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**The Difficulties Encountered by the Hashemite
University Students in Employing the
Internet in University Education**

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Abstract

This study aimed at investigating the difficulties encountered by the Hashemite University students in employing the internet in university education, and determining the effects of gender, major, and computer experience as well as the dual and triple interaction among these variables. The sample consisted of (502) bachelor's level students chosen randomly. The tool consists of (18) items questionnaire which was of sufficient validity and reliability. The appropriate statistical analysis was used. The results revealed that there were big difficulties in employing the internet in university education. However, there were no significant differences related to gender, major, dual or triple interaction among these variables. On other hand, there were significant differences due to computer experience among the students with little experience in favor for medium and high experience. Finally, the researchers suggested some recommendations that decrease the difficulties in employing the internet in university education as encouraging students to use the internet.

Key words: difficulties, employing internet, university education.

الصعوبات التي يواجهها طلبة الجامعة الهاشمية في توظيف الانترنت في التعليم الجامعي

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الملخص

هدفت هذه الدراسة إلى معرفة صعوبات توظيف الانترنت في التعليم الجامعي وتعرف اثر كل من الجنس والتخصص والخبرة الحاسوبية والتفاعل بينها على هذه الصعوبات بلغت عينة الدراسة (٥٠٢) طالبا وطالبة تم اختيارهم بطريقة عشوائية واستخدمت استبانة مكونة من (١٨) فقرة طورها الباحثان وكانت ذات صدق وثبات كافيان لإغراض الدراسة واجريت التحليلات الاحصائية المناسبة وكشفت نتائج الدراسة عن صعوبات كبيرة في توظيف الانترنت في التعليم الجامعي، ولم يكن هناك فروق دالة إحصائية تبعا لمتغير الجنس والتخصص، والتفاعلات الثنائية والثلاثية بين المتغيرات بينما كان هناك فرق دال احصائيا تبعا لمتغير الخبرة الحاسوبية ولصالح أصحاب الخبرة القليلة، وتضمنت الدراسة مجموعة من التوصيات التي تقلل من صعوبات توظيف الانترنت في التعليم الجامعي منها تشجيع الطلبة على استخدام الانترنت.

الكلمات المفتاحية: الصعوبات، توظيف الانترنت، التعليم الجامعي.

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Introduction

Information technology (IT) is invading all aspects of life and is increasingly able to change the face of the world. Internet has been one of the technologies that caused a tremendous information revolution. Therefore, higher education institutions and universities in particular had to bring up a generation that coexists with this technology, uses it, integrates it in university curricula and makes education based on this technology.

Entering the world of knowledge through the internet achieves additional educational aims necessary for the new age. Furthermore, the effectiveness of information technology accomplishes more quality and productivity, and provides learners with experiences and skills that are required by the work market (Bagaresh & Self, 2001).

Teaching through the internet is distinguished from traditional teaching by being synchronized with the network and all of its instruments. This provides a chance for discussions, focuses on teacher evaluation continuous assessment of the textbook, and integrates the curricula with an interactive environment. (Al-Mousawi & Abdel-Rahim, 2004).

The successful use of the internet in university education depends on providing incentives to teachers and learners, proper training, easiness to access information resources, regular academic management, and continuous technical support (Joo, 1999).

Moreover, Al-Najjar (2001) sees that the internet provides higher education with research services, through which it is possible to have access to international libraries. Many studies also indicated that several universities have started to give their students the chance to use the internet, through which these universities provide study schedules and plans, debate and discussion services, e-mail, search for reference books and sources

related to study topics, the assistance in doing homework and completing study projects, and providing educational software (Odabasi, 2002; Al-Omari, 2002; & Mulqueen, 2001). The UNESCO (Charp, 2000) conducted a survey research in which it reviewed (90) studies from different countries revolving around the role of the internet in education. It has become clear that the internet positively influences the incentive of students, increases their self-education, and improves communication and writing skills. Trotter and Andrew (2001) indicated that the internet is considered an important instrument that improves the quality of learning. However, the shortage of time hinders its use. However, both Koohang (2004) and Gardener (2000) called for not being hasty in employing the internet without studying the situation of the school and employing the internet effectively and efficiently. Upton (2005) also showed that the internet is no more a challenge in the computer science; rather it is a challenge in the information science. She confirmed the necessity of assisting students in creating strategies concerning finding information, evaluating them and judging on their accuracy.

