, the lack of qualified administrative staff to deal with the modernized computer based learning techniques was considered as the most significant barrier of e-learning system success.

Mutah University is a Jordanian public-sector university located in the southern part of Jordan in Alkarak district. Mutah University is considered the largest public university in the southern province and the third oldest established nation-wide university in the Hashemite Kingdom of Jordan. The E-learning portal was introduced and included on the university's home page in 2005 as a computerized educational tool for teaching and learning used by faculty members (lecturers) and students. The purpose of incorporating e-learning in the teaching process is to assist faculty members to adopt new modernized tools for teaching to make information available to students anytime and accessed from anywhere.

Besides, due to the increasing number of students registering in the university's compulsory courses (i.e. required in the study plan for all specializations in scientific and humanities colleges), the university took a further step in its journey to utilize ICT in the teaching process by computerizing these courses entirely (e-courses|) that occurred in the academic year 2016.

Statement of the Problem:
E-learning is making its way into developing countries and is believed to assist governments of these countries to meet a growing demand for education while facing a shortage of teachers (UNESCO, 2006). The widespread of the use of e-learning is based on the fact that it is seen as a tool for increasing the number of students who have access to higher education, especially in rural areas, by being a cheaper and more flexible alternative (Andersson and Grönlund, 2009). Even though e-learning is widely used in both private and public universities and some think it is a replacement of the traditional classroom teaching, they are mistaken who

believe that e-learning application can provide a magical solution for all educational challenges and problems in the curriculum design, content and the teaching approaches (Lin and Hui–chao, 2005).

In spite of the tremendous advantages that e-learning can provide, challenges still exist and even plentiful, which may hinder e-learning success. Andersson and Grönlund (2009) stated that in many developing countries there is a lack of vital e-learning components such as technological infrastructure (i.e. computers), electricity and skills and students' active participation for interactive learning where the tradition of teaching in most developing countries takes place in an instructive and directive manner (Evans, 2005).

Therefore, researchers, who are concerned with implementing e-learning in developing countries, should be able to thoroughly understand all challenges facing the implementation of e-learning. Since e-learning most often is being transferred from the developed world, one needs to know not only what challenges that already exist in the developed countries but also what additional challenges may exist in developing countries (Andersson and Grönlund, 2009). Accordingly, the current research aims to identify the positives (the pros) and the negatives (the cons) of implementing e-learning at Mutah University from the perspective of its students.

As the case with most life streams, there are always two faces for any work, this also applies to electronic education from the direct experience of researchers with students through the teaching process or through computerized exams. This study comes to investigate the positives and negatives of e-learning at Mutah University from the students point of view.

The current study aims to answer two main questions, which are:

1. What is the level of assessment of students at the University of Mutah related to the Pros of e-learning?
2. What is the level of assessment of students at the University of Mutah related to the cons of e-learning?

Objectives of the study:

This study aims to identify the pros and cons of electronic learning from the perspective of students at Mutah University. The main aim of the study is achieved by accomplishing the following objectives:

1. T investigate and examine the pros of e-learning at Mutah University from the perspective of students

2. To investigate and examine the cons of e-learning at Mutah University from the perspective of students

Importance of the study :

The importance of the current study stems from the fact that it assesses the e-learning system at Mutah University in terms of recognizing its pros and cons from the perspective of students. This assessment assists in providing feedback to decision-makers at Mutah University to overcome the limitations, which hinder students' use and participation in e-learning and emphasize the advantages, which motivate students to use e-learning systems and even raise usage rate to the promised level. Furthermore, this research represents a starting point and as a framework of reference for other future studies in the subject of e-learning, which already suffers from limited studies.

Moreover, realizing the limitations of e-learning and assessing its benefits, as sought by the intended users (i.e. students), is considered essential as educational institutions bear the entire responsibility for boosting the effectiveness of teaching and learning to improve students' competency and to provide highly qualified and competent students to the labor market. Therefore, enabling effective and accepted e-learning systems in universities can help them to keep pace with the contemporary changes in educational systems that turning increasingly to the use of ICT.

The Hypotheses of the Study:

After reviewing the literature pertaining to e-learning and ICT adoption in the education sector, the study hypotheses were developed by the researchers to be tested empirically as shown later in the study in the data

analysis section. Testing these hypotheses help to answer the research questions and derive findings and present recommendations based on the hypotheses testing.

H0.1: There is no significant difference at the significance level (0.05) between the average answers of students around the pros of e-learning depending on the specialty variable

H0.2: There is no significant difference at the significance level (0.05) between the average answers of students around cons e-learning depending on the specialty variable.

Design and Methodology:

This part of the study presents the methodology adopted, which contains the nature of the study, the population and sample, data collection method, measure, validity and reliability, statistical analysis tools, and procedure.

The research is a descriptive and analytical study as it describes the pros and cons of e-learning from the perspective of students at Mutah University, also this study is considered as an analytical study because it aims to investigate the causes or reasons of both limitations and disadvantages (explanations) by testing the study hypotheses.