Most universities and higher education institutions worldwide are connected to the internet with the existence of differences in the degree of use among those universities and institutions. For example, 14 Jordanian universities are connected to the internet and each one of them has its own site on the World Wide Web (Al-Shayeb, 2001).

The successful use of the internet in university education opens new horizons for developing this education and provides students with distinguished education that responds to the new methods, harmonizes with the scientific and technological development and frees them from the limits of place and barriers of time. Al-Zahrani (mentioned in Al-Ashqary, 2005) conducted a study that aimed at identifying the incentive behind the teaching staff employment of information technology in their teaching and the difficulties that encountered them in this employment. The study sample amounted to 314 members of the teaching staff. The finding indicated that the subjects of the study employed the internet in teaching. Among the main obstacles were the teaching burden, the amount of time spent in preparing electronic assignments, and the fear from using modern technology.

Ruthven et al., (2005) conducted a study that aimed at introducing the internet sources into classrooms, and identifying the difficulties that encounter them. The researchers interviewed eight teachers who employed the internet in human and social studies as well as in practical lessons in English high schools. The most important strategies and difficulties were organizing lessons between the student and the teacher, laying out bases for assisting student to access the internet sources, confirming and enhancing the employment of the information technology instruments to support learning the topic.

Faraj (2005) conducted a study that aimed at employing internet education and its curricula, and identifying the obstacles they faced in using it. The researcher analyzed many educational studies and literature in this field, and the result showed that the high cost, technical problems, shortage of training and multiple internet research instrument are the main obstacles in employing the internet in education.

AL-Mousawi & Abedel-Rahem (2004) used web courses instruments and courseware package to evaluate the effectiveness of on line instruction (OLI), on Sultan Qaboos University students' achievements in an educational technology courses, the results showed that there were no statically significant differences attributed to gender in using internet.

Edwina (2003) conducted a study that aimed at identifying with the difficulties that encounter the teaching staff in Holins American University in using information technology. The findings of the study showed that few teaching staff members use information technology in classroom and that most of them use the e-mail to communicate with their students and to design educational sites through the internet. Among the most important difficulties that encountered them were the obstacles of the administrative decision supporting applying and using technology in the university, the weakness of the equipment and laboratories, and the shortage of material and moral incentives.

Hamdi (2003) conducted a study that aimed at identifying the most important educational uses and difficulties of using the internet by a sample consisted of 306 teaching staff members in Jordan University, Yarmouk University and Mu'tah University. The greatest use was of the e-mail followed by the worldwide website. The most important difficulties

were the slowness of the network lines followed by having an access to appropriate sites. There were statistically significant differences to the favor of the major related to information technology and to the favor of the scientific colleges.

Al-Ebaid (2002) conducted a study that aimed at identifying the extent of the benefit of the Secondary Stage teachers in Riyadh from the internet, and the obstacles that prevented benefiting from it. The findings showed that the degree of benefit was medium. Moreover, the main obstacles were that the timetable and the educational plan were not appropriate because they did not give the teachers the chance to use the internet, the teachers were weak in English and the textbooks and curricula were not connected to the worldwide networks. There were statistically significant differences in favor of the internet. These differences were ascribed to the major in favor of the scientific majors.

Bo-Me'rafi (2001) conducted a study to identify the reality of using the internet by the teaching staff in Al-Shariqah University and the difficulties that they encountered in using it. The sample of the study consisted of (70) teaching staff members. The researcher applied a questionnaire with a validity and reliability sufficient for the objectives of the study. The findings indicated that the main difficulties were the slowness of the network, shortage in training as well as the shortage of time

Al-Shayeb (2001) conducted a study to know the reality of using the internet by the teaching staff of the Jordanian universities and the difficulties that encounter them in using it. The sample of the study consisted of (282) teaching staff members. The researcher used a questionnaire that was distributed on them. The findings of this study showed that the main difficulties were the students little experience in the internet and its applications, the shortage of financial support, the availability of the chance for training on the internet, technical and technological obstacles, He throng of internet laboratory with students and the slowness of the network. Furthermore, the findings showed that there were statistically significant differences ascribed to teaching staff member, major, and computer experience.

Kelley (1998) discussed the internet use by the teaching staff in university education. The results showed that the science majors' staffs use the internet

more than another majors and for longer time and for different purpose, the humanity majors are less use. The difficulties of using internet were the scarcity of sources that tackle issues related to the humanity major and the lack of incentive to encourage this technology.

Overall, the studies discussed in this section can be classified as follows:

1. Some studies showed that the difficulty of using the internet was ascribed to the slowness of the network, the difficulty in having access to sites, shortage of training, fear from using the technology, and time (Ruthven, et al., 2005; Faraj 2005; Hamdi,2003; Al-Shayeb, 2001; & Bo-Me'rafi, 2001).
2. One Study showed that the difficulty was the absence of the administrative decision, weakness of equipment and scarcity of labs (Edwina, 2003).
3. Some studies showed no significant differences according to gender. (Al-Shayeb, 2001; AL- Mousawi & Abedel- Raheem, 2004).
4. Some studies showed significance differences that were ascribed to major and Computer experience (Hamdi, 2003; Al-Ebaid, 2002; & Kelley, 1998).
5. Some studies showed no significance differences according to major. (Al-Shayeb, 2001; Al-Mousawi & Abedel- Raheem, 2004).

The previous studies illustrated the role played by the internet in university education and the difficulties that hinder their use. Hence, appears the importance of this study in light of the previous studies as they attempt to disclose the difficulties that prevent the employment and use of the internet in university education. Further, this study benefited from the previous studies in building the items of the instrument of the study and determining its variables.

Statement of Problem

Since the internet has become a basic tool in instruction, i.e., e-learning, and that there are online curricula and tests all over the world, the Hashemite University has sought to introduce the internet to its people since its establishment. The university had the initiative, among its peers, to establish internet laboratories in all of the colleges. Moreover, it already introduced many web-based courses and conducted some tests and courses

online. Furthermore, it has built an educational system that is based on the internet. This system is called the electronic education. It supports students learning, develops their ability of self-learning, their creative thinking so that they will be able to go along with the scientific and technological development. However, students' use of the internet encounters some difficulties and obstacles that limit circulating and spreading this use.

Aims of the Study

1. Disclosing the difficulties that encounter students in employing the internet in university education.
2. Getting familiarized with the correlation relationship (if found) among the difficulties of employing the internet in university education and the gender, major, and computer experience of the student.
3. Providing suggestions and recommendations that should increase the effectiveness of employing the internet in university education in the Hashemite University in light of the findings of the research.

The Study Questions

This study answered the following questions:

1. What are the difficulties that the Hashemite University students encounter in employing the internet in university education?
2. Do these difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the gender?
3. Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the major?
4. Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the computer experience?
5. Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the dual and triple interactions among the variables of the study: gender, major and computer experience?

Significance of the Study

The importance of the study is embodied in the following:

- 1-This study focuses on employing the internet in university education which is considered the basis of e-Learning that the Hashemite University

seeks to circulate on its students.

2-This study provides a research instrument that is interested in employing the internet in university education to open new horizons for other studies in this field in a way that participates in generalizing the circulation of this network and its employment in university education.

3-The findings of this study may provide information and data that participate in developing the employment of the internet in university education and increase its effectiveness.

4-This study may participate in familiarizing the Hashemite University officials with the difficulties that prevent the circulation of the use of the internet and provide them with proposals and recommendations to make suitable Bo Me'rafi decisions in order to work on overcoming these difficulties and eliminating them.

The study goes along with the modern trends of the university education, which is an education that is based on the internet as well as integrating technology and its communication technologies and applications in university education.