Population and sample:

The population for this study is all third-year students with a total of (5455) spreading over (12) humanities and scientific colleges, (3389) students in the humanities colleges and (2066) students in the scientific colleges. The researchers chose the third-year students as the study population, from which the sample was drawn,   because students at this stage of study had used the e-learning system in many occasions such as submitting computerized exams, downloading the course content and uploading online assignments and consequently gained enough knowledge and skills required to objectively and accurately assess the success of e-learning system.

The sample of the study:

A non-probability purposive (judgmental) sampling technique was adopted for this study (Sekaran, 2003) as the researchers wanted every object in the sample to be a third-year student and had an experience with using e-learning systems. The sample size was (759) students.

(380) questionnaires were distributed on students in the humanities colleges from which 330 questionnaire were retuned and after checking the validity of the questionnaires for analysis (20) questionnaires were excluded leaving (310) questionnaires in use with a response rate of 82%.

(379) questionnaires were distributed on students in the scientific colleges from which (350) questionnaire were retuned and after checking the validity of the questionnaires for analysis (18) questionnaires were excluded leaving (332) questionnaires in use with a response rate of 88%. One point to bear in mind is that the high response rate (82% and 88%) was attributed to the face-to-face in-class distribution and collection of the questionnaires.

Data Collection:

Two types of data were used in this study; primary and secondary data. Secondary data was collected from two sources; firstly Mutah university's academic databases (e.g. EBSCO, ScienceDirect) and the available library's materials. Secondly, Internet based publications such as research articles and online books where Google Scholar was mainly used. Internet search phrases used were "e-learning, online learning, electronic learning, virtual learning, ICT based learning, learning in developing countries" and in conjunction with "challenges, barriers, obstacles, benefits and advantages.

Primary data were collected from the study sample objects by distributing a survey questionnaire. The questionnaire included three separate sections; the first section was dedicated to collect data about the sample characteristics (College, specialization and the year of study). The second section was intended to measure the pros of e-learning systems and (8) questions were assigned. The third section was intended to measure the cons of e-learning system and through (8) questions were assigned. 5 Likert scale was used in the measures and the mean values were: low score (2,49 and Less), (medium score 2, 5 - 3,49), (high score 3, 5 and above).

Data analysis and results:

In this section the researchers introduces a discussion of the data analysis test of the hypothesis and the findings.

Table (1) Averages and percentages, estimates of the study sample (students) regarding the pros of e-learning

The phrase	specialization	Mean	Standard deviation
1. Contributes to the activation to active learning and develop IT skills.	Scientific	3.89	1.17
	Humanities	3.74	0.96
2. Helps to increase students' motivation to study and increase the level of achievement	Scientific	3.78	1.09
	Humanities	3.72	0.95
3. E-learning contributes to the development of critical and creative thinking.	Scientific	3.82	0.75
	Humanities	3.77	0.76
4. E-learning takes into account the individual differences among students.	Scientific	3.91	0.69
	Humanities	3.73	0.96
5. E-learning works to create an effective environment to learn.	Scientific	3.93	0.69
	Humanities	3.71	1.06
6. E-learning supports active learning	Scientific	3.64	0.73
	Humanities	3.59	0.71
7. E-learning develops IT skills.	Scientific	3. 87	0.84
	Humanities	3.53	0.71
8. Develop critical thinking and creativity.	Scientific	3.80	0.97
	Humanities	3.68	0.92

As shown in table (1), it is noted that item (5) "E-learning works to create an effective environment to learn." came first with high level having a mean of (3.93) and a standard deviation of (0.69) for students who responded from the scientific colleges, while item (6) "E-learning supports active learning" reported the least average of (3.674) for the students who responded from scientific colleges.In regards to the humanities colleges, the students responses as shown in table (1) reveals that item (3) "E-learning contributes to the development of critical and creative thinking" came first

with high level having a mean of (3.77) and a standard deviation of (0.76), while item (7) "E-learning develops IT skills" came last with a mean of (3.53) and a standard deviation of (0.71) of the students responses in the humanities colleges.

Table (2) Averages and percentages that estimates of the study sample regarding the cons of e-learning

The phrase	specialization	Mean	Standard deviation
1. The difficulty of applying the methods and tools appropriate calendar.	Scientific	2.45	0.95
	Literary	2.36	0.85
2. Damage in computers hinders the educational process.	Scientific	2.40	1.08
	Literary	2.23	0.84
3. The e-learning increases the burden on students.	Scientific	2.21	0.59
	Literary	1.97	0.71
4. E-learning increases the isolation of students and limit social networking and face-to-face communication.	Scientific	2.21	0.59
	Literary	2.04	0.67
5. E-learning focuses on reading the course content online without the rest of the senses.	Scientific	2.36	0.92
	Literary	1.99	0.81
6. Classroom environment is not suitable for e-learning.	Scientific	2.31	0.93
	Literary	2.29	0.88
7. Internet outages for long periods.	Scientific	2.18	0.85
	Literary	2.11	0.77
8. The weakness of the students' skills in the internet and computer.	Scientific	2.01	0.61
	Literary	2.41	1.01

As shown in table (2), it is noted that item (1) "The difficulty of applying the methods and tools appropriate calendar" ranked first with a mean of (2.45) and a standard deviation of (0.95) for students who responded from the scientific colleges, while item (8) "The weakness of the students' skills in the internet and computer" reported the least average of (2.01) for the students who responded from scientific colleges with a standard deviation of (0.61).