Limitations and Delimitations

1. The study was limited to The Hashemite University students who were enlisted in the second semester of 2004/2005.
2. The study contained one questionnaire only that was prepared and developed by the researchers. The validity and reliability of this questionnaire were verified by familiar ways. Therefore, the validity of the findings is dependent on the validity of the instrument of the study.
3. The generalization of the findings of the study that comes outside its statistical population is limited to the extent of the similarity between the outside society and the current society.
4. The extent of the difficulty in employing the internet in university education is limited to the items included in the measuring instrument that is used in the study.

Assumptions of the Study

This study is based on the following assumptions:

1. The study sample is representative of the study population, who are the

students of The Hashemite University.

2. The questionnaire that had been prepared met the objectives of the study.
3. The validity and reliability of the instrument of the study used were sufficient for conducting the study.
4. The internet is a modern technology that provides university education with great advantages mainly in e-Learning.

Operational Definitions of Terms

Difficulties: any factors that negatively affect the employment of the internet in university education by students in a way that lessens the employment of the internet.

The Internet: A wide network of computer that is connected together through communication media that can bring communication services to the user (Glbreeth, 1999).

Hashemite University Students: are the students who are enlisted in the second semester of the university year 2004/2005 at the BA level despite their study level.

Methodology and Procedures

Research and Method

This study used a survey technique to investigate the difficulties of employing the internet in university education, and the effects of different variables on these difficulties.

Sample and Population

The population of the study consisted of all of the students of The Hashemite University students enlisted in the second semester of the university year 2004/2005 (N = 8710 students) at the BA level.

The sample of the study included (2000) male and female students who were randomly chosen. From the questionnaires distributed, 502 questionnaires were returned. This meant (5, 66%) of the population of the study, and 25% of the random sample. Table (1) shows the distribution of the retrieved study sample according to the variables.

Table 1**The Distribution of the Sample According to the Variables of the Study**

Level	Gender		Major			Computer experience		
Variable	Male	Female	Human.	Scientific	Commercial	Low	Moderate	High
Frequency	253	249	147	290	65	384	78	40
Percent	50.4 %	49.6 %	29.3 %	57.8 %	12.9 %	76.4 %	15.6 %	8 %

The Instrument

The data were gathered through a questionnaire prepared by the researcher for the objectives of the study after reviewing the educational literature related to this field. The instrument was divided into two parts; the first was personal data, and the second include the difficulties that students encountered in the university education, which contain (18) items in its final form as a result of implementing the validity and reliability procedures.

The instrument in its primary form consisted of 25 items. 80% of arbiters advised the researchers to delete seven of these items. This advice was adopted. Therefore, the instrument in its final form included 18 difficulties and consisted from the difficulties of employing the internet in university education. The items were put on a tetra grading scale.

Instrument Validity

To ensure the validity of the questionnaire, it was handed to 15 specialists in the field of educational technology, curricula& instruction, measurement and evaluation, and computer science in The Hashemite, Jordan, Yarmouk, and Al- Al-Bayt Universities. These specialists were requested to give their opinions about the extent of the appropriateness for each of the items for measuring the objective that it had been made for, in addition to checking the correctness of the language and clarity of meaning. Some items were modified according to their suggestions, while some of the items that 80% of the arbiters suggested to be deleted were deleted. Therefore, in the light of the judge's remarks and comments, some paragraphs were deleted and some were re-worded and other paragraphs were added.

Instrument Reliability

After testing the validity of the instrument, its reliability was checked through a survey study in which the following steps were followed:

1-Applying the scale on a different survey group other than the study sample, amounted to (50) students, who were chosen randomly and their names were written on these questionnaires and numbered on a special list. After two weeks, the same instrument was applied on the chosen sample, and the correlating factor between the total score of the survey sample in the first and second applications were calculated. The correlation coefficient was (82%), which indicated a high correlation.

2-Calculating the reliability coefficient according to Cronbaukh Alfa for internal consistency, as the reliability coefficient was (79%). The reliability coefficient were considered acceptable for the objective of scientific research, and that it enjoyed reliability that allowed using it with a high degree of reliance among the items in scaling the difficulties in employing internet in the university education.