In regards to the humanities colleges, the students responses as shown in table (2) reveals that item (1) "The difficulty of applying the methods and tools appropriate calendar" obtained the highest mean of (2.36) and a standard deviation of (0.85), while item (3) "The e-learning increases the burden on students" came last with a mean of (1.97) and a standard deviation of (0.71) of the students responses in the humanities colleges.

Hypotheses Testing:

The two hypotheses of the study were empirically tested as follow:

H0.1: There is no significant difference at the significance level (0.05) between the average answers of students about the pros of e-learning depending on the type of the college (specialty).

Table (3) Results of Unilateral variation analysis of the pros e-learning

Axis	Specialization	Mean	F Value	The significance level	Decision
the pros of e-learning	Scientific	114.055	25.907	0.001	Statistically significant
	Literary	103.069			

Table (3) shows the results of the unilateral variation analysis of the students' responses about the positives of e-learning in the scientific and humanities colleges. The value of F was (25.907) at the significance level (0.001), which is statistically significant at the level (0.05). The F value indicates that there are statistically significant differences between the students' answers in the scientific and humanities colleges (the specialty) regarding the pros of e-learning system and in favor of the scientific colleges.

H0.2: There is no significant difference at the significance level (0.05) between the average answers of students about the cons of e-learning depending on the type of the college (specialty).

Table (4) Results of Unilateral

variation analysis of the cons e-learning

Axis	Specialization	Mean	F Value	The significance level	Decision
The cons of e-learning	Scientific	117.261	2.404	0.066	Not statistically significant
	Literary	42.069			

Table (4) shows the results of the unilateral variation analysis of the students' responses about the negatives of e-learning in the scientific and humanities colleges. The value of F was (2.404) at the significance level (0.066), which is statistically not significant at the level (0.05). The F value indicates that there are no statistically significant differences between the students' answers in the scientific and humanities colleges (the specialty) regarding the cons of e-learning system and in favor of the scientific colleges.

From the analysis above, it can be noticed that students' perceptions regarding the pros (i.e. positives) of the e-learning system at Mutah University were high especially for the students in the scientific colleges and the results also showed significant differences in the students' answers between scientific and humanities colleges (see table 3).

This finding might be attributed to the fact that students in the scientific colleges utilize intensively the e-learning system more than their peers in the humanities colleges as students need to devote more time and exert more effort in studying their courses to match the complexity of the specializations in these colleges (e.g. engineering, pharmaceutical sciences,

agriculture). Consequently, this will enhance students' skills and knowledge in the use of the e-learning system and thus, will be more informed about the benefits or positives of the e-learning system as reaping the benefits of computerized systems has a perquisite, which is full utilization of the system.

The findings show that there are no statistically significant differences between the scientific and humanities colleges regarding the cons (i.e. negatives) of the e-learning system at Mutah University from the students' point of view. By comparing the students' mean answers in both the scientific and the humanities colleges regarding the pros and cons, one can conclude that students perceive e-learning system positively and this lead to the fact that the e-learning system at Mutah university has some negatives that might not affect their usage.

Study Recommendations:

The higher education sector witnesses profoundly immense dramatic changes that force institutions of the higher education to respond effectively to ensure that the quality of teaching and learning is sustained. Therefore, universities can exploit the explosive growth in information and knowledge reinforced by data storage capacity and communication to ensure the delivery of high quality teaching that meet the global standards and e-learning systems can fit perfectly. Accordingly, Mutah University should insist on the development and full utilization of e-learning systems by either students or faculty members and to be considered as primary IT based tool for teaching and learning instead of a secondary one

In this sort, faculty members can foster the usage of e-learning system by enforcing students to use it as a primary tool for teaching by making the academic material available online through e-learning system and require students to submit their assignments and submit exams electronically.

In addition, the university administration should realize the fact that the adoption of e-learning and utilizing the system's capabilities in the teaching process should be considered essential in the promotion of faculty members. Furthermore, conducting ongoing training courses concerning electronic learning for students and faculty members is also crucial.

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Mutah University's efforts to computerize compulsory courses, such as English skills, Arabic skills, Computer skills and National education, should be emphasized and roll out this experience on more courses. This attempt can be beneficial to the university as it can widen its presence nationally, regionally and even internationally through the modernized movement to the virtual learning.

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