Statistical Procedures

The Statistical Package of Social Sciences (SPSS) was used in processing data that had been taken from the questionnaires and entered in the computer to be statistically processed. Calculating the numbers and percentages, means and standard deviation, analysis of variance (ANOVA), and making post comparisons were used to answer the study questions.

Results and Discussion

In this section, we present the results and discuss their implications. The results are organized such that all of the study questions are addressed in order.

Study Question 1: What are the difficulties that the Hashemite University students encounter in employing the internet in university education?

The means and standard deviations of the sample were extracted for each of the items of the questionnaire. These items were classified downward according to the means and standard deviations of the difficulties that the students faced in employing internet in university education. Table (2) shows the results.

Table 2
Means and Standard Deviations of the Difficulties Arranged
in a Descending Order

Item rank	Item	Mean	S.D
2	The lack of computers connected to the internet in the university.	2.52	0.870
6	Restricting internet services to labs and specific places	2.41	0.843
17	The internet is not used in most of the university courses	2.24	0.951
12	The burdens of university homework do not give me the chance to use internet.	2.22	0.980
4	Difficulty in communication and connection to internet in the university	2.19	0.954
1	The high number of students who use the internet in labs does not give me the chance to use internet.	2.19	1.109
9	The difficulty of including the internet in the local university current curriculum and courses.	2.18	0.964
16	The lack of personal computer, which is connected to internet at homes.	2.09	1.201
13	The high cost of using internet.	2.05	1.083
8	I'm not given enough time to browse the internet sites	2.03	1.025
11	The far distance of the university from the students' residential areas forms for me an obstacle in using internet	2.01	1.179
5	I do not have sufficient skills in using the internet.	2.00	1.125
14	The difficulty in searching and getting the exact websites.	1.94	1.017
15	Professors do not assign using the internet for university education and scientific research for their students.	1.93	1.062
3	Using English language forms a formidable obstacle to use the internet.	1.69	1.154
7	Connecting to the internet leads to time waste.	1.46	1.213
18	Weak personal willingness to use the internet	1.37	1.269

Table (2) shows that there were thirteen items that formed very big difficulty, three items formed medium difficulty and two items formed little difficulty.

Regarding item 2, "the lack of computers connected to the internet in the university." it was the main difficulty with a mean of (2.52). In the second

place came the sixth item, “restricting internet services to labs and specific places” with (2.41). Then “the internet is not used in most of the university courses” (2.24). Next was “the burdens of university homework does not give me the chance to use internet.” (2.22). Then two items “difficulty in communication and connection to internet in the university” and “the high number of students who use the internet in labs does not give me the chance to use internet.” (2.19) came in the fifth place, after which “the difficulty of including the internet in the current university curriculum and courses”, has (2.18). Then “the lack of personal computer which is connected to internet at homes” (2.09). In the ninth place came “the rarity of ready-to-use internet and online curricula” with (2.06). In the tenth place came item (13) “the high cost of using internet” (2.05). Then item (8) “I’m not given enough time to browse the internet sites” (2.03), followed by item (11) “the far distance of the university from the students’ residential areas forms an obstacle in using internet (2.01). And next was number (5) “I do not have sufficient skills in using the internet” (2.00). There were 3 items which formed moderate difficulties: item (14) “the difficulty in searching and getting the exact websites” (1.94), then item (15) “professors do not assign using the internet for university education and scientific research for their students” (1.93), and item (3) “using English language forms a formidable obstacle to use the internet” (1.69). There were (2) items which formed little difficulties, item (7) “connecting the internet leads to time waste” (1.46), and item (18) “week personal willingness to use the internet” (1.37). All of this proves that the internet use among university student faces big difficulties, having got the total mean of (2.03).

That may be attributed to a severe shortage in computers connected to the internet compared with the growing number of students. Moreover, the students considered the greatest difficulties in using the internet as overcrowding, limiting internet places to labs and the absence of applying the internet technology in university courses due to the prevalence of the classical method by which courses are taught and which still dominates the educational settings.

In addition, the burdens of university tasks, the difficulty of communication and performing connection with the university place a great overload on students. This causes the loss of much effort and time. They consider these

matters a great difficulty in employing the internet. Reaching these results assures the difficulties referred to in the literature review, regarding that the successful use of internet in the university instruction depends on the proper training, ease of reaching data resources, providing motivation on the students' part & the continuous artificial support. (Joo, 1999), & in addition to what Al-Mousawi & Abedel-Rahem (2004) said that teaching by using the internet must be provided in an interaction environment which blends the curricula with their instruments through the internet, a thing that should provide the chance for discussions, and focuses on the continuous assessment for the curricula. The results also indicate that the implementation of the internet is not a waste of time & that the students have positive tendency & motivation towards the use of the internet (Al-Najar 2001).

This study is in agreement with the studies of Ruthven, & et. al 2005, Edwina 2003, & Hamdi, 2003, which all indicated big difficulties in using the internet are ascribed to the slowness of the net work, the difficulty in having access of sites, shortage of training fear from using the technology.

Study Question 2: Do these difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the gender?

To know whether there were differences among these means according to the gender variable, three-way ANOVA of the impact of these variables on the difficulties of employing the internet in university education was conducted. Table (3) shows the results.

Table 3
Three-way ANOVA for the Effect for the Gender Variable on the Difficulties of Employing the Internet in University Education

Source	Sum of square	D.F	Mean square	F	Significant of F
Gender	43.58	1	43.58	0.42	0.517

From table (3), we can answer the second question, it's clear that there were no statistically significant differences related to the gender. The

absence of differences among statistical significances that was ascribed to the gender variables in the difficulties of employing the internet in university education may be explained by the similarity of university situations and the identical points of view towards using the internet despite gender, male or female which united their vision in identifying the difficulties of using the internet in education. The result agreed with the studies of AL-Mousawi & Abdel-Raheem, 2004, & AL-Shayab, 2001, that showed no significant differences according to gender.

Study Question 3: Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the major?

To know whether there were differences among these means according to the major variable, three-way ANOVA of the impact of these variables on the difficulties of employing the internet in university education was conducted. Table (4) shows the results.

Table 4
Three-way ANOVA for the Effect of the Major Variables on the Difficulties of Employing the Internet in University Education.

Source	Sum of square	D.F	Mean square	F	Significant of F
Major	13.06	2	6.53	0.06	0.939

Also, from table (4), we can answer the third question, it's clear that there were no statistically significant differences related to the major. The fact that there were no statistically significant differences attributed to major, explains that the students of the university, from all the scientific, humanistic and trade majors study compulsory & optional subjects that the university introduces as basic requisites for all the students regardless of their majors. For example, some of the courses of the English language, the Arabic language, computer skills, psychology and fine arts are made available online and are also tested online. However, students face many difficulties during these exams, namely the cessation of electricity, the ability to view any question only once, the overloading of the labs, which enforces testing the students in parts. All of that made them share the attitude toward the difficulties regardless of their major. The result agreed with the

studies of AL-Mousawi & Abdel-Raheem, 2004; & AL-Shayab, 2001; that showed no significant differences according to major. Nevertheless, the result disagreed with the study of Hamdi, 2003; Al-Ebaid 2002; & Kelley 1998, according to major.

Study Question 4: Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the computer experience?

To know whether there were differences among these means according to the computer experience variable, three-way ANOVA of the impact of these variables on the difficulties of employing the internet in university education was conducted. Table (5) shows the results.

From table (5), we can answer the forth question, it's clear that there were significance differences related to the computer experience.

Table 5
Three-way ANOVA for the Effect of the Computer Experience Variable on the Difficulties of Employing the Internet in University Education

Source	Sum of square	D.F	Mean square	F	Significant of F
Computer experience	972.74	2	487.37	4.68	0.010*

*statistically significant.

A Scheffe Test was conducted to find the differences between the means in the difficulties of employing the internet in university education according to the computer experience. Table (6) shows the results.

Table 6
The Results of Chefie's Test for the Statistically Significance Differences of the Means Attributed to Computer Experience

Experience	Means	Low	Moderate	High
Low	2.09		*	*
Moderate	1.83			
High	1.79			

*statistically significant.

As for the computer experience, it can be seen from table (5) that there were statistically significant differences between students with high and moderate computer experience on the one hand, and those of low computer experience on the other, in favor to the first category. This may be explained by that the first category seeks to explore the internet in their attempt to be acquainted with this technology to increase their knowledge and skill in the internet, by wandering in its unknown world and by enjoying the data they see or hear from their counterparts about this network and its advantages, which lessen their degree of the difficulties of using the internet. Students with low experience have the tendency to use the internet in university education, but were blocked by administrative, technical and academic difficulties, which led to the difficulty of using the internet. This also emphasizes the necessity of increasing the numbers of computers connected to the internet and increase internet use in university courses so that the internet will have an effective role in university education, knowing that teaching through it has become enjoyable and interesting. This result agreed with the study of Hamdi, 2003, Al-Ebaid, 2002, & Kelley, 1998, according to computer experience. Nevertheless, the result disagreed with the study of AL-Shayeb, 2001.

Now regarding the existence of statistically significant differences attributed to experience in computer, it is a fact that can be explained by that the learners had little of such experience. Nevertheless, having done the exam online & received the results also online in a novel way, all of this increased knowledge and skill in using it. In addition, learners enjoyed the audio and visual data more than the learner who have high computer experiences. One last factor is that the learners heard from their experienced colleagues about it, which should all soften the attitudes towards the difficulties of using it in university instruction.

Study Question 5: Do the difficulties in employing the internet in university education differ at the level ($\alpha = 0.05$) according to the dual and triple interactions among the variables of the study: gender, major and computer experience?

To know whether there were differences among the dual and triple interactions among the variables of the study: gender, major and computer experience, three-way ANOVA was conducted. Table (7) summarizes the results.

Table 7
The Result of Analysis Using ANOVA for the Duel and Triple
Interaction Among the Variables

Source	Sum of square	D.F	Mean square	F	Significant of F
Major X Gender	49.92	1	49.92	0.481	0.488
Major X Computer Experience	287.18	4	71.79	0.641	0.598
Gender X Computer Experience	298.85	2	149.44	1.44	0.238
Major X Gender X Computer Experience	33.04	2	16.51	0.154	0.853
Error	50541.37	487	103.78		
Total	53542.31	501			

As the table (7) shows, the difficulties in employing the internet in university education do not differ at the level ($\alpha = 0.05$) attributed to the dual and triple interactions among the variables of the study, regarding the difficulties in employing internet in the university education. This result is attributed to the large numbers of the students, regardless of gender, major or computer experiences, who register in online courses. As a matter of fact, conducting many of the university exams for the compulsory and optional requisites online, the difficulties the students face in accessing the courses sites, doing relevant exams both in terms of mechanism or timing, add to that the limited internet labs, all of that helped unify the attitude towards difficulties, regardless of gender, major or computer experiences, in a (= method=) where there was no interaction among any of the three variables.

Conclusions

This study addressed an important topics related to the difficulties that encountered the students in employing the internet in university education. The study results showed that there were many difficulties in employing internet, and students should be directed to employ the internet in education in order to enrich their learning outcomes and experience ,hence there is a need to familiarize students with the uses of the internet and the skills of dealing with it through courses and workshops. This can also be supported by providing technicians and assistants to assist students in the labs and

lecture halls to access databases and to facilitate communication and connection.

Recommendations

Encouraging students to use the internet in all of the faculties of the university and instructing them to employ the internet in education.

Increasing the number of the internet laboratories, providing these laboratories with technicians and assistants to assist students in these laboratories and halls to access databases and facilitate connection and communication.

Encouraging students to use the internet in university education during their study of academic materials in order to enrich learning these materials.

Offering courses related to the internet in order to increase the skills of the students in using them in university education as well as holding training courses for the students to be trained.

Conducting more studies related to the internet and deal with other variables, such as the academic level, the study level and the knowledge of the student in the field of the internet.

Conducting other studies to identify the difficulties of using the internet from the point of view of the teaching staff and those who work in the field of the information technology.

